Decomposing Partisan Bias

Mikael Paaso[1] and Deniz Okat[2]

[1]Erasmus University Rotterdam
[2]Hong Kong University of Science and Technology

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Abstract

We study the nature of partisan optimism in economic expectations in Finland, where governments are often formed through coalitions of multiple parties. Consistent with previous research, we find that individuals are more inclined to invest when their preferred political party holds a greater number of seats in the government. However, this effect becomes insignificant once we account for the differences between people's opinions and the government's views on social and economic issues. Instead, alignment of economic views appears to be the primary factor that explains investment decisions. Our findings suggest that ideological similarity is a more significant driver of partisan optimism than "blind party loyalty."

Keywords: Partisan bias, blind party loyalty, small business economics.

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1 Introduction

Recent work in economics and political science has found evidence for *partisan optimism*: people are more optimistic in their assessments of economic conditions when the party they support is in power.[1] However, the underlying reasons for this optimism remain unclear. Specifically, it is unclear whether people are more optimistic simply because of an emotional attachment to the party in power, or because their economic policy preferences are likely to be aligned with those of the parties they support. Moreover, most of the existing evidence on partisan optimism has been based on data from the US, which is a unique case among democracies due to its two-party dominance, lack of coalition governments, and rising affective polarization [Boxell et al., 2020].[2] In this paper, we aim to study the nature of partisan optimism in economic decisions and examine its prevalence outside of the US.

To understand the reasons behind partisan optimism, we adapt a framework from the political science literature (*e.g.*, Dias and Lelkes [2022], Orr et al. [forthcoming] and Fowler [2020]) that suggests partisanship is driven by either *party* or *policy*. In the former case, people are more optimistic because their preferred party is in power, while in the latter case, people are optimistic because the parties they support will pursue policies that align with their policy preferences.[3] Disentangling these two explanations is challenging because a person's vote choice is often influenced by their economic views, and their ideology is likely to be similar to that of the party they vote for. To address this issue, we first introduce a simple model where a person selects a party based on their alignment along two orthogonal dimensions: economic and social. In this spatial model, the person chooses the party that is closest to them on both dimensions of ideology. The model predicts that if people are optimistic due to ideological alignment (*i.e.,* policy), we would expect to see a correlation between economic optimism and party alignment, which should disappear when economic ideological distance is accounted for. However,

[1]This has been documented in the US across a wide range of settings; in the decisions of credit rating analysts, who give more favorable ratings when the party they support is in power, [Kempf and Tsoutsoura, 2021], in households' likelihood to transition into entrepreneurship [Engelberg et al., 2022], in the portfolio decisions of households and mutual fund managers [Meeuwis et al., 2018, Cassidy and Vorsatz, 2021, Pan et al., 2023, Krupenkin et al., forthcoming], in investor expectations [Cookson et al., 2020] and many other contexts. We discuss the literature in more detail later in the introduction.

[2]Though a fairly large literature in political science, including Stanig [2013], Wlezien et al. [1997] and Evans and Andersen [2006] among others, document partisan bias in economic perceptions (as opposed to expectations) in a range of countries.

[3]Stanig [2013] calls the latter *political bias* and the former *partisan bias* whereas Fowler [2020] uses the terms *partisan intoxication* and *policy voting*. We will use the terms *blind party loyalty* and *ideological alignment* to refer to these two terms respectively.

if optimism is driven by party alignment, both economic ideological distance and party alignment should matter.

Next we analyze the relative significance of party and policy in people's optimism using data on the party affiliations and ideological (economic and social) views of Finnish CEOs (henceforth entrepreneurs, as the vast majority are owner-managers of small businesses). In our data, we observe individuals with similar economic ideologies who support different parties or individuals who support the same party but have different economic ideologies. This variation allows us to make a first pass at separating the effect of *blind party loyalty* from *ideological alignment*. Using a slightly modified measure of party alignment, the share of seats in government held by the party that a person is aligned with, we find that people tend to be more optimistic when the political party they support is in power, as previous literature has shown in the US. This effect is economically modest and not statistically significant in several specifications. However, once we control for the difference in economic ideology between the government and the individual, this effect completely disappears.

Our data consists of entrepreneurs running for municipal council seats. Finland has over 300 municipalities, each with a municipal council of 13-79 elected councillors depending on the size of the municipality. The relatively large number of municipalities means that a significant number of people run for municipal office during elections, with the latest elections in 2021 drawing 35,627 candidates or about 0.6% of the national population. A significant portion of these candidates are entrepreneurs who can be identified and matched to the financial statements of the firms they manage. While municipal councils are responsible for significant decisions, in practice the time commitment and remuneration for an elected councillor is not significant and almost all councillors continue to work in their existing jobs. Being elected (as a marginal councillor) also does not appear to have much of an impact on earnings [Kotakorpi et al., 2017].

In Finland, before elections, many candidates report their views on a range of issues in questionnaires designed to help voters find a candidate with similar views. This is because parties do not present ranked lists of candidates for elections, but rather the seats a party wins are distributed to the highest vote-getters within the party. This feature of the Finnish electoral process elevates the significance of candidate selection compared to elections where ranked lists are provided by political parties. Consequently, candidates are incentivized to report their ideological views in order to draw voters. This allows us to create measures of economic and social ideology for candidates, including elected members of the national government. We first create measures of economic and social ideology for candidates who filled in the questionnaire, including elected members

of the national government. These measures allow us to calculate ideological distance between the government and the candidate on economic and social issues separately. We then identify entrepreneur-candidates[4] and analyze the financial decisions of the firms they manage.

We find that, when economic views are not controlled for, the probability that a firm invests increases with the proportion of seats held by the party of its entrepreneur in government (not parliament). The magnitude of this effect is moderate and sometimes statistically insignificant: having 40 percent of the seats of parties in government (the largest share in our sample) is associated with a 4 percentage point (0.102x0.4) increase in the probability of investment or a 2.5 percentage point increase in gross investment, compared to means of 32% and 16.9%, respectively. Next, we include controls for the economic ideology and social ideology of the entrepreneur and find that only the difference between an entrepreneur's and the government's economic views is associated with the probability of investment. The impact of economic alignment is significantly larger than that of party alignment - a 1 standard deviation increase in economic alignment is associated with an increase in the probability of investment of about 3.4 percentage points and an increase in gross investment of 2.45 percentage points. We note that our regressions include entrepreneur fixed-effects, which means that the variation of interest comes from changes in government rather than differences across entrepreneurs.

There are some potential threats to the validity of our results, which we discuss in Section 5. In particular, we consider the potential role of political connections and measurement error in our ideological variables as well as the risk that our measure of party alignment (the share of seats held by a party) does not accurately capture emotional attachment towards the government.

It is also important to emphasize that the prevalence and drivers of partisan expectations are very likely to be context-specific. For instance, the strength of emotional attachments that people have towards parties is likely to vary across countries, over time and even across parties within a country (for example, Pan et al. [2023] show that the partisan divide in stock portfolios in the US began later than the partisan divide in political opinions). Similarly, the extent to which ideological alignment matters depends on to what extent ideology matters for policy and to what extent ideology captures beliefs about economic outcomes. In our study, we focused on a relatively unique sample of Finnish recent political history, characterized by significant ideological swings across election cycles

[4]Strictly speaking, we identify candidates who are CEOs or chairmen of firms. While almost all of the firms in our sample are small and probably owner-managed, our sample also includes some hired managers.

compared to previous broad coalitions. In countries dominated by one party or coalitions, the general economic ideologies of parties may not be as important to voters as the views of these parties on specific issues as broad ideology might either be "baked in" to policy or simply not translate into policy, depending on the context.

Relevant Literature

Our paper is related to the literature on the impact of partisanship on economic decision-making and makes two contributions to this literature. First, we are among the first to attempt to understand the drivers of partisan optimism, even though we are doing so in a relatively specific context. Second, the literature on partisanship in expectations, especially analyses focusing on economic decision-making as opposed to survey responses, has mainly focused on the United States, a relatively unique setting. We present evidence of partisanship in economic decision-making in a multiparty context dominated by coalition governments.

As mentioned above, the effect of partisanship on economic behavior has been documented across a range of settings. For example, party alignment is associated with more optimistic forecasts about the economy [Coibion et al., 2020], rating decisions of credit analysts [Kempf and Tsoutsoura, 2021], corporate investment decisions [Rice, 2020], portfolio decisions and beliefs of individual investors [Meeuwis et al., 2018, Krupenkin et al., forthcoming, Cookson et al., 2020, Pan et al., 2023] and mutual fund managers [Cassidy and Vorsatz, 2021], syndicated loan pricing [Dagostino et al., 2020], hiring decisions of employers in Brazil [Colonnelli et al., 2022], the decision to become an entrepreneur in the US [Engelberg et al., 2022] *etc.*[5] There has been less work on ideology, but Kempf et al. [2023] find that both social and economic ideological alignment tends to be associated with greater cross-country capital flows. Our main contribution to this literature is to study the driver of these effects using detailed data on the ideological views of individuals.

Our data allow us to observe in more detail the ideological views of people. Most studies mentioned, on the other hand, either measure party affiliation by looking at voter registration or political donations, in which case the strength of beliefs is not measurable, or by looking at county-level vote shares, in which case individual beliefs are not observed. We measure ideology at the individual-level and link that to similar measurements for the government. While our measures of ideology are far from perfect and may (for example) not also failure to capture relative weightings of different aspects of economic policy, these imperfect measures of ideology allow us to make a first pass at trying to separate out the

[5]Mian et al. [2021] and McGrath et al. [2017] are two exceptions which report no effect of party alignment on automobile purchases and county-level spending respectively.

effect of blind party loyalty vs ideological alignment.

