Populism and Ideological Convergence: Evidence from a Multiparty System*

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Abstract

Populist parties have gained significant power in European politics in the last decades, raising concerns over the potentially contagious effect of populism. I study how populist party representation in local councils affects other parties' ideological positions. I use variation created by close elections to identify ideological shifts resulting from a change in party representation, holding voter preferences constant. I use candidate level data from a voting advice application to derive ideological positions. I model candidates' responses using item response theory to obtain measures of ideology that are comparable across election years. I show that higher populist representation causes mainstream parties to become more ideologically aligned with the populist party. The results demonstrate that increased populist representation can spread populist ideologies.

JEL codes: P16, D72

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1. Introduction

Populist parties and ideologies have become increasingly mainstream in European politics. Populists have become significant forces in the opposition, such as AfD in Germany and National Rally in France, and as governing parties, for instance Swiss People's Party in Switzerland, FPÖ in Austria, Lega in Italy and Finns Party in Finland. Recent literature shows that populist governments are bad for economic performance and can erode democratic institutions, such as checks and balances on the executive, independent judiciary and press freedom (Funke, Schularick and Trebesch 2020). Populist politicians' electoral success has raised concerns about contagion of populism across parties, and even of democratic backsliding. One way populism could spread is the impact of populist representation on mainstream parties. However, it is not clear whether the presence of a populist party can directly impact the political space, or whether mainstream parties merely respond to voter preferences. This paper provides causal evidence of the effects of populist representation, and contributes to a better understanding of party competition and policy convergence in a multiparty setting.

In this paper I study how populist party representation affects mainstream parties' ideological positions. To estimate the causal effect of populist representation, I use an instrumental variable approach that takes advantage of close contests in Finnish local elections. I show that increased populist representation leads to convergence towards the populist position, particularly on the liberal-conservative policy dimension. This dimension describes views on social and cultural issues, and it is the primary policy dimension of the populist party. One standard deviation increase in populist seat share (approximately two seats), leads to about 0.1 s.d., or 4%, reduction in average distance between mainstream parties and the populist party.

Finland provides a good case study to explore the impact of populism on the supply of political ideologies for the three following reasons. First, Finland has experienced a strong wave of populism. During the past decade, the Finns Party—the populist party in Finland—has transformed from a fringe party to one of the most popular parties. Its parliamentary vote

share increased from 4 % in 2007 to 19 % in 2011, and it was part of the coalition government in 2015–2017. Second, local elections are important due to the significant economic role of municipalities: they are responsible for social and health care services, they are a major employer, they collect income and property taxes and have a high degree of fiscal autonomy. Finally, I can study several elections in comparable polities within the same institutional context.

Previous the literature on populism shows that adverse economic conditions can drive decreasing trust in politics, anti-immigration attitudes and voting for populist parties, and that mainstream parties also respond to these changes in voter preferences (see e.g. Guriev and Papaioannou 2020; Guiso et al. 2017; Wagner and Meyer 2017; Schumacher and Van Kersbergen 2016). In general, the literature on why and when parties adjust their positions has focused on how responsive parties and candidates are to changes in public opinion (e.g., Ansolabehere, Snyder and Stewart 2001; Adams et al. 2004; Abou-Chadi and Stoetzer 2020). In contrast, I provide evidence for a supply-side effect. By distinguishing representation from voter preferences, I provide causal estimates of how the presence of a populist party affects mainstream parties' behaviour.

Even though gaining more seats in close elections reveals very little about voter preferences, mainstream parties can react to populist presence either because their candidates' preferences change, or because of strategic considerations. These two mechanisms need not be mutually exclusive. First, being more exposed to the populist party's agenda and having more interaction with the populist candidates could influence individual candidates' preferences. Second, gaining more seats can make the party seem like a more viable contender. Having more politicians in office provides more experience, resources, media attention and legislative presence, which can make the party more electorally threatening even without a change in voter preferences. Furthermore, mainstream parties may react because of a perceived or expected change in voter preferences. The seats gained in close elections could be attributed to shifts in voter preferences, or mainstream parties can anticipate that having more elected politicians can increase the popularity of that party's agenda and change voter preferences.

To what extent the impact on mainstream parties' positions is due to a

strategic response or changes in individual politicians' preferences, cannot be answered definitively. In either case, the implication is that populist representation may influence policy also indirectly by inducing mainstream parties to change their policy positions. Furthermore, a supply-side effect in which political candidates adopt more populist positions may increase voter demand for populism by increasing the salience of social and cultural issues (Rodrik 2020), which can then further amplify the spread of populism.

To estimate parties' ideological positions, I use candidate level survey data from a voting advice application (VAA). The survey consists of a list of statements on policy and ideological views, and it therefore provides comprehensive information on candidates' political preferences. The data is collected before the election and also includes candidates who were not elected. Because the purpose of the voting advice application is to provide information for voters, the candidates' answers are made public prior to the election. Voters can fill in the same questionnaire, and the VAA shows which candidates are most aligned with the voters' views. Using individual candidates' preferences to derive party positions allows me to take advantage of both cross-sectional and time variation in ideological positions.

I employ an Item Response Theory (IRT) model to estimate candidates' ideologies. IRT methodology is commonly used in educational assessment and in psychometrics to measure latent traits, such as ability or attitudes, but it has been underutilized in economics. The advantage of IRT is that it distinguishes the respondent's level of latent trait—in my case the political ideology—from properties of the survey items (e.g., item difficulty). The probability of a particular response to a survey question is modeled as a function of the respondent's level of latent trait and item parameters (Kolen and Brennan 2004). This approach allows me to measure the respondents' ideological traits from several waves of data, producing measures that are on the same scale, and therefore comparable between election years.

I examine how an exogenous increase in populist party representation—due to randomness of close elections—influences ideological distances between the populist party and other parties in the same municipality. Because Finland has open-list proportional representation, it is not possible to employ regression discontinuity design. As each candidate's election outcome depends on their vote rank within the party, the party's votes,

and votes of all other parties, there are no predetermined seat thresholds. To identify electoral closeness I follow a bootstrap approach by Kotakorpi, Poutvaara and Terviö (2017). I simulate elections by resampling votes from the empirical vote distributions and determine electoral closeness based on how often a candidate is elected in the simulations. Candidates whose election status changes often in the simulations are considered to be close to the election threshold. I then instrument the populist seat share with the share of closely elected populist party candidates (see Clots-Figueras (2011) and Hyytinen et al. (2018) for a similar approach).

My main finding is that increased populist representation causes mainstream parties' ideological positions to converge towards the populist party's position. Because the effect is due to random election outcomes, it does not reflect a change in voter preferences. In other words, parties seem to overreact to the electoral success of the populist party. The effect grows over time as the populist party becomes more successful. On average, a one standard deviation increase in populist seat share (due to closely elected candidates) leads to a 0.1 standard deviation decrease in the average distance between mainstream parties and the populist party.

Ideological convergence takes place primarily on the liberal-conservative policy dimension, which describes social and cultural values (for example views on immigration and environmental policies), and it can be observed for parties across the political spectrum. The finding demonstrates that populist representation can amplify the populist shift of the political space. Instead, there are no significant effects on the economic policy dimension. Mainstream parties may adjust their position on social and cultural issues to target voters who are conflicted between their economic and social preferences. I show suggestive evidence that convergence is to some degree simultaneous—mainstream parties become more conservative, and the populist party becomes slightly more moderate. Only the Green party, whose platform strongly emphasizes socially liberal issues, clearly increases its ideological distance to the populist party.

The results are consistent with the interpretation that in order to compete against the electoral threat of the populist party, mainstream parties shift closer to the populist platform. This adjustment takes place primarily on the dimension which is more emphasized by the populist party.

Moreover, parties may be willing to adjust their positions on their secondary areas even when the prior distance is long. However, when the prior distance is long and the dimension is a primary policy area for the party, incentive for convergence is low. This is reflected in the different reactions of the two socially liberal parties—the left-wing party which converges, and the green party which moves away from the populist party. The left-wing party is first and foremost concerned with economic issues, whereas the Green party prioritizes liberal issues.

This paper contributes to several strands of literature. First, it speaks particularly to the effects of populism (for a comprehensive review see Guriev and Papaioannou 2020). Previous literature has focused on the drivers of populism, showing that adverse economic conditions have contributed to changes in voter preferences and the initial rise of the populist parties (Algan et al. 2017; Colantone and Stanig 2018; Fetzer 2019). Populist governments have been linked with rising protectionism and slower economic growth (Fajgelbaum et al. 2020; Funke, Schularick and Trebesch 2020). Electing populist politicians has also non-economic consequences, such as undermining democratic institutions (Funke, Schularick and Trebesch 2020), erosion of social norms (Bursztyn, Egorov and Fiorin 2020), and even hate crime against immigrants (Müller and Schwarz 2020; Romarri 2020). My paper speaks particularly to the effects of electing populist politicians by demonstrating that increased populist representation can spread populist ideologies.

Second, this paper contributes to the literature on party competition, particularly regarding the supply-side of politics. I show that populist party representation affects mainstream parties' ideological positions. The paper closest to mine is Abou-Chadi and Krause (2020), who show that when the radical right barely reaches the electoral threshold of gaining a seat in the parliament, mainstream parties positions on multiculturalism move closer to the radical right position. I provide evidence of a more general effect of increased seat share and examine the impact on a broader policy dimension. Another difference to my paper is that Abou-Chadi and Krause (2020) study the question in a cross-country setting and use manifestos to measure party positions, which may overstate the response of the party leadership. I examine a set of parties in several elections within the same

institutional setting and estimate an effect that stems from the reactions of individual candidates. More generally, my paper is related to the literature on the effects of political representation. This literature examines how party power (Lee, Moretti and Butler 2004; Ferreira and Gyourko 2009; Meyersson 2014; Folke 2014; Freier and Odendahl 2015; Pettersson-Lidbom 2008) and politicians' personal characteristics influence policy (Pande 2003; Clots-Figueras 2011; Bhalotra et al. 2014; Hyytinen et al. 2018).

Finally, this paper contributes to the literature on estimating party positions. There is a large literature on using content analysis to estimate ideological positions from political text, most prominently from party manifestos (see e.g. Laver, Benoit and Garry 2003; Budge et al. 2001; Adams et al. 2006). Party manifestos are an important resource in the study of politics, but a significant caveat is that analysis is typically possible only at national level. Moreover, manifestos are strategic documents that reflect the position of the party leadership, and they are unlikely to coincide with the average position of the party's candidates. Another approach to estimating party positions is analysing voting records (Heckman and Snyder 1997; Lee, Moretti and Butler 2004), which has the advantage of measuring actual policy decisions instead of campaign speech. The drawback is that the method uses information only on elected politicians. I add to this literature by using new data on individual candidates' preferences to determine parties' ideological positions. I also provide a methodological contribution by applying an underutilized model of latent variable estimation—item response theory—that can help overcome limitations in survey design.

The rest of the paper is organized as follows. Section 2 describes the institutional background of the analysis. Section 3 discusses the conceptual framework. Section 4 describes the data. Section 5 presents the measurement model used to estimate ideological positions. Section 6 describes the empirical strategy and section 7 presents the main results. Section 8 further explores possible mechanisms. Section 9 concludes.

2. Background

2.1. Political parties in Finland

Both municipal and parliamentary elections in the past decades have been dominated by the Social Democratic Party, the Centre Party and National Coalition, who represent the political left, center and right, respectively. Other parties that have continuously held seats in the parliament and in municipal councils include the Left Alliance, Greens, Swedish People's Party, and Christian Democratic Party. The emergence of the populist Finns Party (formerly known as True Finns) in the early 2000's represents a significant change in the previously very stable party system (Ylä-Anttila and Ylä-Anttila 2015). Similarly to other populist parties in Europe, the Finns Party started to gain popularity following the Great Recession. Their vote share started increasing in the 2007 parliamentary and 2008 municipal elections, and it surged in the 2011 and 2012 elections. Since 2011, The Finns Party has been among the most successful parties in parliamentary elections, together with Social Democrats, National Coalition and Centre Party. The Finns Party was part of the government coalition from 2015 to 2017.[1]

Table 1 presents the vote shares of parties in municipal elections. In addition to the eight main parties, there are a number of small parties that generally do not have representation in the national parliament. Many municipalities also have local, often independent or one-agenda political groups that are not registered parties and are often formed just to participate in single elections.

In a 2019 survey (KAKS 2020), voters placed Centre, Christian Democrats, Finns Party, Swedish People's Party and National Coalition to the political right, with National Coalition most on the right and Centre Party closest to the political center. The majority of respondents place Left Alliance, Social Democrats and Greens to the political left. The Centre party has deep agrarian roots, and as most Finnish municipalities are still relatively rural, it remains the dominant party in municipal elections. At

1. The party left the coalition mid term after the party leadership changed and majority of the party's MPs formed a new parliamentary group. The splinter party Blue Reform did not win any seats in the preceding elections.

Table 1: Party vote shares (%) in municipal elections

	1996	2000	2004	2008	2012	2017
National Coalition	21.6	20.8	21.8	23.4	21.9	20.7
Social Democratic Party	24.5	23.0	24.1	21.2	19.6	19.4
Centre Party	21.8	23.8	22.8	20.1	18.7	17.5
Greens	6.3	7.7	7.4	8.9	8.5	12.5
Finns Party	0.9	0.7	0.9	5.4	12.3	8.8
Left Alliance	10.4	9.9	9.6	8.8	8.0	8.8
Swedish People's Party	5.4	5.1	5.2	4.7	4.7	4.9
Christian Democrats	3.2	4.3	4.0	4.2	3.7	4.1
Others	5.9	4.7	4.2	3.3	2.6	3.3

the national level the Centre party has a similar level of support as the Social Democrats, National Coalition, and since 2011, the Finns Party. The Finns Party, Left Alliance and Greens have somewhat higher support in parliamentary elections than in local elections. The Swedish People's Party is a centrist party that represents the Swedish speaking minority in Finland. Although it has been a part of most government coalitions since the Finnish independence, in the municipal level it is mostly present in regions with significant Swedish speaking populations.

The Finns Party is a self-identified populist party. The founder of the party Timo Soini has on several occasions described himself and the party as populist (see e.g., Soini 2019). The party programs are nationalistic and conservative. In the 2006–2014 Chapel Hill Expert Surveys (CHES) it was classified as a radical right party (Bakker et al. 2015; Polk et al. 2017). The 2014 survey asked experts to rank which policy issues were most important for each party. Based on these responses the three most important issues for Finns Party were anti-elite rhetoric, and conservative positions on EU integration and social lifestyle (e.g. LGBTQ rights, gender equality). Table 2 presents the rankings.

According to a 2009 survey by the Finnish public broadcasting company YLE, the majority of Finns Party supporters had previously voted for Centre Party or Social Democrats.[2] Finns Party also attracted supporters from National Coalition and Left Alliance, as well as voters who didn't vote in the previous election. An analysis of voter surveys reveals that

2. See https://yle.fi/uutiset/3-5725053

Table 2: Party classification and most important issues. Source: CHES 2014

	Classification	Issue #1	Issue #2	Issue #3
Centre Party	agrarian/centre	decentralization	urban vs rural	public services vs taxes
Social Democratic Party	socialist	public services vs taxes	redistribution	state intervention
National Coalition	liberal	public services vs taxes	deregulation	redistribution
Finns Party	radical right	anti-elite rhetoric	EU integration	social lifestyle
Left Alliance	radical left	public services vs taxes	redistribution	state intervention
Greens	green	environment	social lifestyle	multiculturalism
Swedish People's Party	regionalist	ethnic minorities	public services vs taxes	multiculturalism
Christian Democrats	confessional	religious principles	social lifestyle	public services vs taxes

in 2011 parliamentary elections 40% of Finns Party supporters were blue collar workers, which is similar to the share of blue collar workers among supporters of Left Alliance. Both voters of Finns Party and Social Democrats named the other party as their number two choice, whereas Finns Party supporters saw Left Alliance as too left-wing. A notable share of the party's support also consists of entrepreneurs, in which sense it resembles the right-wing National Coalition party (Rahkonen 2011).

