

# Populism and Ideological Convergence: Evidence from a Multiparty System\*

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October, 2024

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## Abstract

Populist parties have gained significant power in European politics in the last decades, raising concerns about 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 estimate ideological positions, modeling candidates' responses using item response theory to obtain measures of ideology that are comparable across election years. The results show that increased populist representation causes the ideological spectrum among other parties' candidates in the municipality to become more concentrated. One additional seat for the populist party reduces the interquartile range of candidate positions by 9 %. While there is initial ideological convergence between mainstream and populist parties, it does not persist as the populist party continues to gain more seats. These effects take place only on the liberal-conservative dimension, while positions on the economic dimension are unaffected. The results demonstrate that increased populist representation influences other parties and causes ideological convergence within the candidate base.

**JEL codes:** P16, D72

**Keywords:** populism, party platforms, political ideology, political parties, voting advice applications

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\*I would like to thank Nikolaj Broberg, Enrico Cantoni, Thomas Crossley, Luisa Dörr, Klaus Gründler, Aino Kalmbach, Natalie Kessler, David Levine, Andrea Mattozzi, Jaakko Meriläinen, Matti Mitrinen, Niklas Potrafke, Tuukka Saarimaa, Arthur Schram, Nicole Stoelinga, Marko Terviö, Janne Tukiainen, and Timo Wochner for helpful discussions and comments. I am also thankful to seminar and conference participants at the EUI, ETH Zürich, Helsinki GSE, ETLA, Ifo Institute, QMUL Economics and Finance Workshop, RGS Doctoral Conference in Economics, EEA-ESEM Congress, European Meeting of the Urban Economics Association, International Conference on European Studies, Annual Meeting of the Scottish Economic Society, Swiss Society of Economics and Statistics, International Association for Applied Econometrics, and the European Public Choice Society.

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# 1 Introduction

Populist parties and ideologies have become increasingly prominent in European politics. Populists have become significant forces, both in the opposition—like the AfD in Germany and the National Rally in France—and as part of governing coalitions, such as the FPÖ in Austria, Lega in Italy, and the Finns Party in Finland. Recent literature shows that populist governments are associated with worse economic performance and can also erode democratic institutions, such as checks and balances on the executive, independent judiciary and press freedom (Funke et al. 2023). Populist politicians’ electoral success has raised concerns about contagion of populism across party lines, and even of democratic backsliding. One way populism could spread is the impact of populist representation on mainstream parties. However, the influence of populists’ electoral success on the political landscape is unclear: Does the presence of a populist party have a direct impact, or do mainstream parties merely respond to shifts in voter preferences? I provide causal evidence of the effects of populist representation and contribute to a better understanding of party competition and ideological convergence in a multiparty setting.

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 leverages close contests in Finnish local elections. I show that increased populist representation gives rise to ideological convergence among other parties’ political candidates, particularly on the liberal-conservative policy dimension. This dimension encompasses views on social and cultural issues and it is the primary policy focus of the populist party. On average, one additional seat for the populist party causes a 9 % decrease of the interquartile range of all other parties’ candidates’ positions in the municipality.

Finland is an excellent case study for exploring the impact of populism on the supply of political ideologies for three key reasons. First, Finland has experienced a strong wave of populism. Over the past decade, the Finns Party—the populist party in Finland—has transformed from a fringe party into 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 and again since 2023. Second, local elections are important due to the significant economic role of municipalities: They are responsible for social and health care services, they are major employers, 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.

Much of the previous literature on populism has focused on the drivers of populism, showing that adverse economic conditions can erode trust in politics, foster anti-immigration attitudes, and increase support for populist parties (Algan et al. 2017; Colantone and Stanig 2018; Fetzer 2019; Edo et al. 2019). As a result, mainstream

parties also respond to these shifts in voter preferences (see e.g. Guriev and Papaioannou 2022; 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 et al. 2001a; 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 evidence of how the presence of a populist party influences mainstream parties’ ideological positions.

Since gaining more seats in close elections reveals very little about voter preferences, it constitutes a “populist supply shock.” Similar to the incumbency effect, gaining more seats can enhance the party’s credibility as a serious contender. Having more politicians in office provides more experience, resources, media attention and legislative presence. Additionally, seats won in close elections could be attributed to shifts in voter preferences, or mainstream parties may anticipate that having more elected politicians could lead to increased voter demand for the party’s platform in future elections. In this setting of proportional elections and multidimensional policy, the direction of the effect is *ex ante* ambiguous, and ultimately an empirical question.

To estimate parties’ ideological positions, I use candidate-level survey data from a voting advice application (VAA). The survey consists of statements on policy and ideological views, providing comprehensive information on candidates’ political preferences. The data is collected before elections and thus also includes candidates who were not elected. Since the purpose of the VAA is to inform voters, candidates’ answers are made public prior to the election. Using individual candidates’ preferences allows me to derive party positions that vary both over time and across municipalities.

To estimate candidates’ ideologies, I apply an Item Response Theory (IRT) model. While IRT is commonly used in educational assessment and psychometrics to measure latent traits such as abilities or attitudes, it has been less widely employed in economics. The key advantage of IRT is that it distinguishes the respondent’s latent trait—in my case the political ideology—from properties of the survey items, such as their difficulty. The model predicts the probability of a particular response as a function of the respondent’s level of latent trait and the item parameters (Kolen and Brennan 2004). This approach allows me to estimate ideological traits from several waves of data, producing measures that are comparable across election years.

I examine how an exogenous increase in populist party representation—due to randomness of close elections—influences party positions and ideological polarization between candidates in the same municipality. Finding exogenous variation in populist representation to identify the causal effect of populism is hard: Election outcomes are correlated with political and economic conditions. Because Finland has proportional representation, it is not possible to use a regression discontinuity design. While seat

allocation within a party is based on candidates' personal votes, the number of seats each party receives depends on all parties' votes, and thus there are no predetermined seat thresholds. To identify electoral closeness, I follow a bootstrap approach similar to Kotakorpi et al. (2017). I simulate elections by resampling votes from the empirical vote distribution, and I calculate the difference between the party's realized number of seats and the mean number of seats it obtains over the bootstrap repetitions. The difference represents how much the realized number of seats deviates from the expected number of seats, and I use it as an instrumental variable for the populist seat share (see Clots-Figueras (2011) and Freier and Odendahl (2015) for similar approaches).

My main finding is that an increase in populist representation causes ideological convergence among other parties' political candidates. The IV results show that, holding voter preferences constant, an exogenous increase in populist representation causes the candidate base in the municipality to become more ideologically concentrated. On average, an additional seat to the populist party results in about a 9 % decrease of the interquartile range, or a 6 % decrease of the 10th-90th percentile range, of positions among candidates from other parties. This ideological convergence takes place on the liberal-conservative policy dimension, which describes social and cultural preferences. Positions on the economic dimension are unaffected.

On average, the overall ideological concentration of the candidate base does not bring established parties closer to the populist party. However, this null result on distances between parties masks significant heterogeneity over time. Decomposing the results by election year reveals that distances between the populist party and other parties decreased early in the sample period, following the populist party's initial gains in local and national politics. Yet, this effect is only present during the early stages of the populist party's success. I do not find similar effects on ideological distances in the later years, as the populist party continues to gain seats. My results complement the findings of Abou-Chadi and Krause (2020), who show that radical right success leads other parties to adopt more culturally protectionist positions. However, their finding is driven by the radical right's initial entry into parliament. My results demonstrate that while ideological convergence between mainstream and populist parties does occur initially, it does not persist. In sum, my findings show that although the presence of a populist party influences other parties and the political space, the effect whereby other parties adopt positions closer to that of the populist party is short-lived.

Ex ante, it is unclear whether mainstream parties would respond to populist success by adopting more populist stances or by differentiating themselves. Party-level estimates show that the most notable effects appear for the parties ideologically closest to the populist party—the center-right parties become more internally cohesive—and for the ideologically most distant party—the green party becomes more liberal. These adjustments take place on the populist party's primary policy dimension, which is a secondary

policy area for most mainstream parties. These results are consistent with the interpretation that in order to compete against the electoral threat posed by the populist party, mainstream parties try to differentiate themselves from the populist party and other parties closest to them.

Lastly, I examine the electoral and policy consequences of increasing populist representation. First, I find no evidence that an unexpected increase in the populist seat share affects individual parties' vote shares in the next elections. Second, since deterring immigration is a central issue for right-wing populism, I examine the impact on the opening of reception centers for asylum seekers. The results do not suggest that the Finns Party's increased representation influenced the establishment of these centers. Third, as populist parties have ambiguous stances on economic policy and often advocate for simplistic policies, which may imply disregarding budgetary constraints (Bellodi et al. 2024), I examine fiscal policy outcomes. The results also do not indicate that an increase in the Finns Party representation is linked with significant effects on local finances.

**Contributions to the literature** My paper contributes to several strands of literature. First, it speaks particularly to the effects of electing populist politicians. Recent studies on the effects of populism have linked populist governments with rising protectionism and slower economic growth (Fajgelbaum et al. 2020; Funke et al. 2023). At the local level, municipalities led by populist mayors experience worse economic performance, increased bureaucratic turnover (Bellodi et al. 2024), and lower budget transparency (Dörr et al. 2021). Electing populist politicians can also lead to undermining democratic institutions (Funke et al. 2023), erosion of social norms (Bursztyn et al. 2020), decreasing diversity in local associations (Dörr et al. 2021), and to hate crimes against immigrants (Romarri 2022; Müller and Schwarz 2023). My paper focuses specifically on the effects that populism has on the political space. It is unclear whether the presence of a populist party directly impacts the political space, or if mainstream parties merely respond to shifts in voter preferences. My paper aims to close this gap—I provide causal evidence of the effects of populist representation, demonstrating that an increased populist presence influences other parties and causes ideological convergence in the candidate base.

Second, my paper contributes to the literature on party competition, particularly regarding the supply side of politics. I show that an increase in populist party representation affects ideological positions of the mainstream parties' candidates. The paper closest to mine is Abou-Chadi and Krause (2020), which shows that when a radical right party just reaches the electoral threshold to gain a seat in parliament, mainstream parties' positions on multiculturalism move closer to the radical right. My contribution is twofold: First, I examine the more general effect of an increasing seat share. Given that populist parties have gained considerable electoral support in many countries, understanding the impact of their increasing success is crucial. Second, I measure ideological positions at

the candidate level, rather than relying on party manifestos, which tend to emphasize the position of the party leadership. I show that although the distances between other parties' and the populist party decrease when the populist party first emerges, this effect does not persist as the populist party's success continues. More broadly, my paper relates to the literature on the effects of political representation (e.g., Lee et al. 2004; Pettersson-Lidbom 2008; Ferreira and Gyourko 2009; Bhalotra et al. 2014; Meyersson 2014; Folke 2014; Freier and Odendahl 2015; Hyytinen et al. 2018). I show that, in addition to policy and economic outcomes, the representation of different parties and ideologies can also influence other parties' politicians.

Finally, my paper contributes to the literature on estimating party positions. There is a large body of research using content analysis to estimate ideological positions from political text, often from party manifestos (see e.g. Budge et al. 2001; Laver et al. 2003; Adams et al. 2006). While manifestos are an important resource in the study of politics, a significant caveat is that analysis is typically possible only at the national level. Moreover, manifestos are strategic documents that reflect the position of party leadership, which may not coincide with the average position of the party's candidates. Another approach to estimating party positions is analyzing voting records (Heckman and Snyder 1997; Lee et al. 2004), which has the advantage of capturing actual policy decisions instead of campaign rhetoric. However, this method provides information only on elected politicians. I contribute to this literature by using new data on individual candidates' preferences to determine candidates' and parties' ideological positions. Additionally, I provide a methodological contribution by applying an underutilized model of latent variable estimation—IRT—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 describes the data. Section 4 presents the measurement model used to estimate ideological positions. Section 5 describes the empirical strategy. Section 6 presents the main results and Section 7 further explores consequences of populist representation. Section 8 concludes.

## 2 Background

### 2.1 Political Parties in Finland

Both municipal and parliamentary elections have traditionally been dominated by three parties: the Social Democratic Party, the Center Party and National Coalition, who represent the political left, center and right. Smaller parties that have continuously held seats in the parliament and in municipal councils include the Left Alliance, Green League, 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

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

Party	1996	2000	2004	2008	2012	2017	2021
National Coalition	21.6	20.8	21.8	23.4	21.9	20.7	21.4
Social Democratic Party	24.5	23.0	24.1	21.2	19.6	19.4	17.7
Centre Party	21.8	23.8	22.8	20.1	18.7	17.5	14.9
Green League	6.3	7.7	7.4	8.9	8.5	12.5	10.6
Finns Party	0.9	0.7	0.9	5.4	12.3	8.8	14.5
Left Alliance	10.4	9.9	9.6	8.8	8.0	8.8	7.9
Swedish People’s Party	5.4	5.1	5.2	4.7	4.7	4.9	5.0
Christian Democrats	3.2	4.3	4.0	4.2	3.7	4.1	3.6
Others	5.9	4.7	4.2	3.3	2.6	3.3	4.4

*Notes:* The table shows vote shares of individual parties in Finnish municipal elections between 1996–2021. Source: Statistics Finland.

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 since 2011, the Finns Party has been among the most popular parties in parliamentary elections. The Finns Party was part of the government coalition from 2015 to 2017 and again since 2023.<sup>1</sup> Table 1 presents the vote shares of parties in municipal 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, at the municipal level it is present in regions with significant Swedish speaking populations.<sup>2</sup>

Several academic sources classify the Finnish Party as a populist or radical right party (e.g., Arter 2010; Jungar and Jupskås 2014; Rooduijn et al. 2023; Jolly et al. 2022, and others). One of the founders and a long time chairman of the Finns Party, Timo Soini, has on several occasions labeled himself and the party as populist (see e.g., Soini 2019). Opposition to immigration, for instance connecting it to issues of safety and unemployment, opposition to the EU and distrust of political elites are important aspects of the party’s agenda (Arter 2010; Dehdari et al. 2022). Although local economic benefits of hosting asylum seekers can mitigate negative views on immigration (Lahdelma 2023), increased immigration, especially establishing asylum centers, has on average contributed to the popularity of the Finns Party (Matakos et al. 2020). Based on the 2014 Chapel

1. The Finns Party left the coalition in 2017 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 following parliamentary elections and was removed from the party registry in 2023. See also Dehdari et al. (2022).

2. In addition to the eight parliamentary parties, there are a number of small parties (such as the Communist Party or the Pirate Party) that generally win very few council seats and no seats 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.

Table 2: Party classification and most important issues

	Classification	Issue #1	Issue #2	Issue #3
Center Party	agrarian/center	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
Green League	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

*Notes:* The table presents classification of Finnish parties and a ranking of their most important policy issues based on evaluations by country experts. Source: CHES 2014 (Polk et al. 2017).

Hill Expert Survey (CHES, Polk et al. 2017), the most important issues for Finns Party are anti-elite rhetoric, opposition to EU integration and conservative position on social lifestyle (e.g., LGBTQI+ rights and gender equality). Table 2 presents classification and issue rankings of the parties.

According to a 2009 survey by the Finnish public broadcasting company YLE, the majority of Finns Party supporters had previously voted for Center Party or Social Democrats, but the Finns Party also attracted supporters from National Coalition and Left Alliance, as well as voters who did not vote in the previous election.<sup>3</sup> Voter surveys show that in 2011 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 (Rahkonen 2011).

## 2.2 Municipal Elections

Finland has a proportional electoral system with open party lists. Municipal elections are held every four years to elect the members of the municipal council.<sup>4</sup> The minimum size of a municipal council is determined as a step function of population, but the council can set the number of councilors higher. The number of seats ranges from 13 to 85. Candidates are nominated by registered political parties or by constituency associations 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 rarely nominate the maximum number of candidates.

Municipal councilors are elected from multi-member districts, and votes are always given to individual candidates. The number of personal votes that a candidate gets determines the candidate's rank on the party's list. The total number of votes over the candidates of a given party list determines how many seats each party gets based on D'Hondt rule. Because of the electoral system, parties have an incentive to nominate

3. See <https://yle.fi/uutiset/3-5725053>

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



as many candidates as they can, and it is common even for the large parties to have unknown candidates who get very few votes.<sup>5</sup>

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, and they 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.

### 3 Data

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

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 match. 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 given to individual candidates, which makes the VAA a 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-old voters, the VAA was the most important source of information (Borg 2018).