The political science literature on voting preferences (*e.g.*, Fowler [2020]) and affective polarization (*e.g.*, Dias and Lelkes [2022], Orr et al. [forthcoming]) has also studied the relative role of policy preferences and party alignment in these contexts. In terms of random variation in the salience of ideology or party, these papers are far ahead of our observational study. Many papers in this literature use experimental methods to make party affiliation or policy preferences more salient and test how partisans respond to these (though Orr et al. [forthcoming] notes that these are often fundamentally linked). There is however one key difference between these settings and economic decision-making. Perceptions of another person may be driven by policy disagreement on a range of issues, and people may weight these issues differently (some may for example consider views on abortion to be more important than views on economic policy). However, if partisan differences in the assessment of economic conditions are driven by policy views, these policy views should relate to economic policy. This means that if we observe a difference in economic assessment of two entrepreneurs from different parties, a measure of economic policy preferences should be the only relevant measure of ideology that we would need to control for.[6]

We also contribute to the literature on political preferences and economic choices outside of the United States. Much of the literature has concentrated on the US, which is quite unique in terms of having a two-party political system and high levels of affective polarization (*e.g.,* Boxell et al. [2020], Finkel et al. [2020]).[7] Findings from the US may not be as relevant in less polarized multi-party systems, which are very prevalent across the democratic world. While the relation between political preferences and economic choice has been studied in non-US contexts (*e.g.,* Kaustia and Torstila [2011] analyze the relationship between political preferences and stock market participation), work on the consequences of *misalignment* in political views between the ruling party and the entrepreneur has been much more scarce. A relatively large literature in political science (including Stanig [2013], Wlezien et al. [1997] and Evans and Andersen [2006]) find that perceptions of economic performance in the UK and various other European countries

[6]This raises the question of whether our measure of economic ideology, described in the Data-section, accurately captures relevant differences in economic ideology. One concern for instance would be whether a left-wing entrepreneur's economic policy views are based on assessments of growth or fairness. It is plausible that someone might believe that governments should pursue more redistributive policies even if these are worse for growth. However, we find almost identical results when left-wing parties are excluded from the sample.

[7]The dynamics of affective polarization may work differently in countries with multiple parties represented in parliament: Kekkonen and Ylä-Anttila [2021] document the formation of "affective blocs" in Finland.

are influenced by partisan alignment, but generally focus on retrospective evaluations and not real economic behavior. Interestingly, Bisgaard [2015] finds that during a crisis, partisans *agree* about the state of the economy but disagree about the role of parties in creating the crisis.

The rest of the paper proceeds as follows. The next section contains a simple theoretical model which helps clarify our empirical analysis. Section 3 describes the data used and section 4 presents the main results. We discuss our results and some potential concerns with our analysis in section 5.

2 A simple model of partisan investment decisions

We set up a simple theoretical framework to motivate our empirical tests. Our model, although simple and intuitive, gives us clear hypotheses to test with our data. The model is a standard spatial model where voters and parties express their preferences along two dimensions of ideology.

Consider an economy with a continuum of individuals with unit measure. Individuals are heterogeneous in their economic and social views. Individual i's economic and social views are captured by x_i and y_i respectively, which are drawn independently from a continuous distribution on unit interval. High x_i may, for example, represent individual i's preferences towards more liberal economic policies whereas high y_i may indicate his attitude towards abortion rights.

There are two political parties, A and B ($j = 0$ and $j = 1$ respectively). Parties' economic and social policies are summarized by (j, j). With this representation each party is located at the opposite ends of the political spectrum in terms of their economic and social policies. Each individual chooses the party he wants to vote (to be affiliated with) by comparing his total distance in economic and social views to respective parties. For example, the political distance of individual with $x_i = 0.2$ and $y_i = 0.5$ to party A is 0.7 and to party B is 1.3. Therefore, individuals with $x_i + y_i < 1$ are closer to party A and others are closer to party B. If views of individuals were uniformly distributed on unit interval, each party would be supported by half of the population. Because x_i and y_i are independently distributed, an individual is more likely to support party B (A) if he has high (low) x_i. This result which is implied by the setup is summarized in the following lemma.

Lemma 1. *An individual is more likely to support a party if his economic views are more aligned with the party's economic views.*

For the rest of the analysis, without loss of generality, we assume that party B is the victor in the election. In order to analyze individuals' economic decisions, we endow everyone with 1 dollar and introduce them an investment opportunity. After seeing which party won the election, people decide how much they want to invest. Investment is risky, as there is a possibility that for every dollar invested, $R > 1$ dollars will be paid back only with a probability of p. That is, there is a chance that the investment may yield nothing with the remaining probability. People have different beliefs about the success probability of the investment. From an individual's perspective, this probability increases when the political party she supports comes into power. It also increases as the individual's economic views become more aligned with the government's. The success probability of the investment is given by the equation:

$$p_i = \alpha + \omega\bar{\beta} + (1-\omega)\gamma x_i$$

where α is a constant satisfying $\alpha > \frac{1}{R}$ so that the investment is a positive NPV project. $\bar{\beta}$ is equal to $\beta > 0$ if individual i supports party B (the ruling party) and 0 otherwise. The parameter β represents the positive effect of an individual's political party being in power on economic optimism, while the parameter γ captures the sensitivity of an individual's investment decision to their alignment with the government's economic views. We assume $\alpha + \beta + \gamma \leq 1$ ensuring that the success probability always falls within the unit interval. The crucial parameter in our analysis is $\omega \in [0, 1]$. This parameter captures the theoretical model underlying partisan optimism. When $\omega = 1$, it represents the *party* model, where individuals become optimistic solely because the party they support is in power. When $\omega = 0$, on the other hand, it corresponds to *policy* model, where individuals become optimistic to the degree their economic views are aligned with the government's. Our main aim in our empirical analysis is to understand whether ω is closer to 0 or 1 (*i.e.,* whether our data support *party* or *policy* models).

Individuals are risk averse and their utility function $u(\cdot)$ is differentiable, strictly increasing and concave with $u(0) = 0$ and satisfies lnada conditions (*i.e.,* $u'(0)$ is sufficiently high and $u'(R) = 0$). Each individual maximizes her utility by choosing the amount of investment V_i. Their optimization problem is

$$\max_{V_i} \; p_i u(1 - V_i + RV_i) + (1 - p_i)u(1 - V_i)$$

The first-order condition is

$$(R-1)p_i u'(1 - V_i^* + RV_i^*) - (1 - p_i)u'(1 - V_i^*) = 0$$

Our assumptions on $u(\cdot)$ guarantee the existence and uniqueness of the solution. That is, $0 < V_i^* < 1$. Observe that the optimal investment amount V_i^* increases with p_i because

$$\frac{dp_i}{dV_i^*} = -\frac{p(R-1)^2 u''(1-V_i+V_iR) + p_i u''(1-V_i)}{(R-1)u'(1-V_i+V_iR) + u'(1-V_i)}$$

which is obtained from total differentiation of the first-order condition is strictly positive. Moreover, because p_i is an increasing function of both β and γ, investment of an individual increases if the party the individual supports is elected. This analysis leads to the following hypothesis.

Hypothesis 1*: An individual has a greater incentive to invest in both the party and policy models if that individual supports party B.*

While the predicted relationship between party affiliation and unconditional probability of investment is positive under both models, the underlying reasons are different. Under the *party* model (*i.e.,* $\omega = 1$), such relationship is positive by construction. When the party an individual supports wins the election, her belief on the success probability of the investment jumps up by β. Under the *policy* model (*i.e.,* $\omega = 0$), on the other hand, economic views affect both party affiliation and investment decisions. In other words, it is the alignment of economic views with the governing party *per se* that leads to partisan bias. Therefore, an observed correlation between investments and party affiliation alone does not allow us distinguish these two models. Moreover, the *party* model implies that individuals who support the same party would make the same investment decision regardless of any differences in their alignment with the government's economic view. The *policy* model, on the other hand, suggests that an individual's investment will increase as their economic views become more aligned with the government's, regardless of their party affiliation.This result is summarized in the following hypothesis.

Hypothesis 2*: If the party model is the primary reason for partisan optimism, we would expect to see little variation in investment decisions among people who are affiliated with the same party. However, if the policy model is the main reason for partisan optimism, we would expect individuals to increase their investment as their economic views become more aligned with the government's, regardless of their party affiliation.*

To understand the intuition, consider that when $\omega = 1$, investment decisions of people affiliated with the same party are not influenced by their economic views. In other words, their investment choices are solely driven by the political party in power. Conversely, when $\omega = 0$, we can accurately predict an individual's investment decision by comparing their economic views with those of the government. In this case, an individual's invest-

ment decision is solely influenced by their alignment with the government's economic views.

3 Data

In this section, we describe the data sources used in our analysis. We begin by describing the main data sources on political opinions, financial information, affect and election outcomes as well as the construction of key variables from these datasets. These datasets are constructed individually. We then describe how the datasets are linked.

3.1 Candidate ideology

Our data on political opinions come from Voting Advice Applications (VAA) run by the largest media group in Finland (Sanoma Media). VAAs are questionnaires designed to help voters find candidates with similar opinions to them by giving candidates and voters the same survey and then offering voters a list of candidates with similar opinions.[8] Sanoma publishes multiple newspapers with similar VAAs, we use the responses from *Helsingin Sanomat*, the largest broadsheet newspaper in the country.

