

# Economic Losers and Political Winners: Sweden's Radical Right \*

Ernesto Dal Bó, Frederico Finan, Olle Folke,  
Torsten Persson, and Johanna Rickne

February 2019

## Abstract

We study the politicians and voters of Sweden's Radical Right. The rise of the Sweden Democrats is descriptively linked to macroeconomic events that magnified job insecurity and stagnated disposable incomes in large segments of the labor market. Negatively impacted groups entered politics to build the Sweden Democrats, and voting for the party concentrated in localities suffering larger impacts. Survey data suggest that economic anxiety may have triggered radical-right mobilization by weakening social and institutional trust among those with anti-immigrant preferences. We characterize the Sweden Democrats as a citizen-candidate movement that channeled inexperienced citizens from negatively impacted groups into politics. The party's entry shifted political selection for soft and hard valence traits in a negative direction.

*Keywords:* Political Selection, Radical Right, Populism.

---

\*We thank participants in a CIFAR program meeting, conferences at Nottingham, Munich, Rotterdam, Oslo, BI, Helsinki, Warwick, and Tinos, and seminars at Berkeley, IIES, LBS, LSE, TSE, Uppsala, and Yale for helpful comments. We also thank Maarten Goos, Alan Manning, and Anna Salomons for kindly sharing their Routine Task Index data, Olof Bäckström for sharing the code for the SELMA labor-market status model, and Jens Rydgren for sharing valuable research. Finally, we gratefully acknowledge financial support from the Central Bank Tercentenary Foundation, Torsten and Ragnar Söderberg Foundations, and the Swedish Research Council.

# 1 Introduction

In the last two decades, many developed democracies have seen a marked strengthening of radical-right parties, a trend that manifests itself across continents and electoral systems. Radical-right parties are visible throughout Europe and are resurging in Australia, Israel, and Japan, as well as on other continents. Radical-right elements take part in the governments of Austria, Brazil, Finland, Hungary, Italy, Philippines, Poland, Slovenia, Turkey, and the United States (Rydgren 2018). These political voices share some broad features. Most of them stress traditional values, law and order, and glorify past times. Their programs are typically nationalistic and nativistic, pushing a populist anti-immigration and anti-establishment message (Mudde 2007). As such, they often challenge the core values of liberal democracy (Mudde and Kaltwasser 2012).

Scholars across academic fields have taken on the urgent task of explaining the rise of the radical right.<sup>1</sup> An important discussion in this literature concerns the factors that trigger the expansion of the radical right in a particular country at a particular time. A core question in this debate is the role of shocks to economic conditions, which are viewed either as critical drivers or as distractions from socio-cultural explanations (Knigge 1998, Lubbers et al. 2002, Ivarsflaten 2008, Norris and Inglehart 2018, Mutz 2018, Dehdari 2018).

We seek to understand the rise of the radical right by paying simultaneous attention to economic events, social attitudes, and standard theories of political representation. To that end, we study the Sweden Democrats, a radical-right party that in 2006 received only 2.9 percent of the national vote, but has since become Sweden’s third largest party. Our main contribution is to analyze the rise of this party from both the supply side (politicians) and the demand side (voters). We use highly detailed and comprehensive register data to examine the characteristics of individuals who come forward as politicians of the Sweden Democrat party. In addition, we investigate the various factors driving votes toward the Sweden Democrats across and within municipalities. Both explorations allow us to link changing socioeconomic fortunes to the supply and demand of politicians on the radical right. Individual socioeconomic changes, we argue, can be traced back to a pair of crucial economic events that created disaffection among citizens. In addition, our study indicates that shared socioeconomic fortunes and social attitudes undergird the credibility of new candidates in the eyes of the disaffected.

**Context and data** The rapid rise of the Sweden Democrats followed two events that worsened the relative economic standing of large segments of the population. In 2006, a center-right coalition of parties took power and implemented a far-reaching reform agenda of tax cuts and social-insurance austerity aiming to “make work pay”. Over a mere six years, these reforms led to large shifts in inequality. With earned-income tax credits, incomes continued to grow among labor-market “insiders” with stable employment, while cuts in benefits implied a stagnation of disposable incomes for labor-market “outsiders” with unstable or no jobs. The second key event is the 2008 financial crisis that was followed by a 5-percent drop of GDP in a single year. This deep recession drastically increased job insecurity for “vulnerable” insiders – those with stable employment, but with jobs at higher risk of replacement by automation and other forms of rationalization – relative to “secure” insiders.

To analyze the consequences of these events, we classify the population into economic winners or losers using comprehensive register data that provides a panel of yearly observations for the entire adult population in 1979-2012. With these data, we can characterize the economic and social

---

<sup>1</sup>A literature review is contained in Section 2, but is by necessity partial. As of July 2018, Kai Arzheimer’s bibliography on the Radical Right in Western Europe alone stood at 743 articles (<http://www.kai-arzheimer.com/extreme-right-western-europe-bibliography>)

circumstances of individual politicians and residents of each municipality. Labor-market insiders and outsiders are defined from detailed data on the composition of income sources, using the SELMA categorization model (Kindlund and Biterman 2002). The insiders are further sub-divided by their risk of replacement by automation, using occupation-level values of the Routine Task Intensity index (Goos et al. 2014). This gives us the two groups of vulnerable and secure insiders.

**Main findings** On the supply side, we find that the groups which faced lower relative income and higher job insecurity are over-represented among the politicians of the radical right. Politicians from the Sweden Democrats include more outsiders and vulnerable insiders than the population. The other political parties instead massively over-represent secure insiders. Moreover, we find that wherever groups of economic losers (or the losses they incur) are particularly large, the Sweden Democrats offer them more over-representation relative to other parties. Across sub-groups of labor-market outsiders, over-representation is also larger, the more the sub-groups were made worse off (relative to insiders) from the make-work-pay reforms.

On the demand side, we find a strong positive correlation between, on the one hand, the Sweden Democrats' electoral success and, on the other hand, the impact of the economic reforms and the financial crisis across (i) municipalities and (ii) precincts within municipalities. These correlations are robust to a long list of control variables, including the stocks and flows of immigrants from different regions, by immigrants having jobs or being welfare recipients in a geographic area, as well as crime rates, media reporting on immigration, and measures of local political context. With respect to the financial crisis, these findings corroborate and extend recent work by Dehdari (2018).

One may ask why new politicians and voters who suffered economic shocks turned to the radical right, rather than the Swedish Left party or the Social Democrats, parties which have traditionally favored redistributive policies and job security (Guiso et al. 2017). Our analysis suggests that the political left offers a slate of politicians skewed away from labor-market outsiders and vulnerable insiders, and skewed instead towards secure insiders. Moreover, we use survey data to show that the economic shocks diminished trust in government, of which the established left parties form part (following Algan et al. 2017). Thus, in an environment of diminished trust, disgruntled voters turn to candidates who share their economic traits and fates.

**Citizen candidates** Our analysis of politicians and voters suggests that the surge of the Sweden Democrats can be understood in terms of citizen candidates. Not only are the party's politicians and voters primarily drawn from the labor-market segments that lost out from the economic events, but they also share a higher distrust in out-groups – immigrants and political elites – and display similar levels of generalized distrust in others. Using a new survey that elicits the attitudes and preferences of voters and politicians alike, we show that along all three dimensions of trust, radical-right voters and politicians depart in a dramatic fashion from the voters and politicians of established parties.

We also document, in data on nominated and elected politicians since 1982, that the vast majority of Sweden Democrat politicians have never been candidates (> 90 percent), nor elected representatives (> 98 percent), for another party. Together, the socioeconomic and attitudinal alignments and the newness to politics, are consistent with a citizen-candidate interpretation of the Sweden Democrats' rise. In this interpretation, a large fraction of the politicians in this new party can – through hard-to-change personal traits – credibly commit to representing disgruntled segments of the electorate.

**How about immigration, gender, and education?** The literature has devoted much attention to the anti-immigrant rhetoric of radical-right parties. In a context of scarcer resources, such rhetoric

can exploit redistributive tensions, if some voters believe that limits on immigration could contain fiscal costs and release funds for native citizens (Borjas 1999). Other explanations posit that a long-standing, latent, anti-immigrant stance may interact with economic shocks to drive populist voting (Gidron and Hall 2017, Norris and Inglehart 2018).

While Sweden Democrat politicians and supporters do hold strong anti-immigration views, our analysis does not show a link between direct local exposure to immigration and support for the radical right. Exploiting evidence from survey data, we do, however, show a sharp increase in the support for the Sweden Democrats among anti-immigrant voters (compared to moderate anti-immigrant or pro-immigrant voters) after the make-work-pay reforms. We also show that these reforms of the center-right coalition made outsiders with strong anti-immigration attitudes turn away from the coalition parties and migrate to the Sweden Democrats. By contrast, the disproportionate gains of the Sweden Democrats among vulnerable insiders appear to come mainly at the expense of left-bloc parties. All in all, our results rhyme well with the idea that an economic shock which creates insecurity may interact with pre-existing, latent, traits among some voters, and lead them to switch their political allegiance.

Another important, though separate, issue is the long-term social decline of white, middle-class or working-class men, often with little education. This population segment is the backbone of radical-right voters, both in Sweden and elsewhere.<sup>2</sup> In the Swedish case, these demographic groups were more likely to suffer from the economic events that we study. However, we show that the strong relationships of voting and political candidacy largely remain even if we flexibly control for gender, education, and sector of employment.

**Implications for political selection** The entry of the Sweden Democrats contributes to a more inclusive political class by boosting the representation of economically aggrieved voters. However, we show that, relative to other parties, the politicians elected from the Sweden Democrats score lower on a number of traits often associated with valence – such as expertise, social trust and moral values. Thus, their entry may begin to reorient representation in Swedish local politics away from the positive selection on ability that we recently documented in Dal Bó et al. (2017).

**Road map of paper** In the next section, we provide some background on Swedish elections, on the Sweden Democrats, and on earlier research about their electoral supporters. We also discuss the sizeable international literature on voting for populist radical-right parties. Our bottom line is that a nuanced explanation of their success might combine economic events and other aspects, such as the social attitudes that govern the connection between descriptive representation and substantive representation. In Section 3, we discuss our data, define the two groups of relative economic losers during the years of Sweden Democrat growth, and describe their losses. In Section 4, we examine the supply side of politics, answering the question ‘who becomes a Sweden Democrat’ with individual data from administrative registers. In Section 5, we turn to the demand side – i.e., ‘who vote for the Sweden Democrats’, or express support for them in surveys. In Section 6, we study the robustness of our main findings to other events that could have driven the growth of the party. In Section 7, we develop our interpretation of the supply-side and demand-side results in terms of citizen candidates, by showing that radical-right voters and politicians share not only the same basic labor-market features but also the same basic social attitudes. In Section 8, we rely on survey data to outline a

---

<sup>2</sup>The long-term socioeconomic decline of these groups and its link to radical right voting is laid out in seminal contributions by Betz (1994), Ignazi, Ignazi, and Press (2003), Minkenberg (2000), Kriesi, Grande, Lachat, Martin, Bornschie, and Frey (2006); in addition to work such as Kimmel (2013) on gender. Swedish overviews include Sannerstedt (2014) Erlingsson (2012), and Oskarson and Demker (2015).

few plausible mechanisms behind the supply-side and demand-side results. In Section 9, we discuss whether the selection patterns into the Sweden Democrats and the established parties differ with regard to social background and candidate valence. We conclude in Section 10. Some auxiliary material – on data and additional empirical results – is collected in a Web Appendix.

## 2 Background

In this section, we first present some facts on Sweden’s electoral system. Then, we briefly chronicle the history of the Sweden Democrats. We also selectively survey earlier research on who votes for the populist radical right, in Sweden and elsewhere. Based on this discussion, we suggest how economic losses together with social forces may create electoral support for the radical right.

**Swedish elections** Every four years, Sweden runs elections for its 290 municipalities, 20 counties, and the nation. All elections take place on the second Sunday in September with a turnout between 80 and 90 percent. In each election, citizens cast a separate party ballot, a ranked list with a large number of candidates. Based on the election results, 13,000 municipal-council members, 1,100 county councilors, and 349 members of parliament, are appointed. The supply-side analysis in Section 4 focuses on the local politicians elected in the first set of elections, while the demand-side analysis in Section 5 focuses on the first and third set of elections (see further discussion below).

In Sweden’s proportional-representation (PR) system, seat shares in the municipal councils and the national parliament align closely with the vote shares of political parties. Since 1998, voters can also cast an optional preference vote for one candidate. But as only about a third of all voters exploit this option, the preference-vote reform only allows a handful of politicians from lower ranks to bypass the party’s list order and win a seat.<sup>3</sup>

**History of the Sweden Democrats** The Sweden Democrats were founded in 1988. In its early days, the party was a marginal force in Swedish politics. It won political representation for the first time in 1991, with two municipal council seats. Although a bit stronger in some regions, its national vote share until 1998 was only about 1 percentage point. In the 2006 election, the party’s support in the national parliamentary elections reached 2.9 percent, still below the 4-percent threshold to gain the first seat. But the party broke this threshold in 2010, by earning 5.7 percent of the national vote. Another major breakthrough was the 2014 election, when the Sweden Democrats became the third largest party with a 12.9 percentage-point vote share and with considerably higher support in some municipalities.

Figure 1 shows the number of seats won by the party over time at the three levels of Swedish politics. Despite its recent success – and differently from its sister parties in many other European countries – the Sweden Democrats have generally been denied essential political influence. However, in half a dozen municipalities the party did play an essential role in putting a governing coalition in place after the 2014 election (Aftonbladet 2014).

[Figure 1 about here]

The Sweden Democrats faced some problems in finding candidates for their party lists, especially during the early era of the party’s success. The characteristics of the elected and non-elected can-

---

<sup>3</sup>This reflects voter “abstention” from the optional vote, a concentration of votes for candidates at the top of the ballot, and high thresholds. See Folke et al. (2016) for a thorough analysis of the preference-vote system and its consequences.

didates are thus likely to reflect self-selection into the new party, rather than screening by party leaders.

As described in Widfeldt (2008), the party initially grew out of an organization known as “Keep Sweden Swedish” (Bevara Sverige Svenskt, BSS). Over time, the Sweden Democrats moderated their political stance from biological racism towards cultural national chauvinism. They currently argue that social conflicts ensue when people from different cultures attempt to live together (Widfeldt 2008). In the early 2010s, nationalism was formally replaced by social conservatism, putting more emphasis on traditional family values and on law and order (Rydgren 2018). Recent work on European-wide party ideologies has classified the Sweden Democrats as a typical radical-right party (Rydgren 2007, 2018) and as part of the “populist right” (van Kessel 2015, Norris and Inglehart 2018).

**Political stance** Like other radical-right parties, the Sweden Democrats adopt an anti-establishment stance, while appealing to a nostalgic picture of Sweden’s past drawn from the construct of the “people’s homestead”, a 1920s Social-Democratic vision that emphasizes working-class employment, nuclear families, and a strong welfare state.

We use the Chapel Hill Expert Surveys to gauge Sweden Democrat policy stances on general left-right policies and on immigration (see Web Appendix Figure W1). Anti-immigration policy is the party’s signature issue, and the experts rate the Sweden Democrats as very anti-immigrant compared to the Social Democrats or Conservatives (see also Erlingsson et al. 2012). In a nutshell, the party argues that (non-white) immigration takes a large toll on the public finances and threatens job prospects for natives. When it comes to the left-right spectrum, the party ranks in between the Social Democrats and the Conservatives. In the national parliament, it often votes with the center-right bloc. But its stance on tax and labor-market issues is more ambiguous. A left-leaning think-tank concludes that for the 2010-2014 election period

“the Sweden Democrats are ambivalent [on tax issues]. The party wants to spend like a left-wing party, but tax like a right-wing party... the party thinks that it can solve this equation by lowering immigration and international aid.” (Tanksmedjan Tiden 2014).

In municipal politics, the Sweden Democrats have often supported center-right coalitions on tax cuts and privatization, warned of an Islamization of cities and neighborhoods, and demanded “multicultural financial statements” that would describe the local budget by separately earmarking money spent on natives and immigrants (Wingmar 2011). The party also emphasizes law and order, challenges multi-cultural education and feminist-inspired pedagogical frameworks, and often strives to direct more resources towards elderly care (Mulinari and Neergaard 2017).

**Who votes Sweden Democrat?** Survey data shows that Sweden Democrat voters have a similar demographic profile as other radical-right parties, with a disproportionate number of men, working-class people, and low-educated individuals (Sannerstedt 2014, Erlingsson et al. 2012, Oskarson and Demker 2015, Jylhä et al. 2018). The party’s voters are also less trusting of politicians, political institutions, the court system, and news media than voters of other parties (SCB 2011, Jylhä et al. 2018).

Earlier research disagrees somewhat on the role of economic vulnerability. With administrative data, Dehdari (2018) finds that layoff notifications among low-skilled native workers during the financial crisis raised the Sweden Democrat vote share in precincts of notified workers. A weak labor-market attachment among the party’s voters is also shown by high self-reported support among the unemployed, people on disability insurance, and people on long-term sick leave (Erlingsson et al. 2012,

Sannerstedt 2014, Jylhä et al. 2018). Some scholars argue that because these categories together do not make up a majority of the party’s voters, economic insecurity cannot be a major driver of the party’s rise (Sannerstedt 2014, 2015, Jylhä et al. 2018). Section W1 in the Web Appendix discusses these results with regard to survey design and sample stratification.

Data from surveys and exit polls suggest that most of those who cast their ballots for the Sweden Democrats would otherwise vote for one of the two dominant parties, the Social Democrats and the Conservatives. Inflows were larger from the Social Democrats between 2006 and 2010, and from the Conservatives between 2010 and 2014 (SCB 2011, 2016).<sup>4</sup> On a left-to-right scale, Sweden-Democrat voters put themselves somewhere in the middle of the ideological spectrum (Sannerstedt 2015).

**Who vote for the radical-right, more generally?** A wide range of theories, accompanied by hundreds – maybe thousands – of empirical papers, purport to explain the dramatic rise of the radical right in Western democracies. In what follows, we comment briefly on the main theoretical arguments, refer to reviews of the empirical literature, and reserve more specific discussion for the empirical work most closely related to our own.

Two arguments for the rise of the radical right enjoy broad currency. The first says that a backbone of support grew out of long-term – and asymmetric – changes in opportunity. Economic and social modernization brought about expanded higher education, shifts from industry to public and service sectors, and more gender (and racial) equality. These shifts reduced the relative well-being of men, industrial workers, the lower strata of white-collar workers, the unemployed, and the lower-educated (Betz 1994, Ignazi et al. 2003, Minkenberg 2000, Kriesi et al. 2006); see also Inglehart and Norris 2017, and Kimmel 2013 on gender). This created a nostalgia for the past among these groups, which all tend to be over-represented among radical-right voters.

The second argument says that politics changed with economic and social modernization: the ideology of established parties converged (Kitschelt 1995, Kitschelt and McGann 1997, Carter 2005, Brug et al. 2005), and Social-Democratic parties turned their agenda more towards well-established blue-collar workers (Rueda 2005).<sup>5</sup> Platform convergence produced voter detachment from established parties and opened an ideological space that allowed the radical right to mobilize on a socio-cultural dimension.

Additional arguments appear necessary to explain why the radical right expanded more in some countries than in others. In Sweden, for example, economic and social modernization went on for many decades since World War II, while the Sweden Democrats did not appear as a significant force until very recently. Some scholars try to explain these cross-country differences by appealing to variation in the ideology or leadership of the radical-right parties themselves, or to variation in political corruption spurring anti-establishment votes (see the review in Rydgren and Arzheimer 2018).

Two further drivers have received considerable attention in the literature: immigration and economic insecurity. Anti-immigration attitudes are, by far, the largest self-reported reason for radical-right voting (Oesch 2008, Ivarsflaten 2008). But do immigrants themselves trigger such voting, or do economic insecurities trigger anti-immigrant sentiments (regardless of immigrant numbers or activities)? Following Allport (1954), advocates of the so-called contact hypothesis hold that more immigrants bring more tolerance, if frequent encounters build harmony and understanding. But

---

<sup>4</sup>Another possibility is mobilization via higher turnout (even though turnout in Swedish elections, around 85 percent, is internationally very high). A direct test in our data reveals that turnout did not go up significantly in municipalities where the Sweden Democrats made their largest gains. This evidence is not definitive, however, as turnout could counterfactually have fallen without the gains of the Sweden Democrats.

<sup>5</sup>Lindvall and Rueda (2014) apply a related argument to Sweden, and pursue their analysis in terms of insiders and outsiders. But this paper does not specifically consider the Sweden Democrats.

more immigrants competing for the same jobs or the same funds from a social program may also raise hostility between in-groups and out-groups – see Barth (1998), Olzak (1992), Quillian (1995), Scheve and Slaughter (2001), and Mayda (2006).

On the empirical side, single and cross-country studies find that high rates of immigrants, Muslims, or asylum seekers are positively correlated with anti-immigrant sentiment and radical-right voting (see the recent review by Billiet et al. 2014, or Sekeris and Vasilakis 2016). A plausible causal link exists for rural Danish municipalities (Dustmann et al. 2013) and polarized voting is related to inflows of labor-market competitive migrants in Norway (Finseraas et al. 2017). Economic insecurity is also associated with stronger anti-immigrant sentiments (shown in the European Social Survey by Billiet et al. 2014, and Guiso et al. 2017). Importantly, the most vulnerable economic groups exaggerate immigrant numbers, which triggers further anti-immigrant sentiments (Alesina et al. 2018).

Our empirical analysis shows that the share of immigrants across districts is not related to the vote share of Sweden Democrats, despite our experimenting with various specifications and measures of immigrant presence. As a result, we find little support for the contact hypothesis either in its positive or negative form.

Another proposed mechanism connects economic insecurity and radical-right voting through the perception that immigrants crowd out natives in government programs (Borjas 1999). This mechanism is distinct from the labor-market contact hypothesis if fiscal tensions extend beyond the regional level. In this view, downward pressure on national fiscal budgets can trigger radical-right voting via perceived or real budget conflicts (Olzak 1992). Ongoing research on UK politics indeed ties austerity policies to UKIP and pro-Brexit voting (Fetzer 2018). Concerns about the fiscal cost of immigration may well dominate labor-market concerns (Dustmann and Preston 2004, Facchini and Mayda 2009). Indeed, a recent survey of 2,000 Sweden Democrat voters shows that 98 percent of respondents agree with “immigration is too costly for public finances”, but only just over a third agree with “it is a problem that immigrants take jobs from native-born Swedes” (Jylhä et al. 2018). Such perceptions of a public-finance conflict also appear in the Sweden Democrats’ proposals and campaigns.<sup>6</sup> Stereotypes about cultural distances, welfare dependencies, and weak work ethics of immigrants may also depress the taste for redistribution among natives (Alesina et al. 2018). As noted above, a standard local proposal by the Sweden Democrats is an “immigration-sensitive budget” reporting on the local costs of immigration.

Any study of economic factors behind radical-right voting has to (explicitly or implicitly) take a stand on not only the type of trends and shocks that drive the radical right, but also on the horizon over which these trends and shocks are considered. As mentioned earlier, some scholars argue that radical-right voting stems from long-dormant traits, which are activated by erosion in living standards (Inglehart and Norris 2017, Gidron and Hall 2017). Others argue that a short-term economic decline can undercut trust in institutions and the political establishment, and that this may or may not influence radical-right voting (Algan et al. 2017, Knigge 1998, and Mutz 2018). Our own analysis says that the tax *cum* social-insurance reforms and the financial-crisis recession from the mid-2000s imposed large relative losses on people in certain groups, and this led to a higher supply and demand for new candidates which was met by the Sweden Democrats. The differential effect of the shocks may shed new light on the long-run vs. short-run controversy. Shocks that change the economic status may trigger radical-right voting, but the effects of this trigger can be more pronounced for groups on a downward relative trajectory, like low-educated men in industry, than for groups on an upward trajectory, like high-educated women in the public sector.

---

<sup>6</sup>Before the 2010 election, a party commercial featured burka-clad women with strollers winning a running race for the national budget against senior ladies with walkers. The message – a culturally distinct group crowds out support for vulnerable Swedes – could not be clearer. The video was censored by Swedish Public TV, which helped make it viral.



A more general way to state this point is that different suggested explanations – here, shocks and long-term trends – may well interact with each other. Given the complexity of the phenomenon under study, we believe that it is plausible to see different drivers as prospective complements rather than as prospective substitutes as does much of the existing literature, explicitly or implicitly.

### 3 Data and Key Socioeconomic Groups

This section describes our data sources, the two key events, and the groups of winners and losers that we consider in the sections to follow.

**Data sources** Our empirical analysis is always based on individual-level data (although we frequently aggregate it to a higher level). One important dataset encompasses all elected and non-elected individual candidates running for national or municipal political office between 1982 and 2014. Prior to every election, each political party must report its ordered list with personal identification codes for each of its politicians. These lists are kept by Statistics Sweden or – in some cases – by regional electoral authorities. After each election, another record is created with a complete account of all elected politicians from each party. Altogether, our sample consists of over 200,000 individuals, of which about 50,000 are elected. Electoral results containing vote shares for every party in every election are linked to our dataset from records kept by the Swedish Electoral Agency.

The politician data are linked to several administrative registers from Statistics Sweden for the population (aged 16+). For most variables, our data holds annual records from 1979 to 2012 for everybody in the entire population, about 14 million men and women. This data contains precise information on demographic and social background variables (e.g., age, sex, education level, and occupation). Thus, we can precisely characterize how the personal traits of politicians relate to those in the entire population.

