

Economic Distress and Support for Radical Right Parties – Evidence from Sweden

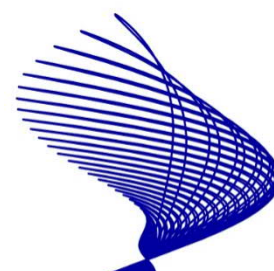
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Economic Distress and Support for Radical Right Parties – Evidence from Sweden

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Abstract

This paper studies the effects of economic distress on support for radical right parties. Using Swedish election data, I show that one layoff notice among low-skilled native-born workers increase, on average, support for the Swedish radical right party the Sweden Democrats by 0.18 to 0.46 votes. The relationship between layoff notices and support for the Sweden Democrats is stronger in areas with a high share of low-skilled immigrants, and in areas with a low share of high-skilled immigrants. These findings are in line with theories suggesting that voters attribute their impaired economic status to immigration, due to labor market concerns. In addition, I use individual-level survey data to show that self-reported unemployment risk is positively associated with voting for the Sweden Democrats among low-skilled respondents while the opposite is true for high-skilled respondents, echoing the aggregate-level findings.

Keywords: Radical right parties, economic distress, unemployment risk, immigration, voting

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1 Introduction

The increase in support for radical right parties is one of the largest changes to the European political landscape in the last few decades. What makes voters abandon mainstream parties and instead cast their votes for those that call for closed borders, increased barriers to trade, and leaving the European Union? Which changes in socioeconomic factors lie behind these altered voting patterns? A large strand of theoretical and empirical research aspires to answer these questions. Given the variation in parliamentary representation of radical right parties across Europe, researchers are struggling to find uniform explanations that speak to most European countries. However, a consensus has formed on which type of voters are most likely to support the extreme right, namely, native-born low-skilled workers, mostly of male gender (Lubbers et al. 2002; Rydgren 2004b; Arzheimer and Carter 2006; Kitschelt 2007; PSU Statistics Sweden). One popular explanation for the overrepresentation of these groups is that their members support anti-immigration and anti-globalization parties in the fear of their jobs or high wages due to technological changes, immigration, or international trade (Kitschelt 1995; Rydgren 2004a, 2005; Norris 2005). Therefore, negative shocks to employment or income are believed to raise the support for radical right parties.¹

This paper studies the effect of economic distress on support for the extreme right. Specifically, it examines how much of the increased vote share for the Swedish anti-immigration radical right party the *Sweden Democrats* (SD) can be explained by economic distress among low-skilled native-born workers. To address this question, I combine detailed election precinct-level data on the number of workers receiving layoff notices with precinct-level election outcomes for the Sweden Democrats in the 2006 and 2010 national elections. This resulting data set differs from those used in previous studies that try to estimate the link between economic factors and support for radical right parties. First, my data use the precinct-level number of layoff notices received by workers, instead of changes to employment shares or sectoral differences of import penetration which interacts with the sectoral composition of the geographic unit (cf. Dippel et al. 2015; Autor et al. 2016; Colantone and Stanig 2018, 2016). My data yield a more accurate measure of economic distress. Second, the underlying individual-level data provide layoff notice numbers conditional on skill level and origin. This allows me to estimate the effect

¹ Throughout the paper, I will use radical right parties and the extreme right interchangeably.

of layoff notices on support for the SD, by skill level and country of origin combinations.

I find that the change in SD votes is positively affected by layoff notices among low-skilled native-born workers. For every low-skilled native-born worker receiving a layoff notice, the SD gain on average 0.18-0.46 votes. For other social groups, such as high-skilled native-born, high-skilled foreign-born, and low-skilled foreign-born workers, the estimates are not statistically different from zero, or in some specifications negative. I use Swedish survey data to study the individual-level relationship between unemployment risk and SD support, and the evidence point in the same direction as the aggregate-level results.

A threat to empirically measuring the causal effect of layoff notices is that the notices are simultaneous with SD support. This would lead to biased OLS estimates. To overcome the potential threat of endogeneity, I supplement the OLS analysis with an instrumental variable approach using a Bartik instrument that predicts the number of layoff notices by the national trends in notices within each industry, and the sectoral composition in each election precinct. Since the sectoral composition might be correlated with local conditions that influence voting through other channels than notices, I hold constant a set of observable characteristics that are highly correlated with the first principal component of the industry shares, as suggested by Goldsmith-Pinkham et al. (2018). Instrumental variable methods are employed with the number of notices instrumented by the Bartik instrument.