Sanoma runs their VAAs around all major elections in Finland and these are filled in by more than 85% of candidates running for parliament and about half of all candidates in municipal elections (Isotalo et al. [2020]). We provide background information on elections in Finland in Internet Appendix I.A.1. One immediate concern might be that the answers given by candidates do not represent their views but rather function as an attempt to cater to voter preferences. While this would lead to our measures of ideology being noisy and bias us against finding a relationship between ideology and economic choice, it is also unlikely for several reasons. First, with many candidates, it is not clear *how* a candidate should game the system. If candidates and voters are roughly aligned ideologically, choosing popular positions on issues is likely to lead to a candidate competing against many candidates. On the other hand, attempts to stand out might increase distance between candidates and voters. Secondly, and more importantly, the answers given by candidates to VAAs in parliamentary elections tend to be well-aligned with their answers to confidential survey questions on their policy views [Ilmarinen et al., 2022].

[8]Sanoma is not the only designer of VAAs in Finland, but we use their VAA due to the standardized set of questions on ideology described below

The format of the Sanoma VAA has been standardized from 2012 until a change in 2023, which falls outside of our sample. In all elections, the questionnaire consisted of 20 statements on topical themes followed by a section that contained the same statements: 4 statements on economic issues, 4 statements on social issues, and 2 statements on environmental values. For each statement, candidates respond on a 1-5 scale whether they disagree or agree with the statement. We use the standardized statements on economic and social values. Every statement in the questionnaire is on a 1-5 scale, with 1 expressing strong disagreement and 5 strong agreement with the statement. These statements are listed below (the first 4 statements are on economic and the rest are on social issues).

- More public services should be produced by private firms
- If we ever face a situation where it is necessary to either cut public services or raise taxes, it is better to raise taxes
- Large differences in income are justifiable so that differences in talent and effort can be rewarded
- Today's level of government services and benefits are economically unsustainable in the long run
- It's a good thing that gay and lesbian couples have the right to marry and adopt children, just like straight couples[9]
- If the state offers to set up a reception center for asylum seekers in my municipality, my municipality must accept
- Schools do not treat children strictly enough these days. More discipline would make schools better
- Traditional values such as family, religion and the motherland form a good value base for politics

We scrape candidates' responses to these questions for the parliamentary elections in 2015 and 2019 as well as municipal elections in 2017 and 2021 from *Helsingin Sanomat*'s webpage.[10] On economic questions, we make the coding consistent so that 1 always represents the left-wing answer and 5 the right-wing. On social questions, however, we

[9]The wording of this question was changed to its current form after same-sex couples were allowed to marry.

[10]VAA data for the 2012 municipal elections were no longer available online when we started this project.

reverse the coding of the answers on several questions such that 5 always represents the conservative and 1 the liberal answer. These codings are then used to create an index of social and economic views for each candidate, which we plot (for a single year) in Figure 1. We do this simply by summing up the answers to the prompts for each candidate and subtracting 12 (to create an index with a minimum value of -8 and maximum value of 8). For example, on the economic scale, the most left-wing score is -8 and the most right-wing score is 8.[11]

Using these data, we create a social and economic score for every candidate in all elections. An entrepreneur's alignment is his/her individual score in a municipal election. If a candidate has run in both municipal elections in our data, we apply their scores from the 2021 election to 2019 and all years after that, and their scores from the 2017 election to all years prior to 2019. In case a candidate only runs in one municipal election, we take his/her score and apply it to the all years.

We calculate the government's views on economic and social issues by taking the average score of all elected members of parliament who are members of the ruling parties. The alignment of the government is assumed to last for the entire term of the government. Because the VAA in 2011 had a different set of questions, we assumed that all parties in 2011 would have the same ideological scores as their elected members of parliament in 2015.[12]

As governments in Finland are broad coalitions, two of the three governments in our sample were affected by parties leaving or splitting up during their tenure. The broad coalition government of 2011-2015 saw the Left Alliance and Green League leave towards the end of the term. The right-wing government of 2015-2019 saw one of the three governing parties, the Finns party, split into two in 2017. A majority of its members formed a new party called Blue Reform, which continued in government while the remaining members moved to the opposition. We ignore these changes since Blue Reform lost all their

[11]There are several advantages to this approach. The measure is simple and consistent across years. For example, if all parties shift in ideological terms, these changes will be reflected.

There are however other ways and questions that could be used: Isotalo et al. [2020] use factor analysis and a larger set of questions (using other questions from the Sanoma VAA as well as questions from the national broadcaster's (Yle) VAA) to place candidates on both the left-right axis as well as a GAL-TAN axis, which is similar to our social ideology axis but also incorporates environmental preferences and Tähtinen [2021] uses an four dimensional Item Response Theory (IRT) model estimated on Yle's VAA, but ends up using only the first two dimensions, which she labels left-right and GAL-TAN, in her estimation of ideological distance. Qualitatively, all three methods produce fairly similar results in terms of the relative positions of the parties represented in parliament.

[12]This does not mean that the government has the same average ideology as the composition of the government changed. Party alignment is generally quite stable, so we judged this option to be safer than attempting to measure ideology from an inconsistent set of questions.

seats in parliament soon after the split and because the departures of the Left Alliance and Green League were at the very end of their term in government.

After these steps, we are left with 4 datasets (one for each election, the 2015 and 2019 parliamentary elections and the 2017 and 2021 municipal ones) containing basic candidate information, candidate-level economic and social ideologies, their party alignments, vote counts, and whether they were elected. The parliamentary-election datasets also have the average economic and social ideologies for all elected members of all governing parties.

3.2 Election data

We obtain election results from the Interior Ministry of Finland. For each candidate, we obtain vote counts as well as an indicator variable for whether the candidate was elected.

3.3 Financial data

We obtain financial data of firms from Bureau van Dijk's Orbis database, which provides financial statements for all public and most private firms in Finland. We use the historical version of Orbis (*i.e.* a copy of the entire database saved to Erasmus University's cloud) as of 2020 for most data, but extend our financial data to 2022 using the web-based version of Orbis. One limitation of this approach is that we only observe firms still in the database in 2020, which means that we are selecting upon survival in 2020 or near it.

Most firms in Finland are required to provide some kind of financial statements to the government (though for smaller firms, these will be quite basic). We start with a dataset of financial information for all Finnish firms in the Orbis database in 2020.

First, we drop firm-years whose consolidation code is *not* U1 ("Only unconsolidated accounts available"). Including consolidated financials would create potential duplicates in our dataset, but the practical implication of dropping firms with consolidated accounts is minimal as there are very few of them in the data. The substantial impact of this is that firms with limited financial information or no financial information (codes LF and NF) are dropped.

Next, we attempt to filter out non-operating companies and companies that exist to provide favorable tax treatment for labor income. Our goal is to keep firms for whom an investment in fixed assets is likely to be driven by a profit motive and reflect improved future expectations. For example, many doctors earn a direct salary from a hospital but

also bill private work to a holding company to avoid paying a high rate of income tax. As many of these doctors do not own the premises where they conduct their private practices, fixed assets are likely to reflect personal consumption (such as car ownership) that is done through the company. It is also common for some professions (such as finance professors) to bill consulting work to a company. We therefore drop all firm-years where the firm has the following 2-digit TOL 2008 codes (the Finnish national industry classification from 2008):

- 68 - real estate activities. These are mainly housing corporations that exist as an organizational structure for many buildings in Finland. These firms do not aim to make a profit and their investment generally reflects maintenance needs of the property rather than expectations of future profit.
- 64 - firms in the financial industry. These rarely invest in fixed assets. Many firms in this industry code are holding companies with no operations.
- 65 - insurance firms. These firms typically hold large portfolios of financial assets that are highly regulated.
- 66 - other financial firms. Similar to the two codes above.
- 70 - head offices, management consultancy. This rather broad industry code includes local legal entities of foreign firms as well as companies set up to bill consultancy work. They are unlikely to invest heavily in fixed assets and when they do, it rarely reflects expectations about the future or improved business conditions as fixed assets are not required for normal operations of the firm.
- 86 - human health activities. These are likely to relate to doctors' tax planning activities.

We also drop firm-years ending before 2011 (the first year that we have government alignment data for) and after 2020. We later supplement this with data from 2020 to 2022 from the web-based interface of Orbis (as the amount of data that can be downloaded from the web-based interface is limited, we do this only for firms managed by candidates, meaning that this step is done after the merging described below has been completed.)In practice, this means that for most firms we have data until the end of FY 2021 or 2020.

After these, we are left with an unbalanced firm-year panel containing basic financial data for firms (information about the manager is in a separate file, described below). Our aim in the data creation process was to make sure that the firms in the sample are firms for whom investment is a real economic decision, ideally driven by expectations of firms.

3.4 Data on decision-makers

We obtain a list of decision-makers (board members and key management) of Finnish firms from the Orbis database described above. Our data come from the Orbis historical file as of 2020.

3.5 Merging financial and candidate data

Our goal is to create two files: A "political" file where a candidate's election ID provides an exact match between political opinions and election outcomes as well as a "financial" file in which the Bureau van Dijk ID in Orbis provides a link between decision-makers of firms and financial information. We use the Orbis DMC file, which contains both identifiers, as a "link-file."

We then merge the financial data and political opinions data via the link file using the candidate's name and age. The merging process creates risks of false positives, *e.g.,* matching politicians to firms they are not connected with and false negatives, missing some firms which are connected with politicians. For the sake of our analysis, a false positive has more severe implications than a false negative - a false negative lowers our statistical power whereas a false positive creates noise. As we had expectations of achieving a high sample size even after dropping observations, choices made in the data cleaning and merging process were generally made with the aim of minimizing false positives even at the cost of false negatives.

3.5.1 Link file

We start by taking the names of all board members of Finnish companies in Orbis' DMC file. We drop those who are not listed as "CEO" or "Private Trader" (in Finnish: Elinkeinonharjoittaja).[13] We then drop all remaining observations whose reported nationality is not Finnish. We calculate, based on the reported date of birth, the age of the politician at all the elections in our sample.

[13]Because a lot of small firms do not have formal roles in the database, this leads to some "true" entrepreneurs being dropped - *i.e.,* creating false negatives. However, keeping all board members would lead to matches in firms where the politician may not have any control.