The Multigenerational Register identifies parent-child relations (we use only biological parents). As the income data begins in 1979, it is truncated. Nevertheless, we observe father’s income in 1979 for 78 percent of the politicians elected after 2002.

Various types of annual earnings for the entire population are available from the Swedish Tax Authority. We also have annual information about the individual’s sector of employment for the whole period. As occupations are only recorded on a yearly basis from 2003, we complement the occupation data with earlier information from Censuses (conducted every fifth year).

Finally, we supplement these register data with a variety of surveys (see further below). Of special note is a survey of the universe of current local politicians, which was carried out in 2017 by a subset of the authors, in collaboration with a group of political scientists from the University of Gothenburg (KOLFU 2017). This survey has a response rate of 67 percent and asks local politicians a number of questions about their preferences, motivations, and personality traits (see Sections 7 and 9 below). In the same year, a subset of the same questions were posed to a random sample of Swedish voters together with questions about their party sympathies in a survey conducted together with another set of Gothenburg political scientists (SOM 2017).

**“Make-work-pay” reforms** The election in September 2006 ended twelve years of Social-Democratic rule. A coalition of center and right parties took power, under the lead of the Conservative Party. The coalition had run on a platform program of tax cuts, coupled with measures against the alleged misuse of social-entitlement programs, to “make work pay”.

This program was gradually implemented over six years through different pieces of legislation. A hallmark of the reforms was a series of labor-income tax cuts, along the lines of an Earned Income

Tax Credit (EITC). Taxes on earned income were thus cut in five steps, once per year in 2007, 2008, 2009, 2010, and a fifth time in 2011 after the center-right coalition’s re-election to a second term. For a person at Sweden’s median income, these tax cuts meant about 10 percent higher level of disposable income.

To finance the tax cuts and incentivize work versus non-work, the coalition also held back expenditures in endowment programs and social insurance. Some prominent policies included lower unemployment benefits, lower sickness insurance benefits, and lower disability insurance benefits, as well as stricter rules for claiming the two latter types of support. A more indirect way of cutting benefits was to index various social insurances to nominal prices while real wages were rising, or to introduce nominal caps for benefit levels. Such policies had already been introduced by earlier Social-Democratic governments (in the 1990s for sickness insurance, and in 2002 for unemployment insurance).

A fully intended consequence of the make-work-pay program was to raise the disposable-income gap between people with and without work (Bengtsson, Edin, and Holmlund 2014, ISF 2014, MoF 2017). The lower taxes for the employed made retirees relatively worse off. To compensate for this, retirees obtained tax cuts worth 50 percent of the EITC. More well-to-do retirees were also buoyed by abolished property and wealth taxes.

Whether and to what extent the reform agenda increased employment is an open question. Employment has only risen marginally, and obviously the financial-crisis recession confounds analysis of this issue. Swedish labor economists have argued that the universal structure of the earned-income tax credit defies robust evaluation methods (Edmark et al 2016).

**Labor-market insiders vs. outsiders** How do we use the register data to determine the individuals who lost out, at least in relative terms, from the make-work-pay reforms? In defining prospective economic losers, it is natural to start with each individual’s labor-market status. Borrowing group labels from Lindbeck and Snower (1984), we distinguish between *insiders* and *outsiders*. The operational distinction follows the Social Exclusion and Labor Market Attachment (SELMA) framework, developed by Kindlund and Biterman (2002) and Bäckman and Franzen (2007). Specifically, we classify individuals as insiders (in SELMA called core members) of the labor force if their labor income exceeds 3.5 “basic amounts” (SEK 156,800 in today’s prices, about USD 18,700) in each one of the last three years.<sup>7</sup>

Other individuals are classified as outsiders, which make up 35-40 percent of the grown-up population during our period of analysis. Following the SELMA framework, outsiders can be further divided into subgroups based on their sources of income.<sup>8</sup> *Students* are defined by receipt of student benefits and enrollment in higher education (those involved in military training are also included among students). *Retiree* status is based on age and age-related pension receipts. Those in *unstable employment* have a combination of income from labor and other sources, such as unemployment benefits or sick leave, over the last three years. Individuals on *extensive sick leave* are those with at least 90 days of such leave in at least two of the past three years. Those on a *disability insurance* have received benefits above a certain threshold. Finally, *excluded from the labor market* are individuals who have suffered extensive unemployment (at least 180 days in two out of the past three years), who have been economically inactive (an income below 0.5 benchmark amounts in all three years),

---

<sup>7</sup>The benchmark amount is updated each year for inflation and used in various Swedish social insurance programs. An income exceeding 3.5 benchmark amounts is expected to cover nearly all full-time jobs in minimum-wage sectors. Only a handful of occupations in the hotel and restaurant services would fall below the cutoff (Social Rapport 2010).

<sup>8</sup>The model also uses information on age, year of immigration, and year of death. Details of the exact categorization are given in the Web Appendix (Table W2).

or who have recently immigrated to Sweden.

We extend the SELMA classification in two ways. First, throughout the analysis we keep students separated from the rest of the outsiders. Second, we check whether retirees have received any “guarantee pension,” a program that supplements low pensions (e.g., due to a low past income level or a short residence time in Sweden). We define low-income retirees as those who receive a nonzero guaranteed pension supplement and consider them as part of the outsiders – those without a guaranteed pension are classified as high-income retirees and as part of the insider group.

**Outsider losses of disposable income** We can compute how the tax cuts and benefit austerity measures shaped the disposable incomes of the outsiders relative to the insiders of the labor market. The result is illustrated in Figure 2, which plots average disposable incomes for insiders and outsiders from 1995 (taken as the benchmark year for both groups) to 2012. Prior to 2002 the average incomes of insiders and outsiders moved largely in parallel. In 2006, the income gap of the two groups had widened by about 7-8 percent (relative to 1995).

[Figure 2 about here]

From 2006, the income gap widens sharply. One clearly sees a hike of average insider disposable income due to the first EITC tax cuts in 2007 (the effects of later tax cuts are confounded with the effects of the financial crisis), as well as a cut in average outsider income due to the benefit austerity in 2008. By 2012, the cumulative relative deterioration of average outsider income since 2005 amounts to about 20 percent.

To the right of the time-series plot, Figure 2 displays the difference in disposable income growth relative to insiders for different subgroups of outsiders from 2005 to 2012. Outsiders who had unstable work, disability insurance, or remained unemployed, all faced cuts of about 20 percent or more. The outsiders farthest away from a stable job thus faced the largest cuts in their relative disposable income.

**Vulnerable vs. secure insiders** Even if we restrict attention to those with a regular job, not all insiders face a similar situation in the labor market. In particular, they face different risks of losing their job due to technological change, outsourcing, or general business downturns. To classify workers in this dimension, we again follow earlier research – this time by Autor (2013), Autor and Dorn (2013), and Goos, Manning, and Salomons (2014), who distinguish occupations with different Routine Task Intensity (RTI) defined by the typical tasks they entail. Specifically, occupations whose holders perform many (few) routine tasks, compared to manual or abstract tasks, have a high (low) RTI. We would expect individuals in such occupations to be more exposed in periods of high rates of job loss.

How do we identify such individuals in our register data? These data include 2-digit occupation (ISCO) codes for each employed person. Using the RTI-index from Goos, Manning, and Salomons (2014), we pool all individuals with such an occupation code in 2002-2012 and compute the median RTI value. We then define a *vulnerable* insider as an insider (by the earlier definition), who has an occupation with an RTI-index above the median. By contrast, we label those working in occupations with a below-median RTI-index *secure* insiders.

**Job loss risks for 2006 insiders** Figure 3 plots the average job-loss risks over time for individuals with insider status in 2006. For each year on the horizontal axis, the vertical axis displays the share of these 2006 insiders who had non-zero unemployment benefit payments in that year. As the figure shows, the vulnerable insiders face a higher average job loss, especially after the financial crisis. The

secure insiders do not see any substantial increase in unemployment from a level of about 4 percent in 2008. In contrast, the risk of job loss for the vulnerable insiders goes up to more than double that number and stays above 7 percent until the end of the sample period.

[Figure 3 about here]

## 4 The Supply Side

In this section, we exploit the rich individual-level data to examine who becomes a Sweden Democrat. Specifically, we want to assess whether party representatives for municipal councils resemble the groups of voters who were most afflicted by the two key economic events described above. When doing so, we compare Sweden Democrat politicians with those from other parties – on average, across time, across subgroups of insiders and outsiders, and across municipalities with different populations.

**Elected candidates – on average and over time** The upper panel of Figure 4 shows the composition of our labor-market categories for the population and elected local politicians from the Sweden Democrats, all other parties (except the Left Party), and the Left Party.<sup>9</sup> The latter is singled out, as one might think that voters facing disposable-income losses or larger unemployment risk would naturally turn to the left. The shares in this bar graph are computed as an average over the 2002-2014 electoral periods.<sup>10</sup> As the bar to the very left shows, between 35 and 40 percent of the population are outsiders, while between 15 and 20 percent are vulnerable insiders. Together, these two groups of economic losers make up about half the adult population.

The Sweden Democrats over-represent each one of the losing groups, such that together they supply about 60 percent of the party’s local councilors. The other parties instead under-represent the two losing groups, which only add up to about 35 percent of their representatives – the flip-side is a massive over-representation of the secure-insider group: 40 percent of the representatives vs. 20 percent of the electorate. The Left Party is similar to these other parties in this respect, and the same goes for the Social Democrats (not shown).

[Figure 4 about here]

The lower panel of the figure shows the same data for each of the four election years from 2002 to 2014. The population composition does not change much, except for a marginal decline in the number of outsiders. The share of outsider representatives of the Sweden Democrats declines over time, but this is compensated by an increase in the share of vulnerable insiders, especially after the two recession-stricken election periods at the end. Overall, the two losing groups are maintained at roughly 60 percent of the party’s representatives during this period. The other parties (now including the Left to keep the figure simple) decrease their share of outsiders over time, such that the two groups of economic losers only encompass 30 percent of their elected representatives in 2014. Thus the other parties do not appear to adapt their ballots in response to the electoral gains of the Sweden Democrats.

---

<sup>9</sup>We have also performed the analysis in this section on the full ballots of nominated candidates, rather than on the candidates elected from these ballots. If anything, the results we report below gets stronger with this wider definition of representation.

<sup>10</sup>Since our individual data ends in 2012, we have to impute an individual’s 2014 group status from her 2012 data.

**A measure of Sweden Democrat over-representation** So far, our decomposition of party candidates into the broad groups defined in Section 3 is countrywide. We can refine this analysis in different ways. First, we disaggregate representation into different subgroups of outsiders (and insiders) – recall the discussion around Figure 2. To carry out this analysis, we estimate the following regression for the full sample of politicians from each subgroup  $g$

$$L_{i,t}^g = \beta^g SD_{i,t} + \mathbf{Z}_{i,t} + \varepsilon_{i,t}^g. \quad (1)$$

Here,  $L_{i,t}^g$  is a dummy variable for councilor  $i$  in group  $g$  and election  $t$ , and  $SD_{i,t}$  is a dummy for  $i$  being a Sweden Democrat politician. We also add indicators,  $\mathbf{Z}_{i,t}$ , for gender, age, and education because the Sweden Democrats field less women (25.5 vs. 43.5 percent), more under-35 (23 vs. 13 percent), more retired (23 vs. 16 percent), and less tertiary-educated (25 vs. 48 percent) candidates than the other parties.

We then use the estimates to define measures of relative Sweden Democrat supply. For each  $g$ , we compute

$$\frac{\beta^g}{E(L_{i,t}^g) \text{ in other parties}} - 1.$$

This measure is equal to 0 if the Sweden Democrats have the same share of elected candidates from subgroup  $g$  as do other parties. It takes a positive (negative) value if the party over-represents (under-represents) the group. For instance, a value of 1 would correspond to a 100-percent over-representation.

**Comparing representation by subgroups** The uppermost part of Figure 5 plots our over-representation measures, ordered by each group’s relative (to secure insiders) economic losses during 2005-2012 (recall Figure 2). The black dots in the figure show the average measures estimated without controls (and their 95-percent confidence intervals), while the gray dots show the estimates controlling for covariates  $\mathbf{Z}_{i,t}$ .

The part of the figure to the left of the vertical dashed line confirms that the Sweden Democrats under-represent secure insiders and over-represent vulnerable insiders. The right part of the figure adds new information. Even though the estimates are not fully monotonic, the largest Sweden Democrat over-representation – on the order of five times the other parties – is found for those with disability insurance and the unemployed/economically inactive, the two subgroups with the largest economic losses vs. secure insiders.

[Figure 5 about here]

One may suspect that these results do not apply to the top local politicians. However, the two lower panels of the figure show that this suspicion is false. The over-representation for the top names on the list (in the middle panel) is, if anything, higher than for candidates lower down on the list (in the lower panel).

**Comparing representation by local populations** Next, we relate the elected councilors of the Sweden Democrats and the other parties to the composition of the municipality population. The left panel of Figure 6 looks at outsiders: the horizontal axis plots the binned share of outsiders in the municipality population, and the vertical axis plots the same share among the elected politicians from the Sweden Democrats (filled circles) and from all other parties (unfilled triangles). The dotted line marks the adjusted 45-degree line, where the population and representation shares coincide. We see a clear shift of the two clouds of points, with other parties under-representing outsiders at all population

shares and the Sweden Democrats (mostly) over-representing them. Moreover, other parties at best increase their representation of outsiders at the same pace as their share in the municipality goes up, while the Sweden Democrats appear to raise the outsider share at a faster pace.

[Figure 6 about here]

The same general pattern is visible in the right panel of the figure, which provides the analogous information for the vulnerable-insider share.

As shown in the Web Appendix, a very similar pattern emerges when the vertical axes instead measure the shares of outsiders and vulnerable insiders among the *nominated*, rather than elected, candidates on the ballots (see the top row of Figure W2).

**Summing up** The results presented thus far suggest that the Sweden Democrats offer considerably more local representation to the two groups of relative economic losers than do the other parties in the Swedish political system. This is not only true on average, but also when outsiders are disaggregated into subgroups by their relative losses, and when the aggregate body of politicians are disaggregated into municipalities by their population shares of losing groups. As discussed in Section 2, the candidates elected on the Sweden Democrat side are most likely new entrants that self-select into the party, rather than ones that the party had strategically screened on.

Of course, the Sweden Democrat gains of vote shares and seat shares came at the expense of other parties. While the two losing groups did become better represented in Swedish local politics over the last dozen years, the gains of the party also decreased the representation of some other groups, notably women and immigrants from non-European countries.

## 5 The Demand Side

In this section, we study how the gains of Sweden Democrat votes relate to the labor-market classifications defined in Section 3 and exploited in the supply analysis of Section 4. On the basis of that classification, we define two measures to analyze how local gains of Sweden Democrat votes relate to local groups of economic losers. In computing them, we start from the individual data and aggregate these to the level of a specific locality for a specific time period. To gauge the local relative income losses of outsiders vs. insiders, we use the inequality measure

$$ineq_{m,t} = \frac{N_{m,t}^{out}}{N_{m,t}} \cdot \frac{I_{m,t}^{in}}{I_{m,t}^{out}}. \quad (2)$$

The first term on the right-hand side denotes the share of outsiders in the total (voting-age) population of locality  $m$  (a municipality or a voting precinct) and election period  $t$ , and the second term is the local ratio of the disposable incomes of insiders vs. outsiders. To gauge the local share of vulnerable insiders in locality  $m$  and election period  $t$ , we simply define

$$share_{m,t} = \frac{N_{m,t}^{vul}}{N_{m,t}^{in}}.$$

**National and municipal insider-outsider inequality** The left part of Figure 7 shows the time-series graph for insider-outsider inequality from Figure 2, overlaid with the Sweden Democrat overall vote share in the national parliamentary elections. The timing of the reforms and the wider income gap between insiders and outsiders coincides with the sharply accelerated electoral support for the Sweden Democrats after the 2006 elections.

[Figure 7 about here]

Beyond these aggregate trends, we find an analogous relationship using cross-sectional variation across municipalities. The right part of Figure 7 plots the growth in Sweden Democrat vote shares between 2002 and 2014 on the vertical axis, against the growth in income inequality between insiders and outsiders over the same period on the horizontal axis – i.e.,  $ineq_{m,2014} - ineq_{m,2002}$ . These data are binned, such that each dot corresponds to five municipalities. We see a strong positive relationship: Sweden Democrats gain the most votes in the municipalities with the highest growth in insider-outsider inequality.

**National and municipal vulnerable insiders** Figure 8 turns to vulnerable vs. secure insiders. The left part of the figure shows the time-series graph for the job-loss among the 2006 insiders from Figure 3. Recalling the growth in the Sweden Democrat parliamentary-election vote share, the party gains the most in those electoral periods when the difference in unemployment risk between the vulnerable and secure insiders is the highest.

[Figure 8 about here]

The right part of the figure shows the cross-sectional pattern across (binned) municipalities. As in Figure 7, we put the growth in Sweden Democrat vote shares between 2002 and 2014 on the vertical axis. But now the horizontal axis shows the level of the 2006 share of vulnerable insiders. We use the level because this share is relatively constant over time and may imply different pressure on vulnerable insider jobs over time depending on the state of the (local) business cycle. As in Figure 7, we observe a strong positive relationship: the Sweden Democrats gain the most votes in the municipalities with the highest shares of vulnerable insiders.

**Geography of losing groups and Sweden Democrat support** An important question is whether the cross-sectional correlations that emerge from Figures 7 and 8 just capture some general regional covariation. To shed some light on this possibility, Figure 9 displays how the most important variation underlying these figures is distributed over Sweden’s geography. The left map shows the quartiles of growth in the Sweden Democrat vote share across Sweden’s 290 municipalities with darker colors indicating larger growth. The map indicates some regional clustering, but also quite a bit of spatial variation, even among neighboring municipalities.

[Figure 9 about here]

The middle map in Figure 9 shows the geographic variation corresponding to the horizontal axis in Figure 8 – the 2006 share of vulnerable insiders. The general pattern is again one of partial regional clustering, and comparing this map to the left one we observe some covariation, especially in the inland area West of the Stockholm region (Bergslagen), in the Western areas bordering Norway next to Sweden’s largest lake (Vänern), and in the South-East (Småland).

Finally, the right map shows the spatial variation of inequality growth – the horizontal-axis variable in Figure 7. Again, some areas with high inequality growth coincide with fast-growing Sweden Democrat vote shares, including some municipalities in the very South of Sweden (Skåne). Comparing the middle and right map suggests that municipal inequality and the share of vulnerable insiders are positively, but far from perfectly, correlated. The simple correlation coefficient between the two variables is 0.36.

**Precinct-level variation** Next, we consider correlations at the smallest unit for which we can measure voting outcomes, namely the precinct. Sweden has about 5,600 precincts, with an average population of about 1,200 voters. Figure 10 illustrates within-municipality correlation between the Sweden Democrat vote share and insider-outsider inequality as well as the share of vulnerable insiders. The figure thus shows the remaining variation after removing the municipality mean from the variable on each axis. From the top, the three plot rows refer to the 2002, 2006, and 2010 elections, respectively.<sup>11</sup> Vertically, the left column shows the inequality/vote-share correlation, while the right column shows the vulnerable-insider share/vote-share correlation.

[Figure 10 about here]

The 2002 correlations in the top plots are quite weak. This is natural, given that the Sweden Democrats were not much of a political factor in that election. But the correlations for 2006 and, especially, 2010 are stronger and decisively positive. These precinct-level correlations are further *prima facie* evidence of heavier economic losses, or many economic losers, being associated with stronger electoral support for the Sweden Democrats.

**Vote-share regression analysis** Denote the Sweden Democrat vote share in municipality  $m$  and election  $t$  by  $vs_{m,t}$ . Our main specification regresses this variable on inequality and the vulnerable-insider share, where the effects of the latter are allowed to differ across periods. Specifically, we estimate

$$vs_{m,t} = \alpha \cdot ineq_{m,t} + \sum \beta_t \cdot \eta_t share_{m,t} + \eta_t + \mathbf{X}_{m,t} \lambda + \delta_m + \varepsilon_{m,t} . \quad (3)$$

To (non-parametrically) remove the aggregate time trend in the Sweden Democrat vote, we always include election-period fixed effects,  $\eta_t$ . To estimate the within-municipality variation, we sometimes include municipality fixed effects,  $\delta_m$ .

Some of our specifications include a control vector  $\mathbf{X}_{m,t}$  with the shares of foreign born, tertiary educated, and employed in main industrial sectors (1-digit SNI level), municipality-level variables thought to correlate with voting for the Sweden Democrats. We cluster the standard errors at the municipality level. Finally, to facilitate interpretation,  $ineq_{m,t}$  is measured as a  $z$ -score.

**Basic regression estimates** Table 1 reports a basic set of regression estimates. Column (1) shows that the simple cross-sectional correlations of the Sweden Democrat vote share with insider-outsider inequality and with the vulnerable-insider share are both positive and precisely estimated. Within-municipality estimates appear in column (2). The association of the vote share with inequality is now stronger. But the association with the vulnerable-insider share drops to zero, as the municipality fixed effects absorb most of the variation in these slow-moving shares.

[Table 1 about here]

Column (3) shows that the previous association with the vulnerable-insider share is recovered when we replace the municipality fixed effect with municipal controls. Interestingly, the immigrant share in the municipality – its coefficient shown in the bottom row – is not associated with electoral support for the Sweden Democrats. The same is true when we add municipality fixed effects in column (4), a specification which otherwise yields results similar to those in column (2). Below, we further discuss the results of using different measures for the presence of immigrants.

---

<sup>11</sup>Since our individual data stops in 2012, we cannot compute the inequality and share variables by precinct for the 2014 election.



Column (5) allows the association between Sweden Democrat voting and the share of vulnerable insiders to depend on the election period. As expected, this reproduces the association seen in the earlier figures, with positive estimates for the two elections following the financial-crisis recession (the 2006 election is the reference category).

All in all, these results strongly indicate that the Sweden Democrats gained the most votes in municipalities where outsiders' incomes dropped the most relative to insiders and where a larger fraction of vulnerable insiders risked losing their jobs in the financial crisis. The associations are statistically precise and quantitatively non-trivial.

The size of the cross-sectional effects can be gauged from a simple back-of-the-envelope calculation. Regressing the Sweden Democrat vote share in 2014 on the two economic variables reveals that a one-standard deviation higher share of vulnerable insiders is associated with a 2.5 percentage-point higher vote share. A one-standard deviation higher inequality is associated with a 1 percentage-point higher vote share. Raising both these variables from one standard deviation below the mean to one standard deviation above the mean, would thus raise the predicted vote share of the Sweden Democrats by 7 percentage points.

The inequality results are driven much more by the change in insider/outsider inequality than the relative shares of the outsider group. We shown this explicitly in the Web Appendix (see Table W3), which splits up the inequality variable into the outsider share and the income gap between the two groups.

**Measurement of inequality** The estimates presented in Table 1 potentially suffer from omitted-variable bias. At least for the inequality measure, we can find a more exogenous source of variation, which relies on the national policy reforms described in Section 3. Specifically, instead of the earlier municipality measure in (2), we can use

$$ineq_{m,t}^B = \frac{N_{m,2006}^{out}}{N_{m,2006}} \cdot \frac{I_t^{in}}{I_t^{out}}. \quad (4)$$

That is, we replace the concurrent outsider share by the fixed 2006 outsider share and the local insider-outsider income ratio in every period with its national counterpart. The resulting specification is similar to the reduced form of a Bartik-style IV-design, with national insider-outsider inequality plus the initial share as an instrument for local inequality. We do not pursue such an IV-analysis because it is unlikely to satisfy the exclusion restriction.

Column (1) in Table 2 shows a positive and precisely estimated association between the Sweden Democrat vote share and  $ineq_{m,t}^B$ . Column (2) shows that this alternative inequality measure holds up under our most general specification from column (5) in Table 1. Moreover, the estimated relationship between inequality and the Sweden Democrat vote share is more than four times larger with this measure than with the raw measure used in Table 1.

We can use the estimate from Column (2) for another back-of-the-envelope calculation of how much of the higher vote share can be attributed to the change in the insider-outsider income gap. Let us assume that this within-municipality estimate also applies within the nation as a whole. The national hike in inequality, at a constant share of outsiders, amounts to 1.8 standard deviations. This wider income gap explains a good share – 4.7 percentage points – of the 2002-2014 increase in the Sweden Democrat vote share.

[Table 2 about here]

The results could also be biased if our measure of inequality includes immigrant residents, who are poorer than natives and less likely to vote for the Sweden Democrats. We thus adjust the inequality

measurement by dropping all non-European immigrants from the calculation. We also adjust the vote share for the Sweden Democrats by dropping non-European immigrants and recalculate the party’s vote share in the Europe-born population. This calculation also accounts for the lower rates of voting eligibility and turnout among the non-European immigrants. As shown in column (3) of Table 2, this does not change the estimates from the most demanding specification of Table 1 in column (5). (Section W3 of the Web Appendix describes these adjustments in detail, and Table W4 replicates all the results in Table 1).

