# Decomposing Partisan Bias: Evidence from Entrepreneur-Politicians

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#### Abstract

We study the nature of partisan bias in economic decision-making using data on the political opinions of Finnish entrepreneurs and their investment decisions. Entrepreneurs are more likely to invest when the party they support is in power, but this effect is driven entirely by the alignment in economic ideology. Alignments in other measures of ideology, such as social (liberal-conservative) views, do not have a similar effect. Our results suggest that documented partisan bias in the literature may be driven, at least in part, by similarity in economic policy preferences rather than "partisan intoxication".

Keywords: Partisan bias, small business economics

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# 1 Introduction

Recent evidence has found that people are more optimistic in their economic decisions when the party they support is in power.<sup>1</sup> A key question is what drives such optimism. One possibility is blind party loyalty, where the mere fact that someone's favored party is in power makes them more optimistic about future economic outcomes. Another is that people tend to hold similar economic views as the parties they support, meaning that rather than being more optimistic because of the party in power, they are more optimistic because they feel more confidence in the economic policies being pursued.<sup>2</sup> A clean test disentangling the effects of partian bias needs to account for the fact that people choose to support a party that is aligned with their economic views and the fact that changing party positions may affect people's economic views.

In this paper, we attempt to study the nature of partisan bias in economic decision-making using a surprisingly simple test. First, we replicate the finding that party alignment affects economic decision-making in our setting - people who are affiliated with the party in power appear more optimistic. We then show that after controlling for economic policy preferences (economic ideology), this effect disappears and instead we observe a strong effect of economic ideology on economic decisions. We also show that other policy preferences (social ideology, from liberal to conservative) predict party alignment as well as economic ideology but do not affect economic decision-making or the effect of party alignment.

The setting for our paper is Finnish entrepreneurs running for municipal council seats. Our setting allows us to observe party affiliation, policy views (across an economic and a

<sup>&</sup>lt;sup>1</sup>This has been documented across a range of settings. For example, credit ratings given by credit analysts [Kempf and Tsoutsoura, 2021], international capital allocation decisions of institutional investors [Kempf et al., 2022], portfolio decisions of individual investors [Meeuwis et al., 2018, Krupenkin et al., Forthcoming], syndicated loan pricing [Dagostino et al., 2020], hiring decisions of employers in Brazil [Colonnelli et al., 2022], and the decision to become an entrepreneur in the US [Engelberg et al., 2022] are found to be affected by party affiliation. However, several papers report no effect of party alignment on certain economic decisions, such as automobile purchases in the US [Mian et al., 2021] and county-level spending [McGrath et al., 2017].

<sup>&</sup>lt;sup>2</sup>This distinction has been studied in the context of voting behavior: Fowler [2020] calls voting decisions driven by policy preferences *policy voting* and those driven by pure party alignment *partisan intoxication*. Stanig [2013] calls the latter *ideological bias*, when the ideology of a person (or the distance between the person and government) affects economic choices and the former *partisan bias*, when party affiliation affects choices.

social dimension) and investment decisions for small firms over about 10 years and 3 national elections. We are able to compare the self-reported policy views of the entrepreneur with those of elected members of parliament in the national government using the exact same set measures of ideology.

Using these data, we are able to compare the relative importance of party affiliation and ideology on small-business investment decisions as well as to study the nature of political partisanship in a multi-party political system. The setting allows us to rule out important potential confounds, such as political connections. Crucially, being elected in municipal elections rarely affects an entrepreneur's incentives to invest: the time spent and monetary income from being elected are minimal and the ability to exploit political connections rarely depends on alignment with the national government but rather on alignment with the municipal one.

Our data on political views come from Voter Advice Applications (VAAs), tools where candidates report their views on a range of issues in order to help voters find a candidate with similar views. Finnish elections are based on proportional representation and feature open party lists, giving voters stronger incentives to choose a candidate whose views match their own compared to other systems, where party choice is much more important. Using a set of standardized questions designed for this purpose, we create measures of economic and social ideology for all candidates who answer one particular VAA. These questions are asked at all elections after 2012 (both parliamentary and municipal), meaning that we have a measure of ideology for all elected members of the national government and for electoral candidates, allowing us to measure ideological distance between the government and the candidate. We then identify entrepreneur-candidates and link their political beliefs to the financial decisions of the firms they manage.