Ylä-Anttila and Ylä-Anttila (2015) suggest that key factors driving support for the populist party have been a scandal related to election funding in the 2007 parliamentary elections, and the European debt crisis, which was an important issue in the 2011 parliamentary elections. Particularly members of the Centre party were implicated in the election funding scandal. The Finns Party also successfully started an immigration debate that dominated the media during the 2011 parliamentary and 2012 municipal elections. Opposing immigration together with welfare chauvinism remained key issues on the party's agenda.

2.2. Municipal elections

Finland has proportional electoral system with open party lists. Municipal elections are held every four years to elect the members of the municipal council.[3] The minimum size of a municipal council is determined as a step function of population, but the council can set the number of councillors higher. The number of seats ranges ranges from 13 to 85. Candidates are nominated by registered political parties or by constituency associations

3. For the 2017 election the election day was moved from October to April, which made the 2012 term slightly longer.

established by eligible voters. The number of candidates on a party list can be up to 1.5 times the size of the municipal council, however, parties are rarely able to nominate the maximum number of candidates.

Municipal councillors are elected from multi-member districts, and votes are always given to individual candidates. The election result is obtained using the D'Hondt rule, in which each candidate is assigned a comparative index that is equal to the total number of votes obtained by the party list (candidate's party or electoral coalition[4]), divided by the candidate's rank within the party list. Candidate's rank within the party list is determined by her personal votes. For example, the first ranked candidate's (the candidate with the most votes within the list) comparative index is equal to total votes obtained by the party list divided by one, and the second ranked candidate's comparative index is the total votes obtained by the party list divided by two, and so forth. The council seats are allocated to the candidates with largest comparative indices in the municipality. Because of the electoral system, parties have an incentive to nominate as many candidates as they can, and even the largest parties have unknown candidates who get very few votes.[5]

Municipal councils are responsible for the municipal functions and the municipal economy. Municipalities in Finland are charged with a wide range of responsibilities, including provision of social and health care services, comprehensive schools, upper secondary schools and vocational schools. They control the land use and construction of their area and provide water, energy and waste management. Municipalities may also take on other services, contributing for instance to employment and housing. Consequently, municipalities are major employers and also constitute a significant share of all public spending. Municipalities have the right to collect income, corporate and property taxes. The municipal tax revenue covers approximately half of the municipal expenses. Central government subsidies and service fees both cover around 20 % of expenses. The central government subsidies constitute a significant share of the national budget.

4. Local parties can form electoral coalitions, whereby in the seat allocation process the member parties are treated as a single party.

5. For instance, about 10% of Centre Party candidates received less than ten votes in 2012 elections.

3. Conceptual framework

The econometric strategy is to estimate how an exogenous increase in populist party representation—due to randomness of close elections—influences ideological distances between parties. In other words, I examine how the presence of a populist party affects other parties' positions while holding voter preferences and all else equal.

Even when there is no change in voter preferences, the electoral threat posed by populist party can influence other parties' positions. In a closely related paper, Abou-Chadi and Krause (2020) argue that a challenger party can change the competitive space even if voter distribution remains unchanged, as gaining representation provides resources and media attention, making the party more electorally threatening. This may be true particularly for an emerging party. Moreover, mainstream parties may also react because of a perceived or expected change in voter preferences. On the one hand, parties may attribute the seats gained in close elections to shifts in voter preferences. On the other hand, mainstream parties can anticipate that with more representatives, the party is better able to influence voter preferences, either by convincing voters of its policies or by increased salience of its agenda. Legislative presence allows a party to take part in legislative bargaining, introduce proposals and try to convince other parties' councillors to support their proposals.

Seat shares also influence whether a party is part of the governing coalition or not. Relatively small shifts in parties' representation can influence policy outcomes (Folke 2014; Fiva, Folke and Sørensen 2018). Folke (2014) shows that party representation has significant effects on what policies are implemented, especially in terms of secondary policy areas. The interpretation is that these policies are determined according to relative allocation of power within the governing coalition, instead of bloc majorities. Small parties may also trade in support with their larger coalition partners—a populist party might for instance support another party's economic policies in exchange for support on its immigration policy. Both increased media attention and the impact on policies can then increase salience of the populist agenda and feed back into increased voter demand for populism (Rodrik 2020).

To provide intuition and structure of how an exogenous increase in populist representation can influence other parties' ideological positions, I propose a simple model of party competition. It is based on a basic model of electoral behaviour with sincere voters and two parties. This static model illustrates the logic of mainstream parties' response to populist representation.[6] In the model there are two parties, one of which is a mainstream party and one is a populist party. The populist party will always propose its most preferred policy, while the mainstream party has conflicting interests over influencing policy and maximizing votes. Elections are proportional and the implemented policy is a convex combination of parties' proposed policies, weighted by their seat shares. Voters vote for the party whose proposed policy is closest to their own ideal policy.

First, as in standard models of spatial competition, the model shows that increased voter demand for more populist policies increases the mainstream party's incentive to move towards the populist position. Descriptive evidence shows that emergence of populist parties is associated with mainstream parties' shift to the right on the liberal-conservative dimension (see e.g., Guiso et al. 2017; Schumacher and Van Kersbergen 2016; Wagner and Meyer 2017). Second, the magnitude of the mainstream party's reaction varies depending on the strength of its policy focus. The more policy sensitive the mainstream party is, the lower pay-off it receives from converging towards the populist position. I then introduce an exogenous shock to parties' seat shares, whereby all else being equal, the seat share of the populist party increases and the mainstream party decreases. This shock creates disproportionality between vote shares and seat shares, and can be thought of as resulting from random election outcomes between tied candidates. As a results, the mainstream party must converge more to obtain the same seat share.

4. Data

I exploit comprehensive data on individual candidates' political preferences. The data comes from a prominent voting advice application (VAA) by the Finnish public broadcasting company YLE. The VAA survey consists

6. The formal model is presented in Appendix B.

of statements on policy and ideological views, most of which are Likert-type questions, where the candidate is asked to respond how much she agrees or disagrees with the statement. The questionnaire is open to all candidates before the elections, and about a month before the election day the responses are made public for voters to find information about the candidates.

The purpose of VAA is to make the candidates' views public and thereby help voters compare and find suitable candidates. Voters can use the VAA to find candidates who hold similar views with them by filling the same survey. The VAA compares the voter's and candidates' answers and finds the closest candidates. Voters can also browse through candidate responses without answering the questionnaire themselves. Using the VAA is free of charge for both the candidates and voters. In Finnish elections votes are always given to individual candidates, which makes the VAA a particularly popular tool among voters. According to the national municipal election study from 2017, more than 40% of the respondents said that the VAA had at least some influence over their voting decision. Among 18-34-year-olds, the VAA from YLE was the most important source of information (Borg 2018). In a recent study, Ilmarinen et al. (2022) compare candidates' answers in the VAA with the Finnish Parliamentary Candidates Survey, which is a confidentially administered post-election survey. They show that policy positions computed from responses to the VAA are very strongly correlated with positions computed from the post-election survey. Therefore, it is unlikely that candidates respond strategically without the responses reflecting their policy positions.

Unlike most survey data on politicians, an important advantage of the VAA data is that it includes information also on the non-elected candidates. I have obtained the data on candidates' responses related to three municipal elections, 2008, 2012 and 2017. Just over half (53%) of all candidates responded to the survey. Parties have an incentive to field as many candidates as they can, since the total number of votes the party receives determines the number of seats it will obtain. The number of candidates a party can nominate is 1.5 times the number of councillors to be elected, and parties often struggle to fill their candidate lists. Recruiting candidates

who are not serious about running likely brings down the response rate.[7] Table (A.4) in the Appendix reports how response probability is related to candidate, party and municipality characteristics. More experienced candidates (incumbent municipal councillors and MP's) are more likely to respond. Response rate is also somewhat higher among women, younger candidates, and in larger municipalities.

The VAA data allows me to obtain measures of party positions that originate from the opinions expressed by individual candidates, as opposed to just the party leadership. Individual candidates' views can then be aggregated to municipality level, which means that my measure of ideology has both cross-sectional and time variation. In addition to the VAA responses, the dataset contains information on municipal elections and municipalities' socio-economic characteristics. The data on elections is obtained from Statistics Finland and the Ministry of Justice. In addition to information on election outcomes, it includes information on the candidates' age, gender and previous political experience. I also collect information on parties' electoral coalitions. Data on municipality characteristics is obtained from Statistics Finland. Descriptive statistics on municipalities, parties and candidates are available in the Appendix A.

5. Measuring ideological positions

Because the list of questions in the VAA changes between election years, it is not possible to directly compare the survey responses. For instance, a year-by-year factor analysis might produce year specific rather than common factors. Item response theory (IRT) models can distinguish and estimate person and item parameters separately, whereas factor or principal component analysis only focuses on the respondent's latent trait. Although IRT models have been more commonly used to measure aptitude, the mathematical models can be as well applied to measure personality, beliefs, or

7. In comparison, in parliamentary elections parties can nominate much fewer candidates, and the response rate is about 90% (see e.g, https://yle.fi/uutiset/3-10688075)

attitudes (Ostini and Nering 2006).[8]

Because the candidates who responded to the VAA in different years are not equivalent, parameter estimates from different samples are not necessarily on the same scale. However, as the surveys include a subset of common items, estimated parameters can be put on the same scale even though majority of the questions changes (Kolen and Brennan 2004). The data from all the survey years is pooled together, and the parameters of the common items are constrained to be equal across years (Kolen and Brennan 2004). The purpose of the anchor items is to separate respondent group differences from survey wave differences. This is possible due to the assumption that the values of the item parameters are a property of the item, not of the group that responded to the item. The respondent's ability is in turn assumed invariant with respect to the items used to determine it. In contrast, factor analysis focuses only on the latent trait.[9]

I estimate a four dimensional IRT model in order to achieve sufficient model fit and to be able to interpret and distinguish the dimensions form one another. However, I test the robustness of the econometric results against different dimensionality of the ideology space and show that the main results are not very sensitive to the dimensionality of the model (see Section D). For a more detailed description of the measurement framework, see Appendix C.

The estimated latent trait distributions are presented in Figure 1. Table 3 provides examples of the statements that describe the dimensions. The first dimension, *Left-Right*, describes preferences on economic policy. This dimension has the highest explanatory power, as it captures to a large extent the traditional economic policy divide. Many of the survey items describing it concern provision of health care and social services, which make up the majority of local government responsibilities. More positive values indicate support for limiting the size of the local public sector, and

8. IRT models are commonly used in psychological measurement, e.g. the Programme for International Student Assessment (PISA), National Assessment of Educational Progress (NAEP) and Trends in Mathematics and Science Study (TIMSS) rely on IRT (Davier et al. 2019).

9. The VAA data has been previously used by Savolainen (2019) to measure politicians' policy positions by constructing summary indices from selected survey items, and by Meriläinen (2019) by pooling the data and creating a single cross-sectional measure using principal component analysis.

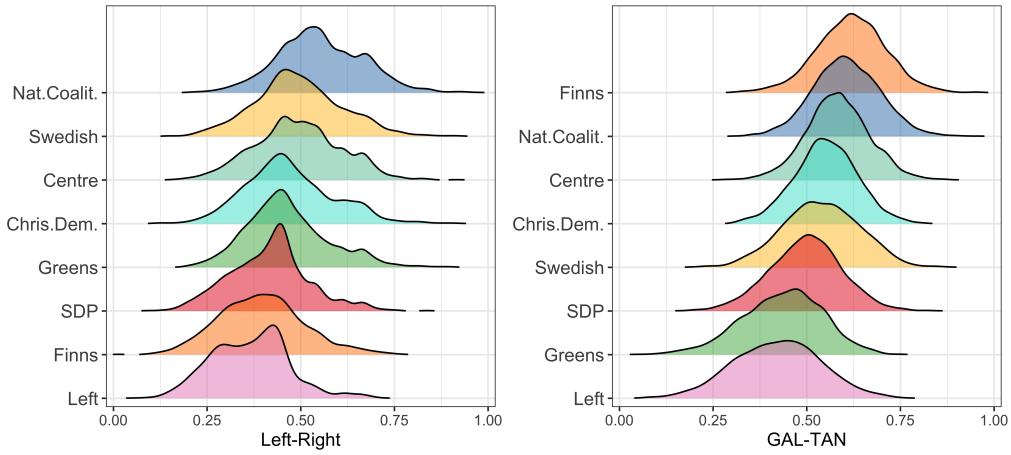

Figure 1: Distributions of candidates on Left-Right and GAL-TAN dimensions

opposition towards increasing taxation or progression in user fees. Left Alliance, Social Democratic Party and Finns Party are the most left-wing parties, and National Coalition is visibly the most right-wing party. Greens, Centre, Christian Democrats and Swedish People's Party are economically in the middle, although there is considerable dispersion within all parties.

The second dimension, *GAL-TAN*, captures candidates' social and cultural views.[10] More positive values indicate more conservative attitudes, support for authoritarian views, and negative attitudes towards immigration and environmentalism. It could be described as socially liberal-conservative, as it is often used to describe how political parties' are positioned in terms of non-economic issues.[11] Left Alliance and Greens are clearly on the more liberal end of the axis. Finns Party, National Coalition and Centre are relatively close to one another on the conservative end. Appendix Table A.5 presents correlations between local party groups' ideological position and party and municipality characteristics.

The other two dimensions of the estimated model are related to economic policy, and have less explanatory power over the variation in can-

10. The abbreviation stands for Green, Alternative, Libertarian and Traditional, Authoritarian, Nationalist.

11. For instance, in the Chapel Hill Expert Survey assesses national parties on a general left–right dimension, economic left–right, and "social left–right dimension," which is also described as "new politics" or green/alternative/libertarian (GAL) and traditional/authoritarian/nationalist (TAN) dimension (Bakker et al. 2015; Polk et al. 2017).

Table 3: Examples of statements describing the different policy dimensions

Left-Right	“"Privatization of municipal health care would increase efficiency and lower the costs.”	+
	“Which of the following services should we privatize? Elder care”	+
	“Which of the following services should we privatize? Day care”	+
	“Which of the following services should we privatize? Social welfare”	+
	“The old should have a universal right to a retirement home. ”	−
	“To balance the municipal budget we should cut down municipal services”	+
GAL-TAN	“It is nowadays too easy to be admitted to social welfare.”	+
	“My municipality should take in refugees.”	−
	“We need strong leadership that can solve problems without the need for compromise”.	+
	“The environmental and natural values in my municipality can be flexible if it can create more jobs.”	−
	“Our society would have fewer problems if people were treated more equitably.”	−
	“If one of the parents is at home, the children should not have a right to daycare.”	+

Left-Right is increasing in right, and GAL-TAN is increasing in TAN. A plus sign indicates that agreement is associated with a more positive value on the dimension.

didates' VAA responses.[12] Moreover, the anchoring of these dimensions across the survey years is weak, which makes their interpretation more difficult and reduces their usefulness as measures of ideology. Therefore, these additional dimensions serve first and foremost to filter out variation that does not fit into the two dimensions of interest. The third dimension describes preferences towards redistribution, particularly in terms of eligibility to public services and generosity of public sector services versus taxation. The fourth dimension concerns various local issues, it is described by items about provision of secondary municipal services (e.g., waste management, zoning), miscellaneous local activities and management of municipal property. Although the main results are not sensitive to the dimensionality of the estimated IRT model (see Section D), the four dimensional model is preferable to a lower dimensional one as including the latter two dimensions reduces noise in the dimensions of interest.