**Level of elections** So far, all our graphs and estimates rely on municipal (or precinct) votes in the *national parliamentary* elections. This is natural given our focus on national policy reforms as a driver of inequality. But one might wonder whether the same results hold up for *municipal council* elections, especially as our analysis in Section 4 focused on these local politicians. Column (4) in Table 2 shows that this is indeed the case, when we rerun the specification in column (5) of Table 1, using as the dependent variable the vote share in the municipal-council election.<sup>12</sup>

**Specification and measurement of immigration** A notable result from our basic regression analysis is that the municipality’s immigrant share is never significantly correlated with voting for the Sweden Democrats, once we include our economic measures. Given the focus in the literature on populist voting discussed in Section 2, we have tried to measure the influence of immigration – and the prospective competition between immigrants and natives – in a variety of ways. These alternative specifications are discussed in the Web Appendix (see Section W3). In particular, we allow the immigration share to enter as an interaction effect with the inequality and vulnerable-insider share variables (see Table W6). This does not change the main results, although the relationship between the share of vulnerable insiders and support for the Sweden Democrats is stronger in municipalities with a higher share of immigrants.

Alternatively, we add as right-hand-side variables the share of insiders in industries, or occupations, with a large immigrant share, the shares of immigrants from different regions in the world, the share of immigrants in the commuting zone (rather than the municipality), and the flow of immigrants into the municipality since the last election (rather than the stock in the municipality). Our estimates (see Table W7) show that none of the immigration variables affect the magnitude or the statistical significance of the coefficients on insider/outsider inequality or the share of vulnerable insiders from the basic analysis. The only alternative immigration variable that is significantly correlated with the Sweden Democrat vote share is the share of immigrants in the commuting zone.

**Evidence from survey data** The correlations between labor-market status and radical-right vote shares are estimated across or within municipalities and precincts, the lowest levels at which we observe actual vote shares. As an additional step, we use individual-level survey data to estimate the same association.<sup>13</sup> The advantage of survey data is that we can estimate individual correlations that are not subject to ecological fallacy. One disadvantage is the reliance on self-declared political preferences. Another is less precise measurement of labor-market status: we can only isolate approximate groups of outsiders and insiders, and we cannot distinguish vulnerable and secure insiders until 2004.<sup>14</sup>

---

<sup>12</sup>Table W5 in the Web Appendix replicates all the results in Table 1, with this alternative dependent variable.

<sup>13</sup>The SOM survey is the largest annual Swedish voter survey, with a nationally representative sample of 1,800 to 8,400 respondents annually in the 16-85 age interval. We use data for five election periods, giving us a total of 80,207 respondents between 1995 and 2014.

<sup>14</sup>We describe the survey data and the variables we use in Section W2 of the Web Appendix.

The upper part of Figure 11 plots the shares of survey respondents who support the Sweden Democrats over time across the four labor market categories. As expected, Sweden Democrat support starts to rise sharply after 2002. But we also see a clear divergence in support across outsiders and insiders after 2006, precisely when outsiders began to lose out in disposable incomes (relative to insiders) due to the make-work pay reforms. By 2011-2014 the difference in support between outsiders and insiders is as large as 75 percent (0.14 versus 0.08). For vulnerable and secure insiders, the divergence is less pronounced and mostly noticeable in the 2011–2014 period, when vulnerable insiders are twice as likely as secure insiders to support the Sweden Democrats (0.06 vs. 0.12).

[Figure 11 about here]

We can quantify relative Sweden Democrat growth across groups by estimating a difference-in-differences specification:

$$SD_{i,t} = \alpha O_i + E_t + \sum \beta_t(O_i \times E_t) + \mathbf{Z}_{i,t}\gamma + E_t \times \mathbf{Z}_{i,t}\delta + \epsilon_{i,t}, \quad (5)$$

where  $SD_{i,t}$  indicates whether individual  $i$  reported the Sweden Democrats as her most preferred political party in election period  $t$ ,  $O_i$  indicates whether individual  $i$  is an outsider, and  $E_t$  indicates election period  $t$ . The control variables  $\mathbf{Z}_{i,t}$  are the same as in the supply equation (1) and they are also interacted with the election-period dummies.

The lower part of Figure 11 shows that the difference between outsiders and insiders grew by about 1.2 percentage points in the 2007-2010 period and by 4 percentage points in the 2011-2014 period (relative 2003-2006 baseline period). The estimates without controls are significantly different from zero (at the 5-percent level) in both periods, as is the estimates with controls in the latter period. The difference between vulnerable and secure insiders did not grow between 2007 and 2010 period, but grew by 3 percentage points between 2011 and 2014 (also significant at the 5-percent level). The control variables help explain only a small part of the growing difference in Sweden Democrat support. It is important to recall that the difference-in-differences specification captures *growth-rate* differences. If we instead examine *level* differences, as in the upper panel, these are significant at the 5-percent level for both periods and both groups, with or without controls.

**Summing up** Of course, we do not pretend to have fully nailed the causal mechanisms behind radical-right support. But it is hard to escape a clear and robust correlation between gains in Sweden Democrat popularity – at the municipality, precinct, and individual levels – and the relative economic losses incurred since the mid-2000s. Such correlations exist for the local income gap between outsiders and insiders as well as for the share of vulnerable vs. secure insiders. At a minimum, the section shows that the highest electoral support for the Sweden Democrats comes from groups that are overrepresented among the politicians in this growing party. Next, we discuss a number of alternative explanations – including many that figure in the existing work on radical-right voting – for these correlations.

## 6 Robustness

We have argued that society-wide events explain part of Sweden Democrat growth among labor-market groups that lost and won from those events. But can we rule out some alternative macro shock causing differential mobilization of these labor-market groups for the Sweden Democrats? Given the arguments in the existing radical-right literature, it is natural to begin by shocks to immigration and other aspects of globalization. Another possibility is that the differential Sweden

Democrat mobilization across labor-market groups reflect some pre-existing differences in attitudes, rather than the events we have highlighted.

**Immigration shocks** Many existing studies of the radical right stress the importance of immigration shocks (Billiet et al. 2014, Sekeris and Vasilakis 2016, Hangartner et al. forthcoming). But Sweden did not see a dramatic increase in immigration during the period 2006-2014 (see Web Appendix Figure W4), before a modest 2014 uptick in asylum seekers. Figure 12 explores anti-immigration attitudes over time across insiders and outsiders, and across secure and vulnerable insiders, respectively. We proxy for anti-immigration attitudes with an indicator for the respondent stating that restrictions on refugee immigration was a very good proposal. The top plot shows that anti-immigrant attitudes have, if anything, declined over time from 32 percent in 1995-1998 to 25 percent in 2011-2014. The two lower plots show estimates of the difference-in-differences specifications in (5), where the dependent variable is the indicator for anti-immigration attitudes. The two graphs plot the resulting  $\beta_t$  coefficients, along with their 95-percent confidence intervals. Evidently, anti-immigration attitudes did not shift between any pair of labor-market groups, which rejects the hypothesis of a trend break in anti-immigrant preferences due to immigration flows or stereotypes.

[Figure 12 about here]

**Immigration attitudes by groups in the labor market** Another immigration-centered explanation would be that pre-existing anti-immigration preferences differed across labor-market groups, even though Figure 12 suggests this was not the case. To address this possibility, we rerun our difference-in differences regression for Sweden Democrat support in (5). But we augment the right-hand side with time dummies fully interacted with dummies for strong anti-immigration sentiments and, separately, time dummies fully interacted with a dummy for immigration salience (an indicator for the respondent ranking immigration as a top priority). This fully-saturated specification means that any estimated differences in Sweden Democrat support across labor-market groups *cannot* be explained by different pre-existing shares of anti-immigration voters or high immigration-salience voters.

The results are shown in Figure 13. The coefficient on the outsider-insider gap drops by between one fourth and one third, but remains statistically significant. The coefficient on the vulnerable-secure insider gap drops more starkly, and when we add the control for strong anti-immigration attitudes the estimates drop towards a non-significant null coefficient.

[Figure 13 about here]

**Immigration policies of other parties** A related alternative driver would be that other parties took a more positive stance on immigration at the same time as the macro shocks, which helped the Sweden Democrats mobilize anti-immigration voters (Carter 2011). The dominant right and left parties – i.e., the Conservatives and the Social Democrats – indeed became more positive to immigration (recall Web Appendix Figure W1), which may have pushed some strong anti-immigrant voters towards the Sweden Democrats. But such policy shifts on both sides of the political spectrum cannot explain the differential trends in support across labor-market groups.

We can also examine this alternative mechanism at the municipality level, as we are able to measure immigration-policy preferences among local politicians via the KOLFU survey data. If we add controls for other-party policy positions on immigration to the regression of local Sweden Democrat vote shares (3), this only marginally reduces our estimates of interest (see columns (1)-(4) in Panel A of Web Appendix Table W8).

**Globalization and offshoring** Some of the economic research on populist voting emphasize a China shock in international trade (Dippel, Gold, and Heblich 2015, Autor et al. 2016). However, Sweden did not experience a large expansion of Chinese imports after that country’s WTO entry in 2001. We can nevertheless test for the importance of job-loss risks due to offshoring, using the offshorability index from Goos et al. (2014). As with the RTI index, we create a dummy for 2-digit occupation codes above the median value. On the supply side, this analysis shows that the share of insiders with highly offshorable jobs is *lower* in the Sweden Democrats (40.5 percent) than the other parties (55.3 percent). On the demand side, the offshorable-share of the municipal labor force does not correlate with the Sweden Democrat vote share and does not change the coefficients of interest (see columns 5-6 Panel A of Web Appendix Table W8).

**Media attention** Following Walgrave and de Swert (2004), and Boomgaarden and Vliegenthart (2007), media reporting – whether positive or negative – on Sweden Democrat core issues may have helped mobilize new politicians and voters for the party. But to explain our results, media reporting would have to strike differently across different labor-market groups. Nevertheless, we collect data on municipal-level news content on from Retriever Sweden Inc., a text database for Swedish newspaper articles. The proportion of articles that mention some version of “immigration” is weighted by subscriber proportions for that paper across municipalities from Tidningsservice Media facts. Adding this variable to the municipality-vote regression does not change the estimates for local inequality or the share of vulnerable insiders (see columns 1-2 Panel B of Web Appendix Table W8).

**Crime** Concerns about crime lie at the core of the radical-right message (Rydgren 2008) and appears to predict voting for the radical right in Germany (Fitzgerald, Curtis, and Corliss 2012). To examine this potential explanation of our results, we exploit data provided by the Swedish National Council for Crime Prevention, a government agency with state-of-the art data collection from the police and court system. We use the total number of crimes per capita, and also distinguish two sub-categories: larceny (most proximate to gang violence), and sex offences including rape (massively politicized by the Sweden Democrats). In these data, attempted offences are counted as crimes, and multiple offences against the same person are each counted as an individual crime. Adding the crime variables to the municipality-vote regression does not change the estimates for local inequality or the share of vulnerable insiders (see columns 3-6 of Panel B and columns 1-2 of Panel C in Web Appendix Table W8)

**Reduced stigma** The Sweden Democrats’ mobilization of new politicians and voters may partly stem from reduced social stigma of joining or supporting a radical-right party (Art 2011). Again, these social costs would have to shift differentially across labor-market groups and time to explain our main results on supply and demand. A related possibility is reverse causality: becoming a Sweden Democrat politician causes job loss due to stigma. (The party has publicized some events of this kind.) However, an event-study analysis of labor-market status around the time individuals get nominated or elected does not support this hypothesis (see Web Appendix Figure W5).

**Mechanisms on the supply side** Other supply-side factors may also help explain Sweden Democrat growth. For example, the party’s growth in 2014 could be a knock-on effect, where its entry in parliament in 2010 shifted voters’ beliefs about the party. Previous research speaks against this mechanism, however, as Sweden Democrat entry into municipal assemblies had the opposite effect (Carlsson et al. 2018). Another possible supply factor is that a more moderate party ideology and an attempt to weed out racists among its candidates may have helped shift the Sweden Democrats

into the choice set of some anti-immigration voters. But, again, it is hard to see why such moves would strike systematically across different labor-market groups, so as to produce our results.

## 7 A Citizen-Candidate Interpretation

Our results on candidate entry into the Sweden Democrats in Section 4 and on voting in Section 5 suggest a clear pattern: people who faced (relatively) declining disposable incomes and mounting job insecurity became more likely to join the Sweden Democrats as candidates and to vote for the party. This pattern suggests a citizen-candidate interpretation.<sup>15</sup> If political parties cannot write binding contracts with their voters, similar personal traits makes candidates more credible promoters of the policies favored by those voters. A fundamental trait shared by politicians and voters in the Sweden Democrat camp is their labor-market situation. Since other parties did not adjust the socioeconomic mix of their candidate lists, the Sweden Democrats alone could present a more credible slate of candidates to groups of voters with – as we will show in Section 8 – strained trust levels. In this section, we add other pieces of evidence that buttress the citizen-candidate interpretation. First, we show that Sweden Democrat candidates were indeed entrants and not seasoned politicians switching from other parties. Then, we explore additional traits along which Sweden Democrat voters and politicians are similar.

**Earlier political experience** To support the citizen-candidate idea, we verify that almost all politicians who stand as candidates for the party are new to the political arena. Specifically, we can use our data of all ballots since the 1982 election (10 elections in total) to compute the fraction of local councilors for the Sweden Democrats who ever appeared on a ballot paper or were elected for another party. This shows that over 90 percent have never been nominated, and over 98 percent have never been elected before they appear as candidates for the Sweden Democrats. The corresponding numbers are much lower for the other parties. Thus the Sweden Democrat councilors do not look like opportunistic Downsian candidates, who are motivated by election as such but have failed to achieve it in other parties.

**Descriptive and substantive representation** While similarity of an important trait – such as labor-market status – may be a necessary condition for a citizen candidate to faithfully represent certain voters, it is not sufficient. For descriptive representation to translate into substantive representation, the politician has to espouse the views of his or her voters. Finding that this is the case would further support a citizen-candidate interpretation because credibility of party representatives in the eyes of voters would stem from a shared outlook on political issues. In particular, people suffering from income losses or greater economic insecurity relative to others may have identified more strongly with others in the same predicament, and put the blame for their situation on out-groups such as the domestic establishment or immigrants.

As mentioned in Section 2, the two starkest political features of the Sweden Democrats are their stances as an anti-establishment and anti-immigration party. To shed light on these features, we turn to survey data on attitudes. Specifically, we compare the attitudes towards the establishment and towards immigrants through the lens of questions about distrust in the national parliament (as a proxy for the establishment) and about anti-immigration sentiments. For both attitudes, politicians and voters were asked exactly the same questions in the 2017 KOLFU and SOM surveys. Since

---

<sup>15</sup>See Osborne and Slivinski (1996) and Besley and Coate (1997) for the original formulations of the citizen-candidate model.

voters were also asked to state their party sympathies, we check whether the attitudes of politicians from a certain party are congruent with the attitudes of their voters. These unique aspects make the surveys worthwhile to consider, even though they were taken after the end of our sample period. To gauge their general outlook on society, we also compare politicians and voters for different parties with regard to their generalized distrust in others.

**Anti-establishment and anti-immigration views** The left graph in Figure 14 compares voters' and politicians' views on a proposal to reduce refugee immigration. Among voters supporting other parties than the Sweden Democrats, only about 20 percent see this as a very good proposal, and only 10 percent of their politicians do. These percentages starkly contrast with the views of Sweden Democrat supporters and politicians. Among the sympathizers, 80 percent think that restricting refugee immigration is a very good idea and about 90 of the party's politicians agree.

The middle graph compares levels of distrust in the political establishment. Among other parties, about 20 percent of voters and politicians say that their distrust in parliament is either quite high or very high. Among the Sweden Democrats, the corresponding number is about 60 percent. Both the gray and the black marker of these attitudes is close to the 45-degree line, showing a close congruence between the attitudes of voters and politicians.

[Figure 14 about here]

**Generalized social trust** The right graph in Figure 14 shows a measure of generalized distrust in others (inverting the answers to the common trust question from the World Value Survey) among voters and politicians. Non-Sweden Democrat voters display the same high generalized trust levels as those normally measured in Sweden: only about 15 percent have distrust levels above 5 on a 1-10 scale. The local politicians elected from these parties are even less distrusting than their voters at about 5 percent. By contrast, both voters and politicians of the Sweden Democrats are much more distrusting, with its politicians exhibiting slightly higher levels of distrust than its voters at around 30 percent. Given the high levels of trust in Sweden, a 25 percentage-point distrust difference across voters and politicians is substantial.

These results on attitudes lend further support to our citizen-candidate interpretation of the Sweden Democrat movement. Not only do the party's voters and politicians belong to the same labor-market groups, but they also share a common outlook on other political issues and aspects of social life.

## 8 Mechanisms

In this section, we explore how the labor-market outsiders and vulnerable insiders came to support the anti-immigration and anti-establishment agenda as members and voters of the party. One possibility is that the economic shocks tilted the preferences of the aggrieved groups towards this dual agenda. Another possibility is that the economic shocks mobilized support for the Sweden Democrats among people who were already critical of immigration and of established politicians.

**Distrust in the political establishment** In Figure 12, we saw that anti-immigration attitudes did not shift between any pair of labor-market groups over time. In Figure 15, we reproduce similar plots for anti-establishment attitudes. Our anti-establishment measure is an indicator for having little or no trust in national parliament. The figure shows that outsiders became more anti-establishment

than insiders. Moreover, the divergent distrust of national parliament appears right after the make-work-pay reforms. This timing suggests that the reforms indeed attracted more outsiders than insiders to the Sweden Democrats' anti-establishment message, which would explain the relative shift in party sympathies displayed in Figure 11. However, we do not see a corresponding shift in the distrust gap between vulnerable and secure insiders.<sup>16</sup>

[Figure 15 about here]

**Shifts in the anti-immigration group** Figure 12 also showed that the key economic events were not associated with increasing shares of people with strong anti-immigration attitudes. This seems to fly in the face of the observation that most Sweden Democrats express such attitudes. But even if the economic shocks did not directly shift immigrant attitudes, they may have shifted party sympathies more strongly among those with pre-existing anti-immigrant attitudes. Figure 16 plots the share of survey respondents who support the Sweden Democrats over time, distinguishing those with strong anti-immigrant views from those with moderate anti-immigrant or pro-immigrant views. Sweden Democrat sympathizers have grown their share substantially over time, such that by 2011-2014, 30 percent among those with strong anti-immigrant attitudes support the Sweden Democrats. In contrast, less than 3 percent of respondents without strong anti-immigrant views support the Sweden Democrats during the same period. Moreover, the divergent support for the Sweden Democrats between these two groups follows the economic shocks we have described in Section 3.

[Figure 16 about here]

To further probe the rise of the Sweden Democrats among those with anti-immigrant attitudes, we ask (i) if the rising support of the party among anti-immigrant voters came at the expense of support for the left or center-right blocs, (ii) whether these shifts differ by labor-market status, and (iii) whether they coincide in time with the economic shocks.

Figure 17 shows political sympathies among people holding strong anti-immigration attitudes. The top two graphs show the pooled support rate for the center-right parties, split by our two pairs of labor-market categories. The left graph shows a striking divergence in center-right support between labor market insiders and outsiders after 2006: while support among insiders remains roughly constant, support among outsiders drops from 40 percent to 20 percent. The support gap between secure and insecure insiders, shown in the right top graph, remains more or less constant. On the other hand, left-wing support by strongly anti-immigration individuals – in the lower two graphs – does not diverge sharply but rather declines slowly over time among both labor-market insiders and outsiders. However, the vulnerable insiders appear to have deserted the left at a faster rate than secure insiders – thus, vulnerable insiders deserted the left rather than the center-right.

[Figure 17 about here]

All in all, Figures 16 and 17 suggest that the make-work-pay reforms made outsiders with strong anti-immigration attitudes turn away from the ruling center-right coalition parties to the Sweden Democrats. By contrast, the disproportionate gains of the Sweden Democrats among vulnerable insiders appears to come mainly at the expense of left-bloc parties.

---

<sup>16</sup>Figure W3 in the Web Appendix examines trust in non-political institutions – such as the church, the police and labor unions – where we do not see as large of a trust gap between Sweden Democrat voters and others. More importantly, we do not see any divergence in trust between outsiders and insiders after the implementation of the make-work-pay reforms.



**Alternative mechanisms?** By a similar token, the economic shocks may have triggered latent voting propensities in some authoritarian-leaning group. An obvious candidate, given the existing evidence on radical-right voting would be low-educated male workers (Betz 1994, Ignazi et al. 2003, Kimmel 2013, Rydgren 2013, Inglehart and Norris 2017). We address this possibility by including a dummy for this group in the differences-in-difference individual-level regression (5) for Sweden Democrat support. The results in Figure 18 only show a very small downward shift in the estimated insider-outsider gap and the vulnerable-secure insider gap. Low-educated male workers being hit disproportionately by the two economic events can thus account for about a quarter of the association between economic losers and Sweden Democrat sympathizers.

[Figure 18 about here]

We could also imagine other mechanisms. For example, economic shocks could plausibly have shifted people to identify as nationalists rather than working-class (Shayo 2009), which might have biased them towards the nationalistic program of the Sweden Democrats rather than the program of the political left. Unfortunately, however, the sequence of representative surveys we have exploited in this section do not include questions that can readily approximate identification with nationalist and/or working-class groups.

## 9 Implications

In this section, we reorient our analysis to the most novel aspect of the paper, namely the selection of radical-right politicians. In particular, we ask if the selection of politicians into the Sweden Democrats differs from that into other political parties, when we move beyond labor-market status. As in our own recent research on the subject (Dal Bo et al 2017), we focus on social background and valence factors like ability.

**Social background** Figure 19 summarizes the recent incomes of politicians elected in the 2002-2014 local elections, and the incomes of their fathers in 1979 (on average thus roughly at the same stage of the life cycle as the current politicians).<sup>17</sup> Incomes for both politicians and their parents are related to the respective population distribution of income. Consider first the middle plot in the middle row, which shows the 1979 distribution of income – in terms of population *percentiles* – across the fathers of current politicians in all parties except the Left Party and the Sweden Democrats. To simplify the comparison, we also show the population distribution in 1979 as a line – by definition, a uniform distribution with a density of 0.01. Clearly, the fathers of these other-party politicians are close to a replica of the Swedish population in their own generation.<sup>18</sup>

Consider next the right-middle plot for the fathers of recently elected Left-Party politicians. This is a smaller sample so the distribution looks more jagged, but still close to the distribution for all fathers, except a possible shortfall at the very highest and lowest levels of income. Finally, the fathers of Sweden Democrat politicians in the left-middle plot look quite similar to those of the whole population. On average, today’s Sweden Democrats, like other non-left politicians, are selected from a representative sample of social backgrounds.

[Figure 19 about here]

---

<sup>17</sup>We find similar results using the mothers of politicians.

<sup>18</sup>Another way to say this, stressed in Dal Bó et al. (2017), is that the social mobility into Swedish local politics appears very high.

The incomes of current politicians, displayed in the top row, show a different pattern. Incomes of other-party and Left-party politicians clearly over-represent higher income levels, a fact emphasized by Dal Bo et al. (2017) as one (of several) indication(s) of meritocratic selection in Swedish politics.<sup>19</sup> By contrast, Sweden Democrats over-represent low-income percentiles and under-represent high-income percentiles.

The Sweden Democrats do not primarily differ from other-party politicians based on their social background, but rather by their own lower incomes. Of course, this is consistent with our earlier results that Sweden Democrat politicians over-represent the groups of recent relative economic losers.

The bottom row of figures shows a striking pattern for the differences in percentile rank between each current politician and his/her own father. As expected, the distribution for the other parties – the middle plot – is skewed to the right: most current politicians occupy a higher percentile rank than did their father. But the distribution for the Sweden Democrats – the left plot – is skewed to the left. Thus, the current generation of Sweden Democrat politicians are less well off also within their own family. As shown in the Web Appendix (See Figure W6), similar within-family differences emerge when we compare the income percentiles of politicians from the Sweden Democrats and other parties with the income percentiles of their own siblings.

**Valence** Figure 20 compares politicians from different parties on a set of characteristics that are likely to approximate aptitude for local politics. The left graph shows the difference between Sweden Democrat and other-party politicians in the shares who have, in turn, political experience as a councilor, job experience in the public sector, and a tertiary education. The difference in political experience is about -40 percentage points, a natural disadvantage for a newer party. The differences in other expertise variables are somewhat smaller: compared to Sweden Democrat politicians, other-party politicians are 30 percentage points more likely to have job experience in the public sector and about 25 percentage points more likely to have completed a tertiary education.

[Figure 20 about here]

The right graph shows differences in a few other traits, all measured in terms of standard deviations (in the sample of politicians). The left-most dot shows the difference in the earnings score, an ability measure based on the residuals estimated from a rich Mincer equation for the whole population, a score developed by Besley et al. (2017) and used by Dal Bó et al. (2017). Since we know that the Sweden Democrats are more often outsiders, we compare the earnings score only for politicians who are labor-market insiders. Among these insiders, Sweden Democrat politicians still score 0.5 standard deviations below politicians in other parties.

While the earnings score is computed from register data, the remaining scores in the figure come from our survey among local politicians (KOLFU 2017); with a smaller sample, the confidence intervals are a bit wider. In the middle, we consider public-service motivation, measured via the survey developed by Kim et al. (2013) and computed from the answers to a battery of questions about private and altruistic motives. On average, Sweden Democrat politicians score 0.6 standard deviations below the politicians of other parties. Lastly, we use the HEXACO module of questions developed by Lee and Ashton (2004) to construct an index for morality (honesty and humility). Sweden Democrat politicians again score lower than those of other parties, now by about 0.25 standard deviations.