We find that, when economic views are not controlled for, a firm is more likely to invest when the party of the entrepreneur managing the firm is aligned with the central government. The magnitude of this effect is moderate - the median firm invests about once every 2.5 years (40% of years), with party alignment increasing this by about 3-4 percentage points, or 10%. This result is generally in line with the literature on partian bias. 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 increases investment by between 6 to 8 percentage points, or 20%. Our results indicate, economic views are more important than party alignment for the likelihood of making an investment. Entrepreneurs in our sample increase their investments if they have the same view as the governing party on the economic policy, irrespective of their alignment with the governing party. The fact that only economic alignment and not social alignment affect investment also help address the two worries that ideological views are simply a more accurate proxy for political views and the fact that ideological views also affect party alignment.

There are many advantages of studying the investment decisions of Finnish politicianentrepreneurs. First, due to the nature of municipal elections in Finland, we have a fairly large sample of entrepreneurs running for office. Second, the open-list format of the elections implies that these entrepreneurs disclose their political views to voters in a fairly standardized format to help voters choose between candidates. Moreover, these views are directly comparable to those of the government, whose MPs disclose these views during parliamentary elections. Third, the investment decisions of the entrepreneurs are consequential for their economic wealth and municipal elections do not significantly interfere with the operations of firms.<sup>3</sup> Finally, these investment decisions are observed through administrative data, not through surveys, where the fact that political opinions are elicited at the same time as opinions about the economy may potentially induce bias.

However, there are some potential concerns regarding our institutional setting and the inferences that may be drawn. One concern may be that our sample is unusual in a way that either overstates or understates the impact of political views. For instance, some may argue that Finland is less polarized than for example the US, and therefore we would

<sup>&</sup>lt;sup>3</sup>Municipal council seats are not full-time jobs. In most municipalities, the council hires a "general manager" for the municipality who runs the operations of the municipality, with councillors attending council meetings. They receive payment for each meeting, but this payment and the frequency of meetings varies depending on the municipality. The highest payments and frequency are typically in large cities, with for instance the Helsinki council meeting twice per month and paying a fee of 340 euros per meeting. Other channels through which election to a council might affect investment, such as favorable contracts through political contacts, are more likely to operate at the municipal level whereas our measures of alignment are based on alignment with the national government. Municipal and national governments are elected 2 years apart while we observe higher investment in the 2 years following a *national* election also suggests that our results are not driven by political connections.

expect less partisan bias. It is important to note there that at least in terms of effective polarization, the US stands out as an outlier compared to other rich democracies [Boxell et al., 2020] and our results shed light on how political views shape economic decisions in a multi-party democracy. While it may indeed be the case that party-alignment is less important in Finland than in other countries, we note that our results on partyalignment-partisanship (i.e. our results before controlling for ideology) are generally in line with existing work in, for instance, the US. One could also argue political candidates to be more partisan than the general population. Political candidates may view their political party as an important part of their identity. Such interpretation, however, would strengthen our results since our findings should be stronger in a sample where people are less partisan.

Another concern might be that elected politicians benefit from their office directly or are distracted by the office. Here, it makes sense to reiterate some features of the setting. First, elected councillors (with a few exceptions, such as the chairpersons of large councils) are not required to spend much time on municipal business, generally meeting only once per month. Their compensation per meeting is low, with the highest-paying council (Helsinki) paying 340 euros per meeting and the vast majority paying significantly less. This means that councillors are unlikely to be distracted or benefit financially in such a way that might affect the investment of the firms they manage.

One might also be concerned that candidates aligned with the ruling coalition benefit from contracts or targeted spending which may provide a rational incentive to increase investment. Our results also speak against this explanation - the importance of ideology relative to party alignment suggests that our results are not being driven by corruption.