6. Econometric approach

To estimate the effect of Finns Party representation on other parties' ideological distance to Finns Party I use the following regression equation

$$Y_{pmt} = \alpha + \beta PS_{mt-1} + X'_{pmt}\delta + \varepsilon_{pmt} \tag{1}$$

where Y_{pmt} is a measure of ideological distance between party p and Finns Party in municipality m at time t. PS_{mt-1} is the share of seats won by the

12. Distributions of candidates on all four dimensions are presented in the Appendix Figure F.1.

Finns Party in the previous elections, X_{pmt} is a set of controls, and ε_{pmt} is the error term.

The main outcome of interest is a party's distance to the mean position of the Finns Party in the same municipality. This is constructed by first computing for each candidate the Euclidean distance to the local Finns Party mean. In the case of a single dimension, this is simply the square root of the squared difference (i.e. the absolute difference), and in the case of overall ideological distance, this is square root of the sum of squared distances across all dimensions (i.e. distance in four dimensional Euclidean space). A local party's distance to Finns Party is constructed by first measuring the distance for each of its candidate, and then averaging across the candidates.[13] If both parties were to shift to the same direction, the movements could cancel each other out and the relative distance would remain unchanged. In order to understand to what extent the changes in relative distances are driven by different parties shifting their positions, I also use the average position of a party as a dependent variable.

The challenge in the empirical analysis is to distinguish the effect of party representation from the effect of voter preferences, because the party composition of a municipal council is of course not random. The OLS estimates of equation (1) would likely be biased due to omitted variables. The seat share of a party in a given municipality may be correlated with unobserved characteristics that also affect other parties' behaviour in the municipality. For instance, if Finns Party candidates are elected in municipalities with preference for populist ideology, this would bias the results.

6.1. Identification strategy

To identify the effect that electing one more Finns Party candidate has on other parties' ideological positions, I take advantage of close elections. Populist candidates who won in close elections will be elected in similar districts and under similar circumstances than other parties' candidates who won in close elections. The thought experiment of the identification

13. The distance on dimension θ is given by $\frac{1}{N_{pmt}} \sum_i^{N_{pmt}} \sqrt{\left(\theta^p_{imt} - \bar{\theta}^{Populist}_{mt}\right)^2}$, where N_{pmt} is the number of candidates in party p in municipality m in year t, θ^p_{imt} is candidate i's position and θ^{PS}_{mt} is Finns Party's mean position in municipality m in year t.

strategy is the following: Finns Party candidates are randomly assigned to some municipal councils. This constitutes a "populist supply shock." Focusing on the exogenous increase in populist representation means that the influence of voter preferences is filtered out. I can then estimate how populist representation influences ideological positions of other parties. This impact could arise due to a strategic response to the increasing electoral threat posed by the Finns Party, or a change in beliefs and attitudes.

Because municipalities are unitary multi-seat districts with proportional elections, it is not possible to construct a forcing variable at the municipality level and use a regression discontinuity design. Instead, following Clots-Figueras (2011) and Hyytinen et al. (2018), I use variation created at the candidate level and aggregate it into a municipality-level instrument for populist seat share. Because of proportional open-list elections, whether a candidate is elected depend on her own votes, the votes of other candidates in her party, and the votes of all other parties. Individual candidates can face multiple competitive margins, and determining electoral closeness is not straightforward. To identify electoral closeness I apply a simulation approach introduced by Kotakorpi, Poutvaara and Terviö (2017). I simulate elections by resampling votes from the empirical vote distribution, and recalculate winners based on the d'Hondt seat allocation rule.[14] Because the number of resampled votes is less than the actual votes, the simulated vote shares have deviations from their empirical counterparts, and this produces variations in the simulated election outcomes. Therefore, the candidates who are closely elected experience many wins and losses in the simulated elections.

Following Kotakorpi, Poutvaara and Terviö (2017), I calculate for each candidate i the fraction τ_i of the bootstrap elections in which that candidate was elected. As there are several parties contesting on average 32 seats, there are many possible vote shifts within and between parties that can affect whether a candidate is elected or not. The simulation approach provides aggregates closeness across multiple margins to a single measure. Candidates who have τ_i close to one are sure winners, whereas candidates

14. The number of resampled votes equals 20 times the municipal council size, and number of simulated elections is $50,000$.

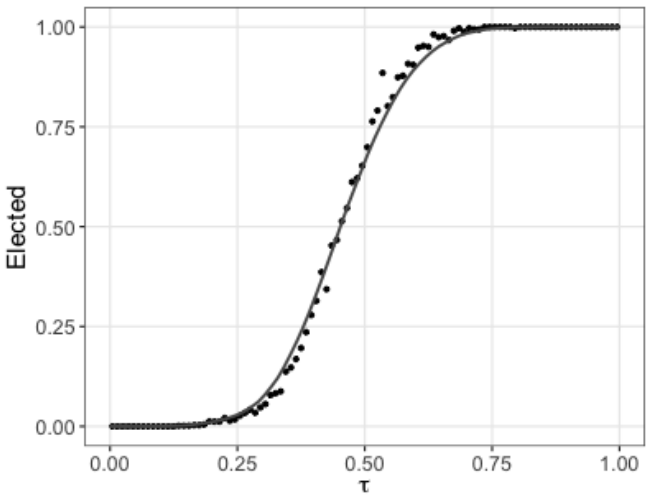

Figure 2: Share of elected candidates by fraction of simulations in which the candidate was elected.

with τ_i close to zero are almost never elected.[15] Figure 2 plots the the share of candidates who are actually elected for a given τ_i. The higher τ_i, the more often candidate i is elected in the simulated elections. Figure 3 plots the distribution of τ. In municipal elections there is a large share of candidates who have very low chance of being elected, which causes some bunching at the lower end of the distribution. Appendix Figure F.2 presents the distribution of candidates' electoral closeness for elected and non-elected candidates.

A candidate is considered to be "close" if her distance to the electoral cutoff is within some small bandwidth λ. I define the bandwidth for closeness as the range of τ where some candidates fall below the cutoff but are in reality elected, or are above the cutoff but are not actually elected. The benchmark bandwidth is set at $\lambda = 0.2$ to get as much variation in the instrument as possible.[16] I also conduct the estimation with different bandwidths, and show that the results are robust to a wide range of bandwidths (see Appendix D for details).

15. For a more detailed description of the bootstrap procedure, see Kotakorpi, Poutvaara and Terviö (2017). For a related method, see Freier and Odendahl (2015), who add random noise to the observed votes to identify close elections.

16. This bandwidth corresponds to on average a 0.2 percentage point difference in vote shares, or a difference of 5.5 votes, between closely elected and closely defeated candidates.

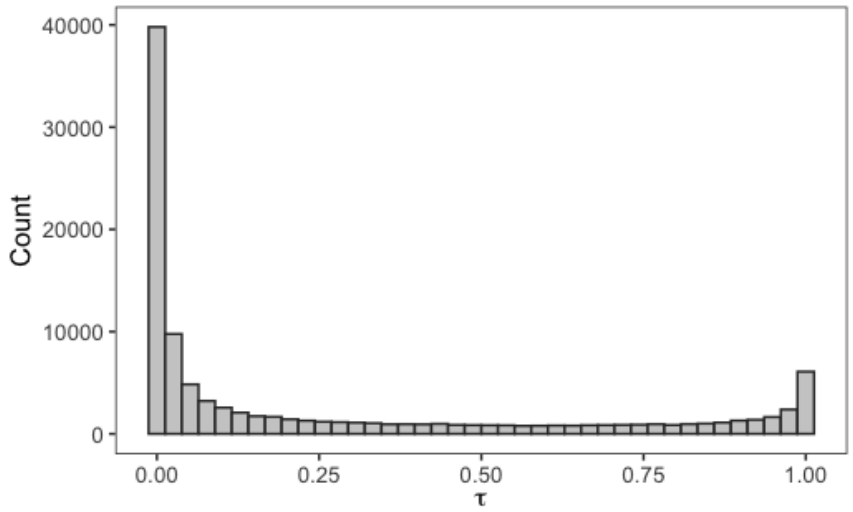

Figure 3: Distribution of candidates' electoral closeness

Table 4 presents summary statistics for close Finns Party candidates. Overall, candidates' characteristics are well balanced between closely elected and defeated candidates. Population size is larger among the non.elected candidates, which reflects the fact that there are more candidates in larger municipalities and a smaller share of them are elected. As council size is determined by population, it is also a little bit higher. The difference in vote shares also reflects this—although the difference in votes is not significant, being elected is mechanically more likely in smaller municipalities with less candidates, which increases average vote shares for elected candidates. In larger municipalities there are on average more candidates per seat. These differences are considerably larger when we compare all elected candidates to those not elected (see Table A.6). Table A.7 compares municipality characteristics for closely elected Finns Party candidates and other parties' closely elected candidates. It shows that different parties' closely elected candidates are on average elected in similar municipalities. Table A.8 shows that the distribution of candidates and seats won by different parties in close contests are very similar to the distribution of all candidates and seats won in different circumstances.

Equation (1) can then be estimated in 2SLS, where the Finns Party seat share, $Populist_{mt}$, is explained by the fraction of seats in municipality m won by Finns Party in close contests, $PopulistClose_{mt}$. This is the part

Table 4: Summary statistics for closely elected and defeated Finns Party candidates

	Elected			Not Elected				
	N	Mean	SD	N	Mean	SD	Difference	p-value
Age	405	47.58	13.07	488	47.43	13.27	0.15	0.86
Council size	434	38.29	14.57	514	40.49	16.41	-2.20	0.03
Female	434	0.26	0.44	514	0.25	0.44	0.00	0.92
GAL-TAN position	181	0.45	0.18	235	0.47	0.17	-0.01	0.48
Incumbent	434	0.13	0.33	514	0.09	0.28	0.04	0.05
Left-Right position	181	0.36	0.16	235	0.38	0.16	-0.02	0.28
No. parties	434	4.26	1.11	514	4.40	1.10	-0.13	0.06
Population	434	31666	62603	514	50145	105567	-18480	0.00
Population, urban %	434	36.78	42.38	514	42.65	44.31	-5.87	0.04
Unemployed, %	434	10.28	3.70	514	10.16	3.66	0.12	0.61
VAA Response	434	0.46	0.50	514	0.49	0.50	-0.03	0.44
Vote share, %	434	1.15	0.74	514	0.91	0.67	0.24	0.00
Votes	434	78.06	75.67	514	74.15	75.97	3.91	0.43

The table presents summary statistics for close Finns Party candidates in 2004-2012 elections. The Left-Right and GAL-TAN position are normalised to the zero one interval. Number of parties is the effective number of parties as suggested by Laakso and Taagepera (1979), computed as inverse of the sum of squared party vote shares.

of Finns Party seat share that is as good as random. When the share of seats won by Finns Party increases due to randomness of close contests, so does the total share of Finns Party seats. The first stage of the 2SLS model is given by

$$Populist_{mt} = \pi PopulistClose_{mt} + X'_{pmt}\gamma + \nu_{mt} \tag{2}$$

and the second stage by

$$Y_{pmt} = \beta Populist_{m,t-1} + X'_{pmt}\delta + \varepsilon_{pmt} \tag{3}$$

Y_{pmt} is a measure of ideological distance between party p and Finns Party in municipality m in election year t, and X_{pmt} is a set of municipality and party controls. Because the treatment only varies at municipality level, standard errors are clustered at municipality level. I use this model to estimate how exogenous increase in Finns Party representation influences parties' ideological positions in subsequent elections in the same municipality.

7. Results

7.1. Ideological distance to the populist party

Table 5 presents estimates for ideological distance to Finns Party. The unit of analysis is party p in municipality m in year t, i.e. the analysis is at local party level. The dependent variable is overall ideological distance (i.e. across all dimensions) between Finns Party and party p. I start by analyzing the average effect across parties, and then move on to examine heterogeneous effects by party. The estimates in Table 5 show the average effect of Finns Party representation across parties and election years. All regressions control for year effects and lagged share of councilors who were closely elected. This is to account for the fact that the existence of close contests may not be random. Column (2) adds party controls, which are number of candidates by party, lagged party seat share, share of women, and average age of candidates. Column (3) adds municipality level controls, and Column (4) adds party dummies. The municipality characteristics are from one year before the election. Including party and municipality controls increases precision of the estimates.

Panel A of Table 5 presents the instrumental variable estimates of the effect of Finns Party seat share on overall ideological distance between the Finns Party and other parties. As all the columns show, Finns Party seat share is estimated to have a negative and statistically significant effect on the average ideological distance between Finns Party and other parties in the municipality. The table presents standardized coefficients, so the estimate in Column (1) means that when populist seat share increases by one standard deviation, on average other parties' distance to it decreases by 0.11 standard deviations. This corresponds to about 4% of the average distance between mainstream parties and the populist party. Although individual parties' reaction varies, and if the populist party also shifts the effects may partially cancel out, we can see that on average an exogenous increase in Finns Party seat share causes ideological convergence.

The first stage Kleibergen-Paap F-statistic is significantly different from zero and clearly shows that the instrument is strong and highly relevant predictor of Finns Party seat share. The IV estimates are only slightly

Table 5: IV estimates for ideological distance to Finns Party

	Ideological distance to populist party			
	(1)	(2)	(3)	(4)
Panel A: IV				
$\text{Populist}_{m,t-1}$	-0.107^{*}	-0.117^{**}	-0.124^{**}	-0.095^{*}
	(0.056)	(0.055)	(0.057)	(0.055)
Panel B: OLS				
$\text{Populist}_{m,t-1}$	-0.107^{***}	-0.110^{***}	-0.111^{***}	-0.077^{**}
	(0.029)	(0.029)	(0.030)	(0.030)
Panel C: First stage				
$\text{PopulistClose}_{m,t-1}$	0.473^{***}	0.472^{***}	0.458^{***}	0.455^{***}
	(0.042)	(0.042)	(0.045)	(0.045)
Observations	3248	3248	3248	3248
K-P F-statistic	88	90	82	81
Party controls		✓	✓	✓
Municipality controls			✓	✓
Party dummies				✓

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$. Robust standard errors clustered at municipality level. Coefficients are standardized. Party controls include number of candidates, lagged seat share, average age, and share of women. Municipality controls include lagged effective number of parties, log population, shares of young and old, unemployment rate, median income and education. All specifications control for lagged share of close seats in the municipality.

larger than the OLS estimates in Panel B. The OLS model does not control for the endogeneity of populist seat share, and the estimates are more affected by having more controls. Panel C of Table 5 shows estimates for the first stage.