As these comparisons show, the Sweden Democrats not only represent other groups in society, but their representatives also carry different qualifications, attitudes, and outlooks on life.

---

<sup>19</sup>As a reminder, these incomes reflect market incomes of politicians as almost all local representatives do not receive a political salary. To the extent they do, we either drop them from the sample or consider their income prior to their first political full-time appointment.

## 10 Final Remarks

We study the Sweden Democrats, a radical-right populist party in Sweden, and its recent success. On the demand side of politics, we mostly expand earlier research on how economic shocks may help shape populist votes (Rydgren and Arzheimer 2018, Autor, et al. 2016, Dehdari 2018), by identifying groups of losers from two main economic events during the period when the electoral support for the Sweden Democrats grew. Our most novel demand-side result may be that the local consequences of an important set of national policy reforms are a main correlate of local populist votes. We also show that the rise of the Sweden Democrats took place as the trust of voters in government diverged depending on their economic status.

More importantly, our paper is the first to systematically analyze the supply side of a major populist party, using individual-level data for the locally-elected representatives of the growing Sweden Democrats. We exploit the same subgroup disaggregation as on the demand side and show that the Sweden Democrats over-represent these economically-losing groups, while other parties under-represent them.

Together, these findings are consistent with a citizen-candidate interpretation: the disgruntled groups not only support the Sweden Democrats electorally, but also join their ranks as members and run as political candidates. Our interpretation is that political platforms lose credibility in the wake of economic grievances and diminished trust. In the spirit of citizen-candidate models, policies become credible when entering candidates share socioeconomic traits with voters and thus appear committed to representing them faithfully. In sum, the economic shocks and the trust deficit create both a supply and a demand for descriptive representation. We have also seen that elected local radical-right politicians differ from the local politicians of other parties in a number of other dimensions. In particular, they score lower on a number of personality traits and attitudes that many would consider valence characteristics in politics.

On the one hand, the Sweden Democrats thus appear to fulfill a traditional role of new parties in democracies, namely to provide representation to previously under-represented groups (at the same time, offering less representation to other groups, like women and non-European immigrants). On the other hand, the new populist party appears to threaten the positive selection on ability in Sweden's local democracy that we have recently documented in Dal Bó et al. (2017).

## References

- [1] Aftonbladet (2014). Kommuner där SD fått inflytande (Municipalities where the Sweden Democrats did have influence).
- [2] Alesina, A., A. Miano, and S. Stantcheva (2018). Immigration and Redistribution. Working Paper 24733, National Bureau of Economic Research.
- [3] Algan, Y., S. Guriev, E. Papaioannou, and E. Passari (2017). The European Trust Crisis and the Rise of Populism. *Brookings Papers on Economic Activity* 48 (2), 309–400.
- [4] Allport, G. (1954). *The Nature of Prejudice*. Addison-Wesley Pub. Co.
- [5] Autor, D.H., D. Dorn, G. Hanson, and K. Majlesi (2016). Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure. NBER Working Paper 22637, National Bureau of Economic Research.

- [6] Autor, D.H. (2013). The “Task Approach” to Labor Markets: An Overview. *Journal for Labour Market Research* 46 (3), 185–199.
- [7] Autor, D.H. and D. Dorn (2013). The Growth of Low-skill Service Jobs and the Polarization of the US Labor Market. *American Economic Review* 103 (5), 1553–97.
- [8] Bäckman, O. and E. Franzén (2007). Employment and the Labour Market (chapter 2). *International Journal of Social Welfare* 16 (s1), S35–S66.
- [9] Barth, F. (1998). *Ethnic Groups and Boundaries: The Social Organization of Culture Difference*, Waveland Press.
- [10] Bengtsson, N., P-A. Edin, and B. Holmlund (2014). Löner, sysselsättning och inkomster – ökar klyftorna i Sverige? (Wages, Employment, and Incomes – Are Cleavages Growing in Sweden?). Technical Report to Finanspolitiska rådet.
- [11] Besley, T. and S. Coate (1997). An Economic Model of Representative Democracy. *Quarterly Journal of Economics* 112 (1), 85–114.
- [12] Besley, T., O. Folke, T. Persson, and J. Rickne (2017). Gender Quotas and the Crisis of the Mediocre Man: Theory and Evidence from Sweden. *American Economic Review* 107 (8), 2204–42.
- [13] Betz, H. (1994). *Radical Right-Wing Populism in Western Europe*. Palgrave Macmillan US.
- [14] Billiet, J., B. Meuleman, and H. De Witte (2014). The Relationship Between Ethnic Threat and Economic Insecurity in Times of Economic Crisis: Analysis of European Social Survey Data. *Migration Studies* 2 (2), 135–161.
- [15] Boomgaarden, H.G. and R. Vliegenthart (2007). Explaining the Rise of Anti-Immigrant Parties: The Role of News Media Content. *Electoral Studies* 26 (2), 404–417.
- [16] Borjas, G.J. (1999). Immigration and Welfare Magnets. *Journal of Labor Economics* 17 (4), 607–637.
- [17] Brug, W.V.D., M. Fennema, and J. Tillie (2005). Why Some Anti-immigrant Parties Fail and Others Succeed: A Two-step Model of Aggregate Electoral Support. *Comparative Political Studies* 38 (5), 537–573.
- [18] Carter, E. (2005). *The Extreme Right in Western Europe: Success Or Failure?* Manchester University Press.
- [19] Che, Y., Y. Lu, J.R. Pierce, P.K. Schott, and Z. Tao (2016). Does Trade Liberalization with China Influence U.S. Elections? Working Paper 22178, National Bureau of Economic Research.
- [20] Colantone, I. and P. Stanig (2018). Global Competition and Brexit. *American Political Science Review* 112 (2), 201-218.
- [21] Dal Bó, E., F. Finan, O. Folke, T. Persson, and J. Rickne (2017). Who Becomes a Politician? *Quarterly Journal of Economics* 132 (4), 1877–1914.
- [22] Dehdari, S. H. (2018). Economic Distress and Support for Far-right Parties – Evidence from Sweden. Technical Report, SSRN.
- [23] Dippel, C., R. Gold, and S. Heblich (2015). Globalization and its (Dis-)content: Trade Shocks and Voting Behavior. Working Paper 21812, National Bureau of Economic Research.
- [24] Dustmann, C., T. Frattini, and I. Preston (2013). The Effect of Immigration along the Distribution of Wages. *Review of Economic Studies* 80 (1), 145–173.

- [25] Dustmann, C. and I. Preston (2004). Is Immigration Good or Bad for the Economy? Analysis of Attitudinal Responses. CReAM Discussion Paper Series 0406, Centre for Research and Analysis of Migration, Department of Economics, University College London.
- [26] Erlingsson, G.O., K. Loxbo, and R. Öhrvall (2012). Anti-immigrant Parties, Local Presence and Electoral Success. *Local Government Studies* 38 (6), 817–839.
- [27] Facchini, G. and A.M. Mayda (2009). Does the Welfare State Affect Individual Attitudes toward Immigrants? Evidence across Countries. *Review of Economics and Statistics* 91 (2), 295–314.
- [28] Fetzer, T. (2018). Did Austerity Cause Brexit? Technical report, CESifo Working Paper 7159.
- [29] Finseraas, H., M. Røed, and P. Schøne (2017). Labor Market Competition with Immigrants and Political Polarization. *Quarterly Journal of Political Science* 12 (3), 347–373.
- [30] Fitzgerald, J. and D. Lawrence (2011). Local Cohesion and Radical Right Support: The Case of the Swiss People’s Party”. *Electoral Studies* 30 (4), 834–847.
- [31] Folke, O., T. Persson, and J. Rickne (2016). The Primary Effect: Preference Votes and Political Promotions. *American Political Science Review* 110 (3), 559–578.
- [32] Gidron, N. and P.A. Hall (2017). The Politics of Social Status: Economic and Cultural Roots of the Populist Right. *British Journal of Sociology* 68 (S1), S57–S84.
- [33] Goos, M., A. Manning, and A. Salomons (2014). Explaining Job Polarization: Routine-biased Technological Change and Offshoring. *American Economic Review* 104 (8), 2509–2526.
- [34] Guiso, L., H. Herrera, M. Morelli, and T. Sonno (2017). Demand and Supply of Populism. EIEF Working Papers Series 1703, Einaudi Institute for Economics and Finance (EIEF).
- [35] Ignazi, P., P. Ignazi, and O. U. Press (2003). *Extreme Right Parties in Western Europe*. Comparative Politics. OUP Oxford.
- [36] Inglehart, R. and P. Norris (2017). Trump and the Populist Authoritarian Parties: The Silent Revolution in Reverse. *Perspectives on Politics* 15 (2), 443–454.
- [37] Ivarsflaten, E. (2008). What Unites Right-wing Populists in Western Europe?: Re-examining Grievance Mobilization Models in Seven Successful Cases. *Comparative Political Studies* 41 (1), 3–23.
- [38] Jylhä, K., Rydgren, J. and P. Strimling (2018). Sverigedemokraternas väljare: Vilka är de, var kommer de ifrån och vart är de på väg? (The Sweden Democrats’ Voters: Who Are they, where Do They Come From, and where Are They Going?). Technical Report, IFFS Report.
- [39] Kim, S., W. B.E. Vandenabeele, E. Wright, L.B. Andersen, F.P. Cerase, R.K. Christensen, C. Desmarais, M. Koumenta, P. Leisink, B. Liu, J. Palidauskaite, L.H. Pedersen, J.L. Perry, A. Ritz, J. Taylor, and P. De Vivo (2013). Investigating the Structure and Meaning of Public Service Motivation across Populations: Developing an International Instrument and Addressing Issues of Measurement Invariance. *Journal of Public Administration Research and Theory* 23 (1), 79–102.
- [40] Kimmel, M. (2013). *Angry White Men: American Masculinity at the End of an Era*. EBL ebooks online. Public Affairs.
- [41] Kindlund, H. and D. Biterman (2002). Work and the Labour Market (chapter 3). *International Journal of Social Welfare* 11, S16–S40.

- [42] Kitschelt, H. (1995). Formation of Party Cleavages in Post-communist Democracies: Theoretical Propositions. *Party Politics* 1 (4), 447–472.
- [43] Kitschelt, H. and A. McGann (1997). *The Radical Right in Western Europe: A Comparative Analysis*. University of Michigan Press.
- [44] Knigge, P. (1998). The Ecological Correlates of Rightwing Extremism in Western Europe. *European Journal of Political Research* 34 (2), 249-79.
- [45] Kriesi, H., E. Grande, R. Lachat, D. Martin, S. Bornschieer, and T. Frey (2006). Globalization and the Transformation of the National Political Space: Six European Countries Compared. *European Journal of Political Research* 45 (6), 921–956.
- [46] Hangartner, D., E. Dinas, M. Marbach, K. Matakos, and D. Xefteris (forthcoming). Does Exposure to the Refugee Crisis Make Natives More Hostile?. *American Political Science Review*.
- [47] Lee, K. and M.C. Ashton (2004). Psychometric Properties of the HEXACO Personality Inventory. *Multivariate Behavioral Research* 39 (2), 329–358. PMID: 26804579.
- [48] Lindbeck, A. and D. Snower (1984). Involuntary Unemployment as an Insider-Outsider Dilemma. Seminar Paper No. 309, Institute for International Economic Studies, University of Stockholm, Sweden
- [49] Lindvall, J. and D. Rueda (2014), The Insider-Outsider Dilemma. *British Journal of Political Science* 44 (2), 460-475.
- [50] Lubbers M, M. Gijsberts, and P. Scheepers (2002). Extreme Right-wing Voting in Western Europe. *European Journal of Political Research*, 41(3), 345–378.
- [51] Mayda, A.M. (2006). Who Is Against Immigration? A Cross-country Investigation of Individual Attitudes toward Immigrants. *Review of Economics and Statistics* 88 (3), 510–530.
- [52] Minkenberg, M. (2000). The Renewal of the Radical Right: Between Modernity and Anti-modernity. *Government and Opposition* 35 (2), 170-188.
- [53] Mudde, C. (2007). *Populist Radical Right Parties in Europe*. Cambridge: Cambridge University Press.
- [54] Mudde, C. and C.R. Kaltwasser (eds.) (2012). *Populism in Europe and the Americas: Threat or Corrective for Democracy?*. Cambridge University Press
- [55] Mulinari, D. and A. Neergaard (2017). From Racial to Racist State? pp 257-285 in *Reimagining the Nation*. Peter Lang Edition. Peter Lang Publishing Group.
- [56] Mutz, D.C. (2018). Status Threat, not Economic Hardship, Explains the 2016 Presidential Vote. *Proceedings of the National Academy of Sciences*.
- [57] Norris, P. and R. Inglehart (2018). *Cultural Backlash: Trump, Brexit, and Authoritarian Populism*. Cambridge University Press.
- [58] Oesch, D. (2008). Explaining Workers’ Support for Right-wing Populist Parties in Western Europe: Evidence from Austria, Belgium, France, Norway, and Switzerland. *International Political Science Review* 29 (3), 349–373.
- [59] Olzak, S. (1992). *The Dynamics of Ethnic Competition and Conflict*. Stanford University Press.
- [60] Osborne, M. and A. Slivinski (1996). A Model of Political Competition with Citizen-candidates. *Quarterly Journal of Economics* 111 (1), 65–96.
- [61] Oskarson, M. and M. Demker (2015). Room for Realignment: The Working-class Sympathy for Sweden Democrats. *Government and Opposition* 50 (4), 629-651.

- [62] Quillian, L. (1995). Prejudice as a Response to Perceived Group Threat: Population Composition and Anti-immigrant and Racial Prejudice in Europe. *American Sociological Review* 60 (4), 586–611.
- [63] Rueda, D. (2005). Insider-outsider Politics in Industrialized Democracies: The Challenge to Social Democratic Parties. *American Political Science Review* 99 (1), 61-74.
- [64] Rydgren, J. (2007). The Sociology of the Radical Right. *Annual Review of Sociology* 33 (1), 241–262.
- [65] Rydgren, J. (2008). Immigration Sceptics, Xenophobes or Racists? Radical Right-Wing Voting in Six West European Countries. *European Journal of Political Research* 47 (6), 737–765.
- [66] Rydren, J. (ed). 2013. *Class Politics and the Radical Right*. London, New York: Routledge.
- [67] Rydgren, J. (2018). *The Oxford Handbook of the Radical Right*. Oxford Handbooks. Oxford University Press.
- [68] Rydgren, J. and K. Arzheimer (2018). *Explaining Electoral Support for the Radical Right*. Mimeo.
- [69] Sannerstedt, A. (2014). Sverigedemokraternas sympatisörer (The Sympatizers of the Sweden Democrats), pp. 445–458. SOM-institutet.
- [70] Sannerstedt, A. (2015). Hur extrema är Sverigedemokraterna? (How Extreme are the Sweden Democrats?), pp. 399–414. SOM-institutet.
- [71] Scheve, K.F. and M.J. Slaughter (2001). Labor Market Competition and Individual Preferences over Immigration Policy. *Review of Economics and Statistics* 83 (1), 133–145.
- [72] Sekeris, P. and C. Vasilakis (2016). *The Mediterranean Refugee Crisis and Extreme Right Parties: Evidence from Greece*. MPRA paper, University Library of Munich, Germany.
- [73] Shayo, M. (2009). A Model of Social Identity with an Application to Political Economy: Nation, Class, and Redistribution. *American Political Science Review* 103 (2), 147-174.
- [74] van Kessel, S. (2015). *Populist Parties in Europe: Agents of Discontent?* Palgrave Macmillan UK.
- [75] Walgrave, S. and K. de Swert. 2004. The Making of the (Issues of the) Vlaams Blok. *Political Communication* 21 (4), 479–500.
- [76] Widfeldt, A. (2008). Sweden. *European Journal of Political Research* 47 (78), 1143-1147.

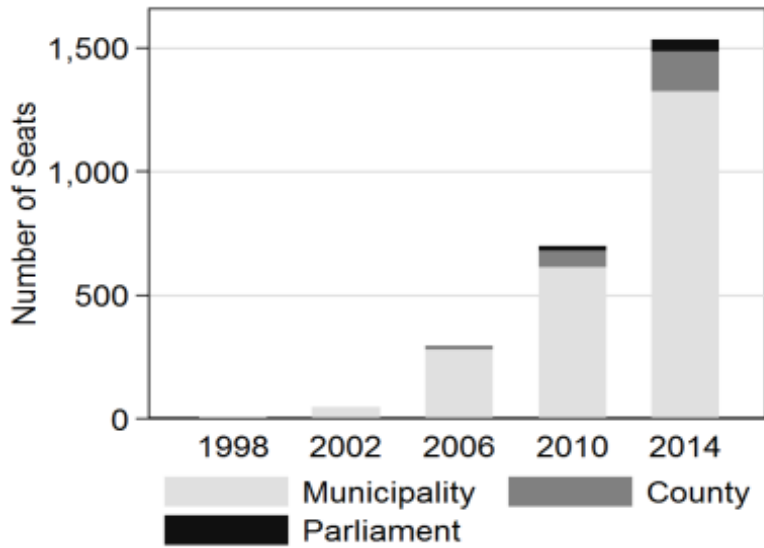


Figure 1: Seats won by the Sweden Democrats, 1998-2014

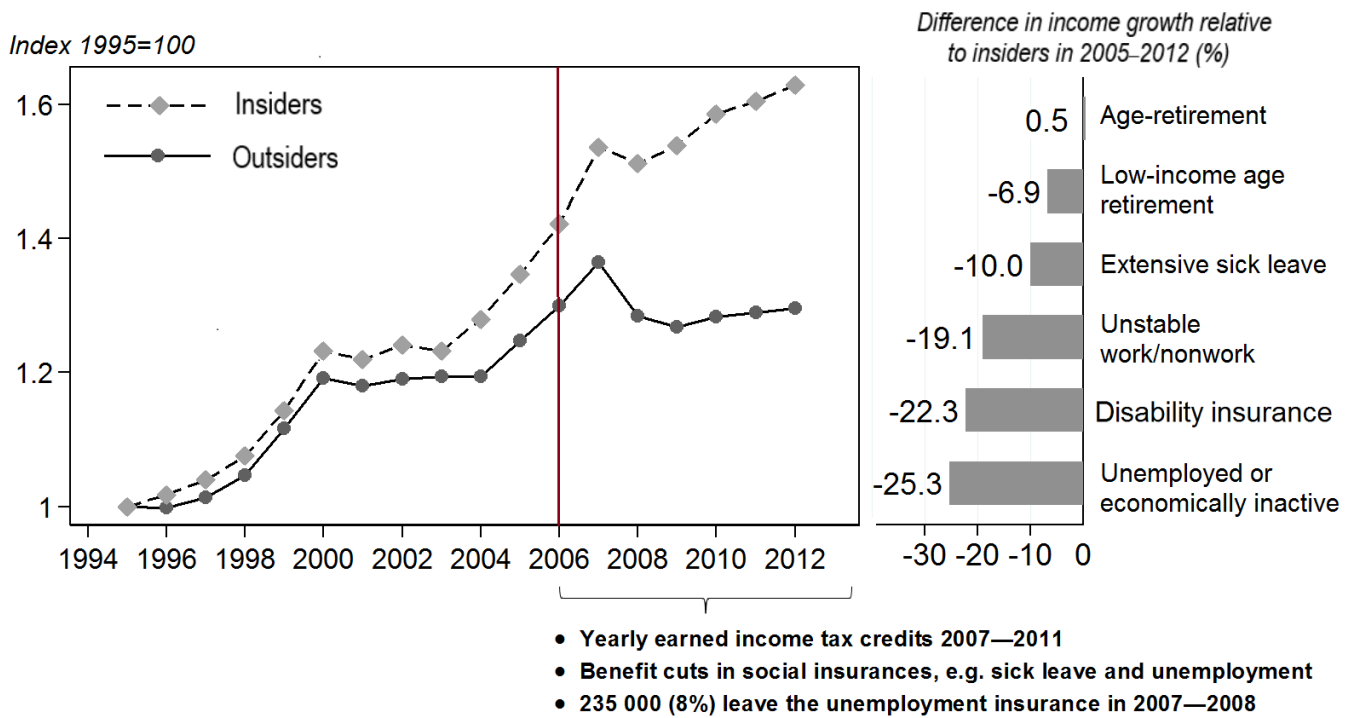


Figure 2: Disposable income for outsiders and insiders, 1995-2012

Notes: Labor market categories are defined based on the SELMA model (Kindlund and Biterman 2002).



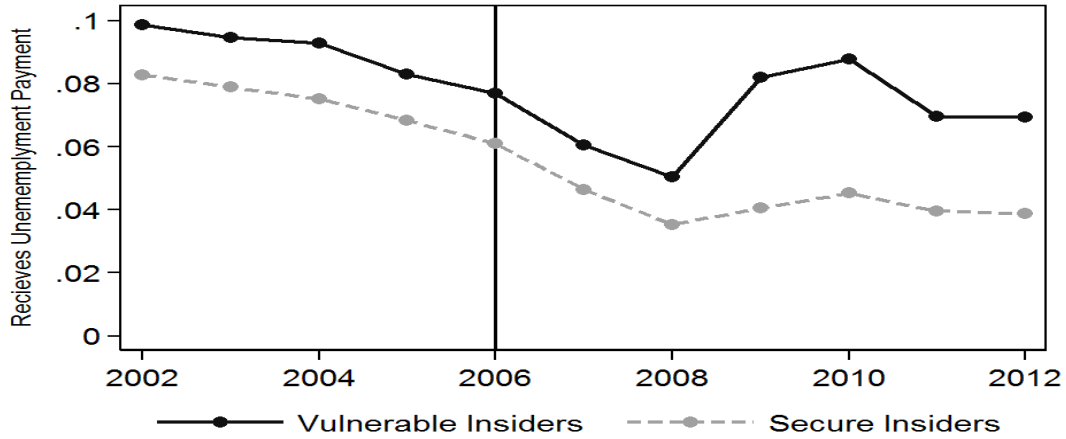


Figure 3: Share of vulnerable and secure insiders receiving unemployment benefits 2002-2011

Notes: Vulnerable insider status is defined as having an occupation with an RTI index score above the median. The authors thank Goos, Manning, and Salomons (2014) from kindly sharing these RTI indices.

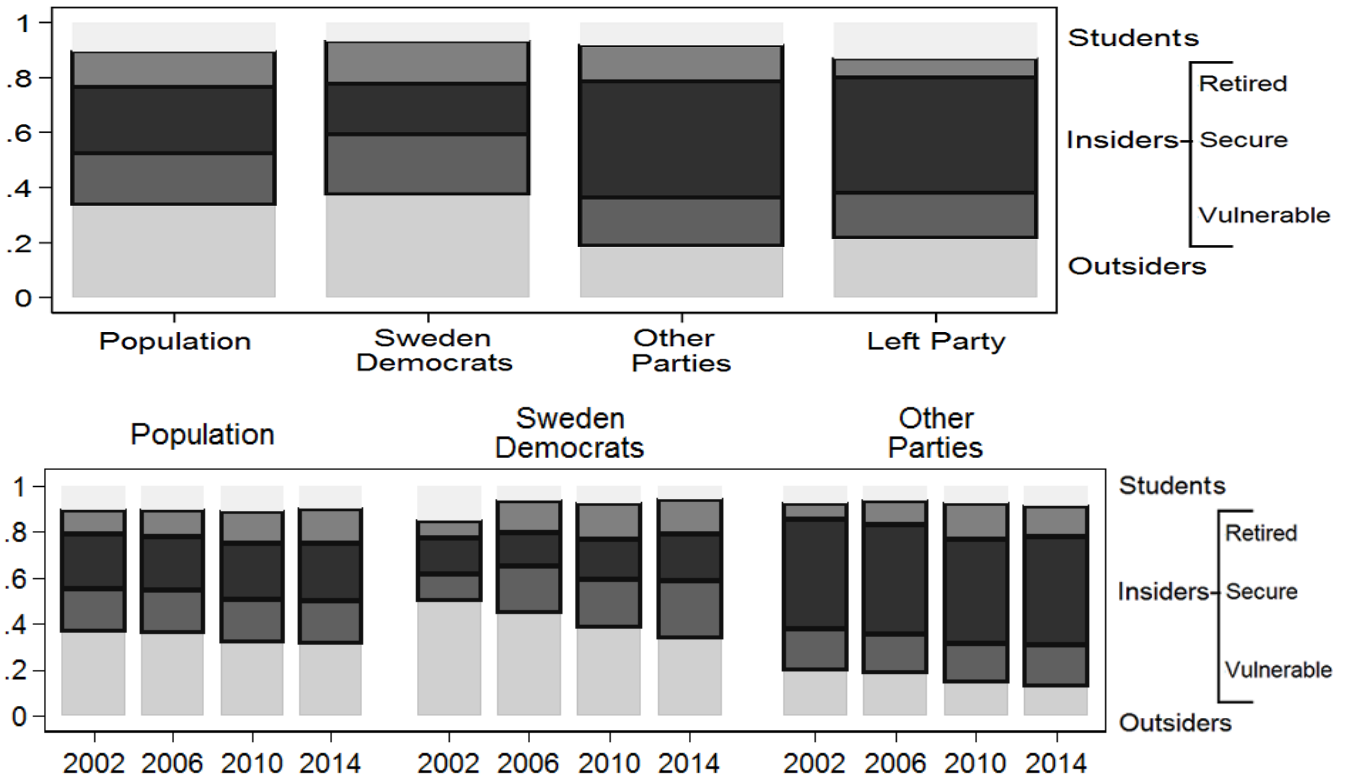


Figure 4: Composition of population compared to representatives of SD, Left Party and other parties, average 2002-2012 (upper figure) and by election (lower figure)

Notes: The sample includes all municipal councilors.