Why does economic distress among low-skilled native-born workers increase support for radical right parties? One potential explanation can be found in the literature on the economic effects of immigration. Native-born workers of a particular skill are expected to lose from immigration of the same skill, as this raises the competition for jobs (Borjas et al. 1996, 1997). At the same time, low-skilled workers might oppose low-skilled immigration for fear of having to compete for welfare services (Facchini and Mayda 2009; Hainmueller and Hiscox 2010). Thus, it seems plausible that low-skilled native-born workers might attribute changes to personal economic circumstances to low-skilled immigration, in particular if they are exposed to immigrants.

To introduce this possibility, I construct a measure of precinct-level visibility of immigrants, which I interact with the number of layoff notices. The IV results from these specifications show that a one standard deviation increase in the share of low-skilled

immigrants increases the effect of notices received by low-skilled native-born workers on support for the SD by 36 percent. The effect is smaller in areas with larger than the average share of high-skilled immigrants. The estimated negative effect on SD voting of layoff notices among high-skilled native-born workers is smaller when the share of high-skilled immigrants is high, and more negative in areas with a high share of low-skilled immigrants. In other words, the effect that layoff notices among natives of a particular skill level has on support for the SD is more positive in areas with a high share of immigrants of the *same* skill level, and less positive in areas with a high share of immigrants of the *opposite* skill level.

An alternative explanation is that voters are attracted to radical right parties due to their anti-globalization stance. Voters that experience worse job prospects due to firms being exposed to import competition, or off-shoring, are more likely to oppose international economic integration and free trade agreements, such as the *Transatlantic Trade and Investment Partnership* (TTIP) or the European Union. To test the validity of this explanation in the Swedish setting, I examine the relevance of anti-EU sentiment and voting behavior. I demonstrate that candidates and voters of the SD and the *Left Party* take almost identical positions on issues related to the European Union. Despite these similarities, increased layoff notices do not raise the vote share of the Left Party. These findings suggest that anti-globalization attitudes cannot explain how economic distress is translated into support for the radical right.

My paper contributes to two strands of literature. First, it adds to the growing literature on economic factors behind the electoral success of the extreme right. In particular, it measures to what extent layoff notices explain the voting for radical right parties. A number of studies rely on survey data on respondents' self-perceived unemployment risk and attitudes for immigration (Mayda 2006; Dustmann and Preston 2007; Hainmueller and Hiscox 2010; Malhotra et al. 2013; Inglehart and Norris 2016), while others link regional unemployment rates or predicted job separation caused by import competition to actual election outcomes (Knigge 1998; Lubbers et al. 2002; Dippel et al. 2015; Autor et al. 2016; Colantone and Stanig 2016, 2018). Most of these studies find that economic distress affects voting for radical right parties, either through its effect on anti-immigrant attitudes or opposition to trade liberalization. My findings suggest that low-skilled native-born workers attribute changes to their economic status on immigration, which lead them

to support radical right parties.

Second, the paper contributes to the literature on visibility of immigrants and radical right voting. By interacting immigration with economic distress, I find that the positive effect of layoff notices – only among low-skilled native-born workers – on voting for radical right parties is higher in areas with a high share of low-skilled immigrants. Numerous studies examine the relationship between radical right voting and immigration (see Golder 2003; Rydgren and Ruth 2013; Steinmayr 2020; Halla et al. 2017). When immigrants become visible, ingroup voters – usually native born – fear that their economic status is threatened, which makes policies that restrict immigration more attractive. The next section discusses some of these theories more in detail.