Next, I examine alignment on different policy dimensions. Table 6 presents IV estimates for local parties' distance to Finns Party by ideological dimension. Panel A presents a set of specifications where the outcome is ideological distance to Finns Party on the Left-Right dimension, and Panel B presents specifications where the outcome is distance on the GAL-TAN dimension. The results show that the effect for overall ideological distance is driven by convergence on the GAL-TAN dimension. As the platform of Finns Party strongly emphasizes social and cultural issues, rather than economic policy, with immigration being one of its most important issues, it makes sense that the party effect is most pronounced on

Table 6: IV estimates for ideological distance to Finns Party: by dimension

	(1)	(2)	(3)	(4)
Panel A: Left-Right				
$\text{Populist}_{m,t-1}$	−0.059	−0.060	−0.064	−0.056
	(0.047)	(0.047)	(0.049)	(0.049)
Panel B: GAL-TAN				
$\text{Populist}_{m,t-1}$	-0.111^{**}	-0.124^{**}	-0.130^{**}	-0.100^{*}
	(0.056)	(0.054)	(0.057)	(0.054)
Observations	3248	3248	3248	3248
K-P F-statistic	88	90	82	81
Year dummies	✓	✓	✓	✓
Party controls		✓	✓	✓
Municipality controls			✓	✓
Party dummies				✓

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$. Robust standard errors clustered at municipality level. Coefficients are standardized. The dependent variable in Panel A is ideological distance to Finns Party on the Left-Right dimension, and on Panel B ideological distance on the GAL-TAN dimension. Party controls include number of candidates, lagged seat share, average age, and share of women. Municipality controls include lagged effective number of parties, log population, shares of young and old, unemployment rate, median income and education. All specifications control for lagged share of close seats in the municipality.

this dimension. As discussed in Section 3, the magnitude of a party's reaction is expected to vary depending on the strength of its policy focus. Since most of the other parties emphasize more the economic policy dimension, adjusting positions on the GAL-TAN dimension may be both more beneficial and more feasible for most parties. The point estimates suggest that some alignment may also take place on the Left-Right dimension, but the estimates are not statistically significant. The effect of Finns Party representation has a much stronger and statistically significant effect on ideological convergence on the GAL-TAN dimension.

Table 7 presents cross-sectional results that show how the treatment effect varies over time. The treatment, i.e., the populist seat share, is based on the electoral results of the previous elections. In Panel A, the treatment is based on 2004 elections, in which the Finns Party was still relatively unknown. Obtaining three seats in the national parliament in 2003 had increased the public's awareness of the party, but in the 2004 elections it still fielded candidates only in one third of the municipalities

and received just one percent of the vote. Therefore, in the first cross-section, the margin I am exploiting is relatively insignificant. Moreover, other parties were not likely to see the Finns Party as a threat, and the views advocated by the Finns Party still seemed to be commonly rejected by voters.

In the 2008 elections the populist party was fielding more candidates and had a much wider presence across municipalities than before. The Finns Party multiplied its council seats in 2008, and its support continued to surge in the 2011 parliamentary elections, increasing the party's recognition and making it a serious competitor to other parties. The average effect on overall ideological distance over time seems to be mostly driven by convergence in 2012 and 2017 elections. The 2012 estimates are imprecise but relatively large in magnitude. If we look at the different dimensions, we can see that the increasing convergence is even more pronounced on the GAL-TAN dimension (see Table E.1 in the Appendix). The results indicate that the effects are linked to the national salience trends that contributed to the electoral success of the populist party.

The results so far have looked at average effects across political parties. However, parties in different positions in the political spectrum are likely to respond differently. Next, I estimate how populist representation affects individual parties. Figure 4 presents IV estimates both for overall policy distance and distances on the individual dimensions by party. Each dot represents an estimated coefficient from a 2SLS regression for a subsample that only contains a single party. For example, the first estimate shows that populist representation causes the overall ideological distance to decrease between the populist party and Left Alliance. The results are also reported in Appendix Table E.2.

Overall, Figure 4 shows the same pattern as Table 6, i.e., that ideological convergence takes place primarily on the GAL-TAN dimension. The estimates are somewhat less precise as statistical power is lower in the subsamples. Interestingly, the estimates show that distance to the populist party decreases across the political spectrum. We can observe convergence on the GAL-TAN dimension clearly for the Centre Party and National Coalition Party. The magnitude of the negative effects are also substantial for the Left Alliance and Social Democratic Party. The effect on Left-Right

Table 7: IV estimates for ideological distance to Finns Party: by year

	Ideological distance to Finns Party			
	(1)	(2)	(3)	(4)
Panel A: 2008				
$\text{Populist}_{m,t-1}$	−0.039	−0.024	0.010	0.016
	(0.059)	(0.063)	(0.062)	(0.062)
Observations	801	801	801	801
K-P F-statistic	107	102	104	99
Panel B: 2012				
$\text{Populist}_{m,t-1}$	−0.053	−0.059	−0.072	−0.063
	(0.049)	(0.048)	(0.050)	(0.047)
Observations	1310	1310	1310	1310
K-P F-statistic	70	70	68	69
Panel C: 2017				
$\text{Populist}_{m,t-1}$	−0.146	−0.174*	−0.197**	−0.181*
	(0.097)	(0.093)	(0.096)	(0.097)
Observations	1137	1137	1137	1137
K-P F-statistic	48	48	45	45
Party controls		✓	✓	✓
Municipality controls			✓	✓
Party dummies				✓

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$. Robust standard errors clustered at municipality level. Coefficients are standardized. Party controls include number of candidates, lagged seat share, average age, and share of women. Municipality controls include lagged effective number of parties, log population, shares of young and old, unemployment rate, median income and education. All specifications control for lagged share of close seats.

dimension is statistically significant only for the Left Alliance. The Greens is the only party for which point estimates are positive, which indicates that distance between the green and the populist party increases.

According to the conceptual framework outlined in Section 3, all else being equal, weaker policy sensitivity is associated with more convergence. Indeed, the different responses between the two liberal parties, Left Alliance and Greens, can be explained by their different issue emphasis. On the one hand, the Greens strongly prioritize issues on the GAL-TAN dimension, with emphasis on socially liberal policies, environmental protection, and pro-immigration policies. Therefore, any perceived shift towards the

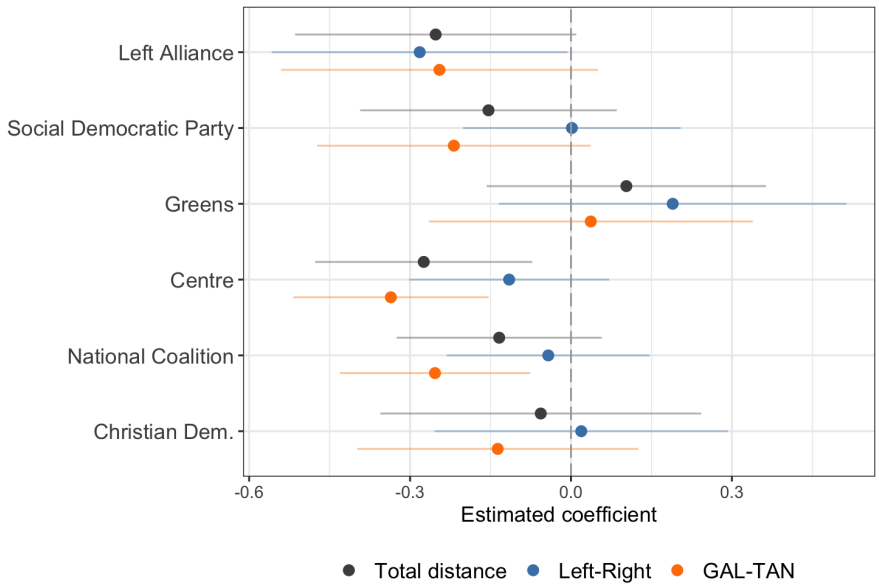

Figure 4: IV estimates for ideological distances to Finns Party: by dimension and by party.
Estimated coefficients for $PS_{m,t-1}$ for different parties. The estimates are effect sizes. The horizontal lines indicate 95% confidence intervals.

populist position could be electorally costly. On the other hand, the Left Alliance is first and foremost a working class party and prioritizes economic issues (Polk et al. 2017). Although it is economically close to the populist party, according to survey evidence many Finns Party supporters see the Left Alliance as too left-wing (Rahkonen 2011). As the party seems to be competing over the same voters as the populists, moderating its position on both dimensions could help it attract more voters.

Alignment with the populist party on the GAL-TAN dimension can also be observed for the two large rightist parties, Centre and National Coalition. They are the two nearest parties to the populists on GAL-TAN dimension, which suggests that they have electoral incentives for convergence without being constrained by too large prior ideological differences.

7.2. Party positions

We have established that ideological distance between Finns Party and most of the mainstream parties decreases. To understand whether mainstream parties are moving towards the populist position, or whether the

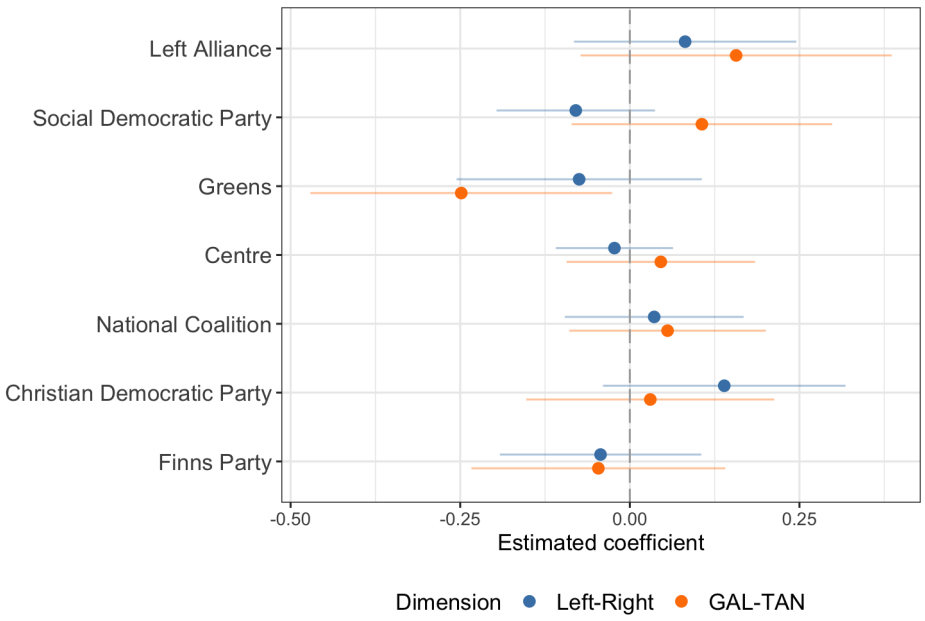

Figure 5: IV estimates for average party positions.
Estimated coefficients for $PS_{m,t-1}$ for different parties. The estimates are effect sizes. The horizontal lines indicate 95% confidence intervals.

populist party is becoming more moderate, I next examine the effect on average party positions.

Figure 5 presents estimates for 2SLS specifications in which the dependent variable is local party's average position on a given ideological dimension. A positive coefficient indicates a move to the right on the Left-Right dimension, or to a more conservative position on the GAL-TAN dimension. The results are also presented in Table E.3 in the Appendix. Although the estimates are quite imprecise, they suggest that most parties take a slightly more conservative position following an increase in populist representation. The magnitude of the effect on GAL-TAN is largest for the two left-wing parties Left Alliance and Social Democratic Party. As in the previous analysis on relative distances, there is less action on the Left-Right dimension. The Green party reacts clearly differently than the rest of the mainstream parties—an exogenous increase in the populist seat share causes the Greens to shift to a significantly more liberal position, i.e., move further away from the populist party.

The point estimates suggest that the populist party may be slightly moderating its position on GAL-TAN. Together with the previous results

Table 8: IV estimates for ideological distances to Finns Party: rerunning, incumbent and new candidates

	Ideological distance to populist party			
	All candidates (1)	Rerunning (2)	Incumbents (3)	New candidates (4)
$\text{Populist}_{m,t-1}$	-0.118^{***}	-0.090^{**}	-0.152^{**}	-0.135^{**}
	(0.043)	(0.036)	(0.060)	(0.058)
Observations	38534	17178	8265	13439
Party controls	✓	✓	✓	✓
Municipality controls	✓	✓	✓	✓
Candidate controls	✓	✓	✓	✓

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$ Robust standard errors clustered at municipality level. Coefficients are standardized. All specifications control for year effects and lagged share of close seats. Candidate controls include age and gender. Candidate controls include age and gender. Column (1) includes a dummy for rerunners and incumbency. Party controls include lagged seat share, number of candidates, average age, and share of women. Municipality controls include lagged effective number of parties, log population, shares of young and old, unemployment rate, median income and education.

on distances between parties, the results indicate that convergence is to some degree simultaneous, i.e., mainstream parties become more conservative, and the populist party becomes a bit more moderate. For instance, the estimated effects on parties' positions suggest that Social Democrats shift to a more conservative position, whereas Figure 4 shows a decrease in the distance between the Social Democrats and Finns Party on the GAL-TAN dimension.

8. Channels

8.1. Rerunning vs. new candidates

To study whether shifts in ideological positions are due to parties attracting new candidates with different views, or due to rerunning candidates adjusting their positions, I conduct a candidate level analysis for different subsamples: rerunning candidates, incumbent councillors running for re-election, and new candidates.

Table 8 presents the estimates. The dependent variable is again ideological distance to Finns Party. Column (1) is the same as the baseline regression, except now it is estimated on candidate level data. Column (2) includes only candidates who ran also in the previous election but were not elected. Column (3) includes current incumbents who are rerunning for

office, and Column (4) includes candidates who did not run in the previous election. The estimated coefficients are similar across the specifications with largest effect among incumbent candidates (Column (3)) and smallest for the rerunning non-incumbent candidates. Therefore, the candidates who ran before but were not elected seem to be most inflexible, while the new candidates that parties attract are similarly affected than incumbents.

These results are consistent with two interpretations, which are not mutually exclusive. First, adjustments in ideological positions are strategic. Incumbent candidates may have more information on successful platforms, and be therefore more responsive to electoral competition than non-incumbents. Another interpretation is that exposure to the populist party's ideas and interaction with populist candidates—e.g., in the municipal council—influences individuals' preferences. For instance, the intergroup contact theory by Allport (1954) explains how close interaction can alleviate prejudice and conflict between groups. Equal group status, common goals, cooperation and support of authorities are conditions under which contact can have positive effects, and all of these could be promoted by shared time in office. The fact that candidates who ran before but were not elected are less affected supports the latter interpretation.

8.2. Ideological cohesion within parties

It is possible that the observed ideological convergence is caused by other parties becoming more ideologically fragmented. Following Matakos et al. (2018), I measure intra party heterogeneity as Euclidean distance between a candidate and her party's average position. The longer the distances are between candidates and their own party's mean, the less cohesive the party is. Table 9 presents the IV results. As the outcome is candidate's distance to her party's mean, positive coefficients indicate less cohesion. The estimates show that increasing populist representation influences only the populist party's own internal cohesiveness. The increased heterogeneity mostly stems from the fourth dimension which concerns secondary municipal services and miscellaneous local matters. Instead, other parties' ideological cohesiveness is not affected. The point estimates are not statistically significant and small in magnitude.