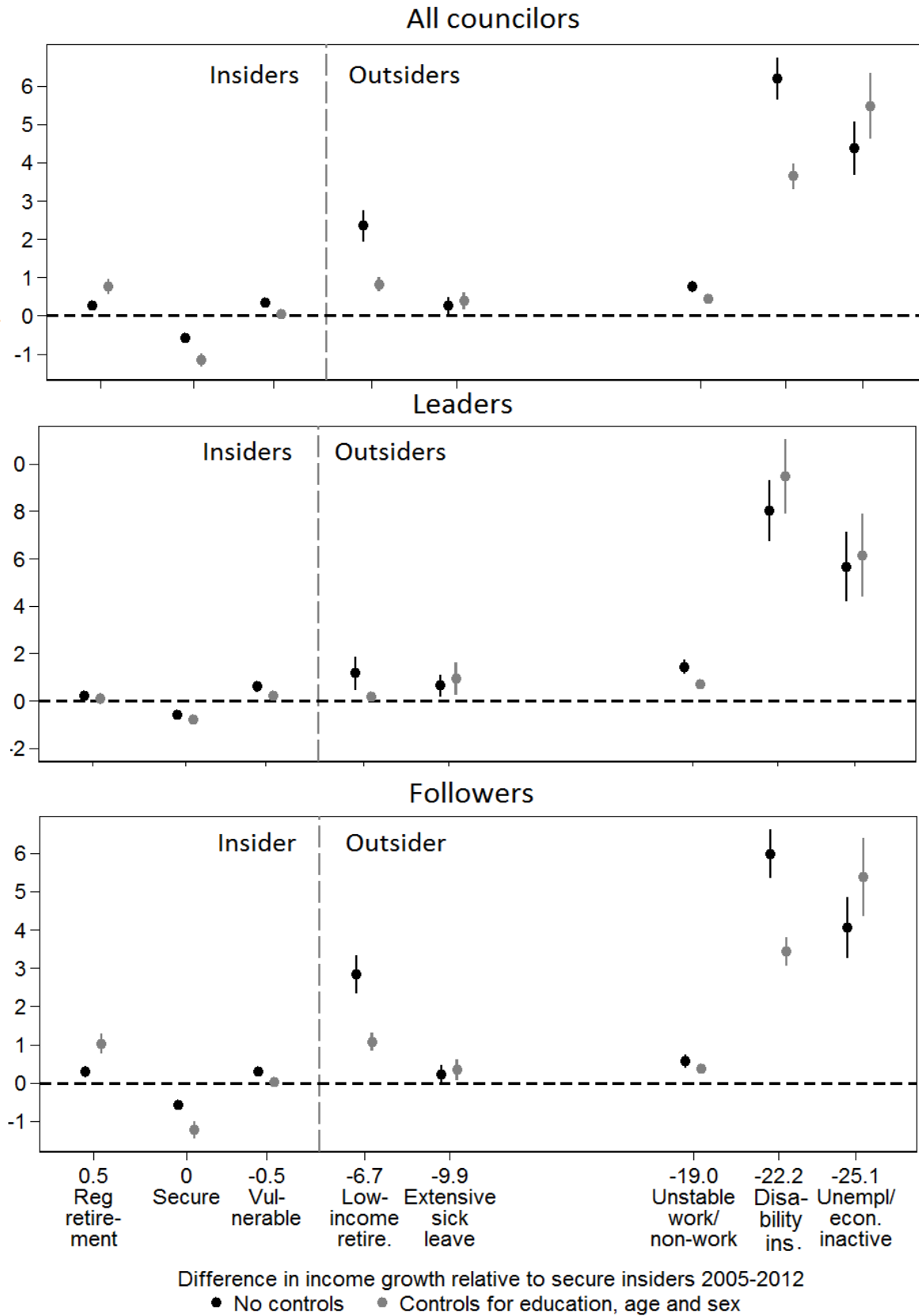


Figure 5: Estimates of over-representation in SD compared to other parties for labor-market subgroups. All elected councilors (upper figure), list leaders (middle figure), and followers (bottom figure).

*Notes:* The sample includes all municipal councilors.

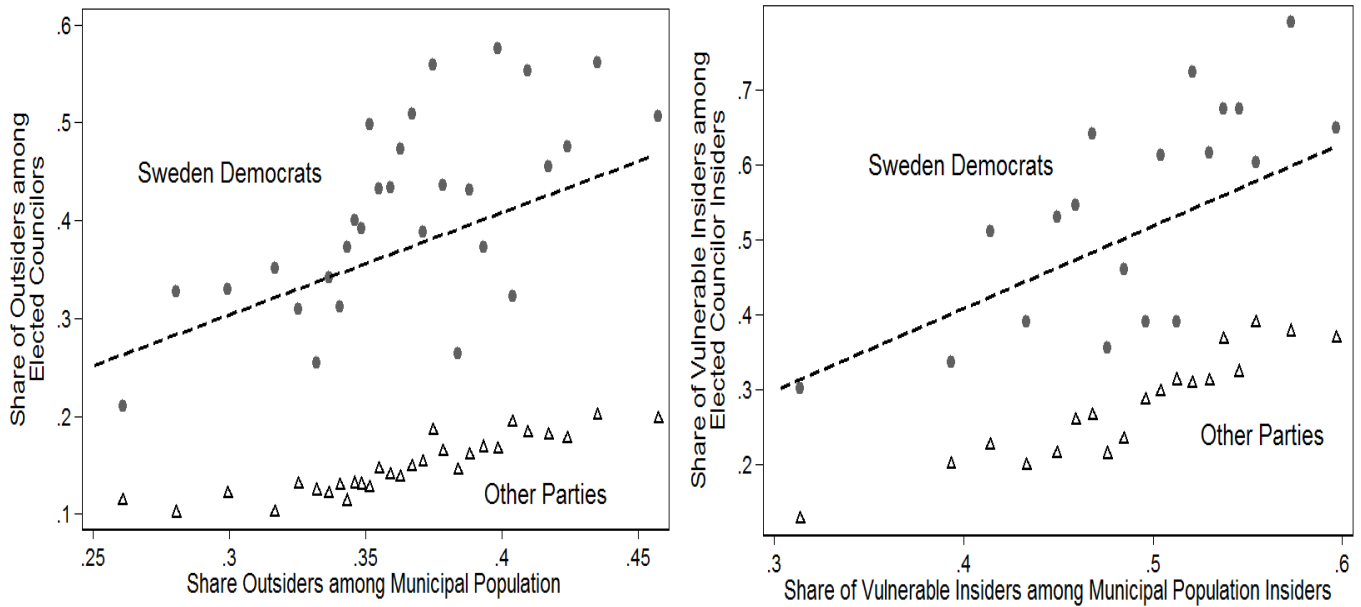


Figure 6: Share of outsiders (left) and share of vulnerable insiders (right) among elected councilors and the municipal population

*Notes:* The sample includes all elected municipal councilors and the adult population in each municipality in the election years between 2002 and 2014. Municipalities are dropped if there are no elected Sweden Democrats. They are also dropped from the left-hand side graph if there are no outsiders among the elected Sweden Democrats, and from the right-hand side if there are no elected insiders and vulnerable insiders.

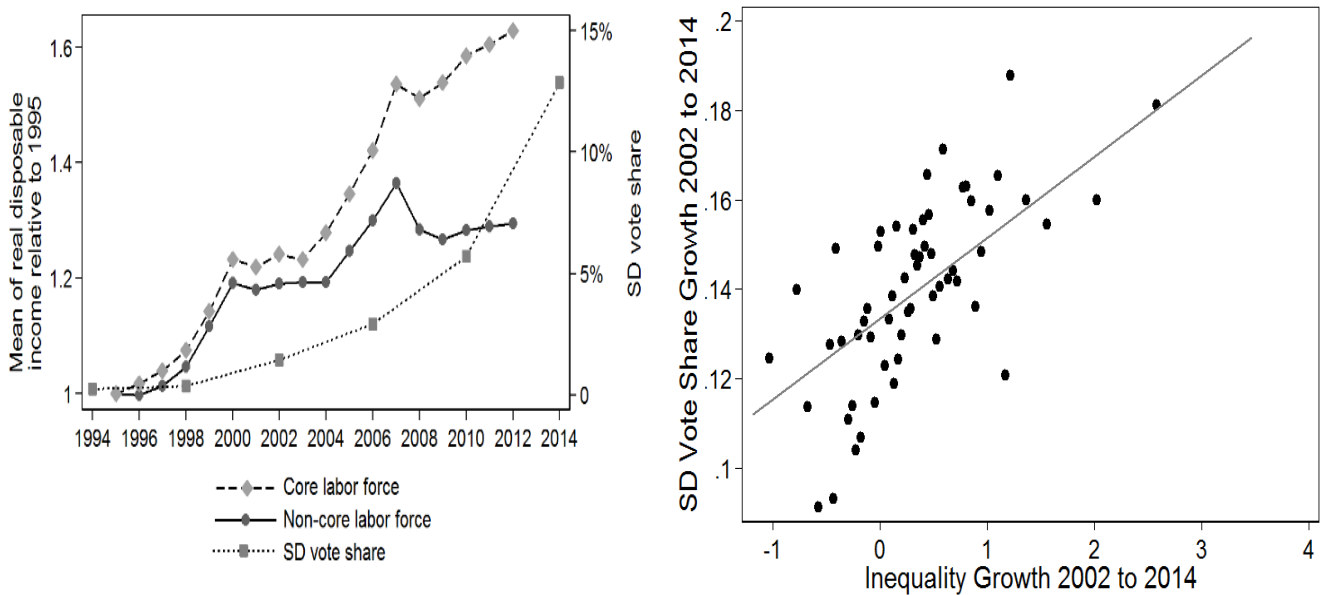


Figure 7: Inequality growth and growth of the Sweden Democrats

*Notes:* Each bin in the right-hand side graph contains 5 municipalities.

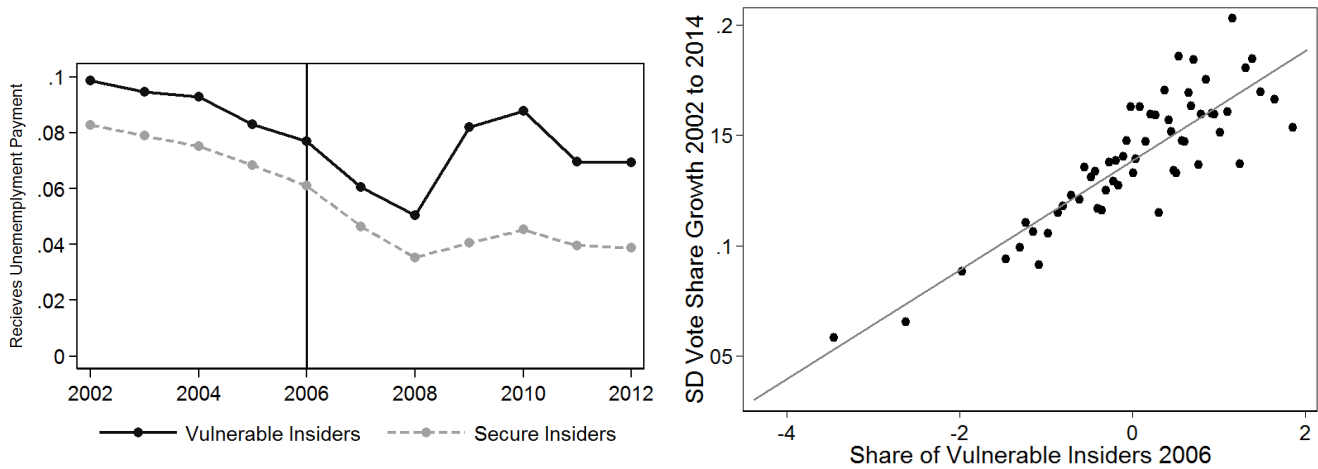


Figure 8: Share of vulnerable insiders and growth of the Sweden Democrats

Notes: Each bin in the right-hand side graph contains 5 municipalities.

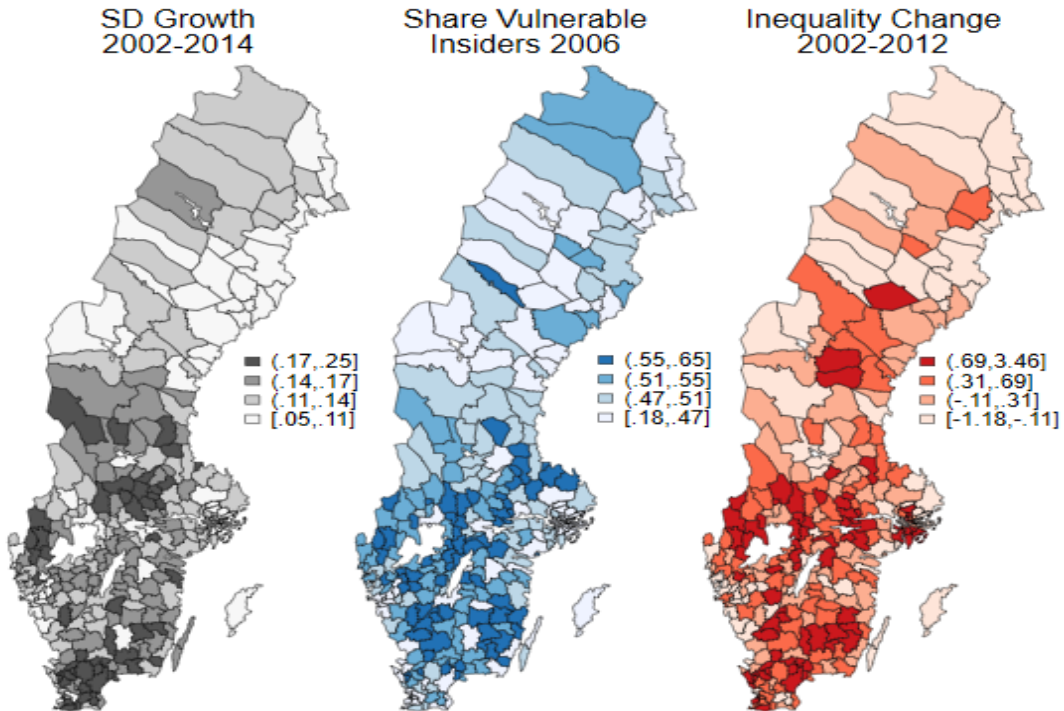


Figure 9: Geographical distribution of the Sweden Democrat's growth between 2002-2014, share of vulnerable insiders in 2006, and growth of inequality between 2002-2012

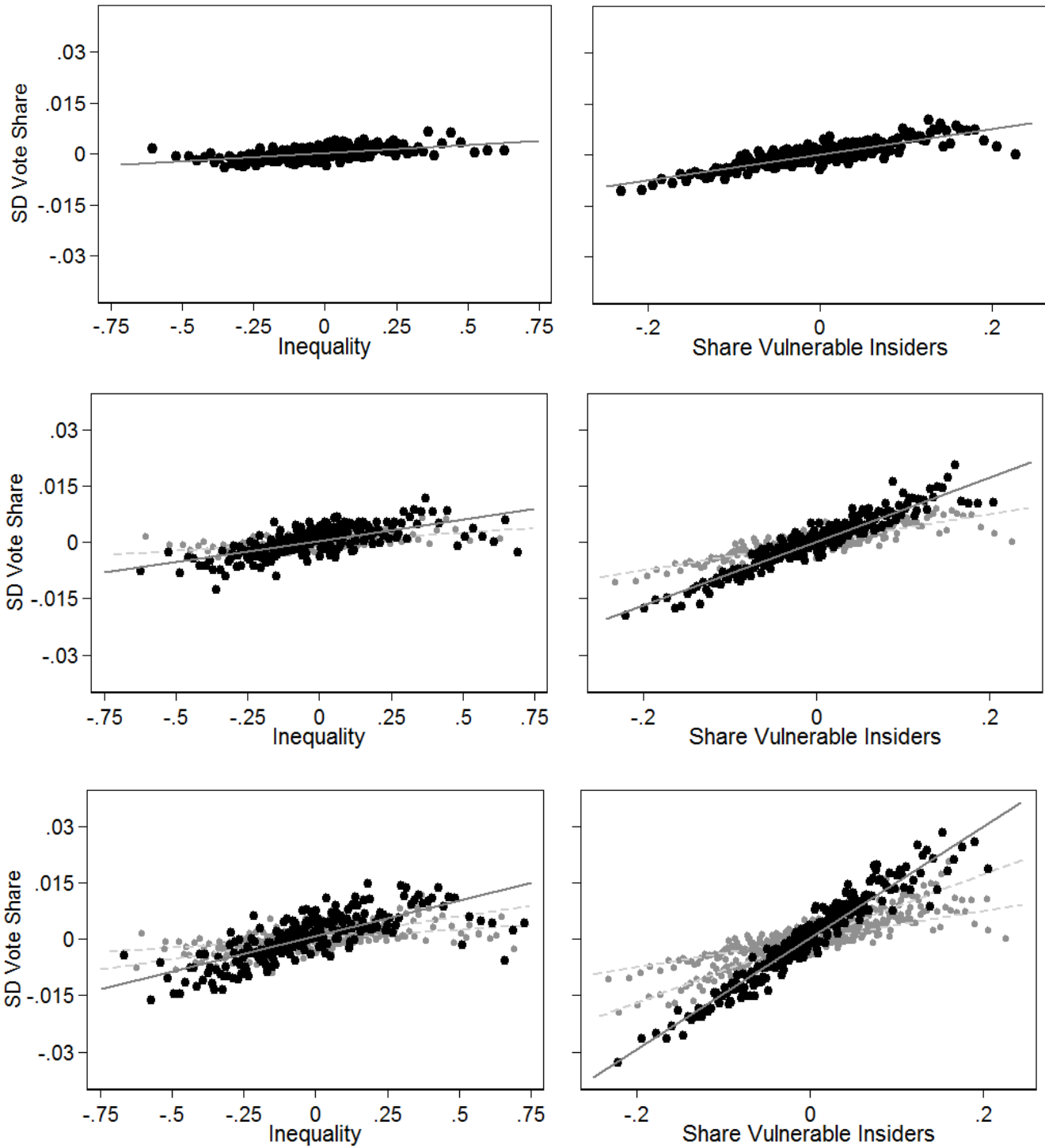


Figure 10: Within-municipality precinct-level variation in SD vote share, inequality and share of vulnerable insiders

*Notes:* Each bin contains 25 observations.

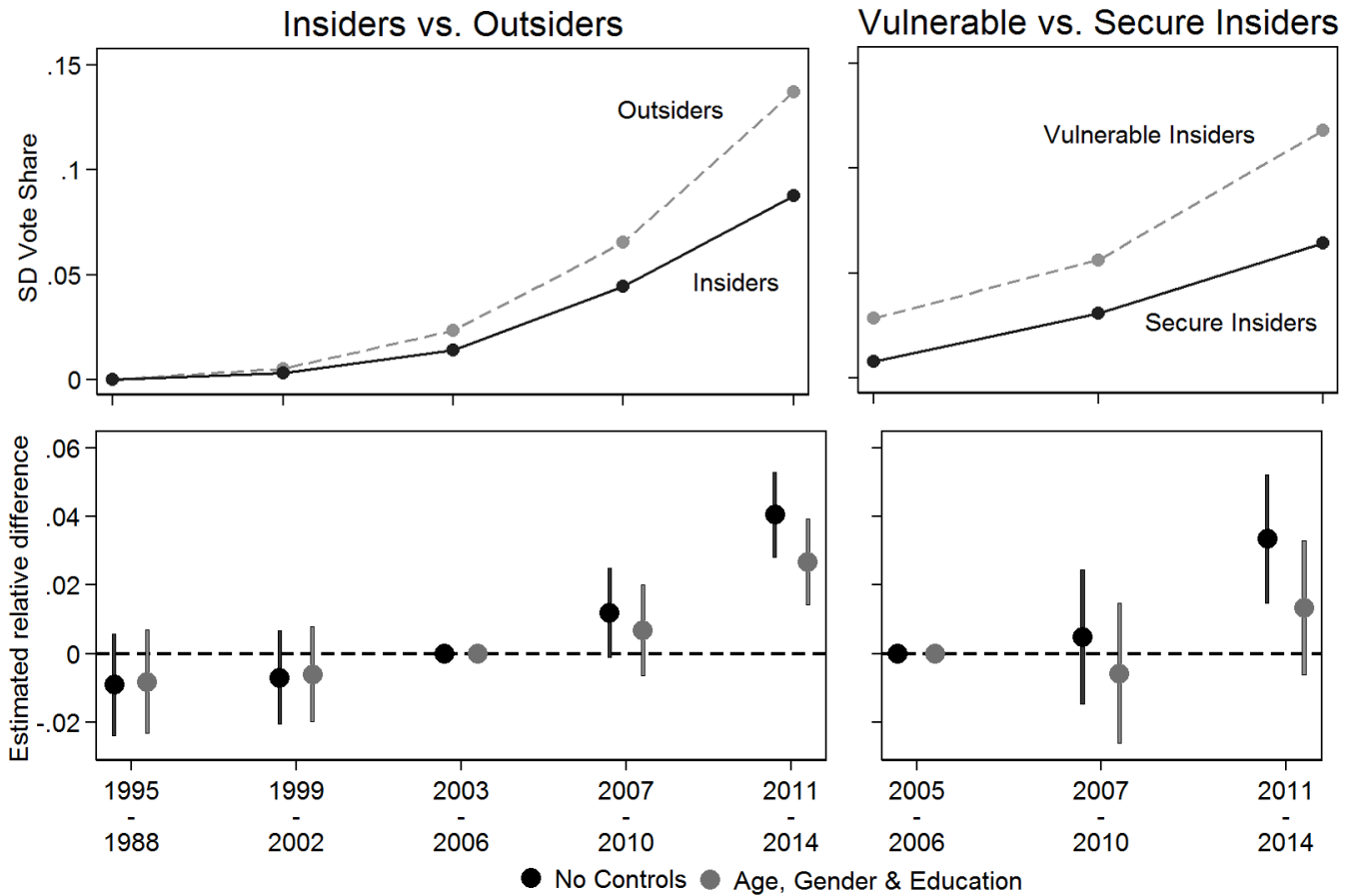


Figure 11: Support for the Sweden Democrats by labor market status in survey data

*Notes:* Data comes from the yearly SOM surveys. An insider is defined as employed and having a medium or high household income. An outsider is defined as being in an active labor market programs, unemployed, on disability pension, non-employed, or employed with a low household income. Vulnerable and secure insiders are delineated by the median RTI index, in the same way as in the main analysis.

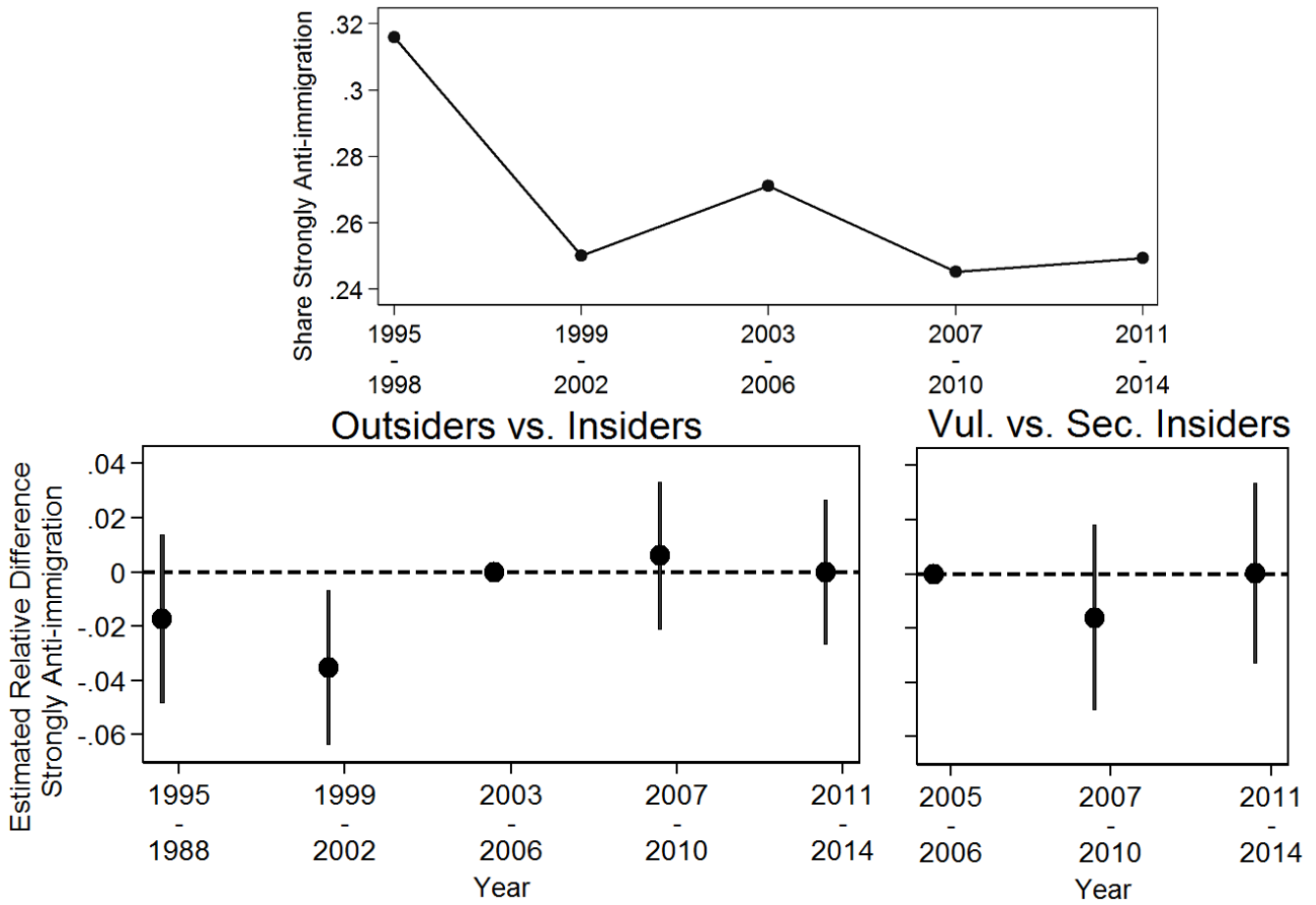


Figure 12: Immigration attitudes

Notes: Data comes from the yearly SOM surveys and are pooled by election period. Immigration preferences are measured by attitudes on the policy proposal of “Reducing refugee immigration to Sweden”. A strong anti-immigration preference is defined as considering this proposal “Very good”. See notes of Figure 11 for additional details.