2 Background and related literature

In 1988, the Sweden Democrats were founded by former members of the racist and radical right party, the *Sweden Party*. In its early years, many members of the SD were also active in, or had close ties to, neo-Nazi organizations (Widfeldt 2008). In the late 90s, the SD focused on re-branding themselves and received 1.4 percent of the votes in the 2002 national election. In the 2006 election, the party did not receive enough votes to get past the 4 percent threshold, but it did obtain more than 250 seats in local councils (Rydgren and Ruth 2011).² Four years later, the SD entered the Swedish parliament for the first time, after receiving a vote share of 5.7 percent, resulting in 20 seats.³ Since their electoral breakthrough, SD’s success has been studied by, in particular, sociologists and political scientists.

The existing literature studying the electoral success of radical right parties has used various measures of socioeconomic and sociodemographic outcomes, such as unemployment risk and influxes of refugees and immigrants. These relate to one of two main categories of theories that explain the increased support for the radical right discussed by researchers and mentioned in the political debate: *i*) issues concerning the visibility of minorities, and *ii*) changes to voters’ personal economic circumstances. The first explanation has been studied extensively and immigration has been associated both positively

² The Swedish electoral system is characterized by *proportional representation*. Each party needs to either get past the national threshold of 4 percent, or the district-level threshold of 12 percent, to receive a seat in the national parliament.

³ Figure A1 in the Online Appendix shows SD vote share from 1998 to 2014.

and negatively with support for radical right parties (see, for instance, Becker et al. 2016; Colussi et al. 2016; Dustmann et al. 2018; Hangartner et al. 2018; Biggs and Knauss 2012; Steinmayr 2020; Andersson and Dehdari 2020).

The second category of explanations emphasizes economic distress as the cause of the electoral success of radical right parties. These theories offer three different channels through which voters' discontent with the mainstream parties and their policies arise. The first channel is that unemployment, resulting from exposure to import competition from low income countries, creates calls for more restrictive trade policies. In recent years, a number of studies have linked exposure to international trade competition with support for radical right parties and found that increased import competition from low-wage countries has a positive effect on voting for radical right parties (see Dippel et al. 2015; Colantone and Stanig 2016).

The second channel, which sociologists call the *social marginalization hypothesis*, argues that residents of economically deprived areas feel let down by the established parties, which makes them more likely to vote for anti-establishment parties. Several studies using Swedish data support this hypothesis, for instance Rydgren and Ruth (2011, 2013) and Valdez (2014).⁴ Lubbers et al. (2002) and Coffé et al. (2007) provide evidence of a positive correlation between voting for radical right parties and unemployment, while a negative correlation is found in Knigge (1998).⁵ In Arzheimer and Carter (2006), no conclusive evidence for the socioeconomic marginalization hypothesis is found. In this study, I will hold a set of variables commonly included as proxies for local economic deprivation constant, such as median income and employment shares. Since the estimated parameters of these variables have no causal interpretation, I will not be able to formally test this channel.

The third channel suggests that voters attribute changes to their personal economic circumstances to immigration. These changes include, for instance, job separation, loss of access to welfare services, or a pay cut.⁶ Natives blame immigrants for changes to

⁴ Dal Bó et al. (2018) find a correlation between share of labor market *outsiders* and support for the Sweden Democrats. A similar result is found in Anelli et al. (2018), where automation is found to have a positive impact on support for nationalist and radical right parties.

⁵ In Algan et al. (2017), a positive correlation between unemployment and voting for nonmainstream parties, especially populist, is reported.

⁶ Similar to the results found in this study are those presented in Guiso et al. (2017). The authors find that economic distress increases support for populist parties by positively affecting anti-immigrant and anti-establishment attitudes.

Table 1: Labor market competition and welfare concerns

	Labor market competition		Constraints on welfare	
	Low-skilled immigration	High-skilled immigration	Low-skilled immigration	High-skilled immigration
Low-skilled natives	Oppose	Not oppose	Oppose	Not oppose
High-skilled natives	Not oppose	Oppose	Oppose	Not oppose