Table 9: Effect of Finns Party representation on within party heterogeneity

	Left (1)	SDP (2)	Greens (3)	Centre (4)	Chris.dem. (5)	Nat.Coalition (6)	Finns (7)
Panel A: Total distance							
$\text{Populist}_{m,t-1}$	−0.040	−0.022	−0.007	0.004	0.104	−0.025	0.158***
	(0.080)	(0.046)	(0.066)	(0.028)	(0.070)	(0.040)	(0.059)
Panel B: Left-Right							
$\text{Populist}_{m,t-1}$	−0.042	−0.016	−0.088	0.041	0.069	−0.040	0.083
	(0.069)	(0.038)	(0.078)	(0.030)	(0.063)	(0.042)	(0.059)
Panel C: GAL-TAN							
$\text{Populist}_{m,t-1}$	−0.006	−0.024	0.043	−0.028	0.058	−0.0001	0.055
	(0.077)	(0.037)	(0.068)	(0.026)	(0.062)	(0.036)	(0.062)
Observations	4494	8424	4641	11075	2534	10791	3706
Party controls	✓	✓	✓	✓	✓	✓	✓
Municipality controls	✓	✓	✓	✓	✓	✓	✓
Candidate controls	✓	✓	✓	✓	✓	✓	✓

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$ Robust standard errors clustered at municipality level. Coefficients are standardized. All specifications control for year effects and lagged share of close seats. Candidate controls include age, gender, incumbency, and a dummy for running in the previous election. Party controls include lagged seat share, number of candidates, average age, and share of women. Municipality controls include lagged effective number of parties, log population, shares of young and old, unemployment rate, median income and education.

8.3. Influence on refugee policy

To better understand the mechanism through which populist representation influences other parties' behavior, I also look at policy outcomes. Specifically, I examine if increased populist party representation influenced the probability of opening a reception center for asylum seekers in the municipality. I only focus on the 2012 electoral term, as the vast majority of the new reception centers were opened in 2015 when the inflow of asylum seekers to Finland was at its highest. Table 10 shows results from a 2SLS regression in which the outcome on the 2012 electoral term is regressed on populist seat share in 2012 elections. The outcome in Column (1) is a dummy for any reception center, in Column (2) a dummy for center for adults and families, and in Column (3) a dummy for unaccompanied minors. The outcome in Column (4) is the total capacity of receptions centers in the municipality. We can see that although the estimates are negative in all columns, they are quite small and imprecise.

In 2015 Finland received 32,000 asylum seekers, which was an almost tenfold increase compared to the previous years. Even though the absolute number of incoming asylum seekers was small compared to many other European countries, the increase was among the largest in Europe (EMN 2016). The Immigration Service aims to run reception centers at close to

Table 10: Effect of Finns Party representation on reception centre openings

	Reception centre (1)	Centre for adults (2)	Centre for underage (3)	Capacity (4)
$\text{Populist}_{m,t-1}$	−0.028	−0.029	−0.013	−11.846
	(0.057)	(0.054)	(0.036)	(14.088)
Observations	294	294	294	294
Mean(Y)	0.33	0.28	0.14	86.32
Municipality controls	✓	✓	✓	✓

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$ Robust standard errors clustered at municipality level. Coefficients are standardized. All specifications include controls for share of close seats in municipality, number of candidates, mean candidate age, share of women, effective number of parties, log population, shares of young and old, unemployment rate, median income and education. Dependent variable in Column (1) is a dummy that takes value 1 if a reception center was opened in the municipality between 2013-2016; in Column (2) a dummy for a reception center for adults and families; in Column (3) a dummy for reception center for unaccompanied minors; in Column (4) total capacity of reception centers in the municipality.

full capacity, which meant that in 2015 there was a need to quickly expand capacity. Centers were opened in municipalities that had suitable buildings that could be used to house asylum seekers. In this light, the results in Table 10 show that indeed, local politicians were not able to systematically influence where reception centers were opened.

In general, as policies are made in coalition governments, individual parties' or councilors influence is expected to be small. Consequently, party effects on policy are expected to be smaller than the variation in representation. However, Fortunato et al. (2021) show that when responsibility is difficult to identify, voters assign accountability based on simple, easily observed cues, like seat shares and role in government. This could mean that even if increased populist representation did not much affect governance, voters may still assign more weight on the populist party due to increased representation.

9. Conclusions

This paper has produced novel findings that help us understand how the emergence of populist parties can influence competition between parties and shape the political spectrum. Supply of populism leads to mainstream parties adopting more populist positions, holding voter preferences constant. Therefore, mainstream parties appear to overreact to the electoral success of the populist party. The results show that populist representation can amplify the populist shift of the political space.

The analysis shows that increased electoral strength of the populist

party leads to ideological convergence towards the populist party, which is mostly due to convergence on the liberal-conservative dimension. This dimension encompasses issues related to authoritarianism, immigration and the environment. It is the primary policy dimension of the populist party. Increase in populist seat share causes distances between the populist party and other parties to decrease on this dimension. Ideological alignment is observable across the political spectrum—only the Green party shifts to a more liberal position and systematically distances itself from the populist party. As the Green party and the populist party hold opposing views on their primary policy areas, increasing distance might be the only credible strategy for the Green party. The economic dimension is the primary policy area for most mainstream parties, which makes shifting their position on the liberal-conservative dimension more feasible for them.

The impact on ideological alignment between the populist party and other parties becomes stronger over time as the populist party gains broader electoral support. The results suggest that convergence is to some degree simultaneous—mainstream parties move closer to the populist party, and the populist party adopts a slightly more moderate position. Moreover, the analysis suggests that one of the channels through which ideological convergence takes place is differential effect on incumbents and challenger candidates. Incumbent councilors seeking re-election adjust their positions towards the populist party more than other candidates.

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A. Descriptive Statistics

Table A.1 provides summary statistics for municipalities, Table A.2 summarises candidate characteristics and Table A.3 provides summary statistics for parties. Table A.4 examines correlation of candidate characteristics with VAA response rate, and Table A.5 examines correlation of party characteristics with ideological positions. Table A.6 compares elected and not elected candidates. Table A.8 presents the distribution of candidates and seats across parties.

Table A.1: Municipality summary statistics

	Mean	Std.Dev.
Candidates	117.35	120.77
Competitiveness	0.80	0.17
Concentration	0.65	0.12
Council size	31.24	12.83
Education, %	62.53	6.40
Effective number of parties	3.81	1.14
Finns Party seats	2.58	2.45
Household disposable income	32346.31	5322.52
No. parties	6.83	2.23
Population	18293.49	46375.12
Population, age 15-65, %	60.87	3.70
Population, age 65+, %	22.77	5.95
Population, urban %	25.82	39.13
Unemployment rate, %	11.25	4.13

Data for election years 2008-2017. Unit of observation is municipality m in year t. Number of observations is 880. Municipality characteristics are end of year values for the year before the election. Competitiveness is $1-(v1-v2)$, where $v1$ and $v2$ are two largest vote shares, and Concentration is $v1+v2$. Effective number of parties is computed as inverse of the sum of squared party vote shares. Education is share of population with higher than basic level education.

Table A.2: Candidate summary statistics

	N	Mean	Std.Dev.
Age	106061	48.65	13.69
Close, %	104525	15.18	35.88
Closely elected, %	104525	6.34	24.36
Elected, %	138102	26.68	44.23
Female, %	138102	39.68	48.92
GAL-TAN position	49346	0.54	0.12
Incumbent, %	138102	20.27	40.20
Left-Right position	49346	0.47	0.13
Member of European Parliament, %	106061	0.01	0.97
Member of Parliament, %	106061	0.45	6.69
Rerun, %	106061	64.15	47.95
VAA Response, %	138102	40.73	49.13
Vote share, %	138102	0.85	1.15
Votes	138102	69.64	186.56

Data for election years 2004-2017. Unit of observation is candidate i in year t. Number of observations is 138,102. Electoral closeness is determined for 2004-2012 elections. Information on age and political experience (MP, MEP, rerun) is not available for 2004 election.

Table A.3: Party summary statistics

	Left	SDP	Greens	Centre	Nat.Coalition	Chris.dem.	Finns
Candidates	17.85	25.96	14.32	29.42	24.60	10.00	15.16
Close candidates, %	14.43	17.74	13.20	18.95	18.35	14.67	17.58
Incumbents, %	20.31	25.27	9.84	30.10	22.69	14.70	14.85
Mean age	51.28	50.81	43.67	48.49	48.63	50.89	48.54
MPs, %	0.19	0.19	0.09	0.35	0.21	0.12	0.37
Population	25779	20564	29329	18913	20010	27002	24582
Population, urban %	35.53	29.60	41.82	26.23	28.37	37.51	33.13
Seat share, %	9.78	19.30	5.64	38.23	17.94	4.62	10.44
Share of close seats, %	2.71	4.82	1.67	7.66	4.74	1.48	2.56
VAA Response, %	49.94	45.79	76.64	50.80	59.23	58.05	46.54
Vote share, %	10.20	19.07	6.45	36.00	17.86	5.31	10.93
Women, %	36.99	40.57	60.53	39.60	37.79	47.04	24.38
N	566	764	483	834	788	536	594

Data for election years 2008-2017. Unit of observation is party p in municipality m in year t. Incumbents is the share of incumbent councilors among the party's candidates.

Table A.4: Determinants of VAA Response Probability

	VAA response probability		
	(1)	(2)	(3)
Age	-0.007^{***}	-0.007^{***}	-0.007^{***}
	(0.0002)	(0.0002)	(0.0002)
Female	0.038^{***}	0.027^{***}	0.025^{***}
	(0.004)	(0.004)	(0.003)
Incumbent	0.138^{***}	0.139^{***}	0.138^{***}
	(0.005)	(0.005)	(0.005)
Parliament	0.142^{***}	0.146^{***}	0.142^{***}
	(0.020)	(0.020)	(0.020)
Rerun	0.032^{***}	0.033^{***}	0.033^{***}
	(0.004)	(0.004)	(0.004)
Party vote share$_{t-1}$	0.099^{***}	0.0003	0.031
	(0.033)	(0.034)	(0.033)
Party candidates	0.0005	-0.0003	-0.0001
	(0.0004)	(0.0003)	(0.0003)
No. parties$_{t-1}$	0.023^{***}	0.017^{**}	-0.021^{**}
	(0.007)	(0.007)	(0.010)
No. candidates	-0.0001	0.00003	-0.0003^{***}
	(0.00004)	(0.00005)	(0.0001)
Voter turnout$_{t-1}$	0.253^{**}	0.229^{**}	-0.052
	(0.118)	(0.112)	(0.141)
log population$_{t-1}$	0.067^{***}	0.066^{***}	0.045
	(0.011)	(0.009)	(0.077)
Observations	104914	104914	104914
R^2	0.090	0.125	0.146
Year FE	✓	✓	✓
Party FE		✓	✓
Municipality FE			✓

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$. Robust standard errors clustered at municipality level. No. parties is the effective number of parties.

Table A.5: Correlation of local party positions with party and municipality characteristics

	Left-Right		GAL-TAN	
	(1)	(2)	(3)	(4)
Year = 2012	−1.466***	−1.518***	0.421***	0.395***
	(0.019)	(0.089)	(0.022)	(0.083)
Year = 2017	−0.764***	−0.933***	−0.353***	−0.411**
	(0.024)	(0.197)	(0.026)	(0.184)
Christian Democratic Party	−0.108**	−0.111***	−0.078*	−0.074*
	(0.042)	(0.043)	(0.042)	(0.043)
Finns Party	−0.505***	−0.515***	0.403***	0.405***
	(0.040)	(0.041)	(0.043)	(0.043)
Greens	−0.253***	−0.260***	−1.192***	−1.195***
	(0.047)	(0.047)	(0.044)	(0.045)
Left Alliance	−1.024***	−1.033***	−1.309***	−1.310***
	(0.037)	(0.037)	(0.046)	(0.046)
National Coalition	0.555***	0.550***	0.251***	0.255***
	(0.028)	(0.029)	(0.029)	(0.029)
Other parties	−0.540***	−0.543***	−0.728***	−0.742***
	(0.064)	(0.065)	(0.068)	(0.068)
Social Democratic Party	−0.617***	−0.622***	−0.679***	−0.677***
	(0.027)	(0.027)	(0.033)	(0.033)
Party seat share$_{t-1}$	0.174*	0.130	0.275***	0.282***
	(0.103)	(0.108)	(0.104)	(0.107)
Candidates per party	0.002**	0.003***	0.003***	0.003***
	(0.001)	(0.001)	(0.001)	(0.001)
Mean age	−0.011***	−0.012***	−0.004	−0.005*
	(0.003)	(0.003)	(0.003)	(0.003)
Women	0.092	0.087	−0.236***	−0.240***
	(0.080)	(0.080)	(0.084)	(0.085)
Effective no. parties$_{t-1}$		−0.007		−0.025
		(0.032)		(0.037)
log Population		−1.364***		−0.905*
		(0.472)		(0.467)
Age 0-14, %		−0.599		3.582*
		(2.072)		(2.024)
Age 65+, %		−1.225		−1.319
		(1.631)		(1.567)
Unemployment rate		−0.992		−0.241
		(0.813)		(0.847)
Income		−0.00005**		0.00001
		(0.00002)		(0.00002)
Education		3.997**		2.239
		(1.817)		(1.779)
Council size		−0.004		−0.001
		(0.003)		(0.004)
Urban %		3.067		−0.245
		(2.811)		(2.351)
Observations	5026	4984	5026	4984
R^2	0.658	0.661	0.595	0.599

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$. Robust standard errors clustered at municipality level. Coefficients are standardized. Reference category for year effects is 2008. Reference category for parties is Centre Party. The municipality controls are measured at the end of previous calendar year. Mean age indicates mean age of candidates in the local party, and Women indicates share of women. Income is household median disposable income, Education is share of population with higher than basic level education. Concentration is the vote share of two largest parties in the municipality.

Table A.6: Summary statistics for elected and not elected candidates

	Elected			Not Elected			
	N	Mean	SD	N	Mean	SD	Difference
Age	27855	49.80	12.34	78198	48.24	14.11	1.56
Council size	27855	36.95	14.78	78198	45.64	17.21	-8.69
Female	27855	0.37	0.48	78198	0.41	0.49	-0.03
GAL-TAN position	15663	0.55	0.11	33676	0.53	0.12	0.02
Incumbent	27855	0.57	0.49	78198	0.07	0.26	0.50
Left-Right position	15663	0.48	0.13	33676	0.46	0.13	0.01
No. parties	27855	4.14	1.18	78198	4.69	1.15	-0.55
Population	27855	31093	69585	78198	71073	122128	-39980
Population, urban %	27855	37.13	42.94	78198	55.69	43.21	-18.56
Unemployed, %	27855	11.00	4.06	78198	10.85	3.91	0.14
VAA Response, %	27855	64.19	47.94	78198	49.05	49.99	15.14
Vote share, %	27855	2.09	1.55	78198	0.38	0.43	1.72
Votes	27855	157.49	355.19	78198	39.85	52.40	117.65

Data for election years 2008-2017. The Left-Right and GAL-TAN position are normalized to the zero one interval. No. parties is the effective number of parties.

Table A.7: Summary statistics for closely elected candidates from Finns Party and other parties

	Finns Party			Other parties				
	N	Mean	SD	N	Mean	SD	Difference	p-value
Candidates_m	434	178.17	158.86	6189	166.92	156.09	11.25	0.15
$\text{Close seats}_{m,t-1}$ %	404	23.77	8.83	4124	23.37	9.05	0.40	0.39
Council size	434	38.29	14.57	6189	37.43	14.69	0.86	0.23
No. parties	434	4.26	1.11	6189	3.99	1.10	0.27	0.00
Population	434	31666	62603	6189	31188	66566	478	0.88
Population, urban %	434	36.78	42.38	6189	38.06	43.00	-1.28	0.54
Turnout, %	434	61.74	5.36	6173	62.20	5.67	-0.47	0.08
Unemployed, %	434	10.28	3.70	6189	10.78	4.26	-0.49	0.01
VAA Response, %	434	46.31	49.92	6189	41.61	49.29	4.71	0.06
Vote share, %	434	1.15	0.74	6189	1.22	0.69	-0.07	0.06
Votes	434	78.06	75.67	6189	81.74	92.41	-3.68	0.34

The table presents summary statistics for closely elected candidates in 2004-2012 elections. Number of parties is the effective number of parties.