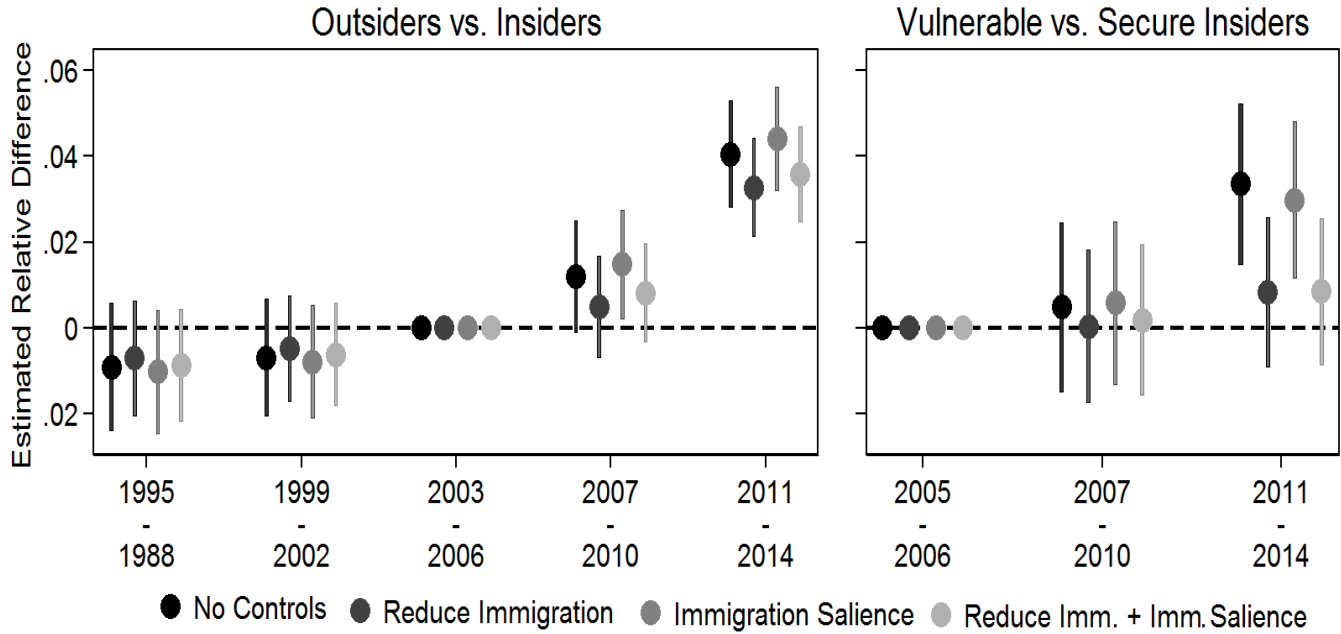


Figure 13: Support for the Sweden Democrats by labor market status with controls for immigration attitudes

Notes: Data comes from the yearly SOM surveys. See notes of Figure 11 for additional details.

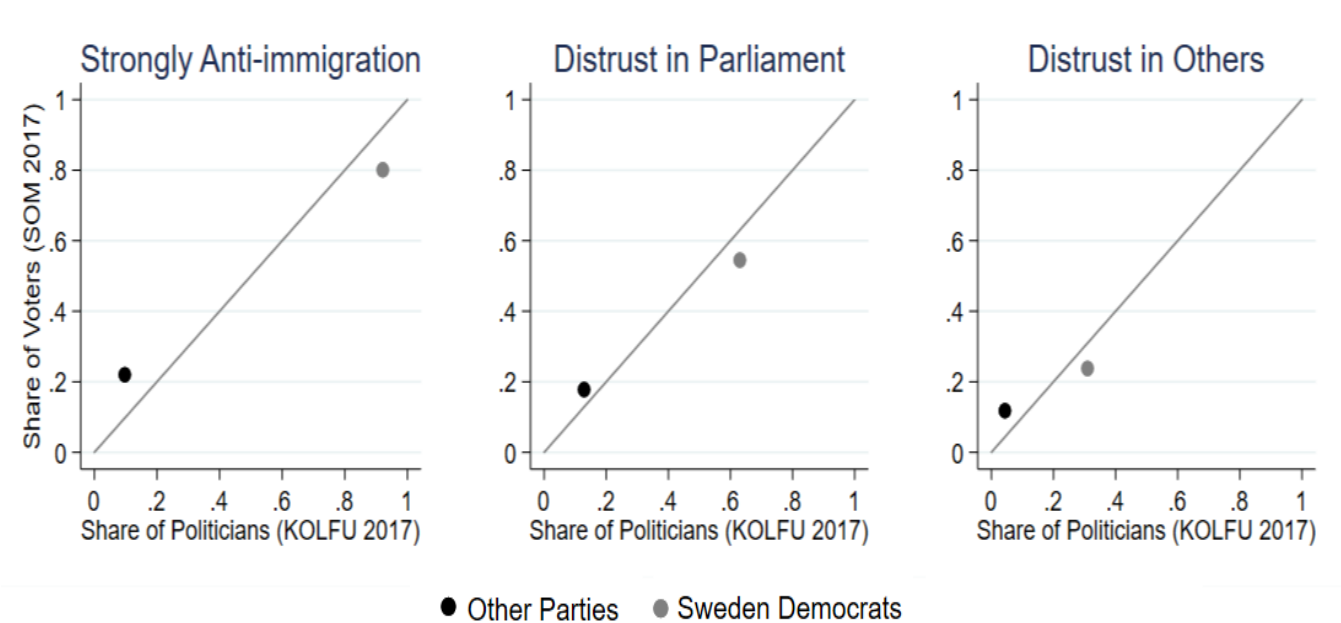


Figure 14: Trust and anti-immigration attitudes of elected councilors and self-identified voters for Sweden Democrats and other parties

Notes: Voter data is from the 2017 SOM survey. Politician data is from the 2017 KOLFU survey, which was administered to all municipal councilors.



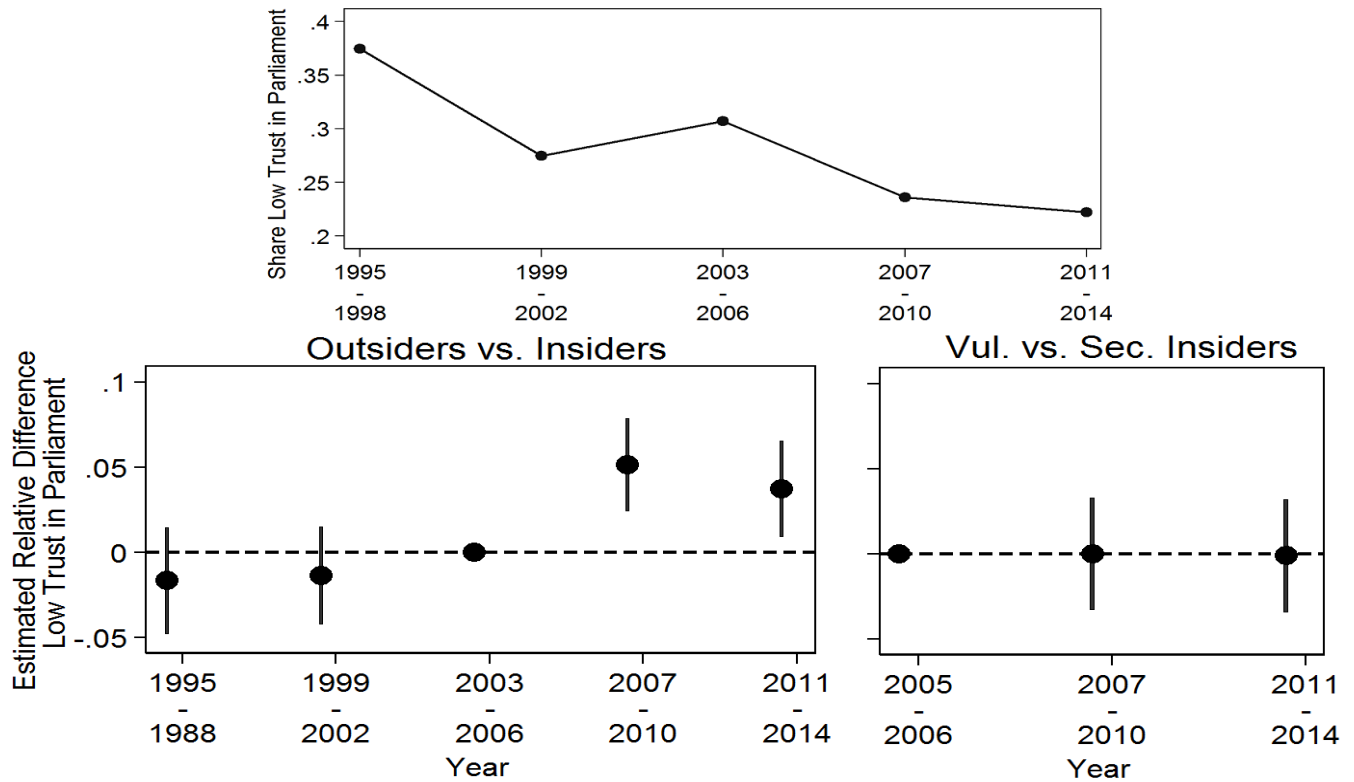


Figure 15: Low Trust in Parliament

Notes: Data comes from the yearly SOM surveys. See notes of Figure 12 for additional details.

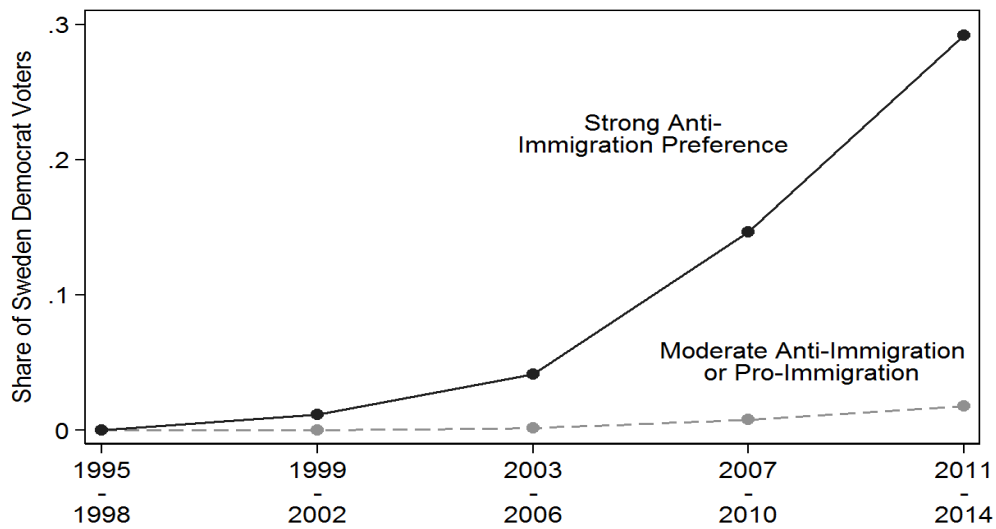


Figure 16: Support for the Sweden Democrats by anti-immigrant attitudes

Notes: Data comes from the yearly SOM surveys. See notes of Figure 12 for additional details.

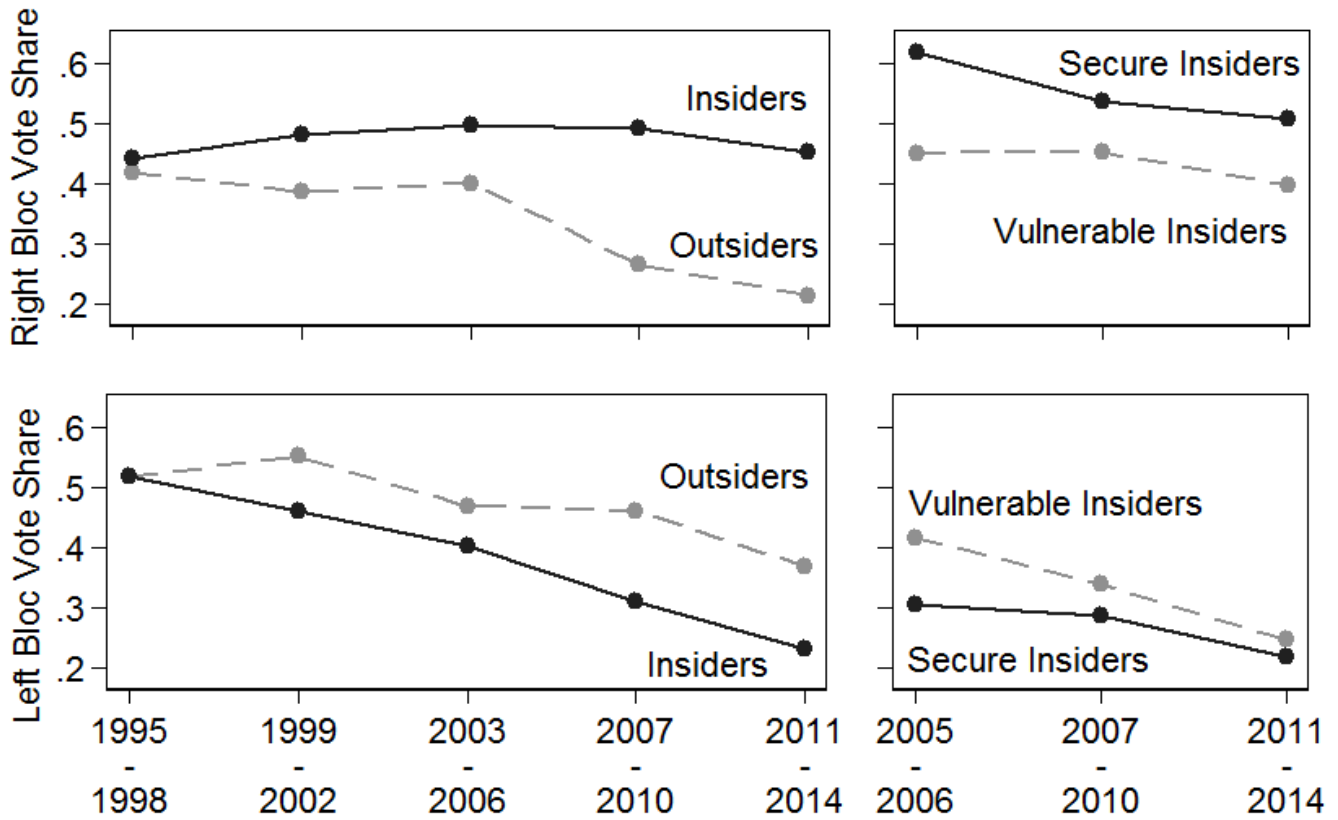


Figure 17: Political Support by Labor-Market Status for Anti-Immigration voters

Notes: Data comes from the yearly SOM surveys. See notes of Figure 12 for additional details.

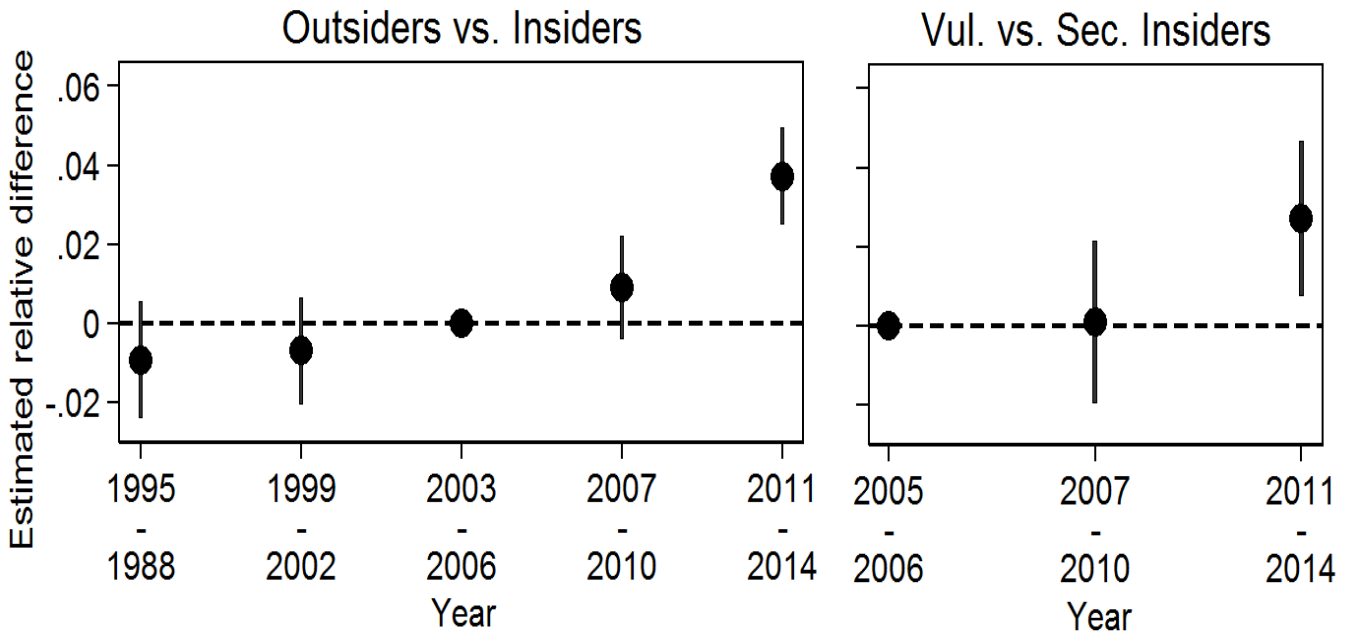


Figure 18: Support for the Sweden Democrats by labor market status in survey data, controlling for being a low-educated male worker

Notes: Data comes from the yearly SOM surveys. See notes of Figure 12 for additional details.

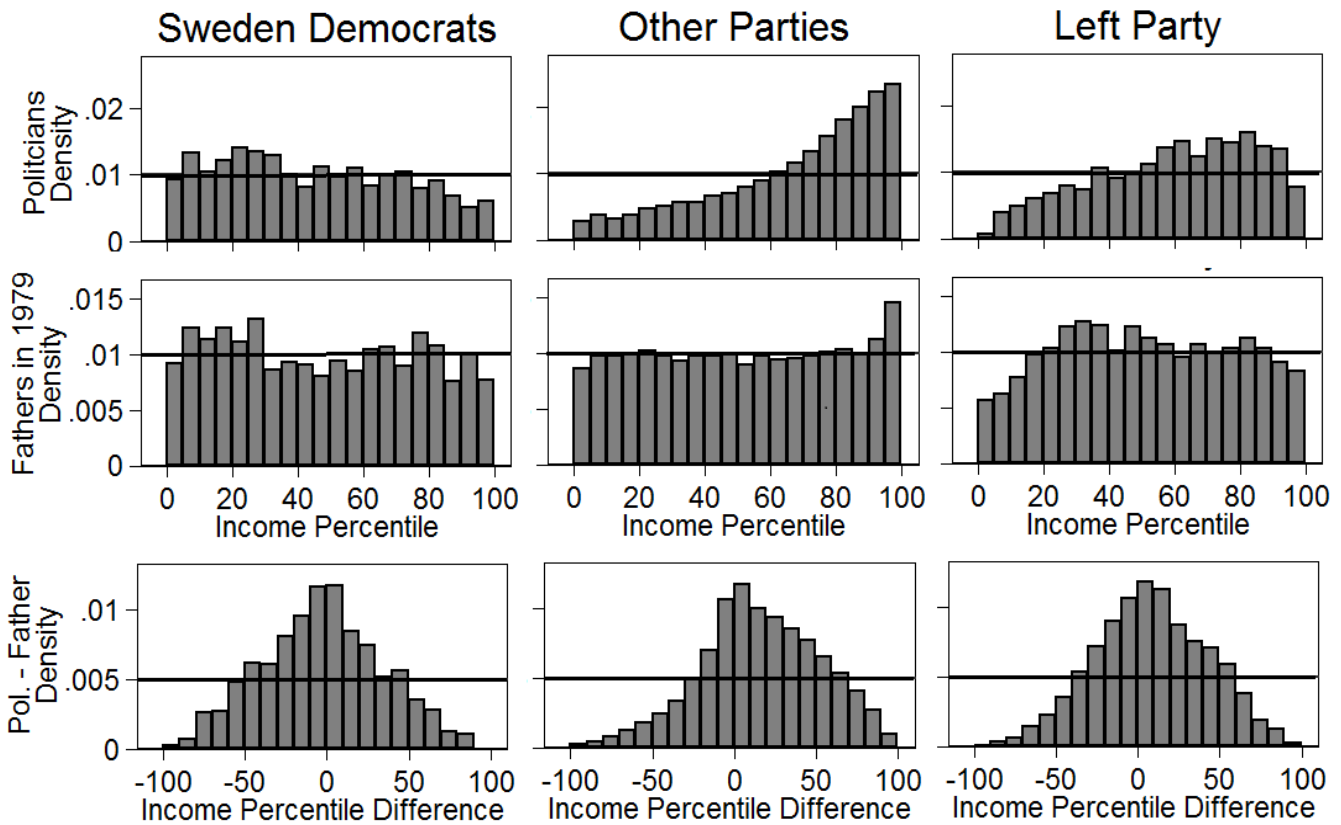


Figure 19: Income percentile of politicians elected between 2002 and 2014 (upper figures) and their fathers in 1979 (lower figures)

Notes: The income percentiles are calculated by birth year and sex at birth. Data from year 1979 were used to compute the percentiles of annual earnings for the fathers. Fathers are only included if they are of adult age in year 1979 (e.g. 18 or older).

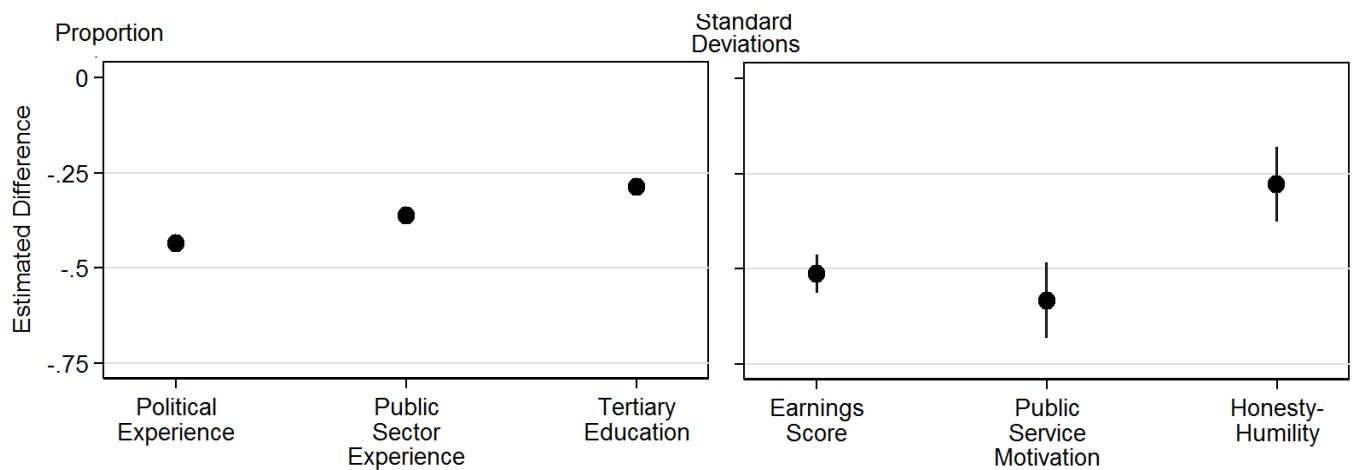


Figure 20: Traits of elected councilors of Sweden Democrats compared to councilors of other parties

Notes: Data on political experience, public sector experience, tertiary education and earnings score come from administrative registers for municipal councilors elected in 2002 to 2014. Data on public service motivation, honesty-humility and generalized trust come from the 2017 KOLFU survey.