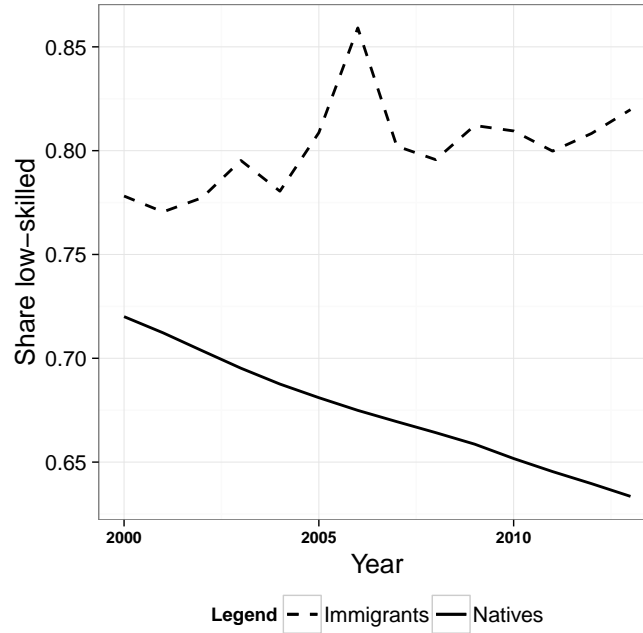
Notes: Expected opposition to high and low-skilled immigration among high and low-skilled native-born voters, respectively, for concerns about labor market competition and constraints on welfare provision.

personal economic circumstances based on concerns about the consequences and effects of immigration. The literature on these concerns can be partitioned into two parts: *i*) competition for employment, and *ii*) increased strain on provision of welfare services. The consequences for natives related to the first part is dependent on the type of immigration the domestic economy is exposed to. According to the *factor-proportions analysis model* (see Borjas et al. 1996, 1997), we should expect factors which immigrants are considered good substitutes for to be relatively worse off. Low-skilled immigration is believed to lower relative wages for native-born low-skilled workers as a result of higher supply of this particular factor. At the same time, relative wages of high-skilled workers will rise. If this was the only concern, we would expect natives to oppose immigrants with a similar skill level while being in favor of immigration of the opposite skill level.

The second important concern related to immigration is the expected burden on welfare services, in terms of both transfers and taxes. As immigration puts pressure on public services, for instance health and education, balancing the government's budget requires adjustments to both taxes and transfers, such as unemployment benefits (Facchini and Mayda 2009). For this part too, the degree of the burden depends on the skill level: high-skilled immigrants are assumed to be net contributors to public finances while the opposite is true for low-skilled immigrants (Hainmueller and Hiscox 2010). Given these assumptions, both high and low-skilled native-born voters should support high-skilled immigration while opposing low-skilled immigration. Table 1 summarizes the expected reactions of natives from low and high-skilled immigration for concerns related to labor market competition and constraints on welfare.

The empirical research on the welfare burden of immigrants does not provide conclusive evidence. Some studies present evidence that immigrants pay less in taxes than they

Figure 1: Share of low-skilled, 2000 to 2014



Notes: The lines represent the share of low-skilled among native-born (solid) and newly arrived immigrants (dashed) respectively. Low skill is defined as high-school education or lower as highest attained education level. Based on administrative individual-level data.

take out in benefits while others show that immigrants are net contributors to the welfare state (Smith and Edmonston 1997; Ekberg 1999; Evans and Fitzgerald 2017; Martinsen and Pons Rotger 2017). The empirical research on the impact of immigration on wages is much more extensive, but also equally inconclusive. Several studies find no effects on wages or a small negative impact on wages for low-skilled workers (Card 1990; Bodvarsson et al. 2008; Borjas 2015; Borjas and Monras 2017; Clemens and Hunt 2017; Peri and Yasenov 2017). In Longhi et al. (2005), 18 studies measuring the effect of immigration on wages are statistically summarized using meta-analysis techniques. The authors find evidence of a very small overall effect on wages.

Recent immigration to Sweden has been characterized by low-skilled immigration, as shown in Figure 1. The share of natives with no more than a high school diploma has been falling steadily for the past 15 years, while this share among immigrants has increased. Given the theories discussed above, low-skilled native-born workers are expected to be more likely to oppose immigration to Sweden.

The data and the empirical methods employed in this study are described in detail in the next section. Data on layoff notices and election outcomes are used to estimate the effect of economic distress for different social groups on their support of radical right

parties. To examine how this effect is influenced by immigration, measures of immigrant visibility are interacted with the number of layoff notices. By separating immigration into high and low-skilled immigration, the relative importance of labor market competition vis-a-vis welfare concerns is studied.