Table A.8: Distribution of all candidates and seats and close a candidates and seats by parties.

	All		Close	
Party	Candidates, %	Seats, %	Candidates, %	Seats, %
Centre	32.44	38.19	34.67	30.98
Christian Dem.	6.38	4.48	5.42	6.11
Finns Party	10.66	10.82	9.95	10.73
Greens	6.22	4.66	5.81	6.60
Left Alliance	12.22	9.72	10.22	11.88
National Coalition	19.15	18.34	19.57	19.39
Other parties	8.82	9.51	8.63	7.97
Social Dem.	19.65	19.28	20.18	20.69

Elections 2004-2012. Candidates is share of candidates over all candidates, or close candidates over all close candidates in the municipality. Seats is share of seats over all seats, or close seats over all close seats in the municipality.

B. Theoretical Model

Parties

There are two parties $j \in \{1, 2\}$ where we assume that Party 1 is a mainstream party and Party 2 is the populist party. Parties are both office and policy motivated, and each party has an ideal policy $b_j \in X = [0, 1]$ and we assume that $b_1 = 0$ and $b_2 = 1$. For simplicity, we assume that Party 2, the populist party, always proposes its most preferred policy, that is $x_2 = 1$.[17] The implemented policy $\tilde{x}$ is a convex combination of parties' proposed policies, given by

$$\tilde{x} = S_1(\pi_1(x_1, 1)) \cdot x_1 + S_2(\pi_2(x_1, 1)) \tag{4}$$

where the weights are determined by parties' seat shares S_j. Seat share is a function of vote share $\pi_j(\mathbf{x})$ such that $S_j : [0, 1] \to [0, 1]$. The vote share of party j depends on all proposed policies and is such that $\sum_j \pi_j(\mathbf{x}) = 1$. We assume purely proportional representation so that $S_j(\pi_j) = \pi_j$

The payoff of party j when policy $\tilde{x}$ is implemented is given by

$$u_j(\tilde{x}) = -\alpha|\tilde{x} - b_j| + (1 - \alpha)S_j(\pi_j) \tag{5}$$

where $0 < \alpha < 1$. If $\alpha = 0$, parties maximize seat share, and if $\alpha = 1$ parties only care about the implemented policy.

Voters

Voters have single peaked preferences over unidimensional policy space $X = [0, 1]$. Voter i's most preferred policy is $x^i \in X$. The distribution of voters' preferences is given by a continuous CDF $F(x)$ on X with density $f(x)$. I assume: i) sincere voting, that is each voter votes for the party whose platform is closest to her most preferred policy. An indifferent voter votes for either of the parties with equal probability, and $\bar{x}$ denotes the most preferred policy of the indifferent voter. ii) $f(x) = 2(1 - x)q + 2x(1 - q)$,

17. This assumption is also motivated by empirical literature suggesting that populist parties are less responsive to voter preferences (Adams et al. 2006), and either do not change their positions (Guiso et al. 2017), or become more extreme as their vote share increases (Wagner and Meyer 2017).

note that when $q = 0$, $f(x) = 2x$, i.e. there is more mass at the right tail of the distribution, when $q = 1$, $f(x) = 2 - 2x$, and there is more mass at the left tail of the distribution, and when $q = 1/2$ we have the uniform distribution.

For a given set of proposed policies $(x_1, 1)$, vote shares are given by

$$\begin{aligned}\pi_1(x_1, 1) = F(\bar{x}) = F\left(\frac{x_1+1}{2}\right) &= \int_0^{\frac{x_1+1}{2}} f(s)ds = \int_0^{\frac{x_1+1}{2}} 2(1-s)q + 2s(1-q)ds \\ &= 2\left(\frac{x_1+1}{2}\right)q + \left(\frac{x_1+1}{2}\right)^2(1-2q) \\ \pi_2(x_1, 1) = 1 - F\left(\frac{x_1+1}{2}\right)\end{aligned}$$

Then,

$$\begin{aligned}\frac{\partial \pi_1(x_1,1)}{\partial x_1} &= q + (1-2q)\left(\frac{x_1+1}{2}\right) \geq 0\,, \\ \frac{\partial \pi_2(x_1,1)}{\partial x_1} &= -q - (1-2q)\left(\frac{x_1+1}{2}\right) \leq 0\end{aligned}$$

Electoral competition

Timing: Parties announce platforms. Elections are held. Voters vote for the party with announced policy closest to them. Implemented policy after the election is a convex combination of the proposed policies, weighted by parties' seat shares.

Predictions

We are trying to understand what are the incentives of mainstream parties to propose their most preferred policies, or adjust their platform towards the populist challenger party. Let us first examine Party 1's strategy in the purely proportional setting, and then see how introducing an exogenous shock to the parties' seat shares influences the strategy.

By moving towards the populist party, the mainstream party obtains a higher vote share by appealing to more socially conservative voters. Although a larger vote share means a larger weight on Party 1's policy, pro-

posing a more rightist policy also moves the implemented policy further away from Party 1's bliss point. The more policy motivated the party is, the lower payoff it gets from increasing vote share. Even if a party is purely policy motivated, vote share influences its strategy due to its effect on the implemented policy.

The following result presents the mainstream party's equilibrium strategy and comparative statics in the absence of exogenous shocks to seat shares. Party 1's equilibrium strategy is given by

$$x_1^* = \frac{1 - 2\alpha - 2q + \sqrt{(1 - 2\alpha - 2q)^2 + 3\alpha(1 - 2q)(2 - 2\alpha q - \alpha)}}{3\alpha(1 - 2q)}, \quad q \neq \frac{1}{2} \tag{6}$$

and

$$x_1^* = \frac{1 - \alpha}{2\alpha}, \quad \text{when} \quad q = \frac{1}{2}$$

In equilibrium,

$$\frac{\partial x_1^*(\alpha, q)}{\partial \alpha} < 0\,, \text{ and} \tag{7}$$

$$\frac{\partial x_1^*(\alpha, q)}{\partial q} < 0 \tag{8}$$

First, the equilibrium strategy x_1^* is increasing as q decreases, i.e. as the demand for leftist policies decreases (median voter moves to the right). A sufficient condition for Party 1 not to fully converge to the populist position is that $q \geq \frac{1}{2}$, i.e., there is more mass at the left end of the distribution. In other words, as long as the support for the populist party is low enough, it is possible that the platforms diverge, but as electoral support for the populist policy increases, Party 1 is more likely to converge towards the populist position.

Second, the equilibrium strategy is decreasing in α. The more policy sensitive the mainstream party is, the less it adjusts its position away from its bliss point $b_1 = 0$. If $\alpha = 1$, there cannot be full convergence for any q, whereas if $\alpha = 0$, there is full convergence ($x_1^* = 1$) for all q. Figure (B.1) presents x_1^* for different values of α and q. The policy x_1^* is decreasing in q and in α.

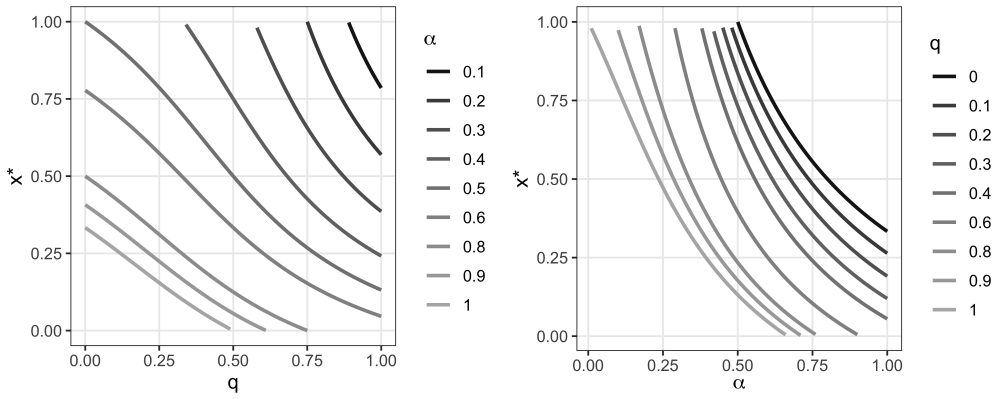

Figure B.1: x_1^* for different values of q and α.

Populist shock

Now, let us introduce and exogenous shock to the parties' seat shares. Specifically, let $S_1 = \pi_1 - \varepsilon$ and $S_2 = \pi_2 + \varepsilon$, which means that seat shares are no longer purely proportional to vote shares. This increase in Party 2's seat share—and the symmetric decrease in Party 1's seat share—can be thought of as disproportionality generated by random election outcomes of tied candidates.

Party 1's equilibrium strategy is now

$$x_1^* = \frac{1 - 2\alpha - 2q + \sqrt{(1 - 2\alpha - 2q)^2 + 3\alpha(1 - 2q)(2 - 2\alpha q - \alpha + 4\alpha\varepsilon)}}{3\alpha(1 - 2q)}, \quad q \neq \frac{1}{2} \tag{9}$$

and

$$x_1^* = \frac{1 - \alpha + 2\alpha\varepsilon}{2\alpha}, \quad \text{when} \quad q = \frac{1}{2}$$

In equilibrium,

$$\frac{\partial x_1^*(\alpha, q, \varepsilon)}{\partial \varepsilon} > 0 \tag{10}$$

As the populist party's seat share increases due to the exogenous shock ε, Party 1's equilibrium strategy increases. With a larger shock, Party 1 obtains a lower seat share, all else equal. Party 1 therefore has to adjust its position more in order to get the same seat share.

C. IRT model

Let there be V respondents and I test survey items. Individual v's responses to the I items are given by $X_v = (x_{v1}, x_{v2}, \ldots, x_{vI})$. Items can be dichotomous, for which $x_{vi} \in \{0, 1\}$, or polytomous, for which $x_{vi} \in \{1, ..., m_i\}$, where m_i is the number of response categories for item i. An individual's response to an item is modelled by an item response function, that describes how an individual with a given level of the latent trait is likely to respond (Ostini and Nering 2006). Every response to an item is assumed to provide some information about the respondent's level of latent trait.

The voting advice application (VAA) data includes both ordered and unordered polytomous items. The ordered items are measured on a Likert-type scale, where response categories run from "completely disagree" to "completely agree." The unordered items include statements like "To provide our municipality with more revenue, we should..." with response categories such as "sell off municipal property, increase user fees, increase the property tax rate," of which the respondent is prompted to select "at least two," or "choose as many as you like," for instance. As the response categories in these items do not have a natural ordering, and they appear in several waves with slightly varying selection of response categories, I transform the items so that each response category is a binary variable. The variable then takes value one if a respondent chooses that option. Another option would be to employ the nominal response model, but I choose to transform the data to increase the number of linking items.

The dichotomous items are calibrated with a two parameter logistic model (2PL), where the response probability is given by

$$\Pr(X_i = 1|\theta) = \frac{\exp(\alpha_i\theta - \beta_i)}{1 + \exp(\alpha_i\theta - \beta_i)} \tag{11}$$

where θ is the person parameter, i.e. the level of latent trait, β_i is the difficulty of item i, and α_i is item discrimination. Figure C.1 illustrates how the parameters affect the item characteristic curves. The discrimination parameter represents how quickly the probability of responding $X_i = 1$ increases as the respondent's level of θ increases. The difficulty parameter

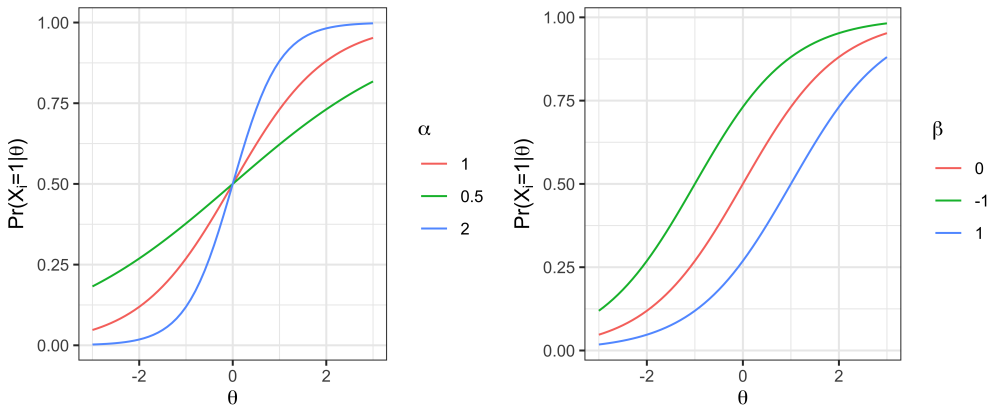

Figure C.1: Given latent trait θ, the probability of positive endorsement of X_i is non-linearly related to the item discrimination (α_i, slope) and difficulty (β_i, location).

indicates where in the latent trait continuum θ a respondent has a 50% chance of responding $X_i = 1$. The probability of responding $X_i = 1$ for a given level of θ is higher the lower β_i is (Mair 2018).

Responses to polytomous items are modelled with the graded response model (GRM) (Samejima 1997). The model was developed for handling of ordered polytomous items and Likert-type questionnaires. It essentially consists of sequential 2-parameter models. The model is characterized by a score category response function

$$\begin{aligned} \Pr(x_i = k|\theta) &= p^*_{ik}(\theta) - p^*_{ik+1}(\theta), \quad k = 1, ..., m_i - 1 \\ \Pr(x_i = k|\theta) &= p^*_{ik}(\theta), \quad k = m_i \end{aligned} \tag{12}$$

and a cumulative category response function (CCRF), which gives the probability that a respondent with trait θ will provide a response of grade k or higher

$$\begin{aligned} p^*_{ik}(\theta) &= \Pr(x_i \geq k|\theta) = 1, \quad k = 1 \\ p^*_{ik}(\theta) &= \Pr(x_i \geq k|\theta) = \frac{\exp(\alpha_i\theta - \beta_{ik})}{1 + \exp(\alpha_i\theta - \beta_{ik})}, \quad k = 2, ..., m_i. \end{aligned} \tag{13}$$

Now β_{ik} is the relative difficulty of response category k of item i. The probability that any respondent provides a response of the lowest grade or higher is 1. For the higher grades the response probability is calculated as

the difference between the adjacent cumulative category response functions (Kolen and Brennan 2004).

The dimensionality of the data is not unambiguous, and in fact, models with more dimensions seem to perform slightly better.[18] This is because the item information and factors' explanatory power is fairly low, as the VAA survey was not constructed to capture any particular number of dimensions. However, estimating as high dimensional model as possible does not serve the purpose of this measurement problem. In addition to being computationally very demanding, it would lead to dimensions that are difficult to interpret and distinguish from one another, and which would therefore not be helpful in understanding differences and similarities between political parties. As there is no one true underlying dimensionality of the political space, a relatively parsimonious model is more useful (Benoit and Laver 2012). To balance the different technical and conceptual considerations, I employ a four dimensional model. I test the robustness of the econometric results against different dimensionality of the ideology space and show that the main results are not sensitive to the dimensionality of the model (see Section D).