3.5.2 Political file

After this, we work with the election results files (for parliamentary elections in 2011, 2015, and 2019 as well as municipal elections in 2012, 2017, and 2021) provided by the Ministry of the Interior of Finland. These files contain basic candidate information as well as the number of votes received by any candidate in any district. In the municipal-election files, we drop all candidates whose self-described occupation does not contain the word "entrepreneur" or "CEO".[14]

Using the candidate's "election ID" (a number assigned by the ministry), we link the political opinions file (based on VAA data) above to the election outcomes files (in 2015, 2019, 2017, and 2021). For the parliamentary elections (2011, 2015, and 2019), we weighted-average ideologies for elected MPs in government parties and stop here. For municipal elections, we now have a file with election outcomes and political opinions for each candidate. As we do not have VAA data for 2012, our 2012 "political" file only contains election outcomes.

3.5.3 Linking the political and link file

We then merge these files (2017 and 2021 election files) with the Orbis DMC / link file (using name and age at the time of election as identifiers), with about 2500 matches in 2021 and 2000 in 2017.[15] We also merge in 2012 data using name, age and municipality to be able to control for election outcomes in 2012.[16]

We now have file with election outcome data for all municipal elections, political opinions from 2017 and 2021 as well as Bureau van Dijk and election IDs. We then use the firm-year data file ("financial file") as the "base" file, and merge in this data using the Orbis ID for the firm (in Stata parlance, we do a "1 to many" merge where a single year of candidate information is linked to multiple years of financial data).[17] We then manually

[14]While "entrepreneur" is the most common job description remaining, there are many observations where the self-reported occupation might be something along the lines of "restaurant entrepreneur", which we deem to be true entrepreneurs.

[15]Suomen Yrittäjät, or the Federation of Enterprises in Finland, reported that 6484 entrepreneurs ran for municipal office in 2021 and 5947 ran in 2017 [STT]. Our matching therefore misses quite a few such entrepreneurs. Our regression sample will be even smaller due to constraints imposed later.

[16]We include the municipality in the merge because in 2012, there are some duplicates in the data when simply looking at name and age. Including municipality in the merge is not optimal as managers may manage firms registered outside of their municipality.

[17]To be more specific - we have separate variables for the candidate's economic and social alignment in 2021 and 2017 and bring these in in one merge. We then assign the opinions to years as described

bring in government alignment data that we calculated for parliamentary elections in 2011, 2015 and 2019 such that the government alignment is that of the 2011 government for the term of that government (2011-2015) and so on.

A description of the key variables used in our empirical analyses is provided in Table 1.

4 Results

4.1 Summary statistics

Summary statistics for our sample are presented in Table 2. Firms in our sample are on average very small, with average revenues of 1.9 million euros and average fixed assets of 720k euros. About half of the entrepreneur-years in our sample are from the National Coalition party, with the Centre Party and The Finns being the party of choice for about another 35%. In terms of ideology, the entrepreneurs in our sample tend to be very right-wing and conservative compared to the population. Figure 1 shows the ideological position of each entrepreneur in our sample on a -8 to 8 scale as well as the ideological position of each of the 3 national governments elected during our sample period. Figure 2 presents detailed data on the elected MPs and governing parties during our sample period - from 2011 to 2022, Finland had three central governments, one "grand coalition" government featuring parties from both the left and right, a moderately right-wing government and a fairly left-liberal government.

Because we are studying small private firms, many will have low levels of fixed assets and even an economically meaningless investment of 1000 euros might appear large. We therefore only include firm-years where fixed assets are greater than 31k euros (the median of the full sample) in our sample. However, in Appendix Figure I.A.2 we present the results using alternative specifications and find that, other than in specifications including the smallest firms, our results are generally quite similar.

We also present party-level summary statistics on the views of the entrepreneurs in our sample (economic and social) in Table 3.

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above, *i.e.,* 2021 alignment is valid for all years after 2019 and 2017 alignment for all years before then if both are available, if only one is available we assign it to all years.

4.2 Alignment regressions

Our goal is to test which elements of political alignment affect investment decisions. We therefore regress our two investment-related variables (Investment Dummy, defined as 1 if fixed assets have increased more than 10%[18] and Gross Investment Pct, defined as the winsorized percentage change in fixed assets if it is positive and 0 otherwise) on various measures of political alignment.

We begin by regressing investment on the proportion of seats a party holds in the government (not parliament). We then progressively add other aspects of ideology as well as firm-level financial controls. All of our regressions include firm fixed-effects, meaning that we are comparing the same firm across different political regimes. This alleviates concerns about political views being jointly determined with other traits that may affect investment.

We run the following regressions:

$$Investment\ Dummy_{i,t} = \beta_0 + \beta_1 \times Seats\ Gov't_{i,t} + \beta_2 \times Economic\ Distance_{i,t} + \beta_3 \times Social\ Distance_{i,t} + \alpha \times X_{i,t} + \gamma_i + \epsilon_i$$

$$Investment\ Percentage_{i,t} = \beta_0 + \beta_1 \times Seats\ Gov't_{i,t} + \beta_2 \times Economic\ Distance_{i,t} + \beta_3 \times Social\ Distance_{i,t} + \alpha \times X_{i,t} + \gamma_i + \epsilon_i$$

Our coefficients of interest are the coefficients on *Seats in Gov't*, *Economic Distance* and *Social Distance*. X is a vector of firm-level control variables and γ_i denotes a firm fixed-effect.

The results are presented in Table 4. Columns 1 and 4 show the unconditional effect of party alignment on investment. The coefficients of 0.102 and 0.063 suggest that firms run by managers whose parties have 40% of government seats (the highest share held by a party in our sample, but quite close to what the largest party would typically have) are 4 percentage points more likely to invest (compared to a baseline of 32%) and invest 2.5 percentage points more (compared to a baseline of 16.9%). However, columns 2 and 6 suggest that when other aspects of ideology are controlled for, this effect disappears and instead we see that economic ideology is negatively associated with both the probability

[18]We use 10% because of the prevalence of firm-years where fixed assets increase by a very small amount and then revert the next year. These appear to be common data errors. However, we present results defining investment as simply an increase in fixed assets in Appendix Figure I.A.2.

of investing and the size of investments. One standard deviation decrease in economic alignment is associated with an 3.5 p.p. increase in the probability of investment and a 2.4 p.p. increase in the size of investment. When economic ideology is controlled for, the *Seats in Gov't*-dummy flips sign and becomes negative. Social ideology does not appear to be associated with investment.

As these regressions involve many specification choices, we present a graph plotting coefficients and 95% confidence intervals from alternative specifications in Appendix Figure I.A.2. In particular, we show the robustness of our results to alternative cutoffs of minimum fixed assets in a year as well as alternative measures of investment (net investment and a dummy that simply takes the value of 1 if a firm's fixed assets are above the previous year's figure). We find that our main results are robust to most specification changes, though including firm-years with low fixed assets tends to be associated with coefficient estimates closer to 0.

One might argue that people assign a bigger weight to closeness in economic ideology then in social ideology while deciding their party affiliation. That is, economic ideology could be a better proxy for party alignment than social ideology. If this were the case, controlling for economic ideology is expected to almost mechanically make "party-alignment partisanship" effects disappear as it is simply a more accurate proxy for them. In Table 5, we present the results of multinomial logistic regressions where we attempt to classify people into parties based on their economic or social views. We generate a predicted probability of belonging to a party and then generate a "predicted party" variable that is equal to the party with the highest probability. After this, we check whether the predicted party is equal to the actual party. The results suggest that neither social nor economic ideology is a very strong predictor of party affiliation and that both variables do about an equally good job of predicting party affiliation. As social ideology does not predict investment outcomes at all, this suggests that economic ideology is unlikely to simply be a better proxy for party alignment.

5 Discussion and limitations

In this paper, we present evidence of partisan bias using data from Finland, a multi-party country. Our findings suggest that Finnish entrepreneurs tend to increase their investments when the political party they support holds a greater number of seats in the government. Although our analysis has some limitations, it is important to note that our study avoids certain limitations of previous research. For instance, many previous

studies have raised concerns that measures of economic optimism and political alignment are elicited in a similar context, which could lead to experimenter demand effects or expressive responding where respondents use economic questions as an opportunity to express their satisfaction or dissatisfaction with the current government. However, in our setting, political views are elicited in a survey whereas economic actions are taken from registry data, eliminating the likelihood of such effects.

One potential concern with our analysis is that political connections or favoritism towards firms run by members of the ruling party could explain why entrepreneurs increase their investments once their preferred party is elected in Finland. However, our results suggest that *ideological* alignment is a much stronger predictor of investment decisions than *party* alignment. Additionally, we compare the views of municipal politicians with those of the elected national government, and while it's possible that municipal politicians could benefit from central government programs, they are more likely to benefit from alignment with the local municipal government. Furthermore, we note that being elected to a council does not appear to be associated with increased investment in any of our regressions.

Another concern may be that economic expectations not only reflect perceptions of a party's economic competence but also of the probability of the party being elected [Ladner and Wlezien, 2007]. In Finland, all of the elections in our sample can be considered close election in the sense that the top 3 parties finished within 0.7% of each other in 2019 and 1.3% of each other in 2011, and while in 2015 the Center Party received 3.4% more votes than the next biggest party, the next three parties (and necessary coalition partners) were within 1.5% of each other.