We make a number of contributions to the literature. First, we contribute to the literature on the relationship between political ideology and small-firm investment / entrepreneurship. Puri and Robinson [2013] find that entrepreneurs are more optimistic than wage earners (though this is a correlation) and numerous studies (see e.g. Coibion et al. [2020]) have documented a relationship between party alignment and optimism about economic outcomes. Putting together these two observations, Engelberg et al. [2022] find that, as most (potential) entrepreneurs in the US align with the Republican party, Republican control of the White House is associated with more new enterprises. We observe similar effects in the investment decisions of small firms and in a multi-party system. More importantly, our results suggest that increased entrepreneurship or investment may be driven by the fact that these entrepreneurs perceive certain governments to be better for economic outcomes.

We contribute to the literature on the impact of partial partian partial partial partial partial partial parti affiliation is considered a key component of social identity (Green et al. [2004]) and, thus, expected to affect individuals' preferences (Akerlof and Kranton [2000]). The effect of partisanship on economic behavior has been shown in many contexts. In addition to the papers cited in footnote 1, McCartney et al. [2021] show that homeowners are more likely to sell their homes and move when their next-door neighbors are affiliated with the opposite political party. Using a field experiment from an online labor market, McConnell et al. [2018] document that workers accept less pay when they are affiliated with the same party of their employer. Although the effect of partial bias on economic decision-making has been shown across a range of contexts, the impact of policy views is rarely considered in this literature. Fowler [2020] highlights the importance of disentangling "irrational partisan intoxication" from viewing economic policy through the lens of one's own policy preferences (which may still produce predictable forecast errors). Our contribution to this literature is to decompose the alignment of an individual to a party on social and economic issues and show that only the alignment on economic issues matter for economic decision making.

We also reduce measurement error in political preferences compared to the prior literature (which has generally focused on the US). Most prior papers 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 are able to measure ideology at the entrepreneur-level and link that to similar measurements for the government. Our setting also allows us to include high-dimensional fixed effects, such as those at the municipality-year level, to rule out concerns about targeted economic policies.

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 (see e.g. Boxell et al. [2020], Finkel et al. [2020]). The multi-party nature of Finnish politics gives voters the chance to identify with parties that are a better match for their policy preferences than the two parties in the US. While political preferences and economic choice has been studied in non-US contexts (e.g. Kaustia and Torstila [2011] study 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.

The rest of the paper proceeds as follows: The next section describes our institutional setting, elections in Finland. Section 3 describes the data used in this paper. In section 4, we present our main results and conclude in section 5.

## 2 Setting

The sample for our paper consists of entrepreneurs who run for municipal office in Finland. Finland consists of 309 municipalities (a number which has been decreasing in recent decades), each of which elects between 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. The large amount of candidates allows us to identify a relatively large number of candidates who own and operate their own businesses.

Below, we provide a brief description of the main types of elections in Finland.

## 2.1 Elections in Finland

There are 5 types of elections in Finland: Presidential elections, European Parliament elections, 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 of the army and responsible for foreign policy, but parliament is responsible for domestic policy. Our sample starts in 2011 and ends in 2020 (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-
- 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-
- 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-
- 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-
- the Swedish People's Party (RKP). Polling around 4% through most of the sample. Economically centrist and socially liberal. In government from 2011-2015 and 2019-

- 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.

## 3 Data

### 3.1 Main Datasets

### 3.1.1 Candidate Ideology

Our data on political opinions comes from voting advice applications (VAAs) run by the Sanoma media group. Sanoma is the largest media group in Finland and the publisher of the largest broadsheet (Helsingin Sanomat) and tabloid (Ilta-Sanomat) newspapers. The company runs their VAAs around all major elections in Finland and these are filled in by a majority of candidates running for office, for example over 85% of those running for parliament (Isotalo et al. [2020]) and about half of all candidates in municipal elections.

The format of the Sanoma VAA has been standardized since 2012. In all elections, the questionnaire consists of 20 statements on topical themes and 10 fixed statements on values - 4 on economic values, 4 on social values and 2 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 are on a 1-5 scale, with 1 expressing strong disagreement and 5 strong agreement with the statement. These statements are:

### Social

- It's a good thing that gay and lesbian couples have a right to marry and adopt children, just like straight couples (note: this question was changed into its current form after gay and lesbian couples were allowed to marry)
- 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 home, religion and the motherland form a good moral basis for politics

#### Economic

- 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 government services and benefits are economically unsustainable in the long term

We reverse the coding of the answers on several questions such that on social questions, 5 always represents the conservative and 1 the liberal answer. On economic questions, we make the coding consistent so that 1 always represents the left-wing answer and 5 the right-wing.