Table 1: Basic regression results for local parliamentary

|                                    | (1)            | (2)             | (3)            | (4)             | (5)             |
|------------------------------------|----------------|-----------------|----------------|-----------------|-----------------|
| Inequality                         | 0.51<br>(0.13) | 1.27<br>(0.29)  | 0.59<br>(0.23) | 0.81<br>(0.28)  | 0.59<br>(0.28)  |
| Share of vulnerable insiders       | 0.12<br>(0.01) | -0.03<br>(0.08) | 0.10<br>(0.04) | -0.02<br>(0.08) |                 |
| D2002×Share of vulnerable insiders |                |                 |                |                 | -0.05<br>(0.01) |
| D2010×Share of vulnerable insiders |                |                 |                |                 | 0.04<br>(0.01)  |
| D2014×Share of vulnerable insiders |                |                 |                |                 | 0.22<br>(0.04)  |
| Immigrant share                    |                |                 | 0.02<br>(0.05) | -0.08<br>(0.12) | -0.04<br>(0.11) |
| Observations                       | 1,159          | 1,159           | 1,159          | 1,159           | 1,159           |
| Election Intercepts                | ✓              | ✓               | ✓              | ✓               | ✓               |
| Municipality Intercepts            |                | ✓               |                | ✓               | ✓               |
| Municipal controls                 |                |                 | ✓              | ✓               | ✓               |

Robust standard errors clustered at the municipality level are in parentheses. All regressions are estimated using OLS. Municipal controls include shares of foreign born, tertiary educated, and employed in main industrial sectors (1-digit SNI level)

Table 2: Robustness of results to inequality measurement and excluding immigrants

|                                    | (1)           | (2)             | (3)             | (4)             |
|------------------------------------|---------------|-----------------|-----------------|-----------------|
| Inequality                         | 3.82<br>(1.2) | 2.62<br>(1.11)  | 0.65<br>(0.29)  | 1.02<br>(0.42)  |
| D2002×Share of vulnerable insiders |               | -0.05<br>(0.01) | -0.05<br>(0.01) | -0.06<br>(0.02) |
| D2010×Share of vulnerable insiders |               | 0.04<br>(0.01)  | 0.04<br>(0.01)  | 0.05<br>(0.02)  |
| D2014×Share of vulnerable insiders |               | 0.20<br>(0.03)  | 0.23<br>(0.04)  | 0.18<br>(0.04)  |
| Observations                       | 1,159         | 1,159           | 1,159           | 1,159           |
| Election Intercepts                | ✓             | ✓               | ✓               | ✓               |
| Municipality Intercepts            | ✓             | ✓               | ✓               | ✓               |
| Municipal controls                 | ✓             | ✓               | ✓               | ✓               |
| Immigration adjusted vote share    |               |                 | ✓               | ✓               |

Robust standard errors clustered at the municipality level are in parentheses. See notes of Table 1 for details.

# Web Appendix

## Economic Losers and Political Winners: Sweden's Radical Right

Ernesto Dal Bó, Frederico Finan, Olle Folke,  
Torsten Persson, and Johanna Rickne

### **W1. Economically Vulnerable Populations in Swedish Survey Data**

Swedish social scientists have relied on survey data to reject the idea that economic insecurity or long-term economic and social decline can explain Sweden-Democrat voting (most notably Sannerstedt 2014, 2015, and Jylhä et al. 2018). They present two main pieces of evidence to arrive at this conclusion: (1) A *majority* of the party's voters do not self-report to be among the unemployed, enrolled in an unemployment program, on long-term sick leave or on disability pension. (2) The income distribution of self-reported Sweden Democrat voters is highly similar to the income distribution of the population.

We take issue with the definitions and the data quality underlying this analysis. On the definition point, using the categories of unemployed, and sickness or disability pension recipients may be a reasonable proxy for the *economically marginalized*. But it leaves out some social support systems as well as low-income seniors. More importantly, other economically insecure voters are not captured by the proxy. The sociological construct of the SELMA model, which we use in this paper, highlights the differences between a core labor force (that we call insiders) and other groups with an unstable status in the labor market. These people, who make up 11% of the voting population in our data, go back and forth between employment and non-employment but do not qualify for other support systems as their main source of income. Another point we highlight in this paper is that economic insecurity can be very real also among people with more stable employment, because of sectoral or occupational variation in the risk of losing one's job from e.g. automation, digitization, or globalization. Taken together, the segments of workers who face significant economic insecurity are a lot larger than the economically marginalized.<sup>1</sup>

---

<sup>1</sup>Another analytical point is that social-insurance recipients do not correspond well to the broader theory of "losers from modernity". As explained in Section 2 of the text, this theory speaks about the development of higher education, gender and racial equality, globalization of industrial production, and the expansion of the public and service sectors. The losers of modernity may thus include men, people with low education, and those with jobs in the industrial sector. The Sweden

When it comes to data quality, survey data is not stratified on income or other labor-market variables. Neither is it stratified on region of birth. Even though survey respondents may be representative of the population income distribution, these multiple sources of prospective measurement error may make it highly unrepresentative in terms of labor-market categories. In the low-income category, students are more likely to respond at the same time as foreign-born and social-support recipients are less likely to respond. The low response rate for foreign-born people is likely to overstate the Sweden democrat vote share upwards, while the low response rates for social-support recipients is likely to understate it.

Calculating response rates for subgroups of the population in surveys is difficult since sub-group characteristics are typically self-reported, or unavailable for the full population. An exception to this rule is the 2010 Swedish National Election Survey (NES), which partly builds on register-based measures. This survey also has a very high response rate, 69 percent, meaning that differential response rates is probably a smaller problem than in other surveys (e.g., the SOM survey that we use in Section 5 of the text has a response rate of 50 percent). In the NES, the share of Sweden Democrats voters was 3.8 percent in 2010, which under-represented the party's actual vote share in the 2010 election by more than a third (the party won 5.7 percent of the vote). NES includes two register-data variables that we can compare to the full population: taxable income, which is available in the survey as the respondent's population percentile, and level of education, which we can compare to the population distribution in our register data.

The results are shown in Table W1. It shows that voters with low income and education are clearly underrepresented, while those with high income or education are over-represented in the NES. For example, the coverage of voters in the lowest 15 percentiles is 77 percent, while those with primary education have an average representation of less than 80 percent. If we would look at the intersection of these groups, the relative response rate would in all likelihood be even lower. Although this issue may not be too important when we look for the probability that certain groups vote Sweden Democrat, it creates a large problem if we look to describe the "typical" Sweden Democrat voter, as the missing voters are more likely to have low income and education.

## **W2. Individual level survey data**

**Measurement.** We use survey data to study shift of attitudes. We focus on three attitudinal variables as measured in the annual SOM survey, the largest annual Swedish voter survey, with a nationally representative sample of respondents in the 16-85 age interval. The sample size grows over time from approximately 1,800 persons in 1995

---

Democrats is over-represented in all these categories in survey data, who in 2010 accounted for 86% of the party's voters

to 8,500 in 2014, for a total of 80,207 respondents. Throughout the analysis we use sample weights by sex, education (high or low), age (four groups), and geographic region (4 groups).

For 86 percent of our sample, we have information on labor-market status and household income (variables *lmsit* and *hinc3rel*). We exclude students and retirees, another 14 percent of the overall sample, and classify the remaining 50,000+ respondents as either insiders or outsiders. An insider is either employed and has a medium or high household income. An outsider is defined as being in an active labor market programs, unemployed, on disability insurance, non-employed, or employed with a low household income. Among the respondents in the voter survey, labor market outsiders are 25 percent of the non-student, non-retiree population, a smaller proportion than in the register-based SELMA definition used in the main text. We further define insiders as vulnerable or secure by having an occupation above or below the median RTI index. With this definition, which is the same as in the main text, 40 percent of the insiders in the survey data are classified as vulnerable, which is close to the proportion in the register data.

Anti-immigration attitudes are captured by preferences for the policy proposal to "Reduce refugee immigration," where respondents are asked to use a scale from 1 to 5 to rate this proposal as (1) "Very good", (2) "Good", (3) "Neither good nor bad", (4) "Bad", and (5) "Very bad". Strong anti-immigration preferences are captured by a dummy variable for choosing most negative value (5) on this scale. Anti-establishment sentiments are measured with "Trust in Parliament", measured in the survey as (1) "Very much trust", (2) "Some trust", (3) "Neither a lot nor a little trust", (4) "Little trust", and (5) "Very little trust". Having low trust is defined as choosing either (4) or (5). The SOM-survey is divided into modules. The immigration and trust questions were included in all modules, and have 56 020 and 54 426 person-year observations, respectively.

We also use control variables for sex (women are 52 percent of the sample), low-educated (23.8 percent, measured as below high school by the variable *edu3*) and 4 age categories, below 35 (25.1 percent, 35 to 49 (25.9 percent) 50 to 64 (27.2 percent) and above 65 (23.4 percent).

### **W3. Robustness of the basic vote-share results**

#### **Excluding the influence of immigrant voters**

We re-calculate the vote share for the Sweden Democrats to remove interference from immigration, as surveys show that likelihood for immigrants to vote for the Sweden Democrats varies considerably by region of birth. People growing up in other Nordic countries, or in Europe, self-report very similar voting probabilities as Sweden-born (Statistics Sweden 2011, 2016). By contrast, the rate is below 1 percent (reported as 0 percent) for people growing up outside of Europe. Simply removing all people in this category from the

denominator when computing the Sweden Democrat's vote share would be an over-adjustment, however, because the franchise and turnout rates are not close to one in this group. Two public databases from Statistics Sweden can be used to compute true rates of eligibility and turnout in our sample period of 2002–2014. The database for eligible voters puts the average share of eligible voters at 0.75 (Statistikdatabasen för röstberättigade, [www.scb.se](http://www.scb.se)). The database for election turnout puts the turnout rate at 0.70 (Valdeltagandeundersökningen, [www.scb.se](http://www.scb.se)). With these two proportions we adjust the Sweden Democrats' vote share in each municipality or district  $r$  as:

$$\frac{\text{Number of SD votes in region } r}{\text{Number of eligible voters} - (\text{Number of people born outside Europe} * 0.75 * 0.70)}$$

We replace the outcome variable in the main regression with the adjusted vote share to get the results in Table W5.

### **Expanding the vote share regression with additional control variables**

Following the literature on radical right party voting discussed in Section 2 of the text, we construct a number of control variables and add these to the baseline regressions in Table 1.

**Immigration** data is available for first and second-generation immigrants, by region of birth (Europe, North America, etc.). At the most basic level, we expect the magnitude of the negative response to immigration by the dominant group to depend on timing and size of the incoming group, and on the ethnic distinctions between in- and out-group(s) (Blalock 1967). Our first variable measures the share of foreign-born from all other countries. The second measures foreign born outside the OECD, and the third includes foreign born outside the OECD plus people born in Sweden but with at least one parent born outside the OECD.

The so-called halo effect holds that stereotypes and negative attitudes about immigrants take hold in areas close to immigrant-dense areas, but less so in those areas themselves (e.g., Mayer and Perrineau 1992). We divide Sweden into 114 commuting zones, using the official categorization of Statistics Sweden. For about 25 percent of municipalities, the municipality itself is the commuting zone, and these are hence dropped from the estimation. We then compute the average share of immigrants - using the baseline definition of people born outside of the Nordic countries - for the commuting zone minus the municipality in question. The resulting, fourth, immigration variable is the proportion of immigrants in the commuting zone surrounding the municipality itself.

The timing of immigration may be important since new inhabitants can take time to integrate economically and socially. We compute the change in the proportion of immigrants since the last election year as our fifth immigration variable.



As discussed at length in Section 2, immigration could trigger a more severe response if immigrants contribute to pressure on labor markets or public finances. Our sixth immigration variable is the share of immigrant outsiders in the municipal population. To compute the intensity of economic competition we first take the share of immigrants among all employees in 3-digit industry codes at the national level, and then weigh each municipality's employment composition by these fractions. Our seventh immigration variable is this weighted industry share of immigrants, and the eighth variable is the election year to election year change in that variable. As the ninth and final variable we compute the share of immigrants in the composite of 3-digit occupation codes instead of industry codes.

The estimation results in Table W6 show that none of the immigration variables change the size or significance of the coefficients on insider/outsider inequality and vulnerable insiders from the main analysis. The only alternative immigration variable significantly correlated with the vote share of the Sweden Democrats is that of the share of immigrants in the commuting zone.

**Globalization** index. We use the offshoring intensity index at the 2-digit ISCO-level from Goos et al. (2014) to weigh the composition of municipal employment by this feature. The method is exactly the same as for the RTI index. Results in panel A, columns (1) and (2) show that this variable is not correlated with the outcome and does not affect our coefficients of interest.

**Media** data operationalizes the proportion of eligible voters that consume media reports on the Radical Right's core issue of immigration. At the most basic level, salience of immigration benefits the party that "owns" that issue, and positive or negative coverage can both be expected to bring votes to the radical-right party.

We collect data on newspaper content from Retriever Sweden Inc., a text database for Swedish newspaper articles. The database has usable coverage of local newspapers starting in 2002. Including both national and local newspapers, gives us a total of 160 newspapers with at least one article and at least one subscriber (further details below). Carlsson et al. (2015) calculate that the Retriever post-2006 data covers 95 percent of all printed newspapers, even after excluding national newspapers. We search each paper's archive for articles that mention "immigration" in various forms. Then, we pool the number of articles for all years in an election period and divide it by the total number of articles (on all topics). To find the consumption intensity of immigration messages in each municipality, we weigh each newspaper's share of immigration articles by the share of subscribers in the municipality. Subscriber data for all local and national newspapers can be downloaded from Tidningsservice Media facts. For 15 percent of the newspapers that appear in Retriever, we cannot find a single subscriber. The final variable contains subscription weighted immigration coverage from 108 newspapers. Results in Table W7 panel A, columns (3) and (4) show that this variable is not correlated with the outcome and does not affect our coefficients of interest.

**Electoral and party system** factors are aggregated up from the KOLFU survey with local politicians. Politicians elected in 2006 and 2010 were surveyed to measure ideologies, political preferences, and attitudes toward other parties. KOLFU was sent to all local municipal councilors and the response rate exceeded two thirds in both years (Gilljam et al. 2010, Karlsson and Gilljam 2014) Our first control variable from this data captures the politization of the left-right dimension as the difference in ideological stance between the Social Democrats and the Conservatives, i.e., left-right convergence. We compute this variable as the absolute value of the difference in means for the placements on a 10-step scale for left-right self-identification.

The second variable proxies for the Cordon Sanitaire, as the average like-dislike attitude of all other parties towards the Sweden Democrats (on a scale from Strongly Like to Strongly Dislike). Unlike the other variables in this section, this survey question was only asked to the 2010 politicians. The third variable captures the salience of the anti-immigration issue, the immigration climate, as the average policy preference for "Reducing refugee immigration to the municipality" among all non-SD politicians. We also compute this variable for the Conservatives only to capture issue competition as the fourth variable. The fifth variable captures the main left-wing party, the Social Democrats', stance on redistribution. This is captured by the reverse-coded, average policy preference in among the Social Democrats' elected local councilors for "Reducing income inequalities".

Because the political variables are available only for the two most recent election periods (2006-2010 and 2010-2014), we only run the specifications without municipality fixed effects. When those dummies are added, the main results of the paper do not hold up in this time-restricted sample. Results in panel A, column (5) of Table W7 shows that the political polarization variable does not affect the point estimates. The control variable for the cordon sanitaire (column (1) in panel B) has the expected negative sign and is significantly correlated with the Sweden Democrat vote share but does not affect our estimates of interest. The average anti-refugee sentiment of other parties (column (3) in panel B) is positively correlated with the vote share and slightly reduces the point estimate of the inequality variable.

**Crime** statistics are provided by the Swedish National Council for Crime Prevention, a government agency with state-of-the art data collection from the Swedish police and court system. We use the total number of crimes per inhabitants, and the number of crimes per inhabitants in two sub-categories: larceny (most proximate to gang violence), rape and sex offences (massively politicized by the Sweden Democrats), and total crime. In these data, attempted offences are counted as crimes, and multiple offences against the same person are each counted as an individual crime.

The crime control variables are added in Table W7, panel C and panel D. In panel C, columns (3) and (4), we see that this crime rate is

not correlated with the Sweden Democrats' vote share and does not affect the estimates of interest. The crime rate of rape and sex offences in panel C, columns (5) and (6) is positive and statistically significant, but does not affect our estimates of interest. Finally, the total crime rate, panel D, columns (1) and (2), is positive and statistically significant. Adding this variable reduces the magnitude of the coefficients on both outsiders and vulnerable insiders in the cross section (column 1) but does not affect the estimates in the specification with municipality fixed effects (column 2).

**Full set of controls.** In panel D, column (3) of Table W7 we add all control variables for media, political factors (except for the cordon sanitaire variable), and crime. Due to the time restriction for the political variables we only run the cross-sectional specification without municipality fixed effects. When we add all controls, inequality is no longer significant at the 10% percent level. In column (5) and (6), we remove the political controls to show that these are what make inequality drop out. Out of these variables, it is attitudes toward immigration of the other parties that affects the inequality variable, and not the control for polarization, the left's attention to redistribution, nor the right's attitude to immigration.

## Web Appendix References

- Gilljam, Mikael, David Karlsson & Anders Sundell (2010a) Politik på hemmaplan. Tiotusen fullmäktigeledamöter tycker om demokrati., Stockholm: skl Kommentus.
- Karlsson, David, and Mikael Gilljam (eds). 2014. *Svenska politiker: Om de folkvalda i riksdag, landsting och kommuner* (Swedish Politicians: Elected Representatives in Parliament, Counties, and Municipalities). Stockholm: Santérus Förlag.
- Mayer, Nonna and Pascal Perrineau (1992). "Why Do They Vote for Le Pen?" In: *European Journal of Political Research* 22, pp. 123-141.
- Carlsson, Magnus, Dahl, Gordon, B. and Dan-Olof Rooth. 2015. Do Politicians Change Public Attitudes? NBER Working Paper No. w21062.
- Goos, Maarten, Manning, Allan, and Anna Salomons. 2014. Explaining Job Polarization: Routine-Biased Technological Change and Offshoring. *American Economic Review* 104(8): 2509-26.
- Jylhä, Kirsti, Rydgren, Jens and Pontus Strimling. 2018. Sverigedemokraternas väljare. Vilka är de, var kommer de ifrån och vart är de på väg? (*The Sweden Democrats' voters: Who are they, where do they come from and where are they going?*). IFFS Report.

Sannerstedt, Anders (2014) Sverigedemokraternas sympatisörer i Annika Bergström & Henrik Oscarsson (red) Mittfåra & marginal. Göteborgs universitet: SOM-institutet.

Sannerstedt, Anders (2015) Hur extrema är Sverigedemokraterna? i Annika Bergström, Bengt Johansson, Henrik Oscarsson & Maria Oskarson (red) Fragment. Göteborgs universitet: SOM-institutet

Statistics Sweden. 2016. Flytande väljare (Floating Voters). Demokratistatistisk rapport 21.

Statistics Sweden. 2011. Åttapartivalet 2010 Allmänna valen Valundersökningen (The Eight Parties Election 2010 General elections, election study).

Figure W1. Political platforms of the Conservatives,  
Social Democrats, and Sweden Democrats.

Notes: Data from the CHESDATA expert survey on party platforms. The left-hand side graph shows the Right-Left policy positions and the right-hand side shows Immigration policy.

Table W1: Response rates for income and education categories  
in the 2010 Electoral Survey.

|                               | Share of<br>respondents | Share of<br>population | Over/under<br>Representation |
|-------------------------------|-------------------------|------------------------|------------------------------|
| <b>Taxable income</b>         |                         |                        |                              |
| 1-15 percentile               | 12%                     | 15%                    | 77%                          |
| 15-35 percentile              | 17%                     | 20%                    | 87%                          |
| 36-65 percentile              | 31%                     | 30%                    | 104%                         |
| 66-85 percentile              | 22%                     | 20%                    | 111%                         |
| 86-100 percentile             | 18%                     | 15%                    | 118%                         |
| <b>Education level</b>        |                         |                        |                              |
| Primary, less than<br>9 years | 7%                      | 12%                    | 65%                          |
| Primary at least 9<br>years   | 10%                     | 11%                    | 84%                          |
| Secondary<br>education        | 46%                     | 55%                    | 83%                          |
| Tertiary education            | 36%                     | 31%                    | 116%                         |
| Doctoral degree               | 1%                      | 1%                     | 130%                         |

Table W2: Categorization rules for the *Social Exclusion and Labour Market Attachment (SELMA) Model*.

|  |  |
|--|--|
| <b>Core labor force</b><br>(Kärnarbetskraft)       | Labor income that exceeds 3.5 price base amounts in at least two out of three years. Zero income from early retirement. Extensive sick leave, unemployment or work income above 1 but below 3.5 price base amounts can exist in at most one out of three years.  |
| <b>Unstable labor force</b> (Instabil arbetskraft) | A unified category for several subcategories that lie between the core labor force and other statuses and which are usually merged.  |
|  | <b><i>Toward establishment or re-establishment</i></b>   |
|  | Labor income of at least 3.5 price base amounts in the last of the three years. No work income at all in the first year. Extensive sick leave, early retirement, unemployment benefits or labor income of less than 0.5 price base amounts can exist in one or two years out of three.   |
|  | <b><i>Unstable labor force</i></b>   |
|  | Participants in the workforce without extensive sick leave, early retirement or unemployment in at least two out of three years. Labor income below 0.5 or above 3.5 price base amounts can exist in one year at most. This category includes part time workers with annual incomes between 0.5-3.5 price base amounts. It also includes some students with part time jobs.  |
|  | <b><i>In the margins of the labor market</i></b>   |
|  | People with a weakened connection to the labor market. The relationship to the labor market is different in each of the three years. Labor income may also be between 0.5-3.5 price base amounts in the first year, and below 0.5 amounts in the last year.  |
|  | <b><i>Alternative sustenance</i></b>   |
|  | Persons who do not belong to any other category and who have labor income below 0.5 PBB in two out of three years.   |
| <b>Students and military basic training</b>        | Students are categorized purely on the income sources in year three, the current year. Any incomes are allowed for the first two years, but in year three, labor income should be below 3.5 PBB and the person should either have nonzero student benefits (t. ex. studiemedel or studiebidrag) or be registered as an attendee of tertiary education.<br><br>Military basic training income above 1 PBB and labor income below 0.5 PBB in year two out of the three years, or in the most recent year only. |
| <b>Extensive sickness absence</b>                  | At least 90 days of registered gross sick leave (re-calculated to 64 days of net leave at 5/7 of gross days)   |
| <b>Early retirement and permanent disability</b>   | Early retirement benefits of at least 1 PBB and labor income below 0.5 PBB in at least two out of three years.   |
| <b>Excluded</b>                                    | <b><i>Extensive unemployment</i></b>   |
|  | Labor income below 0.5 PBB and registered unemployment of at least 180 days in two out of three year.  |
|  | <b><i>Economically inactive</i></b>  |
|  | Persons who do not belong to any other category and who have labor income below 0.5 PBB in all three years.  |
|  | <b><i>Recent immigrant</i></b>   |
|  | Immigrated in the t or t-1, and did not live in the country in year t-3.   |
| <b>Age-based retirement</b>                        | Labor income below 0.5 PBB and income from age-based retirement (all types) that exceed 1 PBB.   |

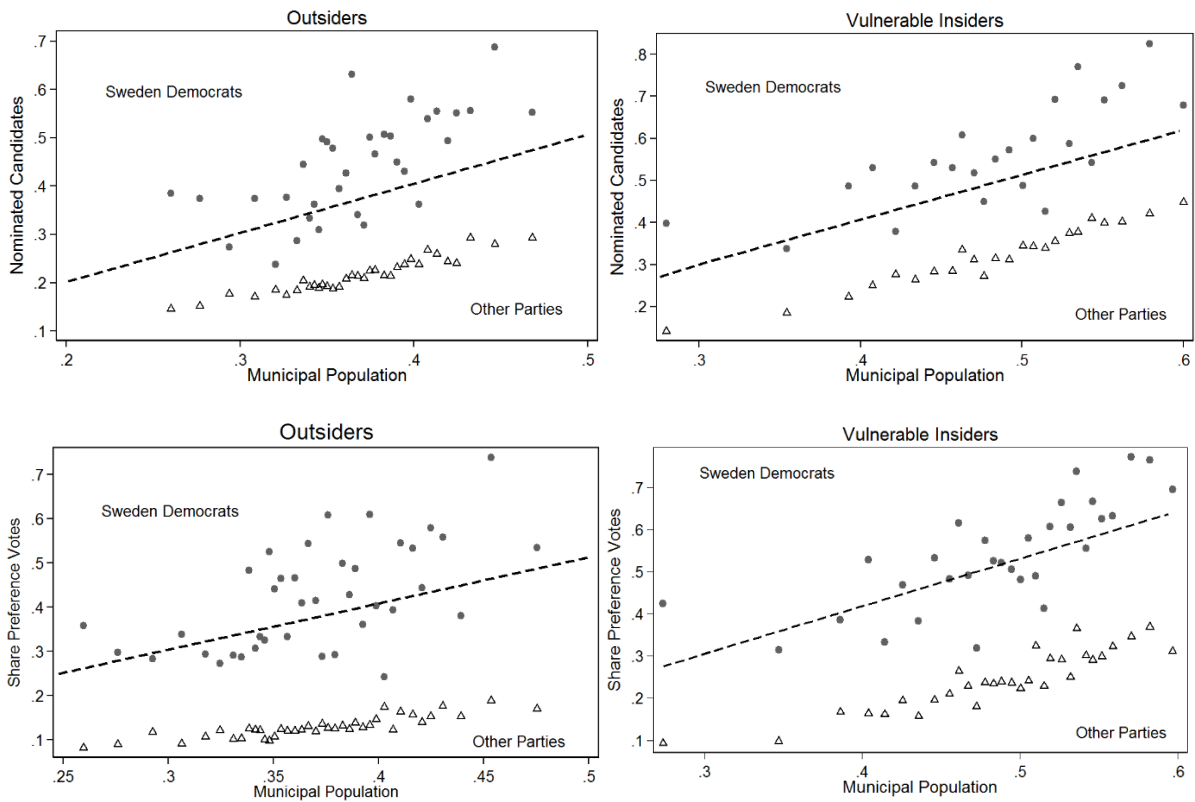


Figure W2: Share of outsiders (left) and share of vulnerable insiders (right) among nominated councilors (top) and preference-vote recipients (bottom), plotted against same shares of municipal population.