It may also be the case that, for example, left-wing policy preferences are not driven by expectations about economic conditions but by concerns about redistributive fairness whereas right-wing positions are driven by economic concerns. As most of the entrepreneurs in our sample are right-wing, this may lead us to estimating a higher importance of economic ideology than

The biggest limitations in our study relate to the measurement of ideology and party alignment. As we mentioned earlier, a simple scale based on basic questions may not accurately capture a person's beliefs about how policy translates to economic outcomes. Similarly, a simple measure of a party's share of seats in government may not fully capture a person's emotional attachments towards a government. We leave analysis of these to further research. Reverse causality between ideological positions and party alignment is also a typical problem in this kind of research, but not necessarily in our setting. Inclusion of firm fixed-effects means that cross-sectional differences in opinion (where

reverse causality would manifest itself) are not necessarily a concern. Instead, variation in both ideology and party alignment comes from changes in national government. This means that reverse causality is less likely to be a concern than the fact that changes in national government may be associated with changes in investment conditions.

Finally, while we have self-reported measures of ideology for candidates and parties, we do not know whether the public believes that the parties are competent or trustworthy enough to carry out these agendas. If people have strong views about these aspects, this could bias our results on economic ideology downwards and increase the importance of party. Overall, while our study is one of the first attempts to understand the nature of partisan optimism, there is still much to be explored in terms of measurement and analysis.

References

M. Bisgaard. Bias will find a way: Economic perceptions, attributions of blame, and partisan-motivated reasoning during crisis. *The Journal of Politics*, 77(3):849–860, 2015. doi: 10.1086/681591.

L. Boxell, M. Gentzkow, and J. M. Shapiro. Cross-country trends in affective polarization. *Review of Economics and Statistics*, pages 1–60, 2020.

W. Cassidy and B. Vorsatz. Partisanship and portfolio choice: Evidence from mutual funds. *Available at SSRN 3977887*, 2021.

O. Coibion, Y. Gorodnichenko, and M. Weber. Political polarization and expected economic outcomes. Technical report, National Bureau of Economic Research, 2020.

E. Colonnelli, V. P. Neto, and E. Teso. Politics at work. Technical report, National Bureau of Economic Research, 2022.

J. A. Cookson, J. E. Engelberg, and W. Mullins. Does partisanship shape investor beliefs? evidence from the covid-19 pandemic. *The Review of Asset Pricing Studies*, 10(4):863–893, 2020.

R. Dagostino, J. Gao, and P. Ma. Partisanship in loan pricing. *Available at SSRN 3701230*, 2020.

N. Dias and Y. Lelkes. The nature of affective polarization: Disentangling policy disagreement from partisan identity. *American Journal of Political Science*, 66(3):775–790, 2022.

J. Engelberg, J. Guzman, R. Lu, and W. Mullins. Partisan entrepreneurship. Technical report, National Bureau of Economic Research, 2022.

G. Evans and R. Andersen. The political conditioning of economic perceptions. *The Journal of Politics*, 68(1):194–207, 2006.

E. J. Finkel, C. A. Bail, M. Cikara, P. H. Ditto, S. Iyengar, S. Klar, L. Mason, M. C. McGrath, B. Nyhan, D. G. Rand, et al. Political sectarianism in america. *Science*, 370 (6516):533–536, 2020.

A. Fowler. Partisan intoxication or policy voting? *Quarterly Journal of Political Science*, 15(2):141–179, 2020.

V.-J. Ilmarinen, V. Isotalo, J.-E. Lönnqvist, and Å. von Schoultz. Do politiciansâ€™ answers to voting advice applications reflect their sincere beliefs? comparing publicly and confidentially stated ideological positions in a candidate-centred electoral context. *Electoral Studies*, 79:102504, 2022.

V. Isotalo, M. Mattila, and Å. von Schoultz. Ideological mavericks or party herd? the effect of candidates' ideological positions on intra-party success. *Electoral Studies*, 67: 102187, 2020.

M. Kaustia and S. Torstila. Stock market aversion? political preferences and stock market participation. *Journal of Financial Economics*, 100(1):98–112, 2011.

A. Kekkonen and T. Ylä-Anttila. Affective blocs: Understanding affective polarization in multiparty systems. *Electoral Studies*, 72:102367, 2021.

E. Kempf and M. Tsoutsoura. Partisan professionals: Evidence from credit rating analysts. *Journal of Finance*, 76(6):2805–2856, 2021.

E. Kempf, M. Luo, L. Schäfer, and M. Tsoutsoura. Political ideology and international capital allocation. *Journal of Financial Economics*, 148(2):150–173, 2023.

K. Kotakorpi, P. Poutvaara, and M. Terviö. Returns to office in national and local politics: A bootstrap method and evidence from finland. *The Journal of Law, Economics, and Organization*, 33(3):413–442, 2017.

M. Krupenkin, S. Hill, and D. Rothschild. Do partisans make different investment decisions when their party is in power? *Political Behavior*, forthcoming.

M. Ladner and C. Wlezien. Partisan preferences, electoral prospects, and economic expectations. *Comparative Political Studies*, 40(5):571–596, 2007.

M. C. McGrath et al. Economic behavior and the partisan perceptual screen. *Quarterly Journal of Political Science*, 11(4):363–383, 2017.

M. Meeuwis, J. A. Parker, A. Schoar, and D. Simester. Belief disagreement and portfolio choice. *Journal of Finance*, 2018.

A. Mian, A. Sufi, and N. Khoshkhou. Partisan bias, economic expectations, and household spending. *Review of Economics and Statistics*, pages 1–46, 2021.

L. Orr, A. Fowler, and G. Huber. Is affective polarization driven by identity, loyalty, or substance? *American Journal of Political Science*, forthcoming.

Y. Pan, E. Pikulina, S. Siegel, and T. Y. Wang. Political divide and the composition of households' equity portfolios. *Available at SSRN 4381330*, 2023.

A. Rice. Executive partisanship and corporate investment. *Available at SSRN 3820065*, 2020.

P. Stanig. Political polarization in retrospective economic evaluations during recessions and recoveries. *Electoral Studies*, 32(4):729–745, 2013.

STT. Lahes 6500 yrittajaa ehdolla kuntavaaleissa. *www.sttinfo.fi/tiedote/lahes-6500-yrittajaa-ehdolla-kuntavaaleissa--yrittajaehdokka* Accessed: 2023-02-22.

T. Tähtinen. Populism and ideological convergence: Evidence from a multiparty system. In *3rd Conference of European Studies, University of Milano-Biccoca*, 2021.

C. Wlezien, M. Franklin, and D. Twiggs. Economic perceptions and vote choice: Disentangling the endogeneity. *Political Behavior*, 19(1):7–17, 1997.

Figure 1: Political Alignment of Entrepreneurs

This graph presents the economic and social alignments of the entrepreneurs in our main regression sample (in the year 2020, to reduce clutter) as well as the weighted-average alignments of elected MPs from government parties in the 3 national governments elected during our sample period. Both the social views and economic views axes have possible values ranging from -8 to 8. A higher economic view score denotes more right-wing views and a higher social views score denotes more conservative views.

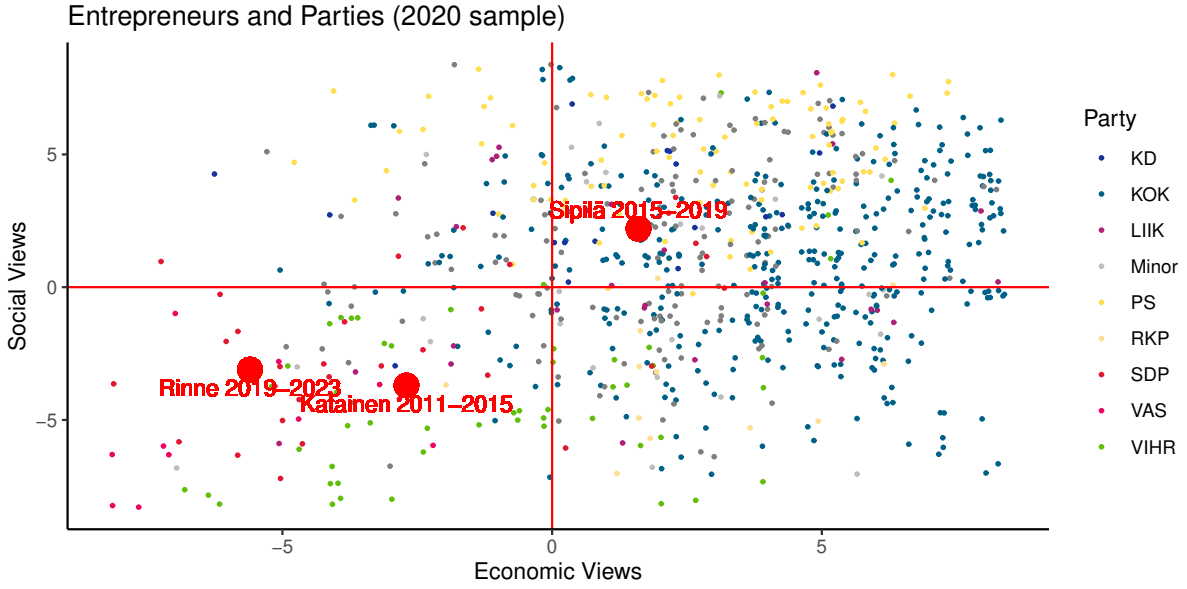


Figure 2: Government Alignments During the Sample Period

These graphs present the economic and social alignments of each MP in our sample period. The year refers to the year of the parliamentary election. Circles denote parties in government. The circles cover 75% of each party's MPs, giving a measure of the ideological range of each party. The size of the circle refers to ideological range, not the number of MPs per party. Both the social views and economic views axes have possible values ranging from -8 to 8. A higher economic view score denotes more right-wing views and a higher social views score denotes more conservative views.