3 Data and methodology

This section describes the individual data on layoff notices based on Swedish register data, the aggregation process to election precincts, the empirical model, and the estimation methods. A list of all variables used in the paper can be found in the Online Appendix, Table A5.

3.1 Geographical data

There were 5668 election precincts in the 2010 election with the number of eligible voters in each precinct ranging from 121 to 2809, with a mean of 1257.⁷ The number of precincts was higher for the 2006 election, which had 5783 election precincts. Thus, computing the difference in election results is potentially problematic. One way is to only keep precincts in 2010 that did not change over time (see Rydgren and Tyrberg 2016), while another is to match the 2006 precincts to the 2010 versions, which is the method employed in this study.⁸ I match the 2006 precincts and 2010 precincts with detailed population data that comes in 100×100 meter squares.⁹ The population of each overlapping part of a precinct in 2006 with precincts from 2010 is divided by that precincts total population, to create *population weights*. The number of votes in 2006 for each party, as well as total number of eligible voters, are then multiplied by the population weights before being aggregated on 2010 precinct level. Thus, the total votes for each party in 2006 is separated into overlapping parts with the 2010 precincts, and the number of votes distributed into each part depends on the population weights. The difference in election results for each party is calculated for all precincts.

⁷ Figure A2 in the Online Appendix shows the distribution of eligible voters per precinct.

⁸ It is worth noting that precincts that appear in both 2006 and 2010 with the same precinct code might still have changed over time in terms of which geographical area they cover. One would lose a considerable amount of observations if only precincts with identical geographical coverage in 2006 and 2010 were included.

⁹ This matching process was unable to match 11 of the 2010 election precincts, which is why I am left with 5657 precincts.

The administrative data provide geographical information for all individuals, where each individual belongs to a *Small Area for Market Statistics (SAMS)*. There are close to 9500 SAMS and many of them coincide with election precincts. However, for those that do not coincide, a similar matching method is used as the one described above. By matching individuals to election precincts, I am able to take advantage of the spatial variation in economic distress and election outcomes across precincts. Although elections are held at the municipal level, aggregating the data to the precinct level gives approximately 20 times more observations than using aggregated data on municipal level. Municipal fixed effects and clustered standard errors at the commuting zone level are employed to account for municipal-specific factors and conditions related to local labor markets. The geographical information for the election precincts can be found at the website of the Swedish Election Authority, while maps for the SAMS are provided by Statistics Sweden.

3.2 Individual-level data

Statistics Sweden provide individual-level data for the Swedish population with information on, for instance, income, employment, origin, skill level, and layoff notices. The layoff notice variable includes all events where at least 5 workers receive a layoff notice (Seim 2012). According to Swedish law, companies have to inform the Swedish Public Employment Service in advance if 5 or more workers are affected by a possible downsizing.¹⁰ This means that I will not be able to capture layoffs from firms laying off less than 5 workers. However, this limitation might actually be beneficial: it reduces potential endogeneity regarding layoffs resulting from the local economic environment, in particular, local factors that might also be correlated with support for radical right parties, such as local crime directed against local shops and other small businesses.

The benefits of using layoff notices instead of, for instance, job separations or changes in employment numbers as a proxy for economic distress is twofold. First, it captures shocks to unemployment risk among workers who do not necessarily lose their jobs. About two-thirds of all workers receiving a notice are laid off, and one would expect the workers that are not laid off to also perceive their labor market situation as less secure. Second, it only includes (potential) separations where the workers were laid off, and not those were workers voluntarily quit their jobs. If a worker is quitting her job

¹⁰ Job Support Schemes (Certain Measures) Act (1974:13).

for employment at another firm, it is unclear whether this is associated with a higher experienced unemployment risk for that particular worker.