These codings are then used to create an index of social and economic views for each candidate. 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 centered around 0). For example, on the economic scale, the most left-wing score is -8 and the most right-wing score is 8.<sup>4</sup>

We scrape candidate responses to the electoral compasses for the parliamentary elections in 2015 and 2019 as well as municipal elections in 2017 and 2021. Unfortunately, data for the municipal elections of 2012 were no longer available. We also obtained data from both Sanoma's and Yle's VAAs for 2011, but neither of these had a consistent set of questions and thus we opted not to use the data.

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 their scores and apply them to the all years.

The government's alignment is calculated in two ways: first, by taking the average score of all elected members of parliament who are members of the ruling parties. Second, in line with the findings of Kempf et al. [2022] that the party of the prime minister is more

<sup>&</sup>lt;sup>4</sup>There are several advantages to this: The measure is simple and consistent across years. This means that 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. Qualitatively, both methods produce fairly similar results in terms of the relative positions of the parties represented in parliament.

important for partian decision-making, by taking average scores for all elected members of parliament from the party of the prime minster. The alignment of the government is assumed to last for the entire term of the government. As 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.<sup>5</sup>

As governments in Finland are broad coalitions, two of the three governments in our sample were affected by parties leaving or splitting up (along with more minor events, such as MPs being kicked out or suspended from parties). The broad coalition government of 2011-2015 saw the Left Alliance (Vas) leave towards the end of the term. The rightwing government of 2015-2019 saw one of the three governing parties, the Finns party (PS) split into two in 2017. A majority of MPs formed a new party called Blue Reform (Sin), which continued in government while the remaining Finns MPs moved to the opposition. We ignore these changes. The Left Alliance left the government in the final year of its term (meaning that its effect is muted) and the fact that the Finns split up after municipal elections in 2017 mean that it is very difficult to figure out which party candidates identify with.

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 MPs of all governing parties as well as the prime minister's party.

### 3.1.2 Financial data

We obtain financial data from Bureau van Dijk's Orbis database, which provides financial statements for public and private firms. Most firms in Finland are required to provide at least some sort of financial statements. We attempt to obtain financial information for all firms for which we managed to match the entrepreneur to a candidate running in

<sup>&</sup>lt;sup>5</sup>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.

elections (see below for details on the merge).

First, we drop firm-years whose consolidation code is not U1 ("Only unconsolidated accounts available"). The reason for this is that there are very few observations with fully consolidated accounts (>37k firm-years with code U1, 42 with C1 and U1, >28k with LF and 4k with NF). 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.

After these, we are left with an unbalance 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.

#### 3.1.3 Merging financial and candidate data

We merge the financial data and political opinions data using the candidate's name and age. Some data files not described above (elections results files from the Ministry of the Interior of Finland) are used as an intermediate link-file. The merging process creates risks of false positives, i.e. matching politicians to firms they are not connected with and false negatives, i.e. 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, our choices are generally made with the aim of minimizing false positives even at the cost of false negatives.

We start by taking the names of all board members of Finnish companies in Orbis. We drop those who are not listed as "CEO" or "Private Trader" (in Finnish: Elinkeinon-harjoittaja).<sup>6</sup> 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.

<sup>&</sup>lt;sup>6</sup>Because a lot of small firms do not have formal roles, 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.

After this, we work with the election results files 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 these files, we drop all candidates whose self-described occupation does not contain the word "entrepreneur" or "CEO".<sup>7</sup> We then merge these files with the Orbis files, with about 2500 matches in 2021 and 2000 in 2017.<sup>8</sup>

After this merge, we have a file with entrepreneurs and basic election information. This file contains a unique identifier linking each entrepreneur to a firm in Orbis and an election ID which allows us to bring in candidate opinions. We go back to our firm-year financial data file, merge in the entrepreneur-data (with election ID) using the Orbis ID for the firm and then merge in the scraped candidate alignment data (VAA data) using the election ID.<sup>9</sup> We then manually 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.