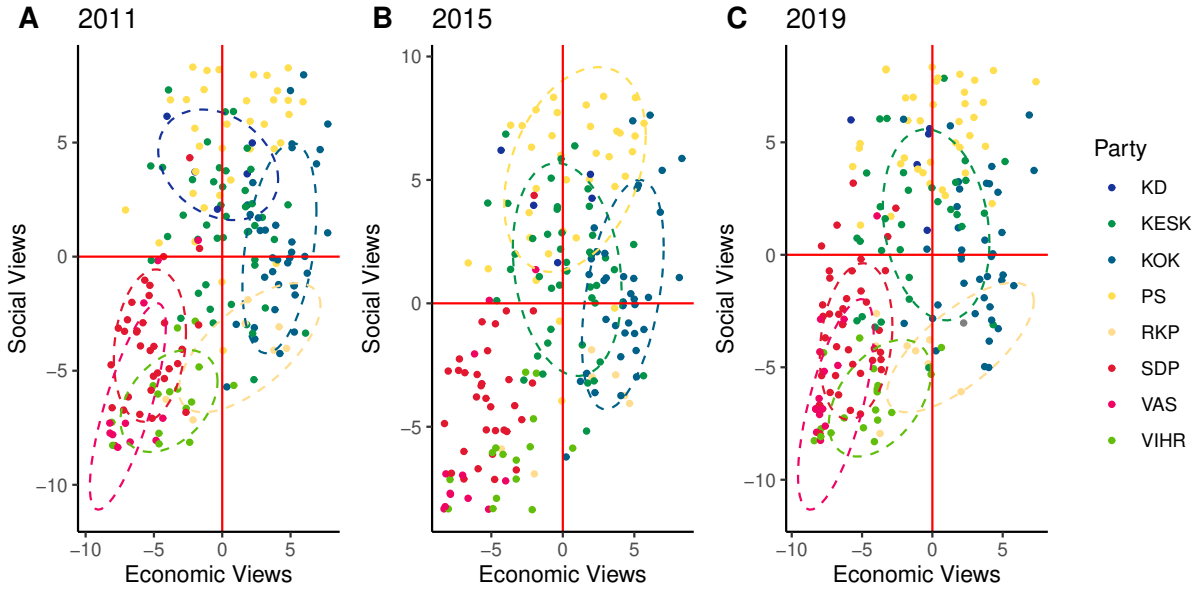


Table 1
Key Variable Definitions

Our main variables of interest are political (economic, social and party) alignment with the party currently in national government as well as investment-related variables. We define investment as an increase in fixed assets as this is the clearest evidence of a direct investment decision as opposed to being caused by for instance an increase in revenues (which may cause total assets to increase). Below, we define the key variables used in the analysis.

- **Seats in Gov't** Based on VAA data. This variable denotes the share of seats in government (i.e. seats in parliament for parties in government) held by the party of the entrepreneur in any given year. Ranges from 0-1.
- **Economic Alignment** Based on VAA data. This variable is defined as the absolute value of the entrepreneur's economic alignment (as defined above, on a scale of -8 to 8) minus the national government's economic alignment. The government's economic alignment is defined as the weighted average economic alignment of all elected MPs in governing parties.
- **Social Alignment** Based on VAA data. This variable is defined as the absolute value of the entrepreneur's social alignment minus the national government's social alignment.
- **Net Investment** Based on Orbis data. This variable is equal to the (fixed assets in year t plus depreciation in t-1) divided by fixed assets in year t-1 if this is greater than 0 and 0 otherwise. The variable is winsorized at the 95% level because of a large number of outliers
- **Gross Investment** Based on Orbis data. This variable is equal to the percentage increase in the firm's fixed assets if fixed assets in year t $>$ fixed assets in year t-1 and 0 otherwise. The variable is winsorized at the 95% level because of a large number of outliers
- **Investment Dummy** Based on Orbis data. This equal to 1 if Gross Investment is above 10% and 0 otherwise.

Table 2
Summary Statistics

This table provides summary statistics at the firm-year level on several key variables used in our analyses. Our sample consists of Finnish entrepreneurs who participated in municipal elections in 2017 or 2021. We exclude firm-years where the previous year's fixed assets were less than 31k euros (our regression sample).

	(1) Mean	SD	Min	Median	Max	N
Political						
Economic Views	2.720	3.351	-8.000	3.000	8.000	3652
Social Views	1.880	3.498	-8.000	2.000	8.000	3652
Abs. Diff. Econ.	5.704	3.590	0.305	5.391	13.642	3652
Abs. Dif. Soc.	4.498	3.020	0.100	4.100	11.672	3652
Seats in Gov't	0.179	0.161	0.000	0.267	0.395	3652
Firm Info						
Sales (EUR 000)	1929.006	6713.679	-104.000	453.000	125634.406	3587
Total Assets (EUR 000)	1382.362	4520.536	32.507	392.000	79483.000	3652
Fixed Assets (EUR 000)	717.287	3044.990	31.000	152.000	55524.016	3652
Leverage (LT Debt / Total Assets)	0.241	0.259	0.000	0.173	2.295	2988
Investment Dummy	0.433	0.496	0.000	0.000	1.000	3230
Investment Dummy (10pct Threshold)	0.316	0.465	0.000	0.000	1.000	3230
Net Investment Dummy	0.743	0.437	0.000	1.000	1.000	3230
Investment (Chg in FA, winsorised)	0.169	0.286	0.000	0.000	0.839	3230
Net investment (Fixed Assets, winsorized)	0.300	0.410	0.000	0.086	1.212	3230
Political Affiliation						
Christian Democrat (KD)	0.026	0.159	0.000	0.000	1.000	3652
Centre Party (KESK)	0.220	0.414	0.000	0.000	1.000	3652
National Coalition (KOK)	0.493	0.500	0.000	0.000	1.000	3652
Movement Now (LIIK)	0.022	0.146	0.000	0.000	1.000	3652
Minor Parties	0.025	0.158	0.000	0.000	1.000	3652
The Finns (PS)	0.128	0.334	0.000	0.000	1.000	3652
Swedish People's Party (RKP)	0.007	0.082	0.000	0.000	1.000	3652
Social Democrat (SDP)	0.030	0.169	0.000	0.000	1.000	3652
Left Alliance (Vas)	0.013	0.114	0.000	0.000	1.000	3652
Green League (VIHR)	0.036	0.186	0.000	0.000	1.000	3652

Table 3
Party Statistics

This table provides summary statistics for key political variables for each party. Note that affect variables are not available for Movement Now or minor parties.

	Mean	N
Christian Democrat (KD)		
Economic Views	0.758	95
Social Views	2.295	95
Centre Party (KESK)		
Economic Views	1.933	804
Social Views	2.537	804
National Coalition (KOK)		
Economic Views	4.032	1800
Social Views	1.495	1800
Movement Now (LIIK)		
Economic Views	2.487	80
Social Views	3.100	80
Minor Parties		
Economic Views	1.688	93
Social Views	-0.269	93
The Finns (PS)		
Economic Views	2.763	468
Social Views	5.312	468
Swedish People's Party (RKP)		
Economic Views	1.040	25
Social Views	-4.280	25
Social Democrat (SDP)		
Economic Views	-2.852	108
Social Views	-0.843	108
Left Alliance (Vas)		
Economic Views	-4.854	48
Social Views	-3.104	48
Green League (VIHR)		
Economic Views	-0.641	131
Social Views	-3.405	131
Observations	3652	

Table 4
Political Alignment and Investment

This table presents results from regressions of a dummy (*Investment Dummy* that takes the value of 1 if gross assets are more than 10% higher than in the previous year and *Gross Investment*, the annual change in fixed assets, on various political alignment measures. The *Seats in Gov't* variable is the proportion of seats in government held by the entrepreneur's party in any given year (range from 0-1). The *Abs. Diff. Econ.* and *Abs. Soc. Diff.* variables denote the absolute value of the ideological distance between the entrepreneur and the government on the economic and social dimensions, respectively. Elected to council is a dummy that takes the value of 1 if an entrepreneur was elected to the municipal council in the latest election before any given firm-year. The sample is all firm-years with fixed assets greater than 31k. All specifications include firm fixed-effects. Standard errors are clustered by individual and shown in parentheses and singleton observations (firms that only appear once and hence are subsumed by the firm fixed effect) are not included in the count of Unique IDs or total observations. Significance levels: * 0.1, ** 0.05, *** 0.01.

	Investment Dummy			Gross Investment (Pct.)		
	(1)	(2)	(3)	(4)	(5)	(6)
Seats in Gov't	0.102*	-0.028	-0.106	0.063	0.003	-0.068
	(0.060)	(0.078)	(0.096)	(0.039)	(0.053)	(0.050)
Abs. Diff. Econ.		-0.009**	-0.008*		-0.007***	-0.005**
		(0.004)	(0.005)		(0.002)	(0.002)
Abs. Dif. Soc.		-0.003	-0.005		0.003	-0.001
		(0.005)	(0.005)		(0.003)	(0.002)
Elected to Council		-0.042	0.009		-0.023	0.005
		(0.039)	(0.045)		(0.023)	(0.022)
L.Log(Sales)			-0.027			-0.021*
			(0.018)			(0.012)
L.Leverage (LT Debt / Total Assets)			-0.330***			-0.219***
			(0.092)			(0.051)
Constant	0.295***	0.391***	0.789***	0.155***	0.196***	0.502***
	(0.013)	(0.038)	(0.255)	(0.009)	(0.024)	(0.168)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	3077	3077	1931	3077	3077	1931
Unique IDs	493	493	360	493	493	360
R2	0.2619	0.2650	0.2945	0.2778	0.2807	0.2992

Table 5
Predicting Party Alignment by Ideological Views

This table presents the number of candidates whose party alignment is predicted correctly or incorrectly. The data consist of entrepreneur-candidates and views are from 2019 (to avoid duplication across years). We first run a multinomial logit model attempting to predict party affiliation using either only the economic ideology or social ideology variables. We then create a "predicted party" variable which is equal to the party that the candidate has the highest predicted probability of belonging to based on the logit model. We then check whether that party is equal to the actual party the candidate is affiliated with, and report the number of correct and incorrect predictions in this table.