Since the candidates' responses are public, candidates can be held accountable and they have a strong incentive to respond in a way that is consistent with their policy intentions. Indeed, research comparing VAA responses with a confidentially administered post-election survey shows that policy positions estimated from the two survey

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

are strongly correlated (Ilmarinen et al. 2022). Finnish local elections have a distinct citizen-candidate nature (Osborne and Slivinski 1996; Besley and Coate 1997), which supports the assumption that candidates respond truthfully. Local councilors are leisure politicians who generally keep their every-day jobs and only receive small monetary compensation for participating in the council meetings. Previous research shows that monetary return for office is low (Kotakorpi et al. 2017). This implies that candidates' office motivation is low. On the other hand, local councils have a lot of policy power, and candidates are likely to be policy-motivated (Hyytinen et al. 2018; Meriläinen 2022).<sup>6</sup>

The VAA data allows me to estimate ideological positions at the candidate level. Individual candidates' views can then be aggregated to municipality level, which means that my measure of ideology has both cross-sectional and time variation. Unlike most survey data on politicians, an important advantage of the VAA data is that it includes information also on the non-elected candidates. My sample includes candidates' responses from four municipal elections held in years 2008, 2012, 2017 and 2021. Just over half (54 %) of all candidates responded to the survey. This is similar to other survey data used in a related research, such as the NPAT survey used by Ansolabehere et al. (2001b).<sup>7</sup> Parties have an incentive to field as many candidates as they can, since a party's total number of votes determines the number of seats it will obtain. The number of candidates a party can nominate is 1.5 times the council size, and parties often struggle to fill their candidate lists. Recruiting candidates who are not serious about running lowers the response rate.<sup>8</sup> As Table C.3 shows, candidates who respond are on average more likely to be elected and are more experienced (incumbent municipal councilors, MP's, and rerunning candidates). They receive more votes, which also reflects the fact that the response rate is higher in larger municipalities. Response rate is also higher among women and among younger candidates.

In addition to the VAA responses, I use data on municipal election results starting from the election year 2000, as well as municipalities' socioeconomic 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 presented in the Appendix A.

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6. Kotakorpi et al. (2017) estimate that getting elected to municipal council has a modest effect on earnings: Annual earnings while in office increase by 1.300€, and subsequent annual earnings increase by 1.000€. Previous research on the context of Finnish local politics shows that characteristics of elected politicians have substantial impacts on policy outcomes (Hyytinen et al. 2018; Meriläinen 2022).

7. In Ansolabehere et al. (2001b) 57 % of all members of U.S. Congress responded to at least 1 of 2 surveys.

8. 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>).

## 4 Measuring Ideological Positions

The Finnish voting advice application data offers a unique opportunity for estimating ideological positions for individual political candidates based on their announced policy preferences. There are two measurement problems. First, due to the number of questions in the VAA and the fact that the list of questions changes between election years, it is not possible to directly compare the survey responses. Instead, the dimensionality of the data has to be reduced. Moreover, as the VAA survey is not based on any established political ideology scale, whereby questions would be clearly framed to measure respondents' position in a specific dimension (for example the economic left-right dimension), it is not obvious how to orient the questions. To obtain credible estimates, I employ a data-driven method to relate questions to different ideological dimensions.<sup>9</sup>

The second measurement problem is that the surveys change between years. Therefore, they need to be linked so that candidates in different election years are positioned on the same scales. I rely on Item response theory (IRT) models that distinguish and estimate person and item parameters separately. Because the person parameter (usually called e.g., ability, here ideology) is invariant of the specific set of items, the same person parameter can be estimated with a different survey or any subset of items. As the surveys include some common items, they can be used to anchor the scales, and estimated parameters are then on the same scale even though majority of the questions changes (Kolen and Brennan 2004). In comparison, factor or principal component analysis only focuses on the respondent's latent trait. A year-by-year factor analysis might then produce year specific rather than common factors.<sup>10</sup>

IRT models have been commonly used to measure aptitude, but the mathematical models can be as well applied to measure other latent variables such as personality, beliefs, or attitudes (Ostini and Nering 2006).<sup>11</sup> In the political science literature, IRT models have been used to estimate legislators' ideological positions (or ideal points) based on roll call voting records (Clinton et al. 2004). Shor and McCarty (2011) use IRT to estimate legislators' ideological positions in the U.S. Congress based on survey responses

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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 (2022) by pooling the data and creating a single cross-sectional measure using principal component analysis. Lahdelma (2023) compares candidates' responses to a question about receiving refugees. Matakos et al. (2018) measure candidate heterogeneity within parties by computing the difference between each candidates response and the party mean response.

10. Note that there exists a close relationship between IRT and factor analysis, and IRT can be understood as a non-linear extension of traditional factor analysis. Unidimensional IRT models can be reparametrized to retrieve factor loadings and communalities (Mair 2018). Since IRT does not rely on computation of correlation matrices but uses the raw input data, it can be applied to the pooled VAA data.

11. IRT models are commonly used in psychological measurement, e.g., the Programme for International Student Assessment (PISA) and National Assessment of Educational Progress (NAEP) use on IRT (Davies et al. 2019).

in the National Political Awareness Test (NPAT).

I use IRT to construct two ideological dimensions: The economic Left-Right and the GAL-TAN.<sup>12</sup> The GAL-TAN dimension, also called the cultural or authoritarian-libertarian dimension, covers issues such as environmentalism, minority rights, traditional values, immigration, EU integration. These two dimensions have been found to describe well the political space in Western European countries (see e.g., Marks et al. 2006; Van der Brug and Van Spanje 2009; Bornschier 2011; Isotalo et al. 2020; Bonomi et al. 2021). Even though the VAA’s are not constructed with the aim of capturing a specific factor structure, they are surveys of political preferences that contain several questions of varying policy issues and can be used to estimate ideological positions in the most relevant dimensions.

To position candidates in the same ideological space, I pool data from all survey years together and estimate the IRT parameters for all surveys concurrently. The item parameters are fixed across years, and items that are not included in some year are treated as not reached. The common items enable separating respondent group differences from survey wave differences. This is possible due to the invariance assumption: 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 invariant with respect to the items used to determine it (Kolen and Brennan 2004). The mean and variance of the person parameters, and the factors’ covariance are allowed to vary between years. A more detailed description is provided in Appendix B.

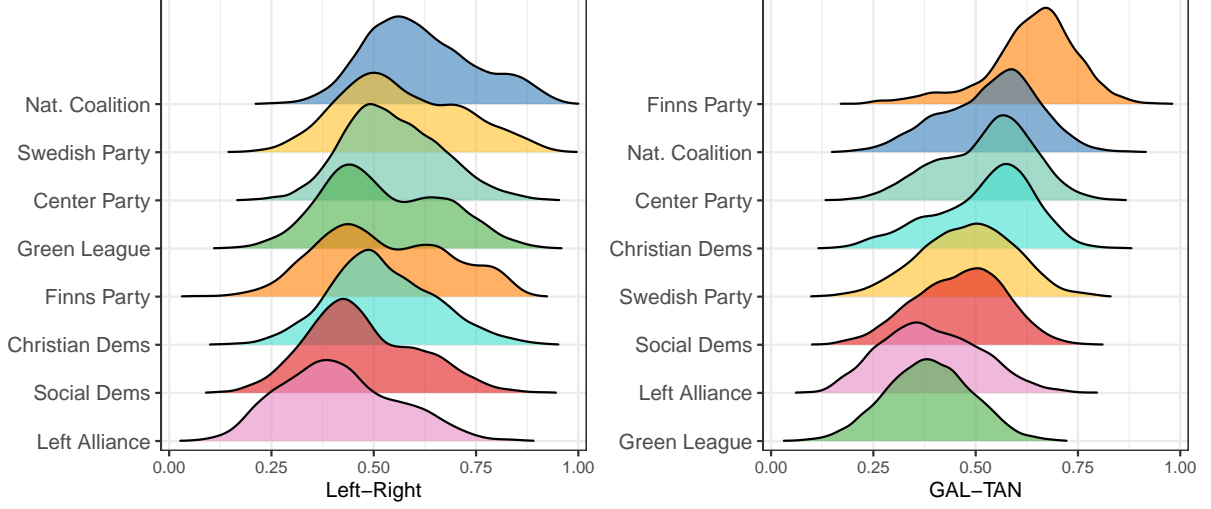
The estimated latent trait distributions are shown in Figure 1. The *Left-Right* dimension describes preferences on economic policy. Many of the survey items concern provision of health care and social services, which make up the majority of local government responsibilities. Survey items loadings strongly on the Left-Right dimension are for instance: “The highest earners could pay more municipal tax than they do now” and “Privatization of municipal health care would increase efficiency and lower the costs.” More positive values indicate more economically rightist views, for example, support for limiting the size of the local public sector, and opposition towards increasing taxation. Left Alliance is the most left-wing, and National Coalition is the most right-wing party. The Finns Party is economically centrist.

The *GAL-TAN* dimension captures candidates’ social and cultural views. Survey items describing the dimension include for example: “My municipality should fly the rainbow flag in honor of Pride”, “My municipality should take in refugees”, and “Exceptions may be made to rules protecting environmental and natural values if they create jobs.” More positive values indicate more conservative attitudes, support for authoritarian views, and negative views towards immigration and environmental protection. Green League and Left Alliance are on the liberal end of the axis, whereas Finns Party is

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12. The abbreviation stands for Green, Alternative, Libertarian on the one end and Traditional, Authoritarian, Nationalist on the other.

Figure 1: Distributions of candidates' ideological positions on the Left-Right and GAL-TAN dimensions



*Notes:* The figure presents distributions of candidates' ideological positions by party, pooling data from all survey years. The x-axis is increasing in economically rightist (left panel) or socially conservative (right panel) preferences. The scale is normalized to range from 0 to 1.

the most socially conservative. Distributions of candidate positions by year are presented in Appendix E.

## 5 Econometric Approach

To estimate the effect of Finns Party representation on ideological polarization and other parties' ideological positions, I estimate a regression of the following form

$$Y_{mt} = \alpha + \beta \text{Populist}_{mt-1} + X'_{mt-1}\gamma + \varepsilon_{mt} \quad (1)$$

where  $\text{Populist}_{mt-1}$  is the share of seats won by the Finns Party in the previous elections,  $X_{mt-1}$  is a set of municipality level controls, and  $\varepsilon_{mt}$  is the error term. As dependent variables, I use both municipality level measures of ideological polarization, and party level measures ( $Y_{pmt}$ ) of ideological cohesion, party position, and distance to the populist party. I use two measures of polarization: The range between 25th and 75th percentile (i.e., the interquartile range), and the range between 10th and 90th percentile of ideological positions of all candidates in a given municipality, excluding the populist party.

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' behavior in the municipality. For instance, if Finns Party candidates are elected in municipalities with preference for populist ideology,

this would bias the results. To overcome this, I construct an instrumental variable for the Finns Party seat share.

## 5.1 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 municipalities and under similar circumstances than other parties' candidates who won in close elections. The thought experiment is that an additional Finns Party candidate is randomly assigned as councilor to some municipalities. 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 strategic responses to the increasing electoral threat posed by the Finns Party, or changes in beliefs and attitudes.

Because municipalities are unitary multi-seat districts with proportional elections, it is not possible to construct a running 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. In proportional open-list elections, whether a candidate is elected depends 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, particularly between parties, is not straightforward. To that end, I apply a simulation approach similar to Kotakorpi et al. (2017). I simulate elections by resampling votes from the empirical vote distribution, and recalculate winners based on the D'Hondt seat allocation rule.<sup>13</sup> This sampling creates simulated vote vectors that have deviations from their empirical counterparts, leading to variation in the simulated election outcomes. For each simulation, I observe the number of seats the Finns Party party receives. I calculate the difference between the party's realized number of seats,  $s_{mt}$ , and the mean number of seats the party obtains over the bootstrap repetitions:

$$T_{mt} = \frac{100}{S_{mt}} \left( \frac{1}{B} \sum_{i=1}^B (s_{mt} - s_{mt}^i) \right) \quad (2)$$

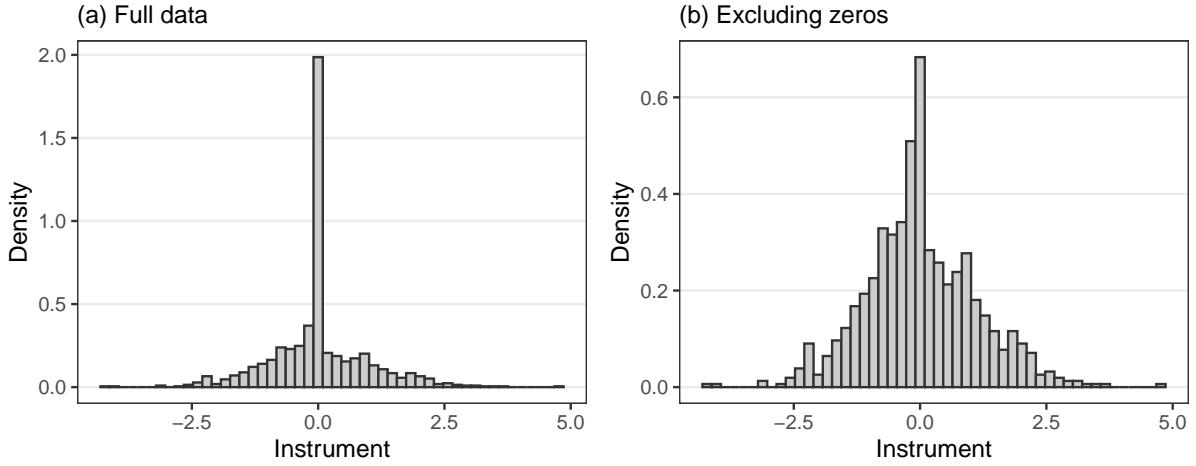
where  $s_{mt}^i$  is the number of Finns Party seats in municipality  $m$  in year  $t$  in the  $i$ th repetition, and  $B$  is the number of bootstrap repetitions. The mean difference is divided by council size  $S_{mt}$  to express it as a seat share (in %).

Figure 2 shows the distribution of the instrument  $T_{mt}$ . The difference represents how

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13. The number of resampled votes equals 20 times the municipal council size, and number of simulated elections (bootstrap repetitions) is 50,000.

Figure 2: Distribution of the instrumental variable  $T_{mt}$ .



*Notes:* The figure shows the distribution of the instrumental variable  $T_{mt}$ . The instrument is the difference in Finns Party’s realized number of seats and average number of seats across the bootstrap repetitions. Left panel includes full data and right panel excludes zeros. Across election years 2004–2017. Mean = 0.01, SD = 0.94, Min = −4.23, Max = 4.76.

much the realized number of seats exceeds or falls short of the expected number of seats. In general these deviations are small, within one percentage point in terms of seat shares, and the distribution is symmetric around zero.<sup>14</sup> Figures E.3 and E.4 present distributions of the instrument depending on council size and separately for each year. The figures show that identification comes from different sized municipalities and evenly from different election years.

Table 3 presents the pre-treatment covariate balance. Overall, the municipalities where the Finns Party won or lost more seats by chance are very similar to each other. The only exception to good balance is a difference in voter turnout. I account for the potential bias by controlling for lagged turnout. Table A.4 reports lagged party seat shares. They are also well balanced between municipalities where the Finns Party unexpectedly gained or lost seats, except for a marginally significant difference in the Social Democratic Party’s seat share.

Candidates in individual parties differ in their background characteristics, and therefore the party effect can be a bundle of things. Table A.3 in the Appendix provides summary statistics for parties. The gender composition in the Finns Party is more skewed towards men than in other parties. The Finns Party candidates have also somewhat lower levels of education, the share of employed persons is lower, and consequently the candidates’ median income is lower than in other parties. Table A.5 present post-treatment balance of council characteristics. There is a marginally significant and small difference

14. This approach is conceptually very similar to Freier and Odendahl (2015), who identify close elections by adding random noise to the vote vector and recalculating the seat allocation over several simulations.