#### 3.1.4 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.

#### 3.1.5 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

<sup>&</sup>lt;sup>7</sup>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 "taxi entrepreneur", which we deem to be true entrepreneurs.

<sup>&</sup>lt;sup>8</sup>Suomen Yrittäjät, or the Federation of Enterprises in Finland, reported that 6484 entrepreneurs ran for municipal office in 2021 and 5947 ran in 2017 [SY2]. Our matching therefore misses quite a few self-reported entrepreneurs. Our regression sample will be even smaller due to constraints imposed later

<sup>&</sup>lt;sup>9</sup>To be more specific - we create 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 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.

(which may cause total assets to increase). Below, we define the key variables used in the analysis.

- Party Alignment Based on VAA data. This variable takes the value of 1 if the party the entrepreneur belongs to is currently in national government and 0 otherwise.
- 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.
- Investment Dummy Based on Orbis data. This variable takes the value of 1 if a firm's fixed assets in year t are higher than the firm's fixed assets in year t-1.
- Investment Percentage 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

## 4 Results

## 4.1 Summary Statistics and Sample Restrictions

We start with the merged file as described above. Due to the way we define investment (as an increase in fixed assets), we exclude firm-years where an increase in fixed assets would not necessarily be meaningful - firms with fixed assets of less than 100k.<sup>10</sup>.

 $<sup>^{10}{\</sup>rm The}$  results are qualitatively similar with restrictions ranging from 20k to 100k. We plan to provide these coefficients in the appendix at a later date

Summary statistics for our sample are presented in Table 1. Firms in our sample are on average very small, with average revenues of 1.8 million euros and average fixed assets of 615k euros. About half of the entrepreneur-years in our sample are from the National Coalition party, with the Centre Party and The Finns being home to another 35%. In contrast, the Federation of Finnish Enterprises reports that from their full sample of entrepreneur candidates, 28% were from the National Coalition, 26% from the Centre Party and 17% from the Finns SY2. Differences between our sample and theirs may be driven by the fact that we exclude smaller firms.

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.

## 4.2 Party Alignment and Ideology

Our goal is to test which elements of political alignment affect investment decisions. We therefore regress our two investment-related variables (Investment Dummy, coded 1 if fixed assets have increased and Investment Pct, coded as the percentage change in fixed assets if this is positive and 0 otherwise) on various measures of political alignment.

We begin by regressing investment on pure party alignment. 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:

 $Investment \ Dummy_{i,t} = \alpha_0 + \alpha_1 \times Party \ Alignment_i, t + \alpha_2 \times Economic \ Distance_i, t + \alpha_3 \times Social \ Distance_i, t + \beta \times X_{i,t} + \alpha_i + \epsilon_i$ 

Investment  $Percentage_{i,t} = \alpha_0 + \alpha_1 \times Party \ Alignment_i, t + \alpha_2 \times Economic \ Distance_i, t + \alpha_3 \times Social \ Distance_i, t + \beta \times X_{i,t} + \alpha_i + \epsilon_i$ 

Our coefficients of interest are the coefficients on *Party Alignment*, *Economic Distance* and *Social Distance*. X is a vector of firm-level control variables and  $\alpha_i$  denotes a firm fixed-effect.

The results are presented in Table 2. Columns 1 and 5 show the unconditional effect of party alignment on investment. The coefficients of 0.046 and 0.041 suggest that firms are 4.6 percentage points more likely to invest (compared to a baseline of 44%) and they invest 4.1 percentage points more (compared to typical investment of c. 20%). 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 of investing and the size of investments. A 1 s.d. decrease in economic alignment is associated with an 8 p.p. increase in the probability of investment and a 10 p.p. (50% of the mean) increase in the size of investment. Given that the median firm has fixed assets of 637k euros, the increase in investments is worth almost 60k euros in a year.

## 4.3 Sorting Into Parties / Parties Influencing Views

What if economic ideology is simply a proxy for party alignment in a way that social ideology isn't? 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 4, 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.