	Economic Ideology	Social Ideology
Correct	479	506
Incorrect	530	503
Total	1009	1009

Internet Appendix

I.A.1 Institutional Setting: Elections in Finland

The sample for our paper consists of entrepreneurs who run for municipal office in Finland. Finland consists of 309 municipalities each of which elects 13 to 79 councillors every 4 years. This means that municipal elections are contested by a large number of candidates, with 35627 candidates running in 2021 out of a population of 5.5 million. We are able to identify a relatively large number of candidates who operate their own businesses.

There are 5 types of elections in Finland: Presidential elections, elections to the European Parliament, parliamentary elections, municipal elections and county elections (a county is a larger political unit than a municipality). County elections were not organized prior to 2022 and thus do not feature in our sample. In terms of their impact on domestic economic policies, parliamentary elections tend to be where the direction of the country is decided. In Finland, the president is the commander-in-chief of the army and partly responsible for foreign policy, but parliament is responsible for domestic policy.

Our sample starts in 2011 and ends in 2022 (for reasons described in the next section). During this time period, Finland experienced 3 parliamentary elections (in 2011, 2015 and 2019) and 2 municipal elections (in 2012 and 2017). We also use data from the 2021 municipal elections. As we measure alignment as the difference between the entrepreneur and the national government, this means that we have 2 changes of government which generate variation in alignment that is unrelated to entrepreneur characteristics.

Almost all political parties in Finland with seats in parliament spent some time in government in our sample period. The parties that had MPs elected into office are listed below:

- the National Coalition (Kokoomus / KOK). One of the major parties with around 20% of the vote, center-right party with a mix of social ideology. In government 2011-2019
- the Social Democratic Party (SDP). One of the major parties with around 20% of the vote, center-left party that is generally socially liberal. In government 2011-2015 and 2019-2023
- the Finns (formerly True Finns) party (Perussuomalaiset / PS). One of the major parties with around 20% of the vote, an anti-immigration party that is socially conservative and economically centrist. In government 2015-2017 (the party split in 2017 with most MPs staying in government until 2019 under a new party)

- the Centre Party (Keskusta / KESK). Formerly a major party, now polling at around 10%. Both economically and socially centrist. In government from 2015-2023
- the Green League (Vihreät / VIHR). Polling around 10% through most of the sample. Economically left-wing and socially liberal. In government from 2011-2015 and 2019-2023
- the Left Alliance (Vasemmistoliitto, VAS). Polling around 7-9% through most of the sample. Economically very left-wing and socially liberal. In government from 2011-2015 and 2019-2023
- the Swedish People's Party (RKP). Polling around 4% through most of the sample. Economically right-wing and socially liberal. In government from 2011-2015 and 2019-2023
- the Christian Democrats (Kristillisdemokraatit / KD). Polling around 4% through most of the sample. Economically right-wing and socially conservative. In government from 2011-2015
- Movement Now (Liike Nyt / LIIK). Polling around 2%. Never in government
- In addition, the autonomous region of Aland elects a representative. In our sample period, this representative has been an unofficial member of the Swedish People's Party during the entire sample. There are also cases of parties splitting up, with the most notable example being the split of the Finns party in 2017 into Blue Reform (SIN) which remained in government and the remaining MPs, who moved into opposition. Blue Reform failed to win any seats in the 2019 parliamentary elections

The government elected in 2011 was a broad coalition with little ideological consistency. It included all parties with elected MPs other than the Centre Party (KESK) and the Finns party (PS). In 2015, the Centre Party had the largest vote share and a right-wing / socially moderate government of the Centre Party, National Coalition (KOK) and the Finns was formed. In 2019, the Social Democratic Party narrowly won an election and formed a left-wing and socially liberal government with the Centre Party, Left Alliance (Vas), Green League (VIHR) and Swedish People's Party (RKP).

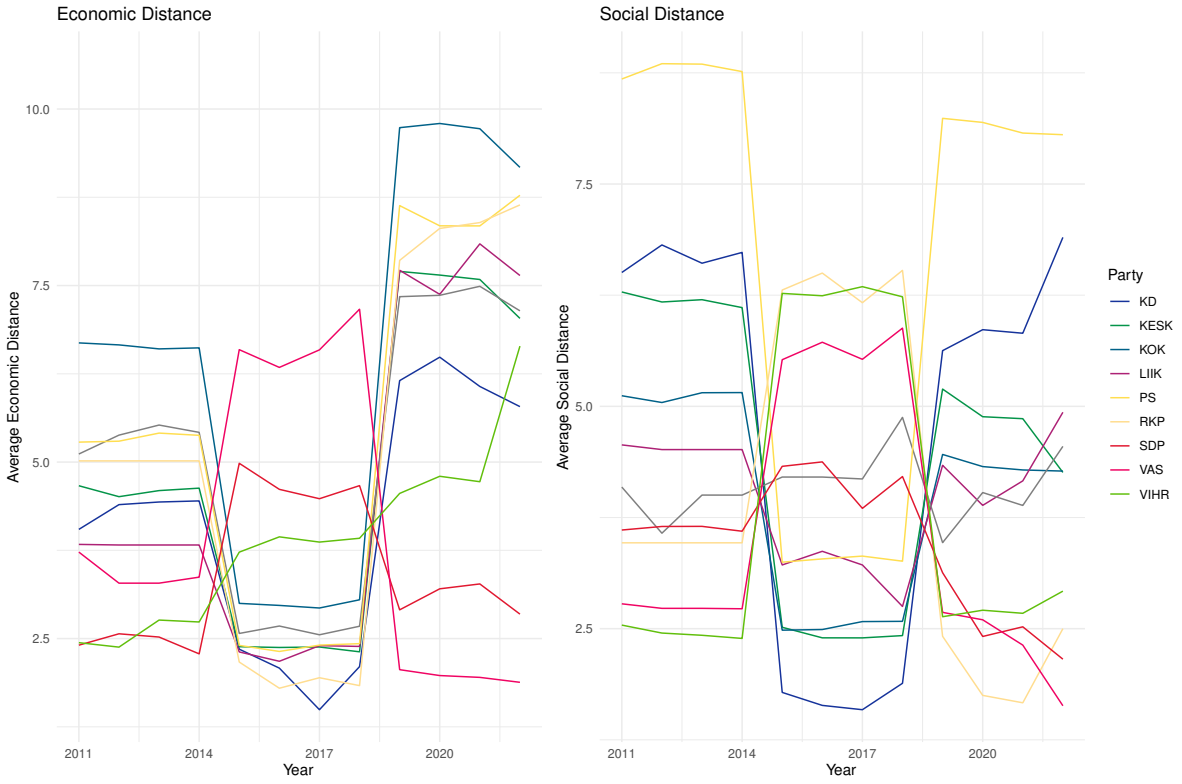
Most entrepreneurs in our sample tend to affiliate with the National Coalition, Centre Party or the Finns. Figure 1 presents the alignment of entrepreneurs as well as the 3 national governments during our sample period.

I.A.2 Time series of political variables variables

In this section, we present the evolution of our key political alignment variables (economic and social distance) for each party throughout the sample.

Figure I.A.1: Time series of political variables

These graphs present the evolution of our political variables for each party in each year. The graph on the left presents economic distance by party and year (note that the distances are changing within government terms due to entrepreneurs entering the sample) and the graph on the right presents social distance.



I.A.3 Alternative specifications

In this section, we present the results of regressions with different sample selection criteria as well as alternative variable definitions.

We show that our results are broadly unaffected by the cutoff of each firm-year needing a minimum of 31k euros in fixed assets and are robust to cutoffs above that value. However, when firm-years below 31k euros are included in the regressions, most of our coefficients of interest are no longer significant and tend towards zero.

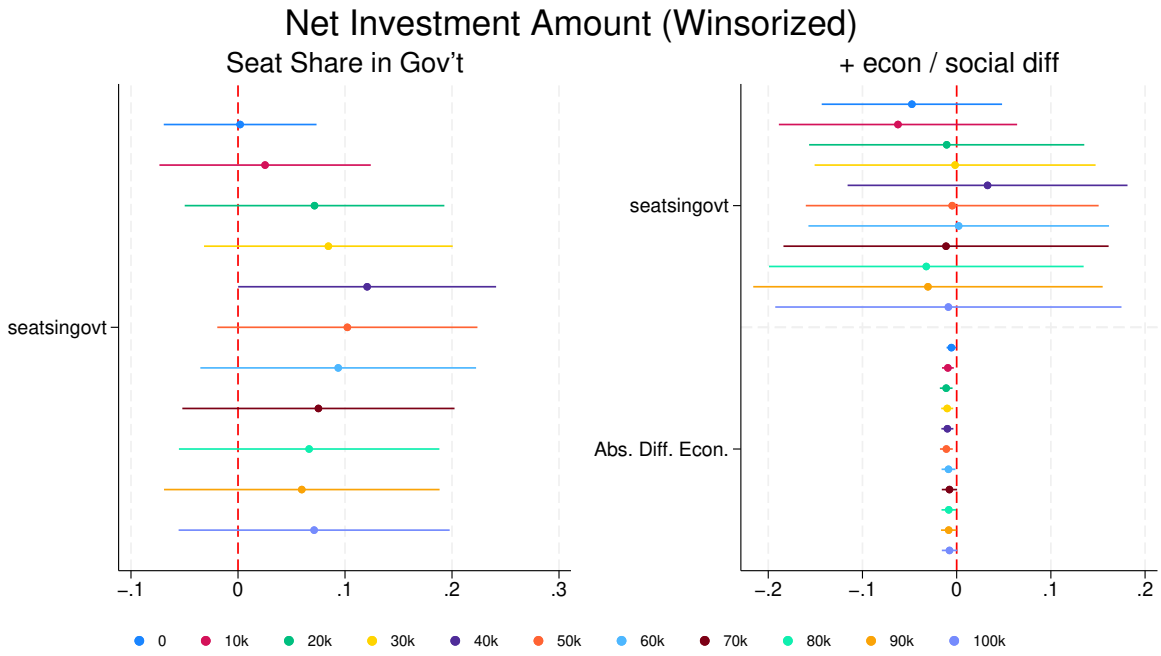
We also show that the results are not driven by any individual year by dropping each year at a time.