Table 3: Balance of municipality level pre-treatment covariates

	T>0			T<0			Difference	Std. Error
	N	Mean	Std. Dev.	N	Mean	Std. Dev.		
Council size	380	33.36	13.32	462	32.47	12.52	0.89	0.83
Effective no. parties	159	3.57	0.98	223	3.68	0.94	-0.12	0.11
Number of parties	380	6.89	2.28	462	6.80	2.11	0.09	0.14
Number of candidates	380	132.03	126.38	462	123.14	116.42	8.89	6.97
Incumbent candidates, %	380	24.35	7.72	462	24.38	7.27	-0.03	0.51
Women candidates, %	379	38.91	4.77	461	38.90	5.10	0.01	0.35
MP candidates, %	379	0.28	0.53	461	0.25	0.48	0.04	0.03
Rerunning candidates, %	247	71.66	6.44	313	71.73	6.81	-0.07	0.57
Turnout, %	380	62.28	6.05	462	63.14	5.90	-0.86	0.41**
Population	355	20640.35	44688.03	410	19236.76	49379.77	1403.59	2246.69
Population, 0-14 %	355	17.13	3.77	410	16.96	3.52	0.17	0.3
Population, 15-64 %	355	62.89	3.08	410	62.55	2.95	0.34	0.21
Population, 65+ %	355	19.98	5.22	410	20.49	5.03	-0.52	0.36
Population, urban %	355	30.17	40.56	410	26.66	39.99	3.50	2.9
Education, %	355	59.40	6.58	410	59.59	6.14	-0.19	0.45
Unemployed, %	355	10.98	4.13	410	10.75	4.08	0.22	0.3
Median income	355	31869.71	5738.46	410	32086.25	5122.74	-216.54	402.44
VAA Response, %	247	47.98	14.98	313	47.49	13.86	0.49	1.22

Notes: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors are adjusted for clustering at the municipality level. Effective number of parties is computed as inverse of the sum of squared party vote shares (Laakso and Taagepera 1979). Education is share of population with higher than basic level education. Income is household median disposable income.

in average age, apart from which the council characteristics are balanced. The table also presents post-treatment seat shares, demonstrating that no other party is systematically gaining or losing seats in the treated municipalities.

With the newly constructed instrumental variable in hand, I estimate Equation (1) using TSLS. The first stage equation is given by

$$Populist_{mt-1} = \pi T_{mt-1} + \mathbf{X}'_{mt-1} \gamma_1 + \nu_{mt-1} \quad (3)$$

where the Finns Party seat share,  $Populist_{mt-1}$ , is explained by the difference between the realized seats and the mean number of seats over the simulations,  $T_{mt-1}$ , and  $\nu_{mt-1}$  is the error term. The instrumental variable  $T_{mt-1}$  is the part of the Finns Party seat share that is as good as random.

Table D.1 reports the first stage estimates. The instrument is strong and a highly relevant predictor of Finns Party seat share. In a finite sample, there should be close to a one-to-one relationship between the Finns Party seat share and the instrument. The coefficients are of expected magnitude—an unexpected increase in the seat share of the Finns Party gives rise to an increase in the actual seat share by close to the same amount.



Table 4: Polarization on the GAL-TAN dimension: IV and OLS estimates

	p75-p25			p90-p10		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: IV</i>						
Populist <sub>t-1</sub>	-0.022*** (0.008)	-0.019** (0.008)	-0.019** (0.009)	-0.033** (0.014)	-0.027** (0.013)	-0.027** (0.013)
R <sup>2</sup>	0.22	0.28	0.54	0.26	0.34	0.64
<i>Panel B: OLS</i>						
Populist <sub>t-1</sub>	0.001 (0.001)	-0.003* (0.002)	-0.001 (0.002)	0.004* (0.002)	-0.004 (0.003)	-0.001 (0.003)
R <sup>2</sup>	0.00	0.03	0.52	0.00	0.04	0.62
N	1161	1161	1161	1161	1161	1161
F-statistic	1230	1265	1219	1230	1265	1219
Vote share	X	X	X	X	X	X
Municipality controls	X	X	X	X	X	X
Year FEs		X	X		X	X
Municipality FEs			X			X

*Notes:* \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors are adjusted for clustering at the municipality level. The unit of observation is a municipality. The dependent variable in columns (1)-(3) is the interquartile range of candidate positions on the GAL-TAN dimension, and in columns (4)-(6) the range between the 10th and 90th percentiles. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

## 6 Results

### 6.1 Ideological Convergence

Table 4 presents estimates of increased populist seat share on municipality-level polarization along the GAL-TAN dimension. The dependent variable in columns (1)-(3) is the interquartile range of candidates' GAL-TAN positions, and in columns (4)-(6) it is the range between the 10th and 90th percentiles. These ranges are calculated over all candidates, except those from the Finns Party, in a given municipality. Since the outcome measures the spread of candidates' positions, a negative coefficient implies that positions become more concentrated.

The IV estimates in Panel A show that municipalities where the Finns Party's seat share unexpectedly increases experience ideological convergence on the GAL-TAN dimension. The estimates indicate that a one percentage point increase in populist seat share leads to a 0.02 unit convergence of the interquartile range, on a baseline range of 0.83. This implies on average a 2.3 % narrowing of positions. In a median sized municipality with 27 council seats, one additional seat for the Finns Party would result in about a 9

Table 5: Polarization on the Left-Right dimension: IV and OLS estimates

	p75-p25			p90-p10		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: IV</i>						
Populist <sub>t-1</sub>	-0.001 (0.008)	0.001 (0.008)	0.000 (0.009)	-0.017 (0.014)	-0.014 (0.014)	-0.011 (0.013)
R <sup>2</sup>	0.21	0.23	0.51	0.30	0.33	0.62
<i>Panel B: OLS</i>						
Populist <sub>t-1</sub>	0.002 (0.001)	0.000 (0.002)	0.001 (0.003)	0.004* (0.002)	-0.001 (0.003)	-0.002 (0.004)
R <sup>2</sup>	0.00	0.03	0.50	0.00	0.04	0.61
N	1161	1161	1161	1161	1161	1161
F-statistic	1230	1265	1219	1230	1265	1219
Vote share	X	X	X	X	X	X
Municipality controls	X	X	X	X	X	X
Year FEs		X	X		X	X
Municipality FEs			X			X

Notes: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors are adjusted for clustering at the municipality level. The unit of observation is a municipality. The dependent variable in columns (1)-(3) is the interquartile range of candidate positions on the Left-Right dimension, and in columns (4)-(6) the range between the 10th and 90th percentiles. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

% decrease in the spread of candidate positions on the 25th-75th percentile range, or a 6 % decrease on the 10th-90th percentile range.

My main finding is that an increase in populist representation causes ideological convergence among other parties' political candidates in the same municipality. While the OLS estimates in Panel B do not indicate that the spread of candidate positions is systematically associated with support for the populist party, the IV results show that, holding voter preferences constant, an exogenous increase in populist representation causes the candidate base in the municipality to become more ideologically concentrated. This decreasing polarization is not driven by changes in number of candidates or parties in the municipality (see Table C.1).

The ideological convergence is only present on the GAL-TAN dimension. Table 5 shows that changes in populist party representation have no influence on the economic dimension. Since the Finns Party's platform strongly emphasizes social and cultural issues, rather than economic policy, it is intuitive that its effect is most pronounced on the GAL-TAN dimension. As most other parties place greater emphasis on economic policy, adjusting positions on the GAL-TAN dimension may be both more beneficial and

Table 6: Effect of the Finns Party representation on polarization by election year

	GAL-TAN				Left-Right			
	2008 (1)	2012 (2)	2017 (3)	2021 (4)	2008 (5)	2012 (6)	2017 (7)	2021 (8)
<i>Panel A: p75-p25</i>								
Populist <sub>t-1</sub>	-0.045* (0.024)	-0.024 (0.015)	-0.015 (0.013)	-0.018 (0.016)	-0.015 (0.026)	-0.017 (0.018)	0.000 (0.014)	0.016 (0.016)
R <sup>2</sup>	0.13	0.30	0.29	0.36	0.33	0.25	0.13	0.21
<i>Panel B: p90-p10</i>								
Populist <sub>t-1</sub>	-0.093*** (0.025)	-0.017 (0.027)	-0.013 (0.022)	-0.034 (0.025)	-0.051 (0.035)	-0.028 (0.035)	-0.007 (0.022)	-0.004 (0.024)
R <sup>2</sup>	0.20	0.35	0.32	0.40	0.41	0.32	0.24	0.32
N	285	293	291	292	285	293	291	292
F-statistic	89	103	346	642	89	103	346	642
Vote share	X	X	X	X	X	X	X	X
Municipality controls	X	X	X	X	X	X	X	X

*Notes:* \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable in Panel A is the interquartile range of candidate positions, and in Panel B the range between 10th and 90th percentiles. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population, squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

more feasible for them.

Table 6 presents the effects of increasing populist seat shares on municipality-level polarization by election year. Again, convergence is only observable on the GAL-TAN dimension. When examining individual years, the estimates are mostly imprecise but very similar to those in Table 4. The impact of Finns Party representation is strongest and most precisely estimated in the first election year, 2008.

The treatment, i.e., the populist seat share, is based on the electoral results of the previous elections. Although the Finns Party was small in 2004, it had gained three seats in the national parliament in 2003 and five seats in 2007, making it well known among voters and politicians, and signaling that it was a party to be taken seriously.<sup>15</sup> The Finns Party's popularity continued to increase strongly in 2008 and 2012, experienced a slight decline in 2017, and increased again in 2021.

## 6.2 Ideological Distance to the Populist Party

To investigate whether the ideological concentration influences parties' proximity to the populist party, I estimate the effect of the Finns Party seat share on ideological distances between the Finns Party and other parties in the same municipality. The unit of observa-

15. For comparison, the Christian Democrats, an established party with a long tradition of parliamentary representation, typically obtains about five seats. In 2004, the Finns Party won 109 council seats. It lagged behind the Green League, which obtained 314 seats, but did significantly better than the Communist Party behind it, which only obtained 16 seats.

Table 7: Effect of the Finns Party representation on ideological distances to the Finns Party

	GAL-TAN				Left-Right			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Populist <sub><i>t</i>-1</sub>	-0.019 (0.016)	-0.014 (0.016)	-0.005 (0.016)	0.009 (0.015)	-0.002 (0.009)	-0.003 (0.009)	-0.004 (0.011)	-0.002 (0.010)
N	4884	4884	4884	4884	4884	4884	4884	4884
R <sup>2</sup>	0.05	0.10	0.26	0.28	0.00	0.01	0.10	0.11
F-statistic	982	1204	827	817	982	1204	827	817
Mean(Y)	1.03	1.03	1.03	1.03	0.69	0.69	0.69	0.69
Vote share	X	X	X	X	X	X	X	X
Municipality controls		X	X	X		X	X	X
Municipality FEs			X	X			X	X
Year FEs				X				X

*Notes:* \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable is ideological distance to the Finns Party. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

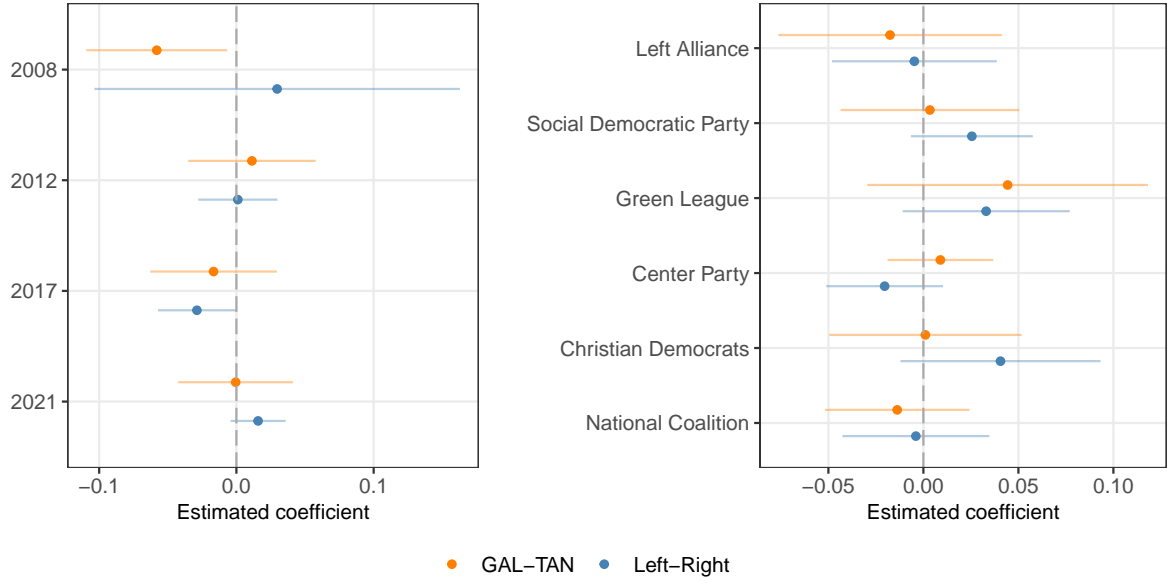
tion is now local party. Table 7 presents the instrumental variable estimates. In columns (1)-(4), the dependent variable is ideological distance between the Finns Party and party  $p$  on the GAL-TAN dimension, and in columns (5)-(8) the dependent variable is distance on the Left-Right dimension. All specifications include a control function for the lagged Finns Party vote share, and successive columns add municipality controls, municipality fixed effects, and year fixed effects. The results do not suggest that an unexpected increase in the Finns Party seat share has an effect on the average ideological distances between the Finns Party and other parties in the municipality. Therefore, convergence of candidate positions does not coincide with systematic changes in distances to the populist party.

However, this null result hides significant heterogeneity. Figure 3 presents IV estimates by election year (left panel) and by party (right panel).<sup>16</sup> Each dot represents an estimated coefficient from a TSLS regression from a subsample that only contains a single election year or a single party. Decomposing the result by year reveals convergence towards the populist party in the beginning of the sample period, when the populist party is just starting to break through, but this effect disappears in the later years.

This finding corroborates the findings of Abou-Chadi and Krause (2020), who show that other parties adopt more culturally protectionist positions when radical right parties gain their first seats in national parliaments. My paper builds on this by demonstrating that while ideological convergence between mainstream and populist parties does occur initially, it does not persist. Studying the effect of increasing seat share, I find that con-

16. See also Tables D.2 and D.3.

Figure 3: Effect of the Finns Party representation on ideological distances to the Finns Party: by year and by party

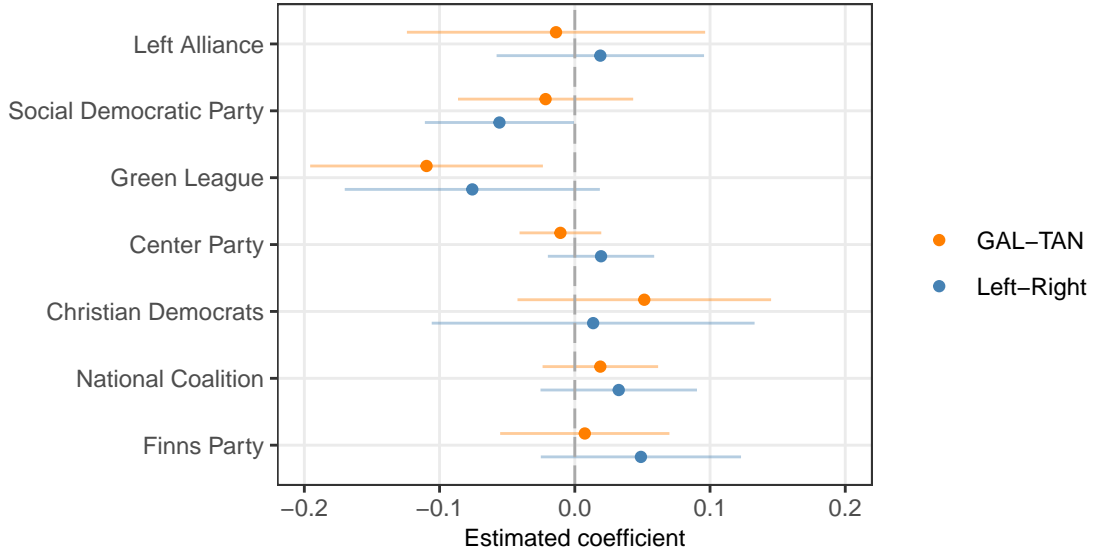


*Notes:* The figure shows IV estimates for the effect of the Finns Party representation on ideological distances to the populist party by election year (left panel) and by party (right panel). Dots represent estimated coefficients for  $Populist_{m,t-1}$  from separate IV regressions. Horizontal bars represent 95 % confidence intervals.

vergence towards the populist party happens after its initial success. The Finns Party's support in local elections remained low until 2008. Gaining its first seats in the parliament (one seat in 1999 and 3 seats in 2003) drew more attention to it, establishing the party as a serious challenger. However, I do not find that the increasing seat share of the populist party had similar effects on ideological distances in the following years, as the party became more successful. The estimates, therefore, suggest a threshold effect: Once the populist party achieves sufficient success, the impact on ideological distances disappears.