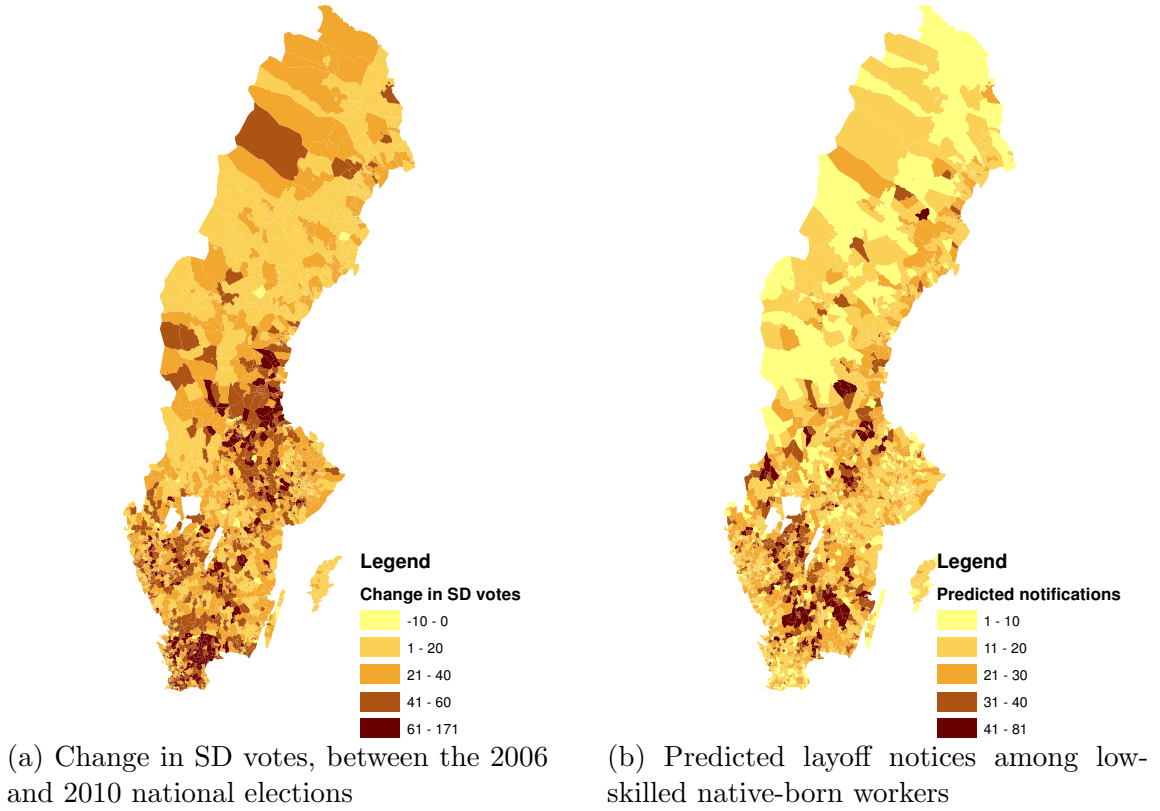
Layoff notice data from 2007 to 2010 are aggregated on SAMS level, based on where the workers reside, and vote, in 2010. Individual-level data on origin and skill level (based on highest attained education level, see Online Appendix Table A2) allow me to create measures of the total number of workers receiving a layoff notice in year t within a SAMS, divided into four social groups based on skill level (low or high skill) and birthplace (inside or outside Sweden).¹¹ The SAMS are then matched with precincts as described above, and a data set comprising all layoff notices for each social group in each election precinct is constructed. Figures 2a and 2b show the increase in SD votes and the number of low-skilled native-born workers receiving a layoff notice, 2007-2010, for all election precincts. These indicate that high number of notices and large increase in SD votes occurred in various different parts of Sweden and are not clustered around any particular location.

The individual-level data allow me to make two important contributions to the literature on the relationship between economic factors and radical right voting. First, my measure of economic distress captures job insecurity among workers who lose their jobs, and among those who are at risk of losing their jobs. This latter group of workers is overlooked when only considering unemployment rates or job separations. Second, data on workers' skill level and country of origin allow me to estimate separate effects for different social groups. According to the theories discussed in Section 2, members of different social groups might react differently to increased job insecurity. In addition, the register data contains information that show where workers live, which means that the layoff notices are associated to where workers vote, rather than where they work.