The first graph in each row only includes the party-alignment dummy. The second graph includes party alignment, economic distance, social distance and the elected dummy (last two unreported) whereas the third graph in each row adds the affect towards governing parties variable.

Figure I.A.2: Alternative specifications

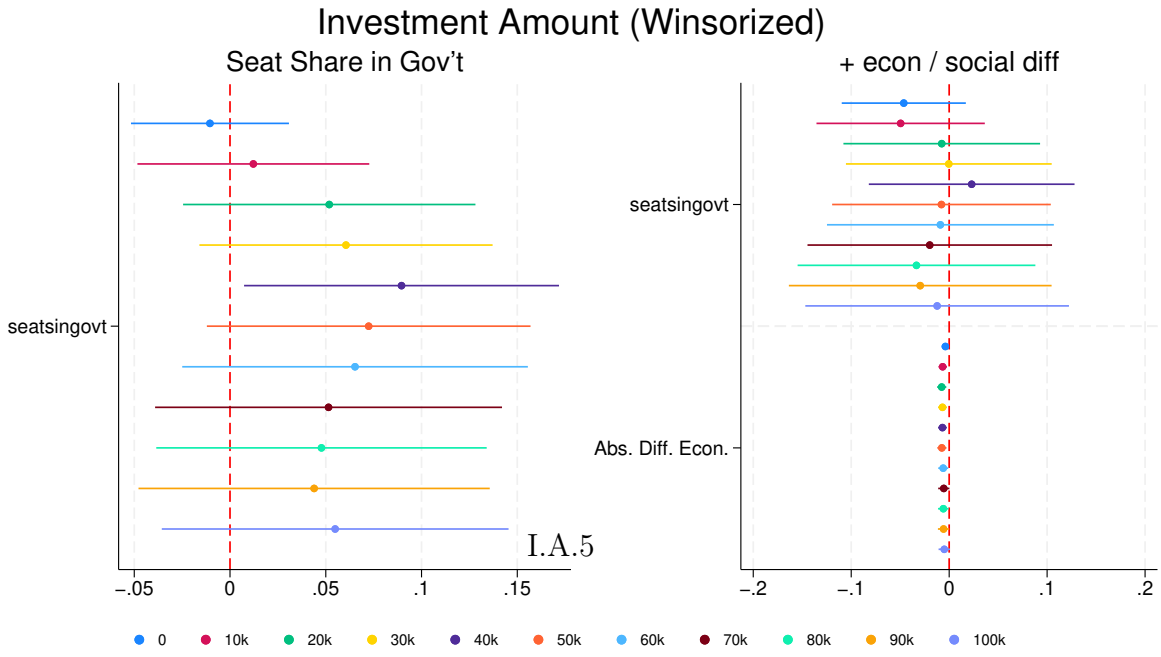
These graphs plot coefficients and 95% confidence intervals from various alternative specifications. All panels present coefficients of our baseline regressions (investment on various measures of political alignment) using different cutoffs for minimum fixed assets per year (31k in our baseline specifications). In Panel A, we use (as the dependent variable) an alternative measure of the amount invested, *Net Investment Amount*, which is defined as (Fixed Assets in year t + Depreciation in year t-1) divided by (Fixed Assets in year t-1) if that quantity is above 0 and 0 otherwise. In Panel B, the dependent variable is *Gross Investment Amount*, defined as (Fixed Assets in year t) divided by (Fixed Assets in year t-1) if that quantity is above 0 and 0 otherwise. In Panel C, the dependent variable is *Raw Investment Dummy* which takes the value of 1 if Fixed Assets in year t are higher than in year t-1. In Panel C, the dependent variable is our *Investment Dummy* which takes the value of 1 if Fixed Assets in year t are at least 10% higher than in t-1.

(a) Panel A



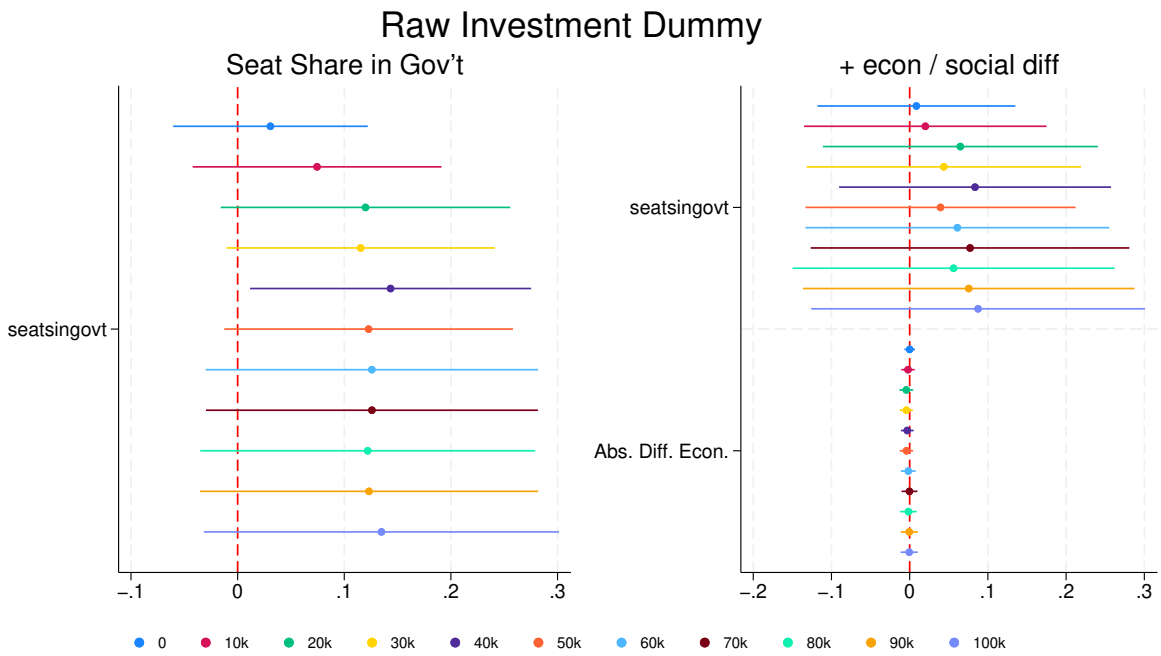
Coefficients for social difference and the elected dummy are omitted. S.E.s clustered by party−year.

(b) Panel B



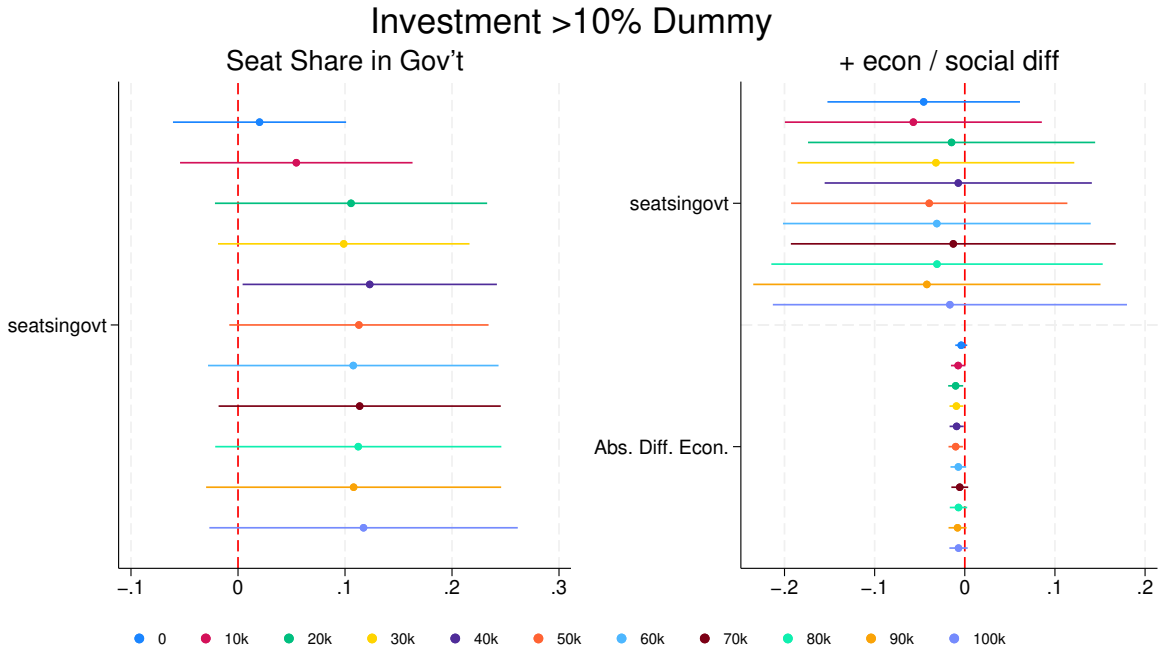
Continued

(c) Panel C



Coefficients for social difference and the elected dummy are omitted. S.E.s clustered by party−year.

(d) Panel D



Coefficients for social difference and the elected dummy are omitted. S.E.s clustered by party−year.