Table W3: Separating the inequality variable into income differences and shares of outsiders.

|                      | (1)               | (2)               | (3)               | (4)               | (5)                |
|----------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| Income difference    | 0.06***<br>(0.01) | 0.06***<br>(0.02) | 0.06***<br>(0.02) | 0.05***<br>(0.01) | 0.03***<br>(0.01)  |
| Share outsiders      | 0.00<br>(0.02)    | 0.12<br>(0.08)    | -0.08<br>(0.05)   | 0.02<br>(0.10)    | -0.00<br>(0.10)    |
| Share vul.ins.       | 0.13***<br>(0.01) | -0.05<br>(0.08)   | 0.09**<br>(0.04)  | -0.03<br>(0.08)   |                    |
| D2002*Share vul.ins. |                   |                   |                   |                   | -0.05***<br>(0.01) |
| D2010*Share vul.ins. |                   |                   |                   |                   | 0.04***<br>(0.01)  |
| D2014*Share vul.ins. |                   |                   |                   |                   | 0.22***<br>(0.04)  |
| Immigrant share      |                   |                   | 0.01<br>(0.05)    | -0.04<br>(0.12)   | -0.01<br>(0.11)    |
| Observations         | 1,159             | 1,159             | 1,159             | 1,159             | 1,159              |
| Election FE          | x                 | x                 | x                 | x                 | x                  |
| Municipality FE      |                   | x                 |                   | x                 | x                  |
| Municipal controls   |                   |                   | x                 | x                 | x                  |

Notes: \*\*\*p < 0.01, \*\*p < 0.05, \*p < 0.1. Robust standard errors clustered at the municipality level are in parentheses. All regressions are estimated using OLS. Municipal control variables are the share of foreign born, share with tertiary education, and share employed in each of the nine 1-digit industrial sectors.



Table W4: Replication of Table 1 when removing the share of Non-European immigrants.

|                      | (1)               | (2)               | (3)               | (4)               | (5)                |
|----------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| Inequality           | 0.63***<br>(0.14) | 1.55***<br>(0.28) | 0.64***<br>(0.23) | 0.87***<br>(0.28) | 0.65**<br>(0.29)   |
| Share vul.ins.       | 0.12***<br>(0.01) | -0.04<br>(0.08)   | 0.10**<br>(0.04)  | -0.02<br>(0.08)   |                    |
| D2002*Share vul.ins. |                   |                   |                   |                   | -0.05***<br>(0.01) |
| D2010*Share vul.ins. |                   |                   |                   |                   | 0.04***<br>(0.01)  |
| D2014*Share vul.ins. |                   |                   |                   |                   | 0.23***<br>(0.04)  |
| Immigrant share      |                   |                   | 0.08<br>(0.05)    | 0.08<br>(0.12)    | 0.12<br>(0.11)     |
| Observations         | 1,159             | 1,159             | 1,159             | 1,159             | 1,159              |
| Election FE          | x                 | x                 | x                 | x                 | x                  |
| Municipality FE      |                   | x                 |                   | x                 | x                  |
| Municipal controls   |                   |                   | x                 | x                 | x                  |

Notes: See notes for Table W3.

Table W5: Replication of Table 1 with municipal election results.

|                      | (1)               | (2)               | (3)              | (4)               | (5)                |
|----------------------|-------------------|-------------------|------------------|-------------------|--------------------|
| Inequality           | 0.66***<br>(0.20) | 2.10***<br>(0.38) | 0.66**<br>(0.28) | 1.27***<br>(0.42) | 1.02**<br>(0.42)   |
| Share vul.ins.       | 0.06***<br>(0.02) | -0.06<br>(0.10)   | 0.13**<br>(0.05) | 0.02<br>(0.11)    |                    |
| D2002*Share vul.ins. |                   |                   |                  |                   | -0.06***<br>(0.02) |
| D2010*Share vul.ins. |                   |                   |                  |                   | 0.05***<br>(0.02)  |
| D2014*Share vul.ins. |                   |                   |                  |                   | 0.18***<br>(0.04)  |
| Immigrant share      |                   |                   | 0.14**<br>(0.07) | 0.34*<br>(0.18)   | 0.40**<br>(0.17)   |
| Observations         | 1,159             | 1,159             | 1,159            | 1,159             | 1,159              |
| Election FE          | x                 | x                 | x                | x                 | x                  |
| Municipality FE      |                   | x                 |                  | x                 | x                  |
| Municipal controls   |                   |                   | x                | x                 | x                  |

Notes: See notes for Table W3.

Table W6: Interacting the immigrant share and economic-insecurity variables.

|                              | (1)                | (2)               | (3)                | (4)                |
|------------------------------|--------------------|-------------------|--------------------|--------------------|
| Inequality                   | 0.61***<br>(0.23)  | 0.80**<br>(0.38)  | 0.87***<br>(0.32)  | 0.70*<br>(0.38)    |
| Inequality* Imm.<br>Share    | -0.90<br>(1.82)    | 1.25<br>(1.77)    | -1.33<br>(1.62)    | -0.14<br>(1.73)    |
| Share vul.ins.               | -0.04<br>(0.03)    | 0.34***<br>(0.08) | 0.00<br>(0.05)     | -0.22***<br>(0.08) |
| Share vul.ins* Imm.<br>Share | 1.79***<br>(0.30)  | 5.35***<br>(0.48) | 1.89***<br>(0.26)  | 3.63***<br>(0.57)  |
| Immigrant share              | -0.77***<br>(0.13) | 2.50***<br>(0.21) | -0.87***<br>(0.12) | -1.64***<br>(0.28) |
| Observations                 | 1,159              | 1,159             | 1,159              | 1,159              |
| Election FE                  | x                  | x                 | x                  | x                  |
| Municipality FE              |                    | x                 |                    | x                  |
| Municipal controls           |                    |                   | x                  | x                  |

Notes: See notes for Table W3.

Table W7: Table 1 with an expanded set of immigration controls.

|                             | (1)                   | (2)             | (3)              | (4)             | (5)              | (6)             |
|-----------------------------|-----------------------|-----------------|------------------|-----------------|------------------|-----------------|
| Inequality                  | 0.90**<br>*           | 0.66**          | 0.90**<br>*      | 0.85**<br>*     | 0.91**<br>*      | 0.93**<br>*     |
|                             | (0.20)                | (0.30)          | (0.23)           | (0.26)          | (0.23)           | (0.25)          |
| Share vul.ins.              | 0.10**                | -0.03           | 0.10**           | -0.02           | 0.10**           | -0.02           |
|                             | (0.04)                | (0.08)          | (0.04)           | (0.08)          | (0.04)           | (0.08)          |
| Imm sh, all countries       | 0.05**<br>(0.02)      | 0.02<br>(0.13)  |                  |                 |                  |                 |
| Imm sh, non OECD            |                       |                 | -0.07<br>(0.05)  | -0.16<br>(0.13) |                  |                 |
| Imm sh, no OECD, include 2g |                       |                 |                  |                 | -0.07<br>(0.05)  | -<br>(0.10)     |
| Observations                | 1,159                 | 1,159           | 1,159            | 1,159           | 1,159            | 1,159           |
| Inequality                  | 0.44**<br>(0.20)      | 0.71**<br>*     | 0.61**<br>*      | 0.65**<br>*     | 0.54**           | 0.65**          |
|                             | 0.12**                | (0.24)          | (0.20)           | (0.23)          | (0.24)           | (0.29)          |
| Share vul.ins.              | *<br>(0.04)           | 0.03<br>(0.09)  | 0.10**<br>(0.04) | -0.04<br>(0.08) | 0.10**<br>(0.04) | -0.03<br>(0.08) |
| Imm sh, commuting zone      | 0.22**<br>*<br>(0.04) | 0.11<br>(0.12)  |                  |                 |                  |                 |
| Imm sh, change              |                       |                 | 0.17<br>(0.16)   | 0.22*<br>(0.13) |                  |                 |
| Imm sh, outsiders           |                       |                 |                  |                 | 0.06<br>(0.10)   | 0.05<br>(0.20)  |
| Observations                | 896                   | 896             | 1,159            | 1,159           | 1,157            | 1,157           |
| Inequality                  | 0.66**<br>*           | 0.60**<br>*     | 0.70**<br>*      | 0.71**<br>*     | 0.74**<br>*      | 0.74**<br>*     |
|                             | (0.19)                | (0.22)          | (0.19)           | (0.23)          | (0.19)           | (0.22)          |
| Share vul.ins.              | 0.10**<br>(0.04)      | -0.03<br>(0.08) | 0.10**<br>(0.04) | -0.03<br>(0.08) | 0.10**<br>(0.04) | -0.02<br>(0.08) |
| Imm sh, industry            | 0.08<br>(0.34)        | 0.50<br>(0.46)  |                  |                 |                  |                 |
| Imm sh, industry change     |                       |                 | -0.40<br>(0.62)  | -0.73<br>(0.44) |                  |                 |
| Imm sh, occupation insiders |                       |                 |                  |                 | -0.24<br>(0.32)  | -0.41<br>(0.43) |
| Observations                | 1,159                 | 1,159           | 1,159            | 1,159           | 1,159            | 1,159           |
| Election FE                 | x                     | x               | x                | x               | x                | x               |
| Municipality FE             |                       | x               |                  | x               |                  | x               |
| Municipal controls          | x                     | x               | x                | x               | x                | x               |

Notes: See notes for Table W3.



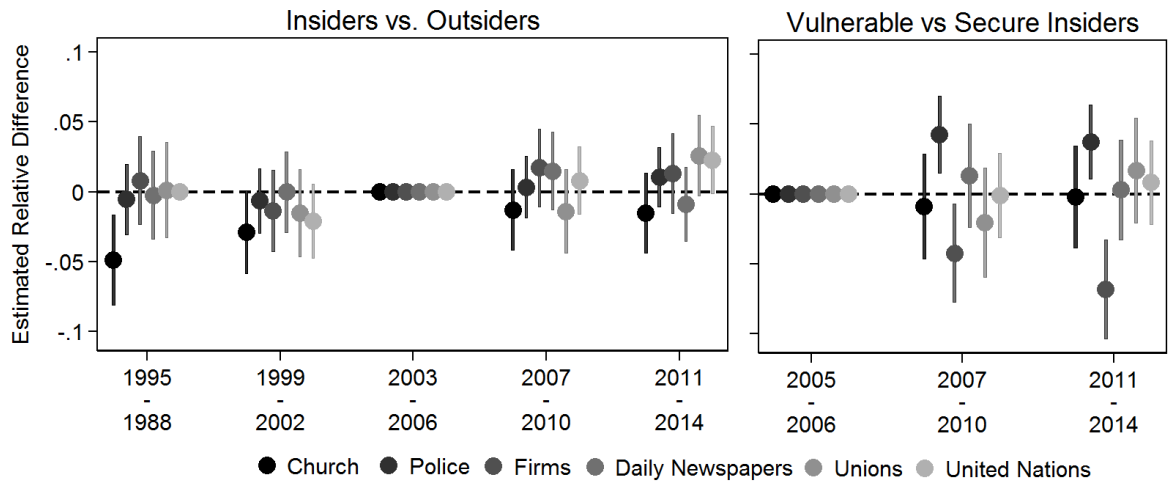
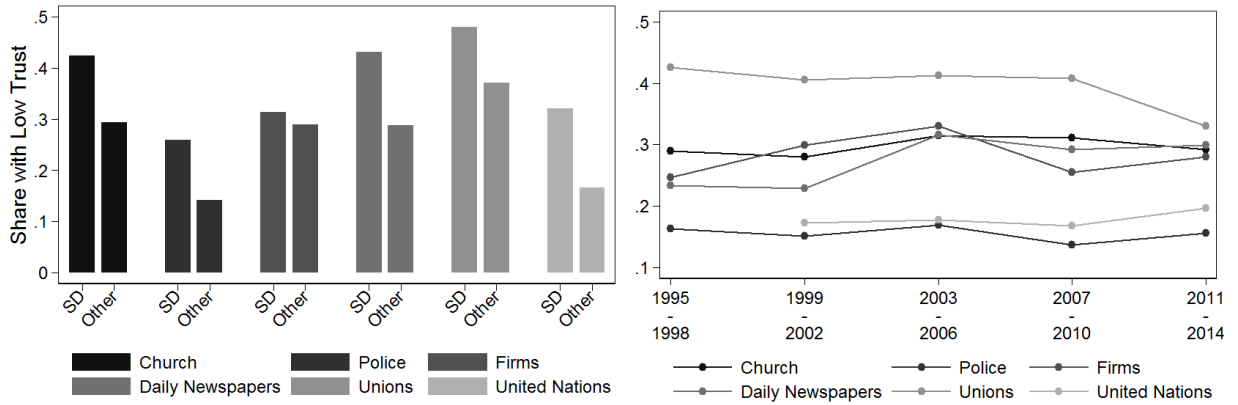


Figure W3: Trust in non-political institutions

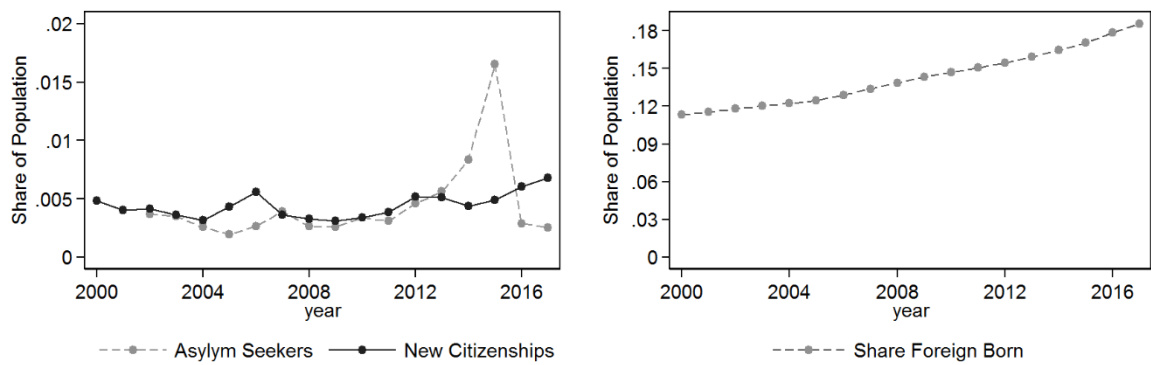


Figure W4: Development of immigration over time

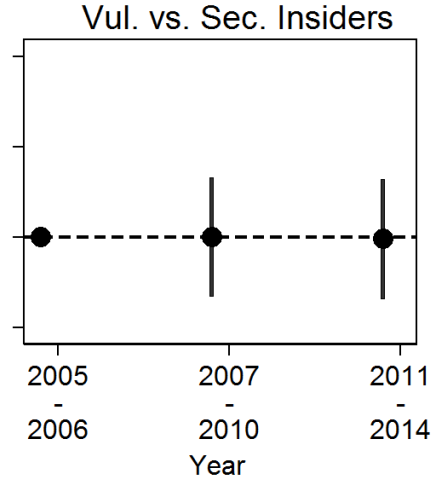
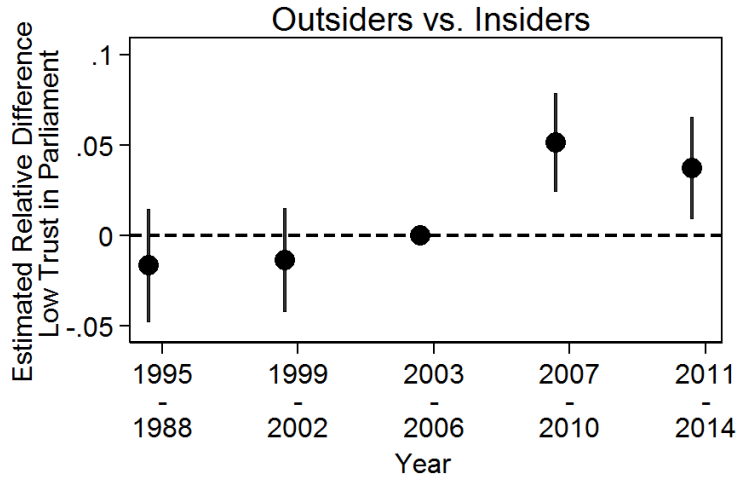
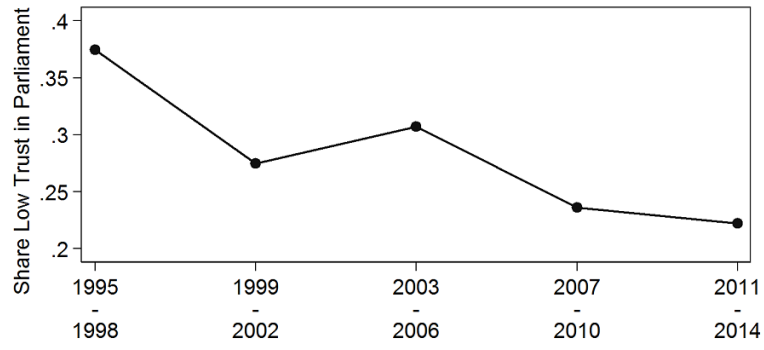


Table W8: Table 1 with controls for immigration, globalization, media salience of the immigration issue, political structure, and crime rates.

| Panel A.                 | (1)               | (2)               | (3)               | (4)               | (5)               | (6)               |
|--------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Inequality               | 0.47*<br>(0.26)   | 0.39<br>(0.62)    | 0.62**<br>(0.29)  | 0.46<br>(0.63)    | 0.60***<br>(0.23) | 0.80***<br>(0.28) |
| Share vul.ins.           | 0.22***<br>(0.06) | -0.49**<br>(0.23) | 0.18**<br>(0.07)  | -0.43*<br>(0.25)  | 0.09**<br>(0.04)  | -0.02<br>(0.08)   |
| Anti-refugee             | 0.04***<br>(0.00) | 0.01<br>(0.01)    |                   |                   |                   |                   |
| Anti-refugee, right bloc |                   |                   | 0.01***<br>(0.00) | 0.00<br>(0.00)    |                   |                   |
| Globalization insiders   |                   |                   |                   |                   | 0.01<br>(0.01)    | -0.00<br>(0.01)   |
| Observations             | 580               | 580               | 557               | 557               | 1,159             | 1,159             |
| Panel B.                 |                   |                   |                   |                   |                   |                   |
| Inequality               | 0.63**<br>(0.26)  | 0.72**<br>(0.32)  | 0.60***<br>(0.23) | 0.81***<br>(0.28) | 0.56**<br>(0.22)  | 0.79***<br>(0.27) |
| Share vul.ins.           | 0.14***<br>(0.05) | -0.08<br>(0.11)   | 0.10**<br>(0.04)  | -0.02<br>(0.08)   | 0.10**<br>(0.04)  | -0.01<br>(0.08)   |
| Immigration news         | 0.18<br>(0.19)    | 0.16<br>(0.22)    |                   |                   |                   |                   |
| Larceny                  |                   |                   | -1.68<br>(1.82)   | -0.44<br>(2.10)   |                   |                   |
| Rape and sex offenses    |                   |                   |                   |                   | 4.23**<br>(1.95)  | 2.46*<br>(1.44)   |
| Observations             | 868               | 868               | 1,159             | 1,159             | 1,159             | 1,159             |
| Panel C.                 |                   |                   |                   |                   |                   |                   |
| Inequality               | 0.52**<br>(0.21)  | 0.79***<br>(0.28) |                   |                   |                   |                   |
| Share vul.ins.           | 0.08*<br>(0.04)   | -0.02<br>(0.08)   |                   |                   |                   |                   |
| All crime                | 0.12***<br>(0.04) | 0.05<br>(0.06)    |                   |                   |                   |                   |
| Observations             | 1,159             | 1,159             |                   |                   |                   |                   |
| Election FE              | x                 | x                 | x                 | x                 | x                 | x                 |
| Municipality FE          |                   | x                 |                   | x                 |                   | x                 |
| Municipal controls       | x                 | x                 | x                 | x                 | x                 | x                 |

Notes: See notes for Table W3.



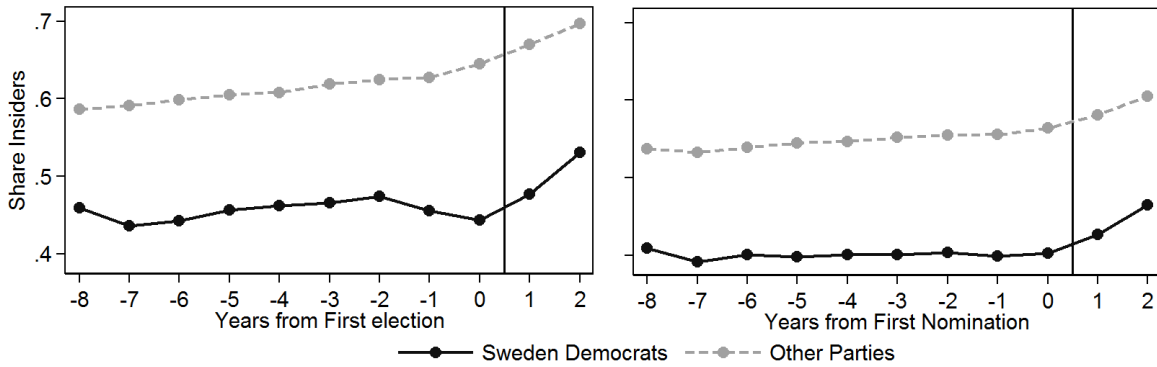


Figure W5. Event study of labor market status before and after being elected or nominated for the first time

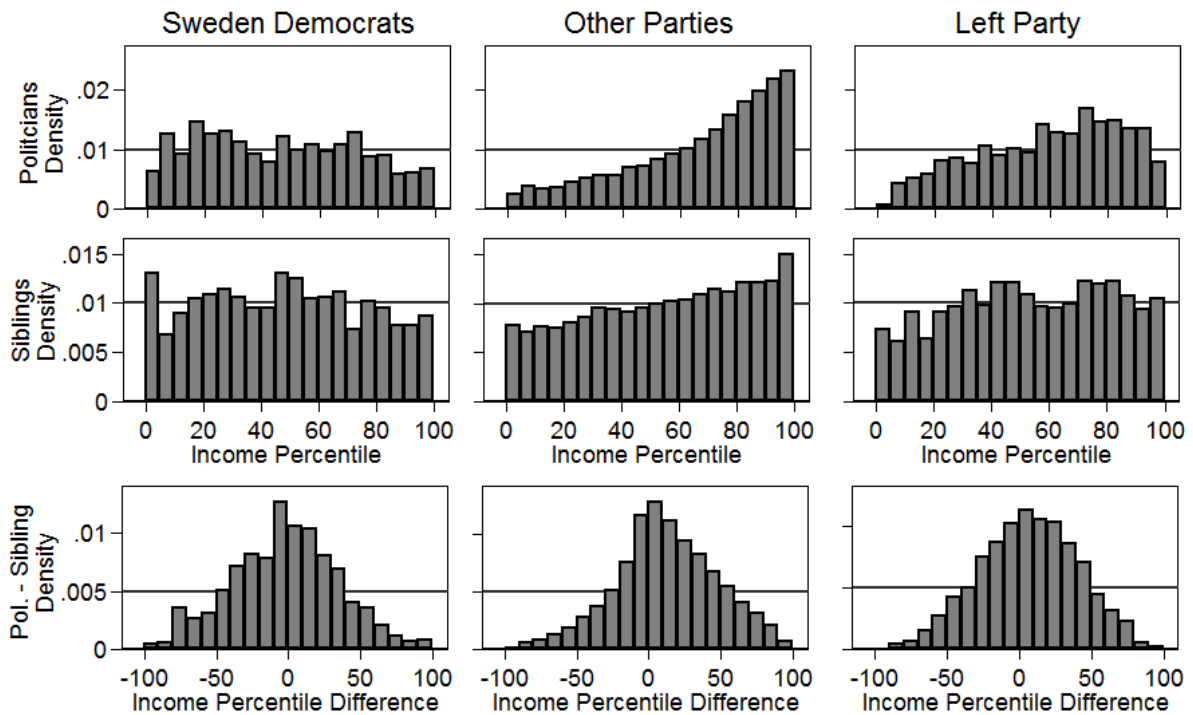


Figure W6: Income percentile of politicians elected between 2002 and 2014 (upper figures) their siblings (lower figures).

Notes: The income percentiles are calculated by birth year and sex at birth. In order to compare income percentile of the politicians to the income percentile of a specific sibling we randomly draw a specific sibling for those politicians that have multiple siblings