In addition to precinct-level data on layoff notices and election results, this study uses a couple of Swedish surveys on both voters and political candidates. The *Riks-SOM* survey (2016) includes questions on self-perceived unemployment risk, voting intentions, and anti-EU attitudes among voters, while *Valpejl2010* covers a 5 percent sample of all candidates running for office in 2010. The candidates are asked about their positions on close to 50 different political issues, for instance immigration, EU, congestion taxes, and conscription. These data are used to examine candidates' positions on issues related to

¹¹ Although I have access to the layoff notice data from 2005 to 2014, I do not have access to other individual-level socio-economic and demographic data for any year after 2013. Therefore, I am unable to include later elections, such as the 2014 or the 2018 national elections.

Figure 2: Change in SD votes and layoff notices, 2007-2010



Notes: Election precinct-level data on change in SD votes between 2006 and 2010 national elections (a), and number of predicted layoff notices (predicted by the first-stage of the 2SLS) among low-skilled native-born workers, 2007 to 2010.

the European Union.

3.3 Empirical strategy

This study uses the number of layoff notices and election results at the precinct level for Swedish national elections. The main outcome of interest is the change in votes for the radical right party the Sweden Democrats between the national elections 2006 and 2010. This outcome is separately regressed on the number of layoff notices received by members of each social group and a set of control variables, according to the following regression model.

$$\Delta SD_i = \alpha^j + \beta^j Layoff_notices_i^j + \mathbf{\Gamma}_i' \boldsymbol{\theta}^j + \varepsilon_i, \quad (1)$$

where ΔSD_i is the change in the number of votes for the Sweden Democrats in precinct

i , $Layoff_notices_i^j$ is the number of layoff notices received by members of social group j in precinct i , and Γ_i is a vector of control variables. The controls in Γ_i include variables frequently used in studies that estimate the correlations between socioeconomic factors and support for radical right parties, for instance the share of high and low-skilled foreign-born, share of low-skilled workers, median income, mean highest attained education, and share of male individuals (see Norris 2005; Kitschelt 2007; Coffé et al. 2007; Rydgren and Ruth 2011, 2013; Strömblad and Malmberg 2015; Harteveld et al. 2015; Rydgren and Tyrberg 2016). Each specification includes the total number of layoff notices received by members of all other groups and municipal fixed effects. The unit of observation, i , is 2010 election precincts, and $j \in \{ln, hn, lf, hf\}$ represents the four social groups: low-skilled native-born, high-skilled native-born, low-skilled foreign-born, and high-skilled foreign-born.¹² The main parameter of interest to be estimated is β^j , which captures the effect of layoff notices among members of social group j on the election results.

If the included controls are not sufficiently absorbing factors that are related to both the number of layoff notices received by workers and the election outcome, our OLS estimates will be biased.¹³ An alternative to the OLS specification in (1) is to construct a measure of economic distress that relies on exogenous variation in the number of layoff notices. To obtain this I construct a Bartik instrument relying on the sectoral composition of each election precincts, and industry-specific national trends in layoff notices (see Bartik 1991). More specifically, the exposure of each precinct to the national trends depends on the sectoral composition of the labor force in that precinct, as well as the number of notices in each sector in all other precincts, effectively removing any precinct-specific shocks.¹⁴ Using the detailed administrative data on worker background and skill level, I am able to construct measures of predicted exposure to layoff notices due to national shifts for each social group, where the predicted shocks can be separately estimated for high and low-skilled workers (cf. Autor et al. 2016).

¹² Native-born children of immigrants are included in the foreign-born categories since their socioeconomic status are, on average, more similar to their parents' than to their native-born counterpart (Rooth and Ekberg 2003).

¹³ Note that by taking the difference between the 2010 and 2006 election outcomes, I control for the initial SD support, which could potentially be correlated with future layoff notices. Table A7 in the Online Appendix presents results for when the number of votes in 2010 is used as outcome, controlling for the number of votes in 2006. These estimates are almost identical to the case when the outcome is measured as the difference between 2010 and 2006.

¹⁴ Similar methods are used to estimate the consequences of import competition on electoral results in Dippel et al. (2015); Autor et al. (2016); Colantone and Stanig (2018, 2016).