Another concern might be that parties shape ideology and hence ideology is a collider variable when looking at the impact of party affiliation on investment. While we cannot directly rule this out, we note that there is considerable ideological variation along both dimensions across all parties. Figure 2 presents histograms of ideological views (on both dimensions) across parties. There is considerable heterogeneity across all dimensions of ideological views in all major parties, helping alleviate the concern that ideology is a collider variable (as there is considerable heterogeneity in ideology even after party is controlled for).

## 5 Conclusion

In this paper, we study the role of political biases in small business investment and the nature of partisan bias using data on the political opinions of Finnish entrepreneurs. We find that entrepreneurs invest more when the party they support is in power, but this effect appears to be driven by the fact that their views on the economy are similar to those of the parties they support. The effects are economically meaningful though not huge. It does not appear that our results are driven by economic views being a more precise measure of party affiliation or reverse causality between party and view as social views do not have a similar effect.

Our results suggest that prior results attributed to irrational partian intoxication may actually be driven by people's policy preferences. While these may still induce biases, these biases are harder to attribute to a polarized political climate than those that would be induced by pure partian intoxication. If our results can be generalized to the US, they suggest that more economically left-wing "Trump Republicans" might not respond as strongly (in their economic expectations and behavior) to a more traditional Republican president than the current literature on partian intoxication would suggest.

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### Figure 1: Political Alignment of Entrepreneurs

This graph presents the economic and social alignments of the entrepreneurs in our main regression sample as well as the weighted-average alignments of elected MPs from government parties in the 3 national governments elected during our sample period. The Swedish People's Party (RKP) and Liike Nyt (LIIK) are omitted from the graph due to the low number of observations. 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: Ideological Dispersion Within Parties

These graphs present histograms of economic and social ideology within parties. The sample consists of entrepreneur-candidates included in our regression sample. To avoid duplication, we only use data from a single year, 2019.



# Table 1Summary Statistics

This table provides summary statistics 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 fixed assets < 100k euros.

	(1) Mean	SD	Min	Median	Max	Ν
Political						
Economic Views	2.754	3.387	-8.000	3.000	8.000	2195
Social Views	2.371	3.352	-8.000	3.000	8.000	2195
Abs. Diff. Econ.	5.251	3.408	0.305	4.695	13.642	2195
Abs. Diff. Soc.	4.476	3.043	0.100	4.100	11.672	2195
Firm Info						
Revenue	1856.065	2805.935	0.000	656.000	12967.000	2195
Total Assets	1358.809	1933.363	102.000	637.000	10113.000	2195
Fixed Assets	615.437	778.955	100.000	315.000	3729.545	2195
Investment Dummy (Fixed Assets)	0.444	0.497	0.000	0.000	1.000	1939
Investment (Fixed Assets, Winsorized)	0.203	0.406	0.000	0.000	1.485	1926
Political Affiliation						
Christian Democrat (KD)	0.038	0.192	0.000	0.000	1.000	2195
Centre Party (KESK)	0.228	0.420	0.000	0.000	1.000	2195
National Coalition (KOK)	0.509	0.500	0.000	1.000	1.000	2195
Movement Now (LIIK)	0.010	0.100	0.000	0.000	1.000	2195
Minor Parties	0.021	0.142	0.000	0.000	1.000	2195
The Finns (PS)	0.126	0.332	0.000	0.000	1.000	2195
Swedish People's Party (RKP)	0.002	0.043	0.000	0.000	1.000	2195
Social Democrat (SDP)	0.035	0.183	0.000	0.000	1.000	2195
Left Alliance (Vas)	0.010	0.102	0.000	0.000	1.000	2195
Green League (VIHR)	0.021	0.143	0.000	0.000	1.000	2195

# Table 2Political Alignment and Investment

This table presents results from regressions of a dummy for whether fixed assets increased (cols 1-4) and the increase in fixed assets (0 otherwise, cols, 5-8) on various political alignment measures. The Party in Govt variable takes the value of 1 if the entrepreneur's party is in government in a given year. 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. All specifications include firm fixed-effects. Standard errors are clustered by municipality and shown in parentheses. Significance levels: \* 0.1, \*\* 0.05, \*\*\* 0.01.