The right panel of Figure 3 presents estimates by party. The estimates are imprecise and do not suggest that an increase in populist seat share gives rise to systematic movements towards or away from the populist party. The estimates for the Green League point to an increase in distance to the populist party on both dimensions. The estimates for Left-Right distance are suggestive of increasing distances for many parties, which may be driven by the populist party becoming somewhat more economically rightist over time (see Figure 4).

Figure 4: Effect of the Finns Party representation on shifts in party positions



*Notes:* The figure shows IV estimates for the effect of the Finns Party representation on changes in party positions. Dots represent estimated coefficients for  $Populist_{m,t-1}$  from separate IV regressions. Horizontal bars represent 95 % confidence intervals.

### 6.3 Shifts in Party Positions

The previous results showed that ideological polarization on the GAL-TAN dimension decreases, i.e., the spread of candidates' ideological positions becomes narrower. The convergence does not, on average, bring mainstream parties closer to the populist party. I next examine how individual party positions change over time. In particular, the outcome I study is  $\Delta Y_{pmt}$ , where  $Y_{pmt}$  is the ideological position of party  $p$  in municipality  $m$  in election year  $t$ .

Figure 4 presents the IV estimates. A positive coefficient indicates a move to a more conservative position on the GAL-TAN dimension, or more to the right on the Left-Right dimension.<sup>17</sup> For most parties the estimates are imprecise and close to zero, but they demonstrate interesting variation between parties. In particular, the estimates show that the most liberal party—Green League—becomes more liberal, while the conservative Christian Democrats becomes more conservative. The more centrist parties positions are not affected.

Similarly to distances (Figure 3), the estimated shift is largest and most precisely estimated for the green party. The Green League strongly prioritizes issues on the GAL-TAN dimension, with emphasis on socially liberal policies, environmental protection, and pro-immigration policies. Therefore, any perceived shift towards the populist party could be electorally costly. While the Left Alliance is also liberal, it prioritizes economic issues.

17. See also Table D.4.

The Finns Party’s own position on GAL-TAN is unchanged, but the point estimates suggest it becomes more economically rightist when it obtains additional seats.

## 6.4 Ideological Cohesion Within Parties

To better understand the observed concentration in the spread of candidate positions, I examine whether individual parties in different parts on the political spectrum become more or less cohesive. Table 8 presents estimates for within-party cohesion on the GAL-TAN dimension.<sup>18</sup> The outcomes are calculated over candidates within a party in a given municipality-year. Since the outcome measures the spread of positions, negative estimates imply decreasing dispersion, or increasing cohesion.

Although ideological polarization on average decreases, the effect on individual parties is less straightforward. First, the two large parties that are ideologically closest to the the populist party—the National Coalition and the Center Party—become more cohesive. For the Center Party, which is already ideologically centrist, the effect is statistically significant only for the relatively more extreme candidates (Panel B). Second, the point estimates suggest that the most liberal party, the Green League, becomes less cohesive. This finding coincides with the Green League becoming on average more liberal. Lastly, the Finns Party’s internal cohesion is not significantly affected by gaining more seats (column (7)).

Together with the results on party positions, the findings suggest that other parties react to the emergence of the populist party by differentiating themselves from it. Parties ideologically closest to the populist party may feel the most threatened by its success, leading them to become more internally cohesive. In contrast, the ideologically most distant party becomes even more liberal.

These findings are consistent with a spatial model, in which entry of a new party causes the established parties close to it become more cohesive in order to differentiate themselves from their neighbors, while the more distant parties move further away. A conclusion that can be drawn from theoretical work on electoral institutions and ideological positions (e.g., Carey and Shugart 1995; Cox 1990) is that within-party competition encourages candidates to differentiate themselves from their co-partisans. Conversely, increased between-party competition implies relatively less within-party competition, fostering greater within-party cohesion (e.g., Catalinac 2018). Even when voter preferences remain unchanged, the increased representation of the populist party increases the electoral threat it poses, thereby intensifying competition.

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18. Estimates for the Left-Right dimension are presented in Table D.5.

Table 8: Effect of the Finns Party representation on within party heterogeneity

	Left Alliance	Social Democratic Party	Green League	Center Party	Christian Democrats	National Coalition	Finns Party
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: GAL-TAN p75-p25</i>							
Populist <sub>t-1</sub>	-0.008 (0.018)	0.010 (0.014)	0.018 (0.020)	-0.009 (0.009)	-0.001 (0.016)	-0.029** (0.011)	-0.016 (0.014)
R <sup>2</sup>	0.60	0.49	0.65	0.41	0.58	0.51	0.52
<i>Panel B: GAL-TAN p90-p10</i>							
Populist <sub>t-1</sub>	-0.023 (0.028)	0.013 (0.020)	0.043 (0.029)	-0.023* (0.014)	-0.002 (0.025)	-0.038** (0.018)	-0.002 (0.022)
R <sup>2</sup>	0.66	0.58	0.74	0.50	0.64	0.61	0.60
N	755	1011	685	1107	731	1045	870
F-statistic	519	1027	627	1200	429	1049	845
Municipality FEs	X	X	X	X	X	X	X
Year FEs	X	X	X	X	X	X	X
Vote share	X	X	X	X	X	X	X
Municipality controls	X	X	X	X	X	X	X

Notes: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$  Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable in Panel A is the interquartile range of candidate positions within a party, and in Panel B the range between 10th and 90th percentiles. Each column represents a pair of IV regressions estimated on a subsample only containing one party. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

## 6.5 Heterogeneity Across Municipalities

I test whether the effect of populist representation is larger in smaller councils, where one randomly elected member is more visible and influential. Table 9 presents the results of heterogeneity analyses based on council size and urban population. Columns (1) and (2) present estimates for councils below and above the median size, and columns (3) and (4) present estimates for municipalities with below and above 50 % of urban population.

First, there is significant convergence in the ideological range of the middle half of candidates, regardless of council size or share of urban population (Panel A). Second, the effect on the range between the 10th and 90th percentiles is significant only in smaller and less urban municipalities (Panel B). These results suggest that while ideological convergence is not limited to small municipalities, an unexpected increase in the Finns Party's seats has a stronger effect across the ideological spectrum, giving rise to convergence also at the more extreme ends, when an additional seat is more visible.

I also test whether the effect of populist representation is larger in municipalities with a stronger presence of the Finns Party (see Table D.6).<sup>19</sup> In municipalities where the Finns Party has only one or two seats, the estimated effect of an increase in the seat share is negative but not statistically significant. Limiting the sample to municipalities where

19. Typically, the Finns Party holds one to three council seats.



Table 9: Polarization on the GAL-TAN dimension: heterogeneity across municipalities

	Council size $\leq 27$ (1)	Council size $> 27$ (2)	Urban $\leq 50$ % (3)	Urban $> 50$ % (4)
<i>Panel A: GAL-TAN p75-p25</i>				
Populist <sub><i>t</i>-1</sub>	-0.017* (0.010)	-0.031** (0.013)	-0.019** (0.010)	-0.026* (0.013)
R <sup>2</sup>	0.40	0.68	0.39	0.71
<i>Panel B: GAL-TAN p90-p10</i>				
Populist <sub><i>t</i>-1</sub>	-0.027* (0.015)	-0.020 (0.019)	-0.031** (0.014)	-0.009 (0.026)
R <sup>2</sup>	0.48	0.73	0.52	0.75
N	665	496	827	334
F-statistic	806	535	975	237
Municipality FEs	X	X	X	X
Year FEs	X	X	X	X
Vote share	X	X	X	X
Municipality controls	X	X	X	X

*Notes:* \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$  Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable in Panel A is the interquartile range of candidate positions, and in Panel B the range between 10th and 90th percentiles. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

the Finns Party has at least two seats yields an estimate similar to the baseline results. Narrowing down the sample further to municipalities with three or more candidates yields imprecise estimates.

## 7 Electoral and Economic Consequences

### 7.1 Subsequent Electoral Success

Does increased representation feed back into more voter demand for the populist party? I examine this in the same instrumental variable framework. Table D.7 presents results for individual parties' vote shares in the following elections. The results do not show any systematic impact on individual parties' election outcomes, and therefore show no evidence of either increased support for the populist party, nor of voter backlash.

### 7.2 Influence on Policy Outcomes

Finally, to better understand the mechanism through which populist representation influences other parties' behavior, I look at policy outcomes. First, as deterring immigration is the focus of populist parties' agenda, I examine if increased populist party representation influenced the probability of opening a reception center for asylum seekers in the

municipality. Second, I examine measures of local finances. The definition of populism as a thin-centered ideology (Mudde 2004) implies that populist parties have ambiguous stances and goals on economic policy. Bellodi et al. (2024) suggest that populist politicians propose simple, easy to monitor policies. Commitment to them can imply disregarding budgetary constraints: Bellodi et al. (2024) show that populist mayors repay debts to a lesser degree, and award more procurement contracts which exceed planned costs.

**Hosting refugees** When examining populist impact on hosting refugees, 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. The estimates do not show that an increase in populist seat share had an impact on reception center openings or on the capacity of reception centers in the municipality (see Table D.8). In 2015, Finland received 32,000 asylum seekers, which was an almost tenfold increase compared to the previous years. This created an urgent need to expand capacity of reception centers. Centers were opened in municipalities that had suitable buildings that could be used to house asylum seekers. Consequently, the results in Table D.8 show that local politicians were not able to systematically influence where reception centers were opened. Previous studies show that under populist mayors in Italy and Austria, fewer immigrants have moved into their municipalities (Bracco et al. 2018; Cerqua and Zampollo 2023; Dörr et al. 2021). However, these effects stem from the municipalities becoming more hostile towards immigrants, rather than enacting specific policies to deter immigration.

**Fiscal Policy Outcomes** The Finnish government uses six metrics to monitor municipal finances. I examine these indicators to estimate how an increase in populist party seats influences public finances: (1) municipality has a negative net result, (2) debt per capita exceeds the national average by more than 50 %, (3) balance sheet has an accumulated deficit (500€ or more per inhabitant), (4) income tax rate is at least 0.5 percentage points higher than the country’s weighted average, (5) solvency ratio is less than 50 %, (6) relative indebtedness is at least 50 %. The results presented in Table 10 do not suggest that an increase in the Finns Party seat share has a significant effect on policy outcomes. The only impact is an increasing likelihood that the solvency ratio falls below 50 %.

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. The ideological convergence in general, and particularly the increased cohesion in the center-right parties which are proximate to the Finns Party also help explain why the increased Finns Party seat share does not have a significant impact on policy outcomes.

Table 10: Effect of Finns Party representation on fiscal sustainability: IV estimates

	Negative net result	Debt per capita above avg	Accumulated deficit	Tax rate above avg	Solvency ratio less than 50%	Indebtedness above 50%
	(1)	(2)	(3)	(4)	(5)	(6)
Populist <sub>t-1</sub>	0.000 (0.010)	-0.011 (0.010)	-0.001 (0.008)	0.015 (0.011)	0.032** (0.013)	0.003 (0.014)
N	854	852	854	854	854	854
R <sup>2</sup>	0.47	0.76	0.53	0.80	0.77	0.77
F-statistic	457	455	457	457	457	457
Mean(Y)	0.08	0.14	0.05	0.59	0.38	0.43
Year FEs	X	X	X	X	X	X
Municipality FEs	X	X	X	X	X	X
Vote share	X	X	X	X	X	X
Municipality controls	X	X	X	X	X	X

*Notes:* \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$  Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable in column (1) is a dummy that takes value 1 municipality has a negative net result; in column (2) a dummy for debt per capita that exceeds the national average by more than 50 %; in column (3) a dummy for accumulated deficit; in column (4) income tax rate is at least 0.5 ppts higher than the country's weighted average; in column (5) a dummy for solvency ratio less than 50 %, and in column (6) a dummy for relative indebtedness is at least 50 %. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

## 8 Conclusions

This paper presents novel findings that help us understand how the emergence of populist parties influences between-party competition and shapes the political space. In particular, this paper provides causal evidence of how established parties respond to populist parties. The results show that supply of populism gives rise to ideological convergence among candidates of the other political parties. Holding voter preferences constant, an exogenous increase in populist representation causes the candidate base to become more ideologically concentrated.

Ideological convergence takes place only 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. On average, candidate positions on the liberal-conservative dimension become more centrist. Particularly the center-right parties, which are ideologically closer to the populist party, become more ideologically cohesive.

The findings are consistent with a spatial model in which an entry of a new party makes the established parties differentiate themselves from the populist party and from their neighbors. Theoretical work on electoral institutions also suggests that more competition between parties leads to less competition within them, fostering internal cohesion. Even without changes in voter preferences, increased populist representation increases the electoral threat and competitive pressure on other parties.

This paper provides insights into how populist representation influences the political space, both when the party is still relatively new and starting to attract support, as well

as when the populist party gains broader support. The analysis shows that on average, populist representation does not give rise to convergence between the established parties and the populist party. Examining the results by year reveals that distances between the populist party and other parties decrease in 2008, following the initial break through of the populist party. However, this effect does not persist as the populist party continues to gain seats.

## References

- Abou-Chadi, Tarik and Werner Krause. 2020. “The Causal Effect of Radical Right Success on Mainstream Parties’ Policy Positions: A Regression Discontinuity Approach”. *British Journal of Political Science* 50 (3): 829–847.
- Abou-Chadi, Tarik and Lukas F Stoetzer. 2020. “How Parties React to Voter Transitions”. *American Political Science Review* 114 (3): 940–945.
- Adams, James, Michael Clark, Lawrence Ezrow and Garrett Glasgow. 2004. “Understanding Change and Stability in Party Ideologies: Do Parties Respond to Public Opinion or to Past Election Results?” *British Journal of Political Science* 34 (4): 589–610.
- Adams, James, Michael Clark, Lawrence Ezrow and Garrett Glasgow. 2006. “Are Niche Parties Fundamentally Different from Mainstream Parties? The Causes and the Electoral Consequences of Western European Parties’ Policy Shifts, 1976–1998”. *American Journal of Political Science* 50 (3): 513–529.
- Algan, Yann, Sergei Guriev, Elias Papaioannou and Evgenia Passari. 2017. “The European Trust Crisis and the Rise of Populism”. *Brookings Papers on Economic Activity* 2017 (2): 309–400.
- Ansolabehere, Stephen, James M Snyder and Charles Stewart. 2001a. “Candidate Positioning in U.S. House Elections”. *American Journal of Political Science* 45 (1): 136–159.
- Ansolabehere, Stephen, James M Snyder and Charles Stewart. 2001b. “The Effects of Party and Preferences on Congressional Roll-Call Voting”. *Legislative Studies Quarterly* 26 (4): 533–572.
- Arter, David. 2010. “The Breakthrough of Another West European Populist Radical Right Party? The Case of the True Finns”. *Government and Opposition* 45 (4): 484–504.
- Bellodi, Luca, Massimo Morelli and Matia Vannoni. 2024. “A Costly Commitment: Populism, Economic Performance, and the Quality of Bureaucracy”. *American Journal of Political Science* 68 (1): 193–209.
- Besley, Timothy and Stephen Coate. 1997. “An Economic Model of Representative Democracy”. *The Quarterly Journal of Economics* 112 (1): 85–114.