By focusing on layoff notices following the financial crisis and during the Great Recession, the national trends used for the Bartik instrument are plausibly exogenous to the local economy. Figure 3 shows the number of workers receiving layoff notices from 2005 to 2014. From a yearly average of about 25,000 total layoff notices in 2005 and 2006, the number increased to almost 40,000 in 2008 and close to 100,000 in 2009, with nearly 70,000 of these received by low-skilled workers. Thus, layoff notices from 2007 to 2010 are used, together with the sectoral composition in 2006. This measure is constructed as follows:

$$Bartik_{i\tau}^j = \sum_h L_{iht}^j \frac{N_{-ih\tau}^{s(j)}}{L_{-iht}^{s(j)}},$$

where $Bartik_{i\tau}^j$ is the Bartik instrument for social group $j = \{ln, hn, lf, hf\}$ in precinct i over time period τ (in this case, 2007-2010); L_{iht}^j is the number of workers from social group j in precinct i and industry h in time t (preceding time period τ); and $N_{-ih\tau}^{s(j)}$ is the number of layoff notices of skill $s(j)$ in industry h in Sweden, excluding precinct i .¹⁵ This measure constructs the amount of layoff notices among social group j in precinct i as predicted by the national shifts and the sectoral composition in precinct i , and unrelated to the impact of local factors.

The effect of layoff notices on SD votes are estimated using 2SLS, where $Bartik_{i\tau}^j$ instruments for the actual number of layoff notices. The IV regression model has the following first stage:

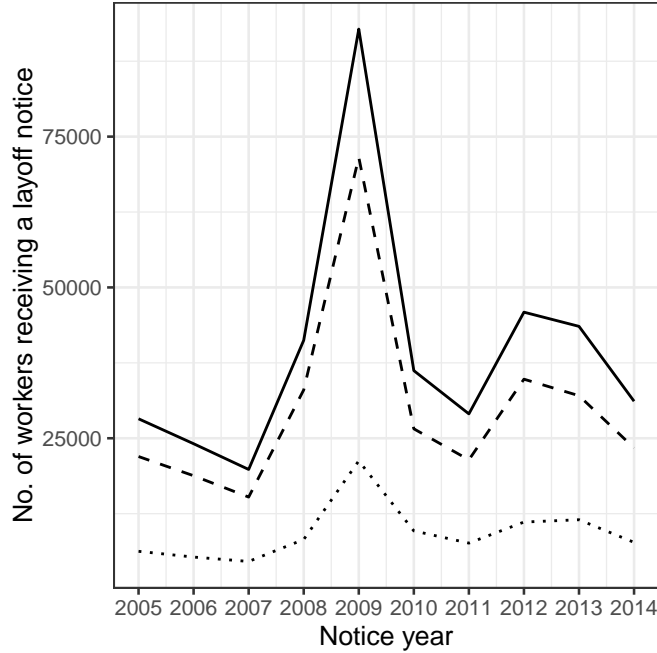
$$Layoff_notices_i^j = \alpha_{fs}^j + \pi^j Bartik_{i\tau}^j + \mathbf{\Gamma}_i' \mathbf{\Lambda}^j + \nu_i, \quad (2)$$

The underlying identifying assumption is based on the sectoral composition of each precinct.¹⁶ In order for the Bartik instrument to allow a causal interpretation, the sec-

¹⁵ The function $s(j)$ gives the skill level of social group j . For instance, if j represents low-skilled native-born workers, then $s(j)$ represents low-skilled workers.

¹⁶ Ideally, the Bartik instrument should vary on the local labor market area, represented by, for instance, commute zones. However, the low number of commute zones in Sweden (74) severely affects the variation in the instrument. For completeness, the Online Appendix, Figures A15 and A16, presents results where the instrument varies on *i*) the commute zone level and, *ii*) the municipal level (290 municipalities). These slope coefficients for the treatment effect are closer to zero and are more imprecisely estimated, possibly due to measurement errors induced by the low variation in the instrument variable.

Figure 3: Yearly layoff notices, 2005 to 2014



Notes: Solid black line represents all layoffs notices, dashed line represents low-skilled layoffs notices, dotted line represents high-skilled layoffs notices. Based on administrative individual-level data.

toral composition must only affect the outcome through its effect on layoff notices. To address this, I control for the variables frequently used in studies that estimate the correlations between socioeconomic factors and support for radical right parties, for instance the share of high and low-skilled foreign-born, share