To obtain estimates that are on the same scale, the repeating questions are used as so called anchor items. The data from all the survey years is pooled together, and the parameters of the anchor items are constrained to be equal across years (Kolen and Brennan 2004). The estimates of the item parameters and the values of the latent traits are obtained with maximum likelihood estimation. The latent traits are first integrated out of the likelihood function to obtain estimates for the item parameters. The observed items in a given scale are assumed to be locally independent—i.e. responses to an item are independent conditional on the latent trait. After estimating the item parameters, the values of the latent traits can be estimated (Kolen and Brennan 2004). To avoid bias caused by differences between the examinee groups, I estimate a multiple group IRT model where each sample is

18. The dimensionality of the data is assessed by methods of exploratory factor analysis, item factor analysis, and by examining model fit. In multidimensional models θ and α are simply replaced with vectors $\boldsymbol{\theta}_v = (\theta_{v1}, ..., \theta_{vz})$ and $\boldsymbol{\alpha}_i = (\alpha_1, ..., \alpha_z)$, where z is the number of latent traits. Each respondent is estimated a value of latent trait on each dimension. The β_i parameter instead denotes multidimensional item location, representing distance from the origin to the point of maximum slope on the information characteristics surface in the z-dimensional space (Mair 2018).

allowed to have a different latent trait distribution. DeMars (2002) shows that if differences in the examinee groups' latent trait distributions are not taken into account, marginal maximum likelihood estimation yields upward biased estimated of the item difficulty parameters.

D. Robustness checks

D.1. Bandwidth of electoral closeness

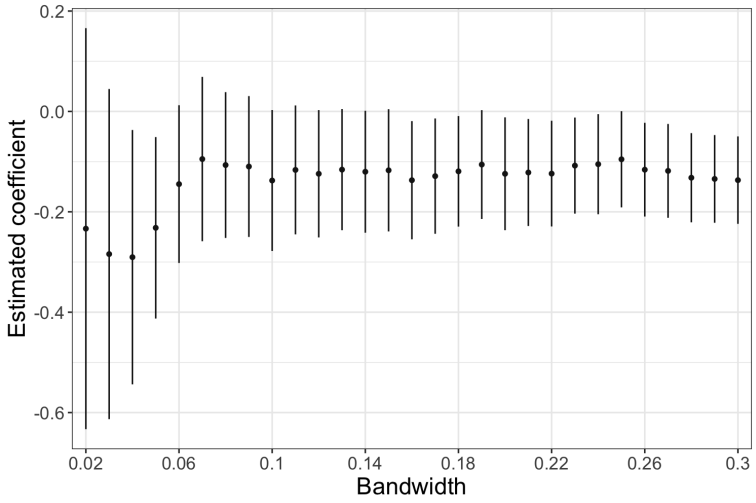

Figure D.1: Estimated coefficients for $Populist_{m,t-1}$ for different bandwidths. The vertical lines indicate 95% confidence intervals.

To test the robustness of the results to the choice of bandwidth of electoral closeness, I construct the instrument based on different bandwidths and re-estimate the baseline model.[19] Figure D.1 plots the estimated coefficients for different bandwidths of electoral closeness. We can see that the estimates are stable for a wide range of bandwidths. The estimate starts to inflate only when the bandwidth gets below 0.05. This is due to decreasing number of identifying observations which weakens the instrument and causes the estimate to become increasingly inaccurate (Table D.1). When the bandwidth is relatively small, the estimate may also be inflated if there is a large local effect for a small group of observations. The main results can be considered reliable, as decreasing the bandwidth does not change the magnitude of the estimates much, but mainly affects precision.

19. Specifically, I estimate a 2SLS model, where distance to Finns Party is regressed on lagged Finns Party seat share, year dummies, party controls and municipality controls.

Table D.1: Robustness to bandwidth choice

	Ideological distance to Finns Party							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$PS_{m,t-1}$	−0.234	−0.290**	−0.145*	−0.107	−0.138*	−0.124*	−0.120*	−0.137**
	(0.204)	(0.129)	(0.080)	(0.074)	(0.072)	(0.065)	(0.062)	(0.060)
Bandwidth	0.02	0.04	0.06	0.08	0.1	0.12	0.14	0.16
K-P F-statistic	12	36	58	55	58	65	72	79
Year dummies	✓	✓	✓	✓	✓	✓	✓	✓
Party controls	✓	✓	✓	✓	✓	✓	✓	✓
Municipality controls	✓	✓	✓	✓	✓	✓	✓	✓

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$. Robust standard errors clustered at municipality level. The specifications are 2SLS regressions in which Finns Party seat share is instrumented with share of closely elected Finns Party candidates. Bandwidth indicates the bandwidth for electoral closeness used in constructing the instrument. Coefficients are standardized. Party controls include lagged seat share, number of candidates, average age of candidates, and share of women. Municipality controls include lagged effective number of parties, lagged log population, lagged shares of young and old, lagged unemployment rate, lagged median income and lagged education. All specifications control for lagged share of close seats in the municipality.

D.2. Dimensionality of the IRT

To check robustness of the results to the dimensionality of the IRT model, I estimate also one, two and three dimensional models. I then construct aggregate party positions in these lower dimensional policy spaces. Table D.2 reports the IV estimates for the overall ideological distance to Finns Party. The outcome in all the columns is overall ideological distance, but in Column (1) distances between party positions are measured in one dimensional space (i.e. on a line), in Column (2) they measured in two dimensional space (in the Euclidean plane), and in Column (3) they are measured in 3-dimensional Euclidean space. Column (4) presents estimates in 4-dimensional space which are the same as in the main analysis (see Table 5). The point estimates are very close to one another and to the baseline results, which indicates that the results for overall ideological distance are robust to dimensionality of the policy space.

Table D.3 presents IV estimates for distance on single dimensions from the two and three dimensional IRT models. In the first two columns, the outcomes are distances on the first and second dimension, respectively, derived from a two dimensional model. In Columns (3)–(5) the dependent variables are distances on the individual dimensions derived from a three dimensional model. The estimates exhibit a very similar pattern as in the main analysis—there is some ideological convergence in the two main policy dimensions, with a clear effect in one dimension in particular.

In the two and three dimensional models, interpreting the dimensions is more cumbersome as they are somewhat more noisy. In the two di-

Table D.2: Results for overall ideological distance: robustness to dimensionality

	Ideological distance to populist party			
	1D	2D	3D	4D
	(1)	(2)	(3)	(4)
Panel A: IV				
$\text{Populist}_{m,t-1}$	-0.105^{**}	-0.111^{*}	-0.080^{*}	-0.095^{*}
	(0.047)	(0.057)	(0.048)	(0.055)
Panel B: OLS				
$\text{Populist}_{m,t-1}$	-0.070^{***}	-0.098^{***}	-0.082^{***}	-0.077^{**}
	(0.022)	(0.027)	(0.027)	(0.030)
Panel C: Reduced form				
$\text{Populist}_{m,t-1}$	-0.048^{**}	-0.051^{**}	-0.037^{*}	-0.044^{*}
	(0.021)	(0.025)	(0.022)	(0.024)
Observations	3248	3248	3248	3248
Year dummies	✓	✓	✓	✓
Party dummies	✓	✓	✓	✓
Party controls	✓	✓	✓	✓
Population controls	✓	✓	✓	✓

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$. Robust standard errors clustered at municipality level. The dependent variable in all specifications is overall ideological distance to the Finns Party. In Column (1) it's estimates with a unidimensional IRT model, and in Column (2)–(4) it's measured from a 2-, 3-, or 4-dimensional IRT model, respectively. Party controls include number of candidates, lagged seat share, average age of candidates, and share of women. Municipality controls include lagged effective number of parties, lagged log population, lagged shares of young and old, lagged unemployment rate, lagged median income and lagged education. All specifications control for lagged share of close seats in the municipality. All specifications control for lagged share of close seats in the municipality. Standardized coefficients.

mensional model, the first dimension can be interpreted as describing the GAL-TAN axis. It includes many of the questions related to for instance immigration and the environment, but also questions about public sector size and redistribution. The second dimension is explained mostly by questions about provision of public services and public sector size, but it also includes questions that are not related to economic policy. In case of the three dimensional model, the first dimension seems to capture more of the items related to social and cultural issues, whereas the second dimension is more related to economic policy. The third dimension describes attitudes to municipal functions. When policy positions are derived from a two dimensional model (Columns (1) and (2)), the point estimates suggest similar

Table D.3: Results for ideological distance: robustness to estimated dimensionality

	2 Dimensional IRT		3 Dimensional IRT		
	θ_1^2	θ_2^2	θ_1^3	θ_2^3	θ_3^3
	(1)	(2)	(3)	(4)	(5)
$\text{Populist}_{m,t-1}$	-0.096^{*}	-0.059	-0.068	-0.090^{**}	-0.020
	(0.050)	(0.065)	(0.052)	(0.040)	(0.060)
Observations	3248	3248	3248	3248	3248
Year dummies	✓	✓	✓	✓	✓
Party dummies	✓	✓	✓	✓	✓
Party controls	✓	✓	✓	✓	✓
Municipality controls	✓	✓	✓	✓	✓

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$. Robust standard errors clustered at municipality level. Coefficients are standardized. The outcome θ_j^z indicates distance on dimension j measured with a z-dimensional IRT model. Party controls include number of candidates, lagged seat share, average age, and share of women. Municipality controls include lagged effective number of parties, lagged log population, lagged shares of young and old, lagged unemployment rate, lagged median income and lagged education. All specifications control for lagged share of close seats in the municipality.

alignment on both dimensions, but the effect is statistically significant only on the first dimension. When policy positions are derived from a three dimensional model (Columns (3)–(5)), convergence takes place mostly on the second dimension. Distance between parties is also decreasing on the first dimension, but the effect is somewhat smaller and only marginally significant.

D.3. Sensitivity to distance measure

When distance is measured in higher than one dimensional space, different metrics are not equivalent. Table D.4 presents results for ideological distance to Finns Party in four dimensional space, measured with different metrics. For reference, in Column (1) the outcome is calculated with the same Euclidean distance that has been used throughout the article. In Column (2) the outcome is measured as squared Euclidean distance. It puts more weight on larger differences, and the point estimates are slightly smaller. In Column (3) the outcome is measured as city block (or Manhattan) distance, and in Column as (4) Chebyshev distance. The former is sum of absolute distances in each dimension, whereas the latter only takes into account the dimension with the most significant distance.

Table D.4: Robustness to distance measure

	Ideological distance to populist party			
	Euclidean (1)	Sq.Euclidean (2)	City Block (3)	Chebyshev (4)
$\text{Populist}_{m,t-1}$	-0.095^{*}	-0.079	-0.076	-0.093^{**}
	(0.055)	(0.053)	(0.054)	(0.046)
Observations	3248	3248	3248	3248
Year dummies	✓	✓	✓	✓
Party dummies	✓	✓	✓	✓
Party controls	✓	✓	✓	✓
Municipality controls	✓	✓	✓	✓

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$. Robust standard errors clustered at municipality level. Coefficients are standardized. The dependent variable in all specifications is overall ideological distance to the Finns Party. In Column (1) it's calculated as 4-dimensional Euclidean distance; in Column (2) as squared Euclidean distance; in Column (3) as city block distance (L_1); in Column (4) as Chebyshev distance. Party controls include number of candidates, lagged seat share, average age, and share of women. Municipality controls include lagged effective number of parties, lagged log population, lagged shares of young and old, lagged unemployment rate, lagged median income and lagged education. All specifications control for lagged share of close seats in the municipality.

D.4. Log outcome

Finally, because the main outcome is a distance, it is limited to non-negative values. This means that the error term is always positive, which could bias down the slope. Therefore, as a robustness check I also estimate the model using a log outcome. The outcome in Table D.5 is logarithm of the ideological distance, and the coefficients represent percentage change in the outcome when the Finns Party seat share changes by one standard deviation. The point estimates are naturally different from the baseline model as their interpretation is different, but the pattern of decreasing distance is the same, and if anything, the estimates are more precise.

Table D.5: IV estimates for ideological distance to Finns Party: log outcome

	Log Ideological distance to Finns Party			
	(1)	(2)	(3)	(4)
Panel A: IV				
$\text{Populist}_{m,t-1}$	-0.041^{**}	-0.044^{**}	-0.046^{**}	-0.037^{*}
	(0.019)	(0.019)	(0.020)	(0.019)
Panel B: OLS				
$\text{Populist}_{m,t-1}$	-0.043^{***}	-0.043^{***}	-0.042^{***}	-0.031^{***}
	(0.010)	(0.010)	(0.010)	(0.011)
Panel C: Reduced form				
$\text{Populist}_{m,t-1}$	-0.019^{**}	-0.021^{**}	-0.021^{**}	-0.017^{**}
	(0.009)	(0.009)	(0.009)	(0.009)
Observations	3248	3248	3248	3248
Year dummies	✓	✓	✓	✓
Party controls		✓	✓	✓
Municipality controls			✓	✓
Party dummies				✓

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$. Robust standard errors clustered at municipality level. Party controls include number of candidates, lagged seat share, average age, and share of women. Municipality controls include lagged effective number of parties, lagged log population, lagged shares of young and old, lagged unemployment rate, lagged median income and lagged education. All specifications control for lagged share of close seats in the municipality.

E. Appendix tables

Table E.1: IV estimates for ideological distance to Finns Party: cross-sectional estimates by dimension

	Left-Right (1)	GAL-TAN (2)	Redistribution (3)	Local issues (4)
Panel A: All years				
$\text{Populist}_{m,t-1}$	−0.056	−0.100*	−0.045	0.044
	(0.049)	(0.054)	(0.050)	(0.064)
Observations	3248	3248	3248	3248
Panel B: 2008				
$\text{Populist}_{m,t-1}$	−0.038	0.047	0.029	0.058
	(0.046)	(0.054)	(0.050)	(0.064)
Observations	801	801	801	801
Panel C: 2012				
$\text{Populist}_{m,t-1}$	−0.072	−0.031	0.012	−0.051
	(0.054)	(0.042)	(0.052)	(0.045)
Observations	1310	1310	1310	1310
Panel D: 2017				
$\text{Populist}_{m,t-1}$	0.014	−0.244**	−0.139*	0.114
	(0.077)	(0.101)	(0.077)	(0.112)
Observations	1137	1137	1137	1137
Party controls	✓	✓	✓	✓
Municipality controls	✓	✓	✓	✓
Party dummies	✓	✓	✓	✓

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$. Robust standard errors clustered at municipality level. Coefficients are standardized. The dependent variable is ideological distance to Finns Party on the Left-Right dimension (Column (1)), GAL-TAN dimension (Column (2)), Redistribution dimension (Column (3)), or Local issues dimension (Column (4)). Municipality controls include lagged effective number of parties, lagged log population, lagged shares of young and old, lagged unemployment rate, lagged median income and lagged education. All specifications control for lagged share of close seats in the municipality. Panel A controls for year effects.

Table E.2: IV estimates for ideological distances to Finns Party: by dimension and by party

	Left (1)	SDP (2)	Greens (3)	Centre (4)	Nat.Coalition (5)	Chris.dem. (6)
Panel A: Total distance						
$\text{Populist}_{m,t-1}$	-0.252^{*}	-0.154	0.103	-0.272^{***}	-0.134	-0.056
	(0.134)	(0.122)	(0.133)	(0.103)	(0.098)	(0.153)
Panel B: Left-Right						
$\text{Populist}_{m,t-1}$	-0.282^{**}	0.002	0.190	-0.113	-0.042	0.019
	(0.141)	(0.103)	(0.165)	(0.095)	(0.097)	(0.140)
Panel C: GAL-TAN						
$\text{Populist}_{m,t-1}$	-0.245	-0.218^{*}	0.037	-0.334^{***}	-0.254^{***}	-0.137
	(0.151)	(0.130)	(0.154)	(0.093)	(0.091)	(0.134)
Observations	424	538	384	574	558	413
Party controls	✓	✓	✓	✓	✓	✓
Municipality controls	✓	✓	✓	✓	✓	✓
Party dummies	✓	✓	✓	✓	✓	✓

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$ Robust standard errors clustered at municipality level. Coefficients are standardized. The dependent variable in Panel A is ideological distance to Finns Party on the Left-Right dimension, and on Panel B ideological distance on the GAL-TAN dimension. Each column represents a set of specifications for a different subset of local party groups. Party controls include number of candidates, lagged seat share, average age, and share of women. Municipality controls include lagged effective number of parties, lagged log population, lagged shares of young and old, lagged unemployment rate, lagged median income and lagged education. The specifications in Panel A include year dummies. All specifications control for lagged share of close seats in the municipality.