	Investment Dummy				Investment Pct			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Party in Govt	$0.046^{*}$ (0.026)	0.003 (0.033)	$0.002 \\ (0.033)$	-0.004 (0.035)	$0.041^{**}$ (0.020)	-0.003 (0.026)	-0.000 (0.026)	-0.016 (0.022)
Abs. Diff. Econ.		$-0.013^{**}$ (0.005)	$-0.013^{**}$ (0.005)	-0.004 (0.006)		$-0.020^{***}$ (0.004)	$-0.020^{***}$ (0.004)	$-0.006^{*}$ (0.004)
Abs. Diff. Soc.		$0.003 \\ (0.006)$	0.003 (0.006)	-0.003 (0.007)		$\begin{array}{c} 0.013^{***} \\ (0.005) \end{array}$	$\begin{array}{c} 0.014^{***} \\ (0.005) \end{array}$	$0.002 \\ (0.004)$
Elected to Council			$\begin{array}{c} 0.021 \\ (0.042) \end{array}$	$0.034 \\ (0.044)$			-0.047 (0.033)	-0.033 (0.028)
L.Log(Revenue)				$0.022 \\ (0.026)$				$0.027^{*}$ (0.016)
L.Total Assets				-0.000*** (0.000)				$-0.000^{***}$ (0.000)
L.Leverage				$-0.128^{*}$ (0.074)				-0.022 (0.047)
Constant	$\begin{array}{c} 0.404^{***} \\ (0.020) \end{array}$	$\begin{array}{c} 0.488^{***} \\ (0.045) \end{array}$	$\begin{array}{c} 0.487^{***} \\ (0.045) \end{array}$	$\begin{array}{c} 0.433^{***} \\ (0.166) \end{array}$	$0.166^{***}$ (0.016)	$\begin{array}{c} 0.241^{***} \\ (0.036) \end{array}$	$\begin{array}{c} 0.243^{***} \\ (0.036) \end{array}$	$0.178^{*}$ (0.104)
Observations Fixed effects	1888 Firm	1888 Firm	1888 Firm	1614 Firm	1875 Firm	1875 Firm	1875 Firm	1614 Firm

# Table 3Social vs. Economic Views

This table presents results from regressions of a dummy for whether fixed assets increased (cols 1-3) and the increase in fixed assets (0 otherwise, cols, 4-6) on various political alignment measures. The Party in Govt variable takes the value of 1 if the entrepreneur's party is in government in a given year. The Abs. Soc. Diff. variable denotes the absolute value of the ideological distance between the entrepreneur and the government on the social dimension. All specifications include firm fixed-effects. Standard errors are clustered by municipality and shown in parentheses. Significance levels: \* 0.1, \*\* 0.05, \*\*\* 0.01.

	Inve	Investment Dummy			Investment Pct			
	(1)	(2)	(3)	(4)	(5)	(6)		
Party in Govt	$0.046^{*}$ (0.026)	$0.036 \\ (0.030)$		$0.041^{**}$ (0.020)	$0.049^{**}$ (0.023)			
Abs. Diff. Soc.		-0.004 (0.005)	-0.007 (0.005)		$0.003 \\ (0.004)$	-0.002 (0.004)		
Constant	$\begin{array}{c} 0.404^{***} \\ (0.020) \end{array}$	$\begin{array}{c} 0.429^{***} \\ (0.038) \end{array}$	$\begin{array}{c} 0.465^{***} \\ (0.023) \end{array}$	$0.166^{***}$ (0.016)	$\begin{array}{c} 0.149^{***} \\ (0.030) \end{array}$	$0.199^{***}$ (0.018)		
Observations Fixed effects	1888 Firm	1888 Firm	$\begin{array}{c} 1888\\ \text{Firm} \end{array}$	$\begin{array}{c} 1875\\ \text{Firm} \end{array}$	$\begin{array}{c} 1875\\ \text{Firm} \end{array}$	$\begin{array}{c} 1875\\ \text{Firm} \end{array}$		

# Table 4Predicting 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