- Bhalotra, Sonia, Irma Clots-Figueras, Guilhem Cassan and Lakshmi Iyer. 2014. “Religion, Politician Identity and Development Outcomes: Evidence from India”. *Journal of Economic Behavior & Organization* 104:4–17.
- Bonomi, Giampaolo, Nicola Gennaioli and Guido Tabellini. 2021. “Identity, Beliefs, and Political Conflict”. *The Quarterly Journal of Economics* 136 (4): 2371–2411.
- Borg, Sami. 2018. *Kuntavaalitutkimus 2017*. Tutkimusjulkaisu 108. Kunnallisalan kehittämissäätiö.
- Bornschieer, Simon. 2011. “The New Cultural Divide and the Two-Dimensional Political Space in Western Europe”. In *The Structure of Political Competition in Western Europe*. Routledge.
- Bracco, Emanuele, Maria De Paola, Colin P Green and Vincenzo Scoppa. 2018. “The Effect of Far Right Parties on the Location Choice of Immigrants: Evidence from Lega Nord Mayors”. *Journal of Public Economics* 166:12–26.
- Budge, Ian, Hans-Dieter Klingemann, Andrea Volkens, Judith Bara, Eric Tanenbaum et al. 2001. *Mapping Policy Preferences: Estimates for Parties, Electors, and Governments, 1945-1998*. Oxford University Press.
- Bursztyn, Leonardo, Georgy Egorov and Stefano Fiorin. 2020. “From Extreme to Mainstream: The Erosion of Social Norms”. *American Economic Review* 110 (11): 3522–48.
- Carey, John M and Matthew Soberg Shugart. 1995. “Incentives to Cultivate a Personal Vote: A Rank Ordering of Electoral Formulas”. *Electoral Studies* 14 (4): 417–439.
- Catalinac, Amy. 2018. “Positioning under Alternative Electoral Systems: Evidence from Japanese Candidate Election Manifestos”. *American Political Science Review* 112 (1): 31–48.
- Cerqua, Augusto and Federico Zampollo. 2023. “Deeds or Words? The Local Influence of Anti-Immigrant Parties on Foreigners’ Flows”. *European Journal of Political Economy* 77.
- Chalmers, R Philip. 2012. “mirt: A Multidimensional Item Response Theory Package for the R Environment”. *Journal of Statistical Software* 48 (6): 1–29.
- Clinton, Joshua, Simon Jackman and Douglas Rivers. 2004. “The Statistical Analysis of Roll Call Data”. *American Political Science Review* 98 (2): 355–370.
- Clots-Figueras, Irma. 2011. “Women in Politics: Evidence from the Indian States”. *Journal of Public Economics* 95 (7-8): 664–690.
- Colantone, Italo and Piero Stanig. 2018. “The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe”. *American Journal of Political Science* 62 (4): 936–953.

- Cox, Gary W. 1990. “Centripetal and Centrifugal Incentives in Electoral Systems”. *American Journal of Political Science*, 903–935.
- Davier, Matthias von, Kentaro Yamamoto, Hyo Jeong Shin, Henry Chen, Lale Khorramdel, Jon Weeks, Scott Davis, Nan Kong and Mat Kandathil. 2019. “Evaluating Item Response Theory Linking and Model Fit for Data from PISA 2000–2012”. *Assessment in Education: Principles, Policy & Practice* 26 (4): 466–488.
- Dehdari, Sirus H, Konstantinos Matakos, Jaakko Meriläinen and Janne Tukiainen. 2022. “A Pink Slip for the Blue Reform: Is Selection, Experience, or Ideology the Elixir of Populists’ Survival?” *Journal of Political Institutions and Political Economy* 3 (1): 1–21.
- DeMars, Christine. 2002. “Incomplete Data and Item Parameter Estimates under JMLE and MML Estimation”. *Applied Measurement in Education* 15 (1): 15–31.
- Dörr, Luisa, Niklas Potrafke and Felix Roesel. 2021. *Populists in Power*. CESifo Working Paper 9336.
- Edo, Anthony, Yvonne Giesing, Jonathan Öztunc and Panu Poutvaara. 2019. “Immigration and Electoral Support for the Far-Left and the Far-Right”. *European Economic Review* 115:99–143.
- Fajgelbaum, Pablo D, Pinelopi K Goldberg, Patrick J Kennedy and Amit K Khandelwal. 2020. “The Return to Protectionism”. *The Quarterly Journal of Economics* 135 (1): 1–55.
- Ferreira, Fernando and Joseph Gyourko. 2009. “Do Political Parties Matter? Evidence from US Cities”. *The Quarterly Journal of Economics* 124 (1): 399–422.
- Fetzer, Thiemo. 2019. “Did Austerity Cause Brexit?” *American Economic Review* 109 (11): 3849–86.
- Folke, Olle. 2014. “Shades of Brown and Green: Party Effects in Proportional Election Systems”. *Journal of the European Economic Association* 12 (5): 1361–1395.
- Freier, Ronny and Christian Odendahl. 2015. “Do Parties Matter? Estimating the Effect of Political Power in Multi-Party Systems”. *European Economic Review* 80:310–328.
- Funke, Manuel, Moritz Schularick and Christoph Trebesch. 2023. “Populist Leaders and the Economy”. *American Economic Review* 113 (12): 3249–3288.
- Guiso, Luigi, Helios Herrera, Massimo Morelli and Tommaso Sonno. 2017. *Demand and Supply of Populism*. Working Paper n. 610.
- Guriev, Sergei and Elias Papaioannou. 2022. “The Political Economy of Populism”. *Journal of Economic Literature* 60 (3): 753–832.

- Heckman, James J and James M Snyder. 1997. “Linear Probability Models of the Demand for Attributes with an Empirical Application to Estimating the Preferences of Legislators”. *RAND Journal of Economics* 28:S142.
- Hyttinen, Ari, Jaakko Meriläinen, Tuukka Saarimaa, Otto Toivanen and Janne Tukiainen. 2018. “Public Employees as Politicians: Evidence from Close Elections”. *American Political Science Review* 112 (1): 68–81.
- Ilmarinen, Ville-Juhani, Veikko Isotalo, Jan-Erik Lönqvist and Åsa von Schoultz. 2022. “Do Politicians’ Answers to Voting Advice Applications Reflect their Sincere Beliefs? Comparing Publicly and Confidentially Stated Ideological Positions in a Candidate-Centred Electoral Context”. *Electoral Studies* 79.
- Isotalo, Veikko, Mikko Mattila and Åsa von Schoultz. 2020. “Ideological Mavericks or Party Herd? The Effect of Candidates’ Ideological Positions on Intra-Party Success”. *Electoral Studies* 67.
- Jolly, Seth, Ryan Bakker, Liesbet Hooghe, Gary Marks, Jonathan Polk, Jan Rovny, Marco Steenbergen and Milada Anna Vachudova. 2022. “Chapel Hill Expert Survey Trend File, 1999–2019”. *Electoral Studies* 75:102420.
- Jungar, Ann-Cathrine and Anders Ravik Jupskås. 2014. “Populist Radical Right Parties in the Nordic Region: A New and Distinct Party Family?” *Scandinavian Political Studies* 37 (3): 215–238.
- Kolen, Michael J and Robert L Brennan. 2004. *Test Equating, Scaling, and Linking*. Springer.
- Kotakorpi, Kaisa, Panu Poutvaara and Marko Terviö. 2017. “Returns to Office in National and Local Politics: A Bootstrap Method and Evidence from Finland”. *Journal of Law, Economics, and Organization* 33 (3): 413–442.
- Laakso, Markku and Rein Taagepera. 1979. ““Effective” Number of Parties: A Measure with Application to West Europe”. *Comparative Political Studies* 12 (1): 3–27.
- Lahdelma, Ilona. 2023. “Do Local Economic Benefits of Asylum Seekers Lead to More Support for Local Refugee Intake?” *Journal of Politics* 85 (4).
- Laver, Michael, Kenneth Benoit and John Garry. 2003. “Extracting Policy Positions from Political Texts Using Words as Data”. *American Political Science Review* 97 (2): 311–331.
- Lee, David S, Enrico Moretti and Matthew J Butler. 2004. “Do Voters Affect or Elect Policies? Evidence from the US House”. *The Quarterly Journal of Economics* 119 (3): 807–859.
- Mair, Patrick. 2018. *Modern Psychometrics with R*. Springer.

- Marks, Gary, Liesbet Hooghe, Moira Nelson and Erica Edwards. 2006. “Party Competition and European Integration in the East and West: Different Structure, Same Causality”. *Comparative Political Studies* 39 (2): 155–175.
- Matakos, Konstantinos, Riikka Savolainen, Orestis Troumpounis, Janne Tukiainen and Dimitrios Xefteris. 2018. “Electoral Institutions and Intraparty Cohesion”. *VATT Institute for Economic Research Working Papers* 109.
- Matakos, Konstantinos, Riikka Savolainen and Janne Tukiainen. 2020. “Refugee Migration and the Politics of Redistribution: Do Supply and Demand Meet?” *Aboa Center for Economics, Discussion Paper*, no. 132.
- Meriläinen, Jaakko. 2022. “Political Selection and Economic Policy”. *The Economic Journal* 132 (648): 3020–3046.
- Meyersson, Erik. 2014. “Islamic Rule and the Empowerment of the Poor and Pious”. *Econometrica* 82 (1): 229–269.
- Mudde, Cas. 2004. “The Populist Zeitgeist”. *Government and Opposition* 39 (4): 541–563.
- Müller, Karsten and Carlo Schwarz. 2023. “From Hashtag to Hate Crime: Twitter and Antiminority Sentiment”. *American Economic Journal: Applied Economics* 15 (3): 270–312.
- Osborne, Martin J and Al Slivinski. 1996. “A Model of Political Competition with Citizen-Candidates”. *The Quarterly Journal of Economics* 111 (1): 65–96.
- Ostini, Remo and Michael L Nering. 2006. *Polytomous Item Response Theory Models*. SAGE Publications.
- Pettersson-Lidbom, Per. 2008. “Do Parties Matter for Economic Outcomes? A Regression-Discontinuity Approach”. *Journal of the European Economic Association* 6 (5): 1037–1056.
- Polk, Jonathan, Jan Rovny, Ryan Bakker, Erica Edwards, Liesbet Hooghe, Seth Jolly, Jelle Koedam, Filip Kostelka, Gary Marks, G Schumacher et al. 2017. “Explaining the Salience of Anti-Elitism and Reducing Political Corruption for Political Parties in Europe with the Chapel Hill Expert Survey Data”. *Research & Politics* (January-March):1–9.
- Rahkonen, Juho. 2011. “Perussuomalaisten Ruumiinavaus: Onko Työväen Protestipuolueen Kannatus Saavuttanut Vielä Ylärajaansa?” *Yhteiskuntapolitiikka* 76 (4): 425–435.
- Romarri, Alessio. 2022. *Strongmen in Power Are Not Without Consequences: Far-Right Mayors and Hate Crimes*. Technical report. Working Paper.
- Rooduijn, Matthijs, Andrea L.P. Pirro, Daphne Halikiopoulou, Caterina Froio, Stijn van Kessel, Sarah L de Lange, Cas Mudde and Paul Taggart. 2023. “The PopuList 3.0:



- An Overview of Populist, Far-left and Far-right Parties in Europe”, <https://doi.org/DOI10.17605/OSF.IO/2EWKQ>.
- Samejima, Fumiko. 1997. “Graded Response Model”. In *Handbook of Modern Item Response Theory*, 85–100. Springer.
- Savolainen, Riikka. 2019. *Does Political Experience Influence Policy Positions?* Working Paper.
- Schumacher, Gijs and Kees Van Kersbergen. 2016. “Do Mainstream Parties Adapt to the Welfare Chauvinism of Populist Parties?” *Party Politics* 22 (3): 300–312.
- Shor, Boris and Nolan McCarty. 2011. “The Ideological Mapping of American Legislatures”. *American Political Science Review*, 530–551.
- Soini, Timo. 2019. *Populismi. Polemia*. Pole-Kuntatieto Oy.
- Van der Brug, Wouter and Joost Van Spanje. 2009. “Immigration, Europe and the ‘New’ Cultural Dimension”. *European Journal of Political Research* 48 (3): 309–334.
- Wagner, Markus and Thomas M Meyer. 2017. “The Radical Right as Niche Parties? The Ideological Landscape of Party systemsS in Western Europe, 1980–2014”. *Political Studies* 65 (1): 84–107.
- Ylä-Anttila, Tuomas and Tuukka Ylä-Anttila. 2015. “Exploiting the Discursive Opportunity of the Euro Crisis: The Rise of the Finns Party”. In *European Populism in the Shadow of the Great Recession*, edited by Hanspeter Kriesi and Takis Pappas. ECPR Press Colchester.

# Populism and Ideological Convergence: Evidence from a Multiparty System

Online Appendix

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October, 2024

## A Descriptive Statistics

Table A.1 provides summary statistics for municipalities, Table A.2 summarizes candidate characteristics and Table A.3 provides summary statistics for parties. Table A.4 presents balance tests of pre-treatment party seat shares. Finally, Table A.5 presents balance of post-treatment council characteristics and seat shares.

Table A.1: Municipality summary statistics

	Mean	Std.Dev.	N
Council size	31.32	12.68	1457
Council, women %	36.78	8.77	1457
Council, incumbents %	56.46	9.46	1457
Council, members of parliament %	1.12	2.45	1457
Finns Party seats	2.58	2.62	1457
Number of candidates	119.11	121.83	1457
Women candidates, %	39.14	5.29	1455
Incumbent candidates, %	25.18	8.11	1457
MP candidates, %	0.26	0.53	1455
Number of parties	6.89	2.34	1457
Effective number of parties	3.83	1.15	1457
Population	18323.96	46797.97	1457
Population, 0-14 %	16.38	3.88	1457
Population, 15-64 %	60.33	4.40	1457
Population, 65+ %	23.28	6.77	1457
Population, urban %	26.04	39.25	1457
Education, %	62.62	7.58	1457
Median income	32672.75	5452.14	1457
Unemployed, %	11.93	4.22	1457
Turnout, %	61.70	6.59	1457

The table reports municipality level summary statistics across election years 2004-2021. The population characteristics are end of year values for the year preceding an election. 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. Income is median household disposable income.

Table A.2: Candidate summary statistics

	Mean	Std.Dev.	N
Age	48.24	13.48	137647
Female, %	39.79	48.95	137647
Elected, %	26.67	44.22	137917
Incumbent, %	20.26	40.19	137917
Rerun, %	71.07	45.34	105927
Member of Parliament, %	0.44	6.63	137647
Votes	69.70	186.68	137917
Vote share, %	0.84	1.15	137917

The table reports summary statistics for candidate characteristics across election years 2004-2021. Information on rerunning is not available for the 2004 election.

Table A.3: Party summary statistics

	Left	Social Dem.	Greens	Centre	Swedish	Nat. Coalition	Christian Dem.	Finns
Candidates	15.21	23.56	13.10	28.30	25.07	22.92	8.42	14.07
Incumbents, %	21.01	25.75	11.06	29.80	23.51	22.07	16.21	13.40
MPs, %	0.16	0.18	0.09	0.32	0.25	0.19	0.10	0.27
Seat share, %	8.89	18.38	5.03	37.80	26.63	17.29	4.39	10.16
Vote share, %	9.49	18.29	5.92	35.67	25.57	17.26	5.05	10.71
Women, %	35.56	40.01	58.43	40.12	42.52	37.38	47.03	23.02
Mean age	51.92	51.10	44.23	48.47	49.36	48.82	52.20	49.52
VAA Response, %	43.64	42.13	73.00	49.10	59.70	54.93	49.61	37.32
Education, %	79.40	82.20	91.70	86.60	87.80	89.80	87.30	76.10
Employed, %	62.50	71.00	73.90	76.20	77.70	77.00	65.30	58.10
Income	26328	31254	27481	30530	35513	36968	26063	23145
Population	22431	18985	27366	18673	52585	19088	23315	20665
Population, urban %	31.54	27.12	39.67	26.27	55.86	27.06	32.84	28.01
N	1128	1398	874	1413	257	1382	1078	1176

The table reports party level summary statistics across election years 2004-2021. Unit of observation is party  $p$  in municipality  $m$  in year  $t$ . Incumbents, MPs and women are shares of the party's candidates. Candidates' education, employment, and income are based on party level information for 2012. Education is the share of candidates with higher than basic level education.

Table A.4: Balance of pre-treatment seat shares

	T>0			T<0			Difference	Std. Error
	N	Mean	Std. Dev.	N	Mean	Std. Dev.		
Left Alliance	304	9.09	7.28	368	9.43	7.37	-0.33	0.55
Social Democratic Party	370	20.11	9.85	452	18.94	9.85	1.17	0.68*
Green League	239	4.27	4.57	282	3.97	4.38	0.30	0.35
Center Party	377	39.00	19.90	459	39.00	19.25	-0.01	1.38
Swedish Party	54	15.92	19.22	68	18.87	23.44	-2.96	3.93
Christian Democrats	296	4.21	3.76	361	4.35	3.45	-0.13	0.3
National Coalition	367	18.35	9.87	448	17.63	9.80	0.72	0.66
Finns Party	375	6.08	7.04	455	6.80	7.28	-0.72	0.52
Other Party	169	0.99	3.13	199	1.34	4.28	-0.35	0.35

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . The table reports statistics for lagged party seat shares in municipalities where the Finns Party seat share was higher ( $T > 0$ ) or ( $T < 0$ ) than expected. Standard errors are adjusted for clustering at the municipality level.

Table A.5: Balance of post-treatment council characteristics and seat shares

	T>0			T<0			Difference	Std. Error
	N	Mean	Std. Dev.	N	Mean	Std. Dev.		
Council size	381	33.22	13.55	465	32.18	12.94	1.04	0.85
Effective no. parties	381	3.98	1.10	465	3.89	1.09	0.09	0.08
Council, women %	381	36.63	8.59	465	36.15	8.40	0.48	0.58
Council, mean age	380	49.58	2.71	465	49.90	2.55	-0.32	0.17*
Council, incumbents %	381	56.57	9.63	465	56.36	9.45	0.21	0.61
Council, MPs %	381	1.27	2.53	465	1.23	2.46	0.04	0.15
Council, rerunners %	356	87.14	7.62	413	87.32	7.43	-0.18	0.53
Left Alliance	305	8.52	7.13	368	9.21	6.97	-0.69	0.53
Social Democratic Party	370	18.90	9.20	452	18.25	9.64	0.65	0.65
Green League	243	5.11	4.80	285	5.46	5.37	-0.35	0.4
Center Party	377	37.31	19.15	459	38.96	19.45	-1.65	1.35
Swedish Party	54	15.91	19.84	68	19.21	24.12	-3.30	4.02
Christian Democrats	296	3.90	3.54	362	4.37	3.48	-0.48	0.29
National Coalition	368	17.48	9.60	450	17.45	10.11	0.03	0.68
Finns Party	381	10.39	6.21	465	7.78	6.81	2.61	0.49***
Other Party	171	3.44	7.20	208	3.89	6.68	-0.45	0.67

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . The table reports statistics for council characteristics and party seat shares in municipalities where the Finns Party seat share was higher ( $T > 0$ ) or ( $T < 0$ ) than expected. Standard errors are adjusted for clustering at the municipality level.

## B IRT Model

Let there be  $V$  respondents and  $I$  test survey items. Individual  $v$ 's responses to the  $I$  items are given by  $X_v = (x_{v1}, x_{v2}, \dots, x_{vI})$ . Items can be dichotomous, for which  $x_{vi} \in \{0, 1\}$ , or polytomous, for which  $x_{vi} \in \{1, \dots, m_i\}$ , where  $m_i$  is the number of response categories for item  $i$ . An individual's response to an item is modeled by an item response function, which 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 one," or "choose two," 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 chose that option.<sup>20</sup>

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

$$\Pr(X_i = 1 | \theta, \psi) = \frac{\exp(\alpha_i \theta - \beta_i)}{1 + \exp(\alpha_i \theta - \beta_i)} \quad (4)$$

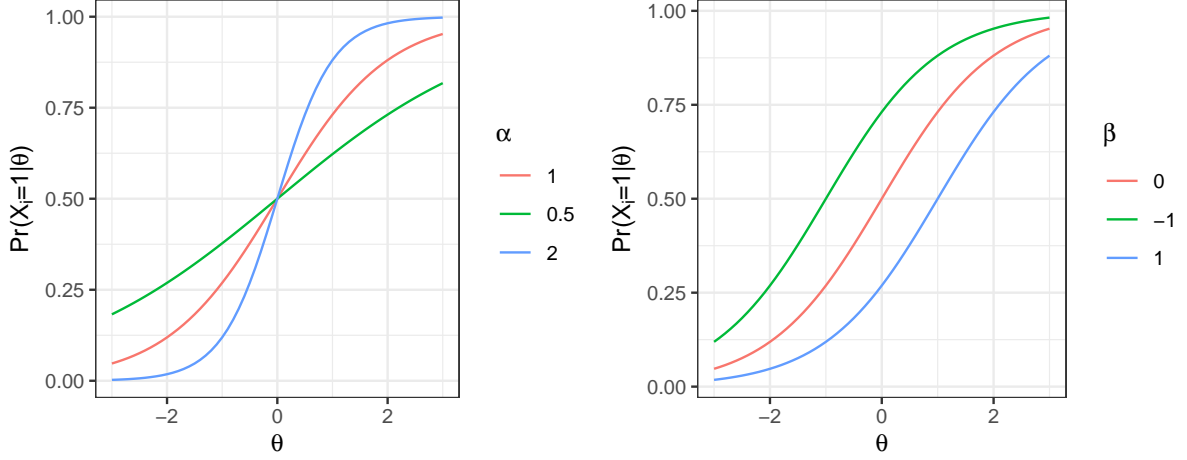
where  $\theta$  is the person parameter, i.e., the level of latent trait,  $\psi$  is the collection of item parameters, here consisting of item difficulty  $\beta_i$ , and item discrimination  $\alpha_i$ . Figure B.1 illustrates how the parameters relate to the item characteristic curves. The discrimination parameter  $\alpha_i$  represents how quickly the probability of responding  $X_i = 1$  increases as the respondent's level of  $\theta$  increases. The difficulty parameter  $\beta_i$  indicates where in the latent trait continuum  $\theta$  a respondent is equally likely to respond  $X_i = 1$  and  $X_i = 0$ . The probability of responding  $X_i = 1$  for a given level of  $\theta$  is higher the lower  $\beta_i$  is (Mair 2018).

Responses to polytomous items are modeled with the graded response model (Samejima 1997). The model was developed for handling of ordered polytomous items and Likert-type questionnaires. It consists of sequential 2-parameter models. The model

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20. The VAA questionnaires are provided in Appendix F.

Figure B.1: Item characteristic curves: Given latent trait  $\theta$ , the probability of positive endorsement of  $X_i$  is non-linearly related to the item discrimination ( $\alpha_i$ , slope) and difficulty ( $\beta_i$ , location).



is characterized by a score category response function

$$\begin{aligned} \Pr(x_i = k|\theta, \psi) &= p_{ik}^*(\theta) - p_{ik+1}^*(\theta), \quad k = 1, \dots, m_i - 1 \\ \Pr(x_i = k|\theta, \psi) &= p_{ik}^*(\theta), \quad k = m_i \end{aligned} \quad (5)$$

and a cumulative category response function, which gives the probability that a respondent with trait  $\theta$  will endorse a response of grade  $k$  or higher

$$\begin{aligned} p_{ik}^*(\theta) &= \Pr(x_i \geq k|\theta, \psi) = 1, \quad k = 1 \\ p_{ik}^*(\theta) &= \Pr(x_i \geq k|\theta, \psi) = \frac{\exp(\alpha_i \theta - \beta_{ik})}{1 + \exp(\alpha_i \theta - \beta_{ik})}, \quad k = 2, \dots, m_i. \end{aligned} \quad (6)$$

$\beta_{ik}$  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).

In multidimensional models  $\theta$  and  $\alpha$  are replaced with vectors  $\boldsymbol{\theta}_v = (\theta_{v1}, \dots, \theta_{vz})$  and  $\boldsymbol{\alpha}_i = (\alpha_{i1}, \dots, \alpha_{iz})$ , where  $z$  is the number of latent traits. Each respondent is estimated a value of latent trait on each dimension. The  $\beta_i$  parameter is interpreted as the 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). The 2PL and graded response models are compensatory, which means that a high standing on one dimension can compensate for a low standing on another dimension in computing response probabilities (Chalmers 2012).

The dimensionality of the data is not unambiguous, and in fact, models with more

dimensions seem to fit the data slightly better.<sup>21</sup> The aim is to reduce the data while retaining dimensions that can be interpreted, following existing research I start from the assumption that the underlying ideological space is two-dimensional (see e.g., Marks et al. 2006; Bornschieer 2011; Bonomi et al. 2021).

Polytomous (Likert type) items are modeled with a graded response model, and dichotomous items are modeled with a 2PL model. I drop remaining nominal items, as well as two items in 2021 that ask the respondent to rank alternatives, as in the previous years there are no items with that structure. I exclude candidates who responded to less than 5 items on a survey, and parties with 10 or less respondent across municipalities. I examine item fit and eliminate items exhibiting most misfit. To assess item fit, I first impute missing data and then compute the signed chi-squared test. I further eliminate items with very low loadings.

To obtain estimates that are on the same scale, the repeating questions are used as so-called anchor items, and their parameters are constrained to be equal across survey waves. The data from all the survey years is pooled together and estimation is run concurrently (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 allowed to have a different latent trait distribution, i.e., mean and variance of  $\theta$  can vary between years (DeMars 2002). The estimates of the item parameters are obtained with maximum likelihood estimation using Metropolis-Hastings Robbins-Monro (MH-RM) algorithm, and the person parameters are estimated using the expected a posteriori method.

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21. I explore the dimensionality of the data by methods of exploratory factor analysis (year by year), and by item factor analysis and comparison of nested exploratory IRT models.



## C Robustness

**Number of parties and candidates** To rule out that the effect on ideological convergence is not driven by changes in number of candidates or parties, I estimate a TSLS model using number of parties, effective number of parties, and number of candidates as the outcome. Effective number of parties computed as inverse of the sum of squared party vote shares. The estimates are presented in Table C.1. The estimates show that Finns Party representation has no effect on number of parties running or number of candidates fielded.

Table C.1: Effect of Finns Party representation on number of parties and candidates

	Parties		Effective no. parties		Candidates	
	(1)	(2)	(3)	(4)	(5)	(6)
Populist <sub>t-1</sub>	-0.017 (0.043)	-0.006 (0.032)	0.008 (0.029)	0.013 (0.014)	0.631 (0.758)	-0.154 (0.398)
N	1164	1164	1164	1164	1164	1164
R <sup>2</sup>	0.70	0.89	0.45	0.93	0.95	0.99
F-statistic	1163	1234	1163	1234	1163	1234
Mean(Y)	7.07	7.07	3.94	3.94	120.78	120.78
Year FEs	X	X	X	X	X	X
Municipality FEs		X		X		X
Vote share	X	X	X	X	X	X
Municipality controls	X	X	X	X	X	X

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors are adjusted for clustering at the municipality level. The dependent variable in columns (1)-(2) is number of parties, in columns (3)-(4) effective number of parties, and in columns (5)-(6) number of candidates. Estimates are from an IV regression. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

**Log outcome** As the outcome in the main analysis is a range, it is limited to non-negative values. This means that the error term is always positive, which could bias down the slope. As a robustness check I estimate the model using a log outcome. The outcome in Table C.2 is logarithm of the spread of ideological positions, and the coefficients represent percentage change in the outcome when the Finns Party seat share changes by one percentage point. The estimates demonstrate the same pattern as in the baseline model: Ideological polarization among candidates decreases on the GAL-TAN dimension, and is unaffected on the Left-Right dimension.

**VAA non-response** Table C.3 presents characteristics of candidates who responded or did not respond to the voting advice application. Respondents and non-respondents

Table C.2: Effect of the Finns Party representation on polarization: log outcome

	p75-p25		p90-p10	
	(1)	(2)	(3)	(4)
<i>Panel A: GAL-TAN</i>				
Populist <sub>t-1</sub>	-0.028** (0.012)	-0.025* (0.014)	-0.023** (0.011)	-0.023** (0.011)
R <sup>2</sup>	0.23	0.51	0.27	0.60
<i>Panel B: Left-Right</i>				
Populist <sub>t-1</sub>	0.003 (0.011)	0.004 (0.012)	-0.011 (0.010)	-0.008 (0.009)
R <sup>2</sup>	0.22	0.52	0.28	0.60
N	1159	1159	1159	1159
F-statistic	1254	1200	1254	1200
Year FEs	X	X	X	X
Municipality FEs		X		X
Vote share	X	X	X	X
Municipality controls	X	X	X	X

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable in columns (1)-(2) is the interquartile range of candidate positions, and in columns (3)-(4) the range between 10th and 90th percentiles. Panel A shows estimates for the GAL-TAN dimension, and Panel B shows estimates for the Left-Right dimension. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

differ in many characteristics, largely reflecting the fact that more experienced and more successful candidates, often in bigger municipalities, are more likely to respond.

I show that response rates do not react to an increase in populist representation. Table C.4 presents IV estimates on response rates. Column (1) shows an IV estimate on the full sample, in column (2) the sample is restricted to municipalities where Finns Party had at most one seat. Finns Party seat share does not affect response rate in general, nor when the party obtains its first seat. In column (3) I use the Finns Party's relative voting power as the endogenous regressor. Following Freier and Odendahl (2015), voting power, or Banzhaf index, for party A is calculated as  $\beta_a = \frac{\eta_a}{2^{n-1}}$ , where  $2^{n-1}$  is the number of possible coalitions in a municipality and  $\eta_a$  is the number of times party A is critical. Relative voting power is then  $\beta_a = \frac{\eta_a}{\sum_p \eta_p}$ . The point estimate in column (3) is large but very imprecise, and the instrument is weak. An increase in Finns Party's voting power does not influence the survey response rate.

Furthermore, the results are robust to excluding municipalities and parties with unusually low response rates. First, Table C.5 presents IV estimates on a subsample where

Table C.3: Characteristics of VAA respondents and non-respondents

	Response	Non-response	Difference	p-value
Female	0.42	0.37	0.05	0.00
Age	46.22	51.49	-5.28	0.00
Elected	0.32	0.20	0.12	0.00
Incumbent	0.22	0.18	0.05	0.00
Member of parliament	0.01	0.00	0.01	0.00
Rerun	0.72	0.69	0.03	0.00
Votes	96.98	40.15	56.84	0.00
Vote share	0.01	0.01	0.00	0.00
Council size	46.38	39.89	6.49	0.00
Left Alliance	0.09	0.11	-0.02	0.00
Social Democratic Party	0.17	0.22	-0.05	0.00
Green League	0.09	0.04	0.06	0.00
Center Party	0.23	0.24	-0.01	0.09
Swedish Party	0.04	0.03	0.01	0.07
Christian Democrats	0.05	0.06	-0.01	0.04
National Coalition	0.21	0.15	0.07	0.00
Finns Party	0.07	0.12	-0.04	0.00
Other Party	0.04	0.04	0.00	0.34

The table presents means of personal characteristics and party affiliation for candidates who responded to the VAA and for those who did not. Standard errors are adjusted for clustering at the municipality level.

municipalities that have a response rate below 30 % have been excluded. Second, Table C.6 presents IV estimates on a subsample where parties that have a response rate below 30 % have been excluded.

**Sensitivity to distance measure** When distance is measured in higher than one-dimensional space, different metrics are not equivalent. Table C.7 presents results for ideological distance to Finns Party in two-dimensional space, measured with different metrics. In column (1) the outcome is Euclidean distance, same as in the main analysis. In column (2) the outcome is measured as squared Euclidean distance. It puts more weight on larger differences. In column (3) the outcome is measured as city block (or Manhattan) distance, and in column (4) as Chebyshev distance. The former is sum of absolute distances in each dimension, whereas the latter is maximum of the absolute differences.

Table C.4: Effect of the Finns Party representation on VAA response rate

	Response rate		
	Full sample (1)	Finn Party seats $_{t-1} \leq 1$ (2)	Full sample (3)
Populist $_{t-1}$	-0.004 (0.004)	-0.008 (0.009)	
Voting Power $_{t-1}$			-0.271 (0.627)
N	7844	3763	5548
R <sup>2</sup>	0.18	0.18	0.22
F-statistic	1173	370	15
Municipality FEs	X	X	X
Year FEs	X	X	X
Vote share	X	X	X
Municipality controls	X	X	X

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable is party level VAA response rate. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

Table C.5: Effect of the Finns Party representation on polarization: municipalities with low response rates excluded

	p75-p25			p90-p10		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: GAL-TAN</i>						
Populist <sub>t-1</sub>	-0.017** (0.008)	-0.015* (0.008)	-0.017* (0.009)	-0.019 (0.013)	-0.014 (0.012)	-0.017 (0.012)
R <sup>2</sup>	0.24	0.29	0.57	0.27	0.36	0.67
<i>Panel B: Left-Right</i>						
Populist <sub>t-1</sub>	0.003 (0.008)	0.005 (0.008)	0.004 (0.009)	0.001 (0.014)	0.003 (0.014)	0.011 (0.014)
R <sup>2</sup>	0.20	0.23	0.53	0.29	0.33	0.64
N	989	989	989	989	989	989
F-statistic	1026	1075	1083	1026	1075	1083
Year FEs		X	X		X	X
Municipality FEs			X			X
Vote share	X	X	X	X	X	X
Municipality controls	X	X	X	X	X	X

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable in columns (1)-(3) is the interquartile range of candidate positions, and in columns (4)-(6) the range between 10th and 90th percentiles. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

Table C.6: Effect of the Finns Party representation on polarization: parties with low response rates excluded

	p75-p25			p90-p10		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: GAL-TAN</i>						
Populist <sub>t-1</sub>	-0.021** (0.008)	-0.018** (0.008)	-0.021** (0.009)	-0.027** (0.013)	-0.021 (0.013)	-0.028** (0.013)
R <sup>2</sup>	0.21	0.27	0.52	0.25	0.34	0.62
<i>Panel B: Left-Right</i>						
Populist <sub>t-1</sub>	0.005 (0.008)	0.007 (0.008)	0.004 (0.009)	-0.008 (0.013)	-0.004 (0.013)	-0.003 (0.012)
R <sup>2</sup>	0.19	0.21	0.50	0.29	0.33	0.60
N	1133	1133	1133	1133	1133	1133
F-statistic	1315	1357	1144	1315	1357	1144
Year FEs		X	X		X	X
Municipality FEs			X			X
Vote share	X	X	X	X	X	X
Municipality controls	X	X	X	X	X	X

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable in columns (1)-(3) is the interquartile range of candidate positions, and in columns (4)-(6) the range between 10th and 90th percentiles. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

Table C.7: Effect of the Finns Party representation on ideological distance to the Finns Party: robustness to distance measure

	Ideological distance to populist party			
	Euclidean (1)	Sq.Euclidean (2)	City Block (3)	Chebyshev (4)
Populist <sub>t-1</sub>	0.003 (0.014)	0.021 (0.045)	0.007 (0.017)	-0.002 (0.016)
N	4884	4884	4884	4884
R <sup>2</sup>	0.25	0.23	0.23	0.28
F-statistic	817	817	817	817
Year FEs	X	X	X	X
Municipality FEs	X	X	X	X
Vote share	✓	✓	✓	✓
Municipality controls	✓	✓	✓	✓
Municipality FEs	✓	✓	✓	✓
Year FEs	✓	✓	✓	✓

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable in all specifications is overall ideological distance to the Finns Party. In column (1) it is calculated as Euclidean distance; in column (2) as squared Euclidean distance; in column (3) as city block distance ( $L_1$ ); in column (4) as Chebyshev distance. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

## D Additional Tables

Table D.1: First stage estimates

	(1)	(2)	(3)	(4)	(5)
$T_{t-1}$	0.543 (0.341)	0.934*** (0.030)	0.933*** (0.027)	0.929*** (0.032)	0.934*** (0.033)
N	4884	4884	4884	4884	4884
R <sup>2</sup>	0.01	0.99	0.99	0.99	0.99
F-statistic	3	982	1204	827	817
Vote share		X	X	X	X
Municipality controls			X	X	X
Municipality FEs				X	X
Year FEs					X

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors are adjusted for clustering at the municipality level. The endogenous regressor is the Finns Party's seat share. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.



Table D.2: Effect of the Finns Party representation on ideological distance to the Finns Party: IV estimates by election year

	Ideological distance to populist party			
	2008 (1)	2012 (2)	2017 (3)	2021 (4)
<i>Panel A: GAL-TAN</i>				
Populist <sub>t-1</sub>	-0.058** (0.026)	0.011 (0.024)	-0.017 (0.024)	-0.001 (0.021)
R <sup>2</sup>	0.04	0.04	0.07	0.08
<i>Panel B: Left-Right</i>				
Populist <sub>t-1</sub>	0.030 (0.068)	0.001 (0.015)	-0.029** (0.014)	0.016 (0.010)
R <sup>2</sup>	0.03	0.01	0.01	0.01
N	824	1341	1260	1459
F-statistic	57	162	278	738
Vote share	X	X	X	X
Municipality controls	X	X	X	X

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable in Panel A is another party's distance to Finns Party on the GAL-TAN dimension, and in panel B distance to the Finns Party on the Left-Right dimension. Vote share includes a second order polynomial of Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

Table D.3: Effect of the Finns Party representation on ideological distance to the Finns Party: IV estimates by party

	Ideological distance to populist party					
	Left Alliance	Social Democratic Party	Green League	Center Party	Christian Democrats	National Coalition
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: GAL-TAN</i>						
Populist <sub>t-1</sub>	-0.018 (0.030)	0.003 (0.024)	0.044 (0.038)	0.009 (0.014)	0.001 (0.026)	-0.014 (0.019)
R <sup>2</sup>	0.77	0.66	0.78	0.59	0.50	0.55
<i>Panel B: Left-Right</i>						
Populist <sub>t-1</sub>	-0.005 (0.022)	0.026 (0.016)	0.033 (0.022)	-0.020 (0.016)	0.041 (0.027)	-0.004 (0.020)
R <sup>2</sup>	0.43	0.40	0.58	0.45	0.46	0.49
N	615	778	579	847	603	809
F-statistic	285	765	593	822	289	971
Year FEs	X	X	X	X	X	X
Municipality FEs	X	X	X	X	X	X
Vote share	X	X	X	X	X	X
Municipality controls	X	X	X	X	X	X

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$  Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable in Panel A is another party's distance to Finns Party on the GAL-TAN dimension, and in panel B distance to the Finns Party on the Left-Right dimension. Each column represents a set of specifications estimated on a subsample only containing one party as indicated in the table header. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

Table D.4: Effect of the Finns Party representation on shifts in party positions

	Change in party position						
	Left Alliance	Social Democratic Party	Green League	Center Party	Christian Democrats	National Coalition	Finns Party
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: GAL-TAN</i>							
Populist <sub>t-1</sub>	-0.014 (0.056)	-0.022 (0.033)	-0.110** (0.044)	-0.011 (0.015)	0.051 (0.048)	0.019 (0.022)	0.007 (0.032)
R <sup>2</sup>	0.74	0.84	0.84	0.90	0.73	0.89	0.80
<i>Panel B: Left-Right</i>							
Populist <sub>t-1</sub>	0.019 (0.039)	-0.056** (0.028)	-0.076 (0.048)	0.019 (0.020)	0.014 (0.061)	0.032 (0.030)	0.049 (0.038)
R <sup>2</sup>	0.90	0.91	0.91	0.90	0.84	0.88	0.88
N	513	725	451	823	484	753	558
F-statistic	688	1048	629	1189	347	894	725
Year FEs	X	X	X	X	X	X	X
Municipality FEs	X	X	X	X	X	X	X
Vote share	X	X	X	X	X	X	X
Municipality controls	X	X	X	X	X	X	X

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$  Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable is shift in party position on the GAL-TAN dimension (Panel A), and on the Left-Right dimension (Panel B). Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

Table D.5: Effect of the Finns Party representation on within party heterogeneity: Left-Right dimension, IV estimates

	Left Alliance (1)	Social Democratic Party (2)	Green League (3)	Center Party (4)	Christian Democrats (5)	National Coalition (6)	Finns Party (7)
<i>Panel A: Left-Right p75-p25</i>							
Populist <sub>t-1</sub>	0.011 (0.016)	-0.020 (0.012)	0.020 (0.019)	-0.022** (0.010)	-0.016 (0.019)	-0.008 (0.012)	0.005 (0.015)
R <sup>2</sup>	0.52	0.49	0.59	0.40	0.56	0.55	0.54
<i>Panel B: Left-Right p90-p10</i>							
Populist <sub>t-1</sub>	0.021 (0.024)	-0.021 (0.020)	0.020 (0.029)	-0.026* (0.015)	-0.028 (0.029)	-0.020 (0.019)	0.021 (0.024)
R <sup>2</sup>	0.60	0.58	0.67	0.49	0.62	0.62	0.60
N	755	1011	685	1107	731	1045	870
F-statistic	519	1027	627	1200	429	1049	845
Municipality FEs	X	X	X	X	X	X	X
Year FEs	X	X	X	X	X	X	X
Vote share	X	X	X	X	X	X	X
Municipality controls	X	X	X	X	X	X	X

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$  Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable in Panel A is the interquartile range of candidate positions within a party, and in Panel B the range between the 10th and 90th percentiles. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

Table D.6: Polarization on the GAL-TAN dimension: heterogeneity by Finns Party representation, IV estimates

	Finns Party seats < 3 (1)	Finns Party seats > 1 (2)	Finns Party seats > 2 (3)	Finns Party seats > 3 (4)
<i>Panel A: GAL-TAN p75-p25</i>				
Populist <sub>t-1</sub>	-0.012 (0.013)	-0.022* (0.012)	-0.008 (0.017)	-0.006 (0.023)
R <sup>2</sup>	0.51	0.73	0.80	0.84
<i>Panel B: GAL-TAN p90-p10</i>				
Populist <sub>t-1</sub>	0.001 (0.019)	-0.016 (0.019)	-0.017 (0.027)	-0.027 (0.033)
R <sup>2</sup>	0.61	0.79	0.85	0.89
N	757	560	404	274
F-statistic	519	1082	579	267
Municipality FEs	X	X	X	X
Year FEs	X	X	X	X
Vote share	X	X	X	X
Municipality controls	X	X	X	X

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$  Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable in Panel A is the interquartile range of candidate positions, and in Panel B the range between the 10th and 90th percentiles. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported. The data is divided into subsamples based on number of Finns Party seats in  $t - 1$  as indicated in the table header.

Table D.7: Effect of the Finns Party representation on party vote shares

	Left Alliance	Social Democratic Party	Green League	Center Party	Christian Democrats	National Coalition	Finns Party
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Populist <sub>t-1</sub>	-0.060 (0.097)	-0.046 (0.104)	0.010 (0.147)	-0.210 (0.160)	-0.005 (0.086)	0.060 (0.143)	-0.008 (0.142)
N	896	1116	730	1127	885	1102	1060
R <sup>2</sup>	0.92	0.92	0.86	0.96	0.87	0.90	0.80
F-statistic	891	1133	462	1214	804	1248	1301
Vote share	X	X	X	X	X	X	X
Municipality controls	X	X	X	X	X	X	X
Year FEs	X	X	X	X	X	X	X
Municipality FEs	X	X	X	X	X	X	X

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$  Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. The dependent variable is party vote share. Each column represents an estimate from a subsample only containing one party as indicated in the table header. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

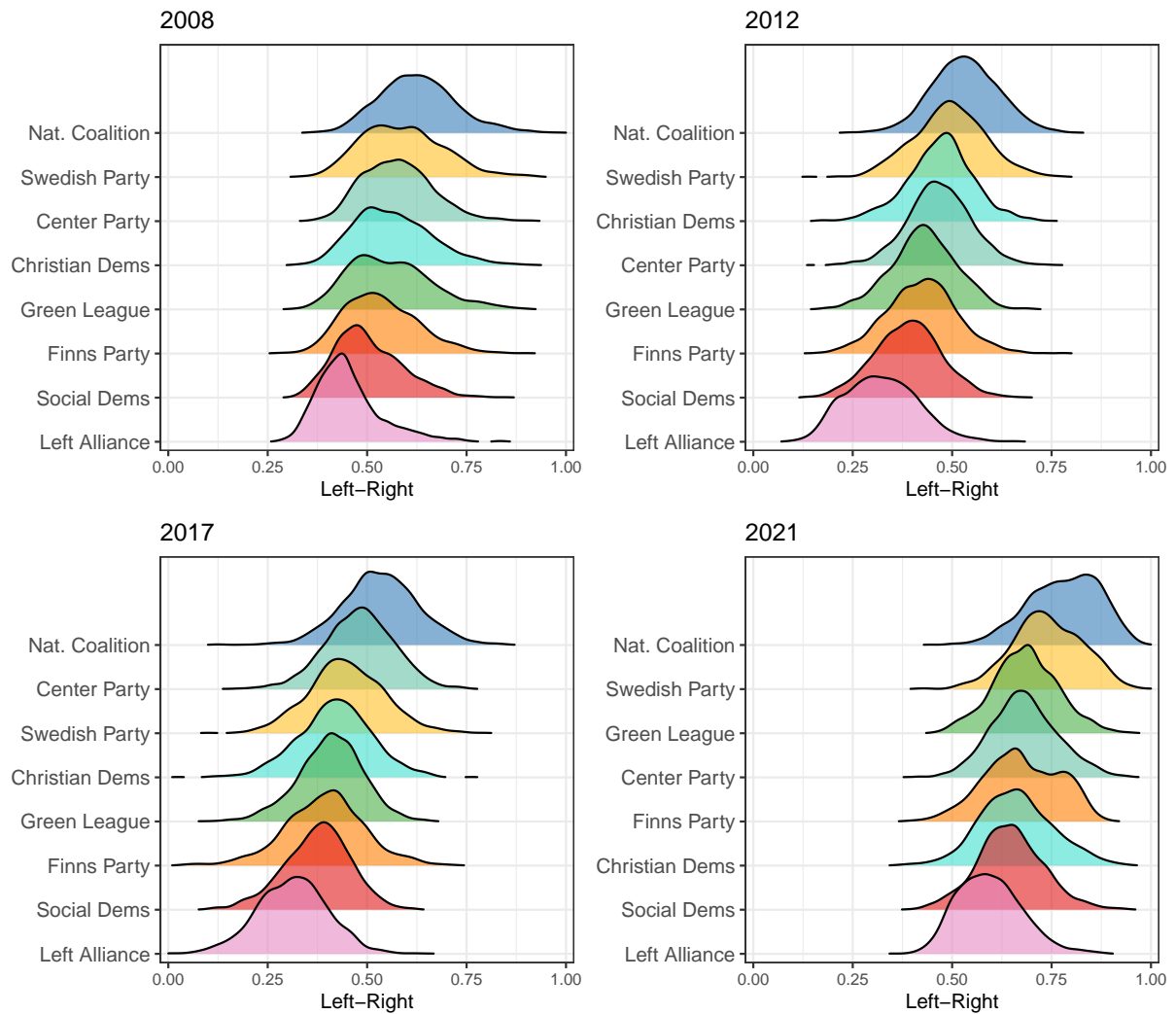
Table D.8: Effect of the Finns Party representation on reception center openings

	Reception centre	Centre for adults	Centre for underage	Capacity
	(1)	(2)	(3)	(4)
Populist <sub>t-1</sub>	0.038 (0.033)	0.015 (0.027)	0.029 (0.025)	-5.800 (8.693)
N	293	293	293	293
R <sup>2</sup>	0.21	0.22	0.24	0.71
F-statistic	103	103	103	103
Mean(Y)	0.34	0.29	0.14	89.10
Vote share	X	X	X	X
Municipality controls	X	X	X	X

Notes: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$  Standard errors are adjusted for clustering at the municipality level. Estimates are from an IV regression. 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. Vote share includes a second order polynomial of the Finns Party vote share. Municipality controls include lagged population and squared population, lagged shares of young and old, and lagged turnout. First stage Kleibergen-Paap F-statistics are reported.

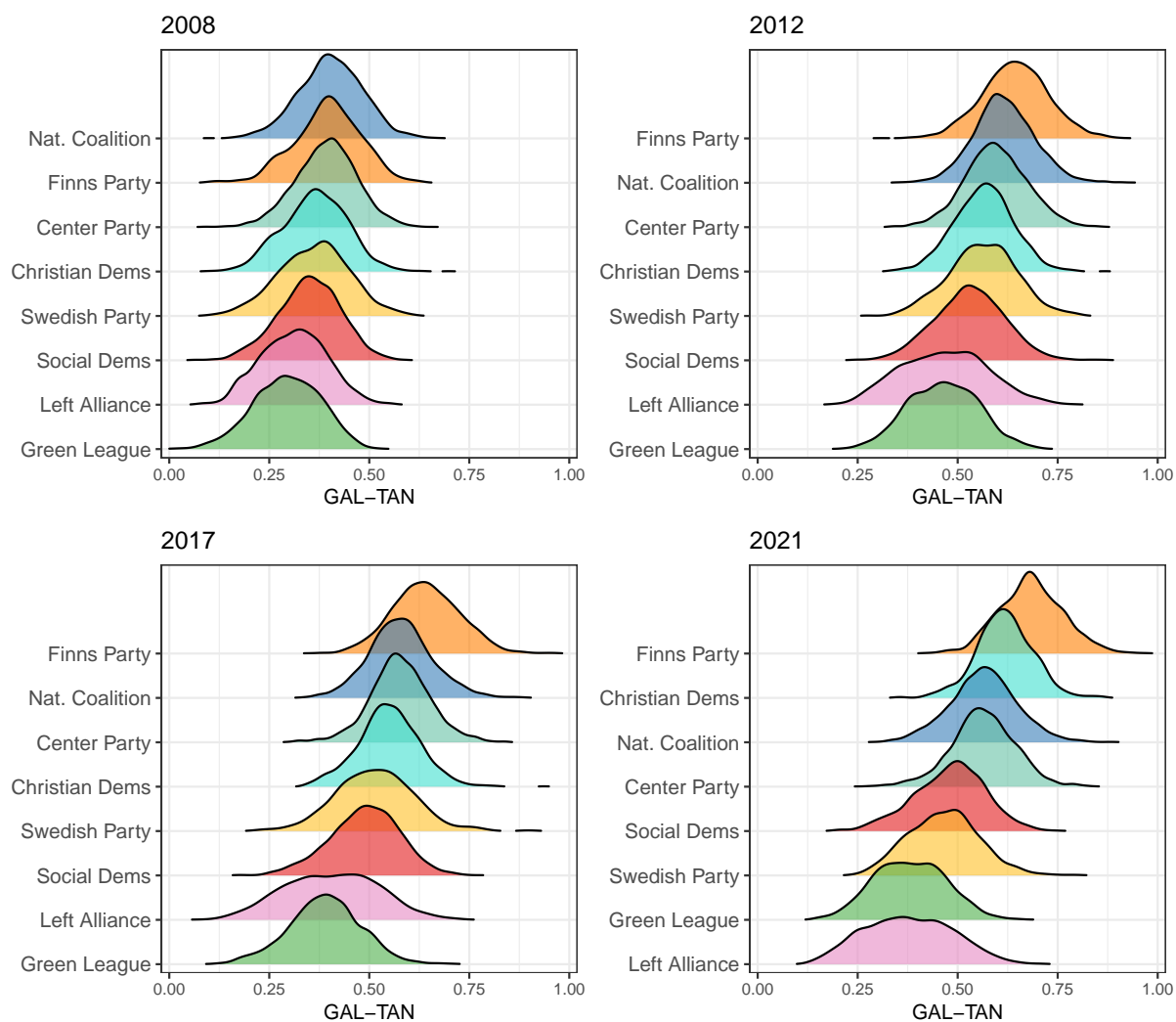
## E Additional Figures

Figure E.1: Distributions of candidate positions on the Left-Right dimension by year



*Notes:* The figure shows distributions of candidates' ideological positions on the Left-Right dimension by party and by election year. The x-axis is increasing in more economically rightist preferences. The scale is normalized to range from 0 to 1.

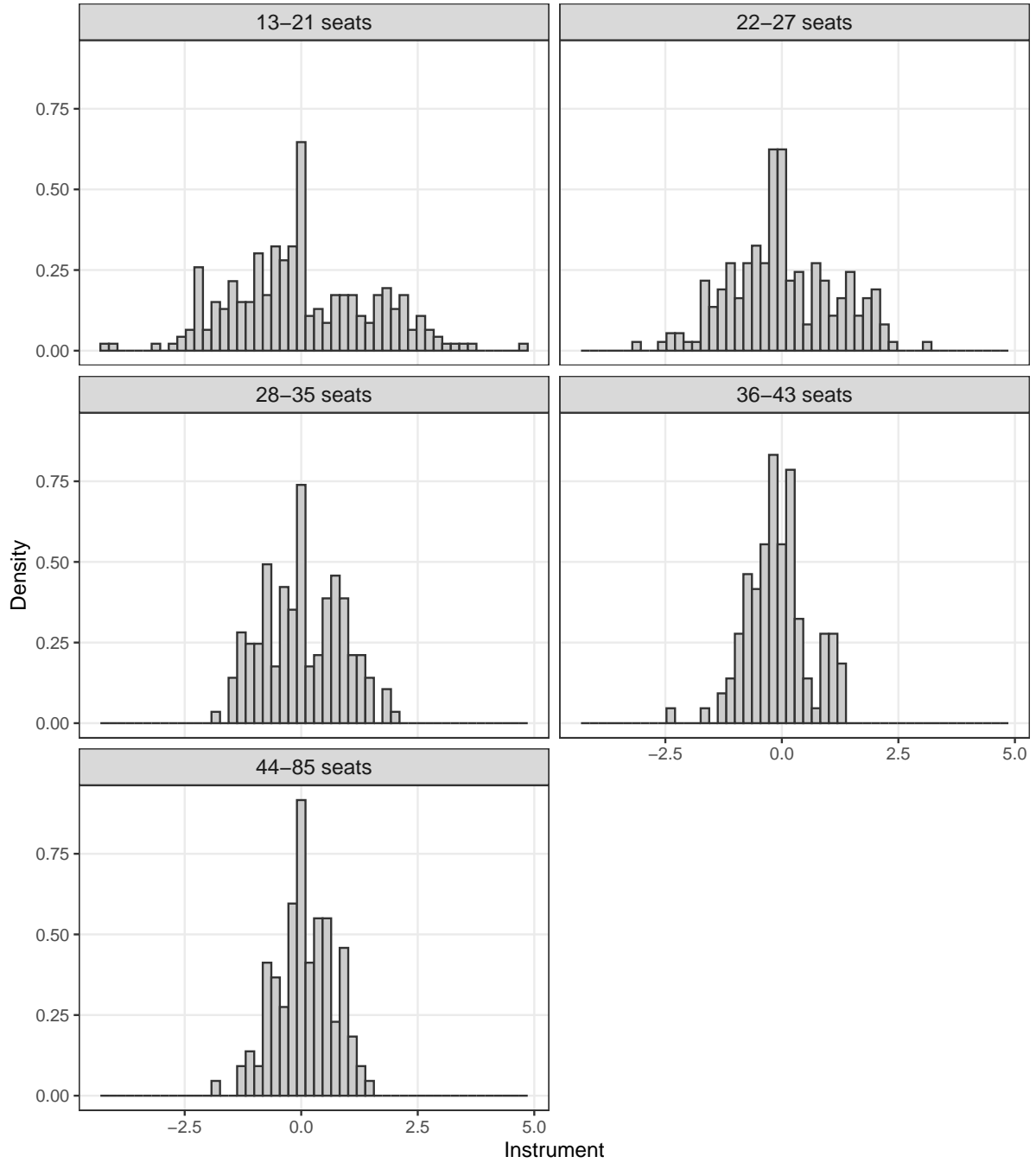
Figure E.2: Distributions of candidate positions on the GAL-TAN dimension by year



*Notes:* The figure shows distributions of candidates' ideological positions on the GAL-TAN dimension by party and by election year. The x-axis is increasing in more socially conservative, or TAN, preferences. The scale is normalized to range from 0 to 1.

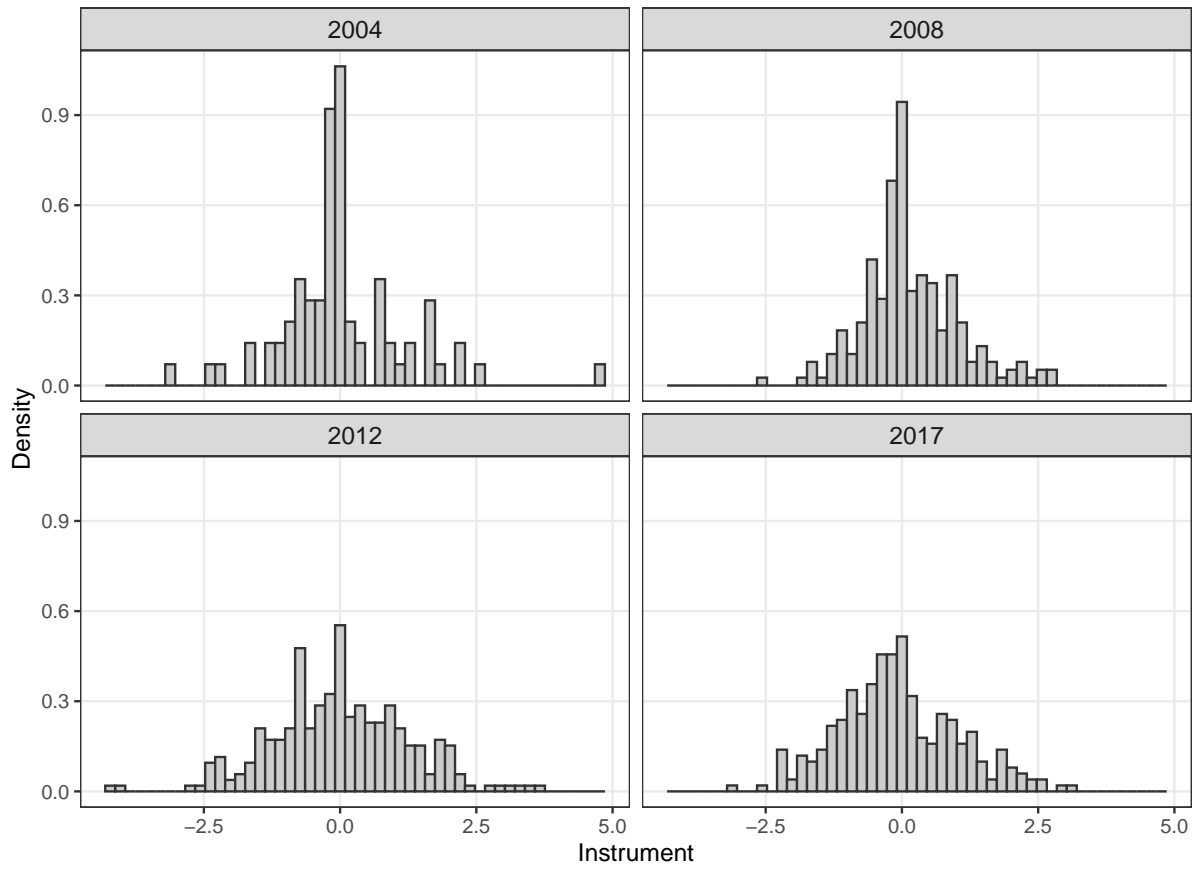


Figure E.3: Distribution of the instrumental variable  $T_{mt}$  by council size.



*Notes:* The figure shows the distribution of the instrumental variable  $T_{mt}$  in municipalities with different council sizes. The instrument is the difference in Finns Party's realized number of seats and average number of seats across the bootstrap repetitions. Zeros are excluded. Across election years 2004–2017.

Figure E.4: Distribution of the instrumental variable  $T_{mt}$  by year.



*Notes:* The figure shows the distribution of the instrumental variable  $T_{mt}$  in individual election years. The instrument is the difference in Finns Party's realized number of seats and average number of seats across the bootstrap repetitions. Zeros are excluded.

## F Voting advice application questionnaires

### 2008 questionnaire

1. If there is no other option, we should raise the municipal tax rate rather than cut from the municipal services.
2. It is nowadays too easy to be admitted to social welfare.
3. The environmental and natural values in my municipality can be flexible if it can create more jobs or increase residents' economic well being.
4. My municipality should reduce the number of municipal employees, because there are too many of them.
5. The municipal user fees should be made more progressive in income.
6. If one of the parents is at home, the children should not have a right to daycare.
7. If necessary, it is better to cut funding from health centers than schools, because there are private health centers but no private schools.
8. To provide our municipality with more revenue, we should... [choose 2]:
  - (a) Increase the property tax rate for residential buildings.
  - (b) Increase the property tax rate for holiday houses.
  - (c) Increase user fees.
  - (d) Sell off municipal property.
  - (e) Attract business with favorable conditions or financial support.
  - (f) Attract new well-off taxpayers by offering them building plots.
  - (g) Request for more state subsidies.
  - (h) Consider a municipal merger.
  - (i) Establish new user fees.
9. Which of the following services should we privatize? [choose at least 1]:
  - (a) Comprehensive school.
  - (b) Health centers.
  - (c) Elder care.
  - (d) Day care.
  - (e) Municipal engineering.
  - (f) Social welfare.
  - (g) Substance abuse treatment and rehabilitation.
  - (h) Fire and rescue services.
  - (i) Zoning.
  - (j) Specialized health care.
  - (k) Water utility.
  - (l) None of the above.

### 2012 questionnaire

1. All older people must be guaranteed the right to a place in a care home similar to the right enjoyed now by children and daycare.
2. Privatization of municipal health care would increase efficiency and lower the costs.
3. The health center fees can be raised in my municipality.
4. If your municipality received a large donation to improve the municipal services, which services should be mainly targeted? [choose 2]:
  - (a) Social services.
  - (b) Day care.
  - (c) Elder care.
  - (d) Schools.
  - (e) Nursing staff wages.
  - (f) Health centers.
  - (g) Specialty health care.
5. My municipality should take in refugees.
6. If one of the parents is at home, we should limit the right of the family to have their child placed in daycare.
7. Too little attention has been paid to the marginalization of children and youth in my municipality.
8. It is nowadays too easy to be admitted to social welfare.
9. It should be possible to recycle trash in the public trash cans in my municipality.
10. My municipality should spend more money in the road maintenance.
11. The environmental and natural values in my municipality can be flexible if it can create more jobs.
12. We should raise the property tax rate in my municipality.
13. If my municipality were to merge with another municipality in the near future, a consultative referendum should be held on the merger decision.
14. The voting age for local elections should be lowered to 16.
15. To balance the municipal budget in your municipality we should... [choose 2]:
  - (a) Cut down municipal services.
  - (b) Increase or establish new user fees.
  - (c) Increase taxes.
  - (d) Sell off municipal property.
  - (e) Develop the business in the municipality.
  - (f) Issue more debt.
16. Members of parliament should not run in the municipal elections.
17. The five-year long dismissal period for the municipal employees in conjunction with a municipality mergers is too long.
18. Municipal employees should not be nominated as municipal board members.

## 2017 questionnaire

1. Young people must be obliged to pursue postgraduate studies or work placements directly after primary school.
2. The municipality should provide all children a right to free daycare.
3. Schools should have at least one vegetarian lunch day a week.
4. The municipality should support the culture by providing its premises free of charge to cultural associations.
5. The school teaching groups are already so big that learning is disrupted.
6. All older people must be guaranteed the right to a place in a care home because the current home care is not sufficient.
7. The jobs of current municipal employees must be secured in the social and health care reform.
8. Functioning of social and health services is more important than their location.
9. Privatization of municipal health care would increase efficiency and lower the costs.
10. favoring outpatient care in mental health creates a feeling of insecurity.
11. Municipal tax can be reduced steeply, as most of the tasks are transferred to the provincial administration.
12. Construction must be speeded up by limiting citizens' right of appeal.
13. Private car use is favored too much in zoning.
14. The municipality should support businesses by offering them cheap plots.
15. The environmental and natural values in my municipality can be flexible if it can create more jobs.
16. My municipality should take in refugees.
17. An annual fee could be charged for library services.
18. The income thresholds for municipal rental housing must be removed.
19. My municipality is spending too much money on building and maintaining sports facilities.
20. Everyone should be able to get to the services by public transport.
21. Things were not better before—the changes in the Finnish lifestyle have been good.
22. We need strong leadership that can solve problems without the need for compromise.
23. It is more important for children to be curious and independent than to be well behaved and obedient.
24. In essence, life is a race for resources and power, and you can't succeed without a fight.
25. Our society would have fewer problems if people were treated more equitably.
26. In Finland, everyone has equal opportunities for wealth and happiness.
27. Public transport in the metropolitan area must be free of charge.
28. The municipality must employ refugees at all costs.
29. The municipality must restrict construction in sparsely populated areas.

30. In their food service, the municipality must choose domestic ingredients whenever they are available.
31. The population base of my municipality is too small to carry out the statutory tasks.
32. The duty of politicians is, above all, to promote their voters' interests.
33. Providing social and health services to the citizens is better done by the provincial government than by my municipality.

## **2021 questionnaire**

1. Schools should have at least one vegetarian lunch day a week.
2. Exceptions may be made to rules protecting environmental and natural values if they create jobs.
3. My municipality would be fine without immigration.
4. My municipality should advance the integration of asylum seekers who have received residence permits.
5. In the coronavirus crisis, people should be trusted to act voluntarily rather than forced to act.
6. My municipality should offer free contraception to people aged under 25.
7. My municipality should give drug users the opportunity to replace used needles with clean ones.
8. All older people must be guaranteed the right to a place in a care home.
9. The highest earners could pay more municipal tax than they do now.
10. When balancing the municipality's expenditure and income, it should be done by cutting expenditure rather than raising taxes.
11. Schools must carry on Christian traditions.
12. The municipality should pay families extra for caring for children under the age of three at home.
13. My municipality should provide the opportunity to study Swedish in Finnish-language schools before sixth grade of primary school.
14. Branch libraries will be needed less in the future as books and other materials become digital.
15. My municipality should allow sports associations to use school gyms and other municipal exercise facilities for free for the activities of under-18s.
16. Politics needs strong leaders who put things in order without compromise.
17. My municipality should fly the rainbow flag in honor of Pride.
18. The voting age for local elections should be lowered to 16.
19. The duty of politicians is, above all, to promote their voters' interests.
20. My local council needs instructions to define what behavior or speech is prohibited in council meetings.

21. The regions created by the social and healthcare reform should be given taxation rights.