Table E.3: IV estimates for average party positions: by party

	All (1)	Left (2)	SDP (3)	Greens (4)	Centre (5)	Nat.Coalition (6)	Chris.dem. (7)	Finns Party (8)
Panel A: Left-Right								
$\text{Populist}_{m,t-1}$	0.007	0.082	-0.079	-0.075	-0.022	0.036	0.139	-0.043
	(0.026)	(0.084)	(0.059)	(0.092)	(0.044)	(0.067)	(0.091)	(0.076)
Panel B: GAL-TAN								
$\text{Populist}_{m,t-1}$	0.021	0.157	0.107	-0.248^{**}	0.046	0.056	0.030	-0.046
	(0.029)	(0.117)	(0.098)	(0.113)	(0.071)	(0.074)	(0.093)	(0.095)
Observations	4393	560	758	478	828	783	532	591
Year dummies	✓	✓	✓	✓	✓	✓	✓	✓
Party controls	✓	✓	✓	✓	✓	✓	✓	✓
Municipality controls	✓	✓	✓	✓	✓	✓	✓	✓

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$ Robust standard errors clustered at municipality level. Coefficients are standardized. The dependent variable is ideological position on the Left-Right dimension (Panel A), and GAL-TAN dimension (Panel B). Each column represents a set of specifications for a different subset of local party groups. Party controls include number of candidates, lagged seat share, average age of candidates, and share of women. Municipality controls include lagged effective number of parties, lagged log population, lagged shares of young and old, lagged unemployment rate, lagged median income and lagged education. The specifications in Panel A includes year dummies. All specifications control for lagged share of close seats in the municipality. Column (1) includes Party dummies.

F. Appendix figures

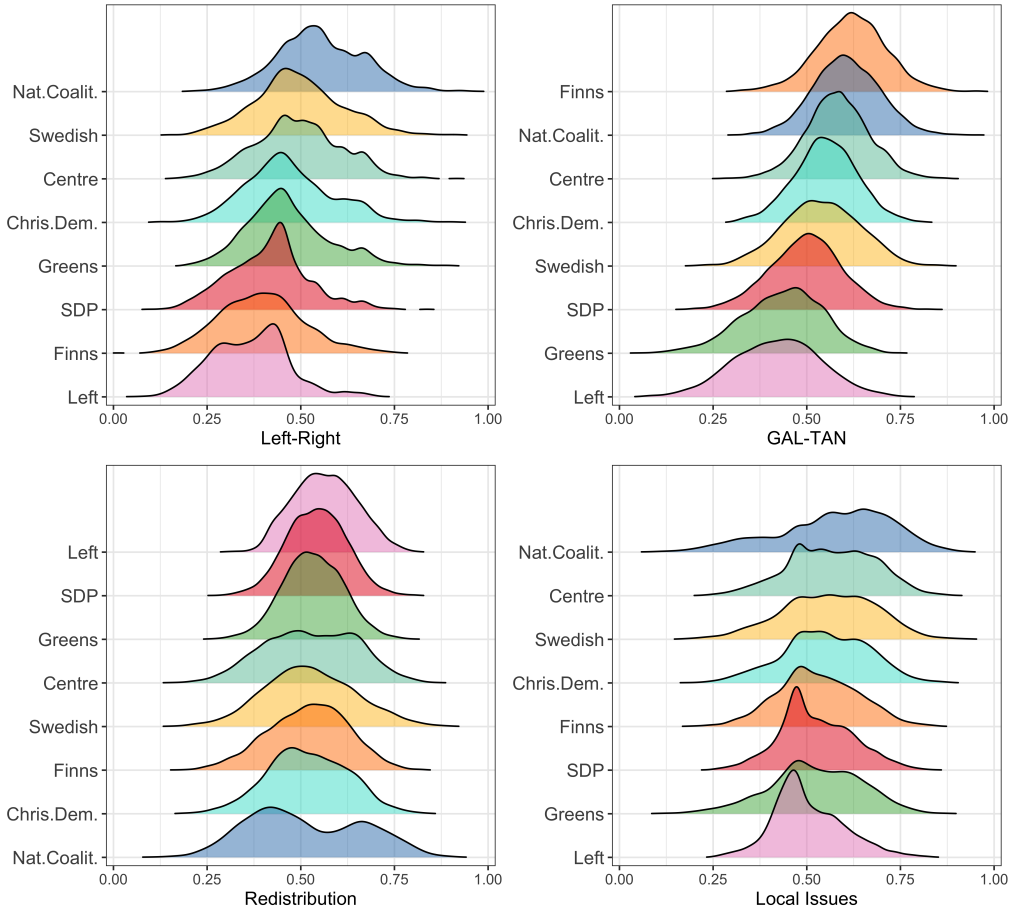

Figure F.1: Distributions of estimated latent traits from 4-dimensional IRT model.
Left-Right is increasing in right; GAL-TAN is increasing in TAN; Redistribution is increasing in support for more redistribution; Budget Control is increasing in support for tighter budget control.

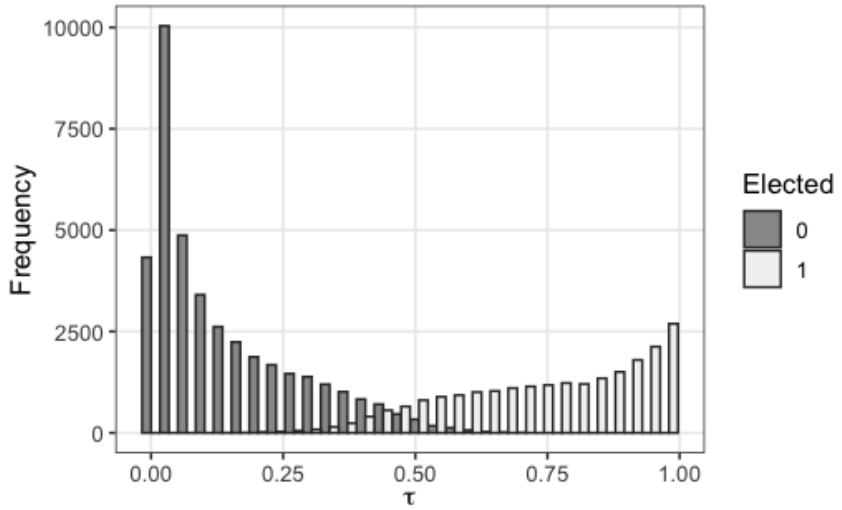

Figure F.2: Distribution of candidates' electoral closeness for elected and non-elected candidates., omitting $\tau < 0.01$ and $\tau > 0.99$.

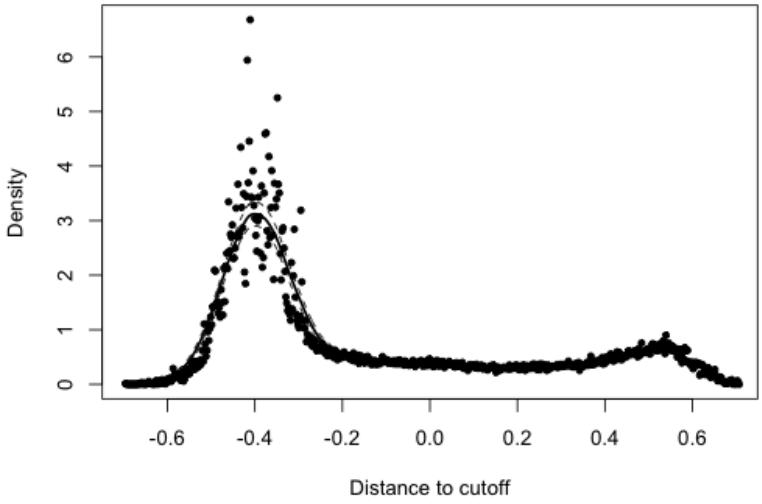

Figure F.3: McCracy test of discontinuity in the distance to electoral cutoff.
Discontinuity est. = 0.034 with s.e. = 0.044

G. VAA questionnaires

YLE voting advice application questionnaire 2008

- If there is no other option, we should raise the municipal tax rate rather than cut from the municipal services.
- It is nowadays too easy to be admitted to social welfare.
- The environmental and natural values in my municipality can be flexible if it can create more jobs or increase residents' economic well being.
- My municipality should reduce the number of municipal employees, because there are too many of them.
- The municipal user fees should be made more progressive in income.
- If one of the parents is at home, the children should not have a right to daycare.
- If we have to choose, it is better to cut funding from health centers than comprehensive schools, because there are private health centers but no private schools.
- To provide our municipality with more revenue, we should... [choose 2]:
  - Increase the property tax rate for residential buildings.
  - Increase the property tax rate for holiday houses.
  - Increase user fees.
  - Sell off municipal property.
  - Attract business with favorable conditions or financial support.
  - Attract new well-off taxpayers by offering them building plots.
  - Request for more state subsidies.
  - Consider a municipal merger.
  - Establish new user fees.
- Which of the following services should we privatize? [choose at least 1]:

  - Comprehensive school.
  - Health centers.
  - Elder care.
  - Day care.
  - Municipal engineering.
  - Social welfare.
  - Substance abuse treatment and rehabilitation.
  - Fire and rescue services.
  - Zoning.
  - Specialized health care.
  - Water utility.
  - None of the above.

YLE voting advice application questionnaire 2012

- The old should have a universal right to a retirement home similar to one enjoyed now by children and daycare.
- Privatization of municipal health care would increase efficiency and lower the costs.
- The health center fees can be raised in my municipality.
- If your municipality received a large donation to improve the municipal services, which services should be mainly targeted? [choose 2]:
  - Social services.
  - Day care.
  - Elder care.
  - Schools.
  - Nursing staff wages.
  - Health centers.
  - Specialty health care.
- My municipality should take in refugees.

- If one of the parents is at home, we should limit the right of the family to have their child placed in daycare.
- Too little attention has been paid to the marginalization of children and youth in my municipality.
- It is nowadays too easy to be admitted to social welfare.
- It should be possible to recycle trash in the public trash cans in my municipality.
- My municipality should spend more money in the road maintenance.
- The environmental and natural values in my municipality can be flexible if it can create more jobs.
- We should raise the property tax rate in my municipality.
- If my municipality were to merge with another municipality in the near future, a consultative referendum should be held on the merger decision.
- The voting age in the municipal elections should be lowered to 16 years.
- To balance the municipal budget in your municipality we should... [choose 2]:
  - Cut down municipal services.
  - Increase or establish new user fees.
  - Increase taxes.
  - Sell off municipal property.
  - Develop the business in the municipality.
  - Issue more debt.
- Members of parliament should not run in the municipal elections.
- The five-year long dismissal period for the municipal employees in conjunction with a municipality mergers is too long.
- Municipal employees should not be nominated as municipal board members.

- Let's assume your municipality is financially troubled. You must save and there is a trade-off between the services for the elderly and the children. What will you do?
  - I cut from children.
  - I cut from elderly.
  - I try to cut evenly from both.
  - We must save but I still suggest issuing more debt.
- A historical building has gotten in bad shape. What will you do?
  - History is more valuable than temporary economic gain. We must refurbish the building.
  - Economic gain is more valuable than history. The plot should be taken for more profitable use.
  - There's a risk that the decision will be too rushed. I suggest postponing the decision.
  - I listen to the residents' opinion and decide based on that.
  - We cannot compare historical and economic value. I don't want to take stand for or against.
- Your municipality is planning a new residential area for immigrants and social welfare recipients together with more well-to-do population. What do you think about it?
  - I see such a project outright wrong. I cannot understand the pursuit of a diverse residential culture.
  - I wonder if the project could create something new socially and humanly that we could learn from.
  - I am actively seeking a compromise without nailing my own position.
  - I find the project exclusively positive. I am mainly amazed at the intolerance of others.
- Politics and life require social skills. This means the ability to get along in different groups and between different people. In a position

of trust, you may also be required to have thoughts and reasoned opinions on often quite complex matters. How do you work?

  - I think I am social, I enjoy being in large groups and I enjoy being the center of attention. I am proactive and I tell openly about myself and my thoughts.
  - I am social, but I know I am at my best in smaller groups where you can delve deeper into things.
  - I love quick decisions, visions and I am happy to plan for the future with others.
  - I have a lot of vision, I want to envision and think quietly before I come out with my thoughts.

- There are situations at work in which you have to solve complex issues. How would you describe your general attitude in decision situations?

  - I am constantly wary in order to avoid mistakes and wrong decisions. I check all documents and minutes with particular care.
  - I trust that others will not try to mislead me.
  - I get anxious if I'm not in control of big and small things.
  - I try to be perfect. I demand it of myself and my subordinates.
  - I think life cannot be controlled and it is useless to waste energy with all kinds of nagging.

YLE voting advice application questionnaire 2017

- Young people must be obliged to pursue postgraduate studies or work placements directly after primary school.
- The municipality should provide all children a right to free daycare.
- Schools should have a vegetarian day at least once a week.
- The municipality should support the culture by providing its premises free of charge to cultural associations.
- The school teaching groups are already so big that learning is disrupted.

- The old should have a universal right to a retirement home because the current home care is not sufficient.
- The jobs of current municipal employees must be secured in the social and health care reform.
- Functioning of social and health services is more important than their location.
- Privatization of municipal health care would increase efficiency and lower the costs.
- Favoring outpatient care in mental health creates a feeling of insecurity.
- Municipal tax can be reduced steeply, as most of the tasks are transferred to the provincial administration.
- Construction must be speeded up by limiting citizens' right of appeal.
- Private car use is favored too much in zoning.
- The municipality should support businesses by offering them cheap plots.
- The environmental and natural values in my municipality can be flexible if it can create more jobs.
- My municipality should take in refugees.
- An annual fee could be charged for library services.
- The income thresholds for municipal rental housing must be removed.
- My municipality is spending too much money on building and maintaining sports facilities.
- Everyone should be able to get to the services by public transport.
- Things were not better before—the changes in the Finnish lifestyle have been good.
- We need strong leadership that can solve problems without the need for compromise.
- It is more important for children to be curious and independent than to be well behaved and obedient.

- In essence, life is a race for resources and power, and you can't succeed without a fight.
- Our society would have fewer problems if people were treated more equitably.
- In Finland, everyone has equal opportunities for wealth and happiness.
- Public transport in the metropolitan area must be free of charge.
- The municipality must employ refugees at all costs.
- The municipality must restrict construction in sparsely populated areas.
- In their food service, the municipality must choose domestic ingredients whenever they are available.
- The population base of my municipality is too small to carry out the statutory tasks.
- The most important task of a municipal councilor is to defend the interests of his constituency.
- Which committee do you think will be the most important in your municipality in the coming election term?
- Providing social and health services to the citizens is better done by the provincial government than by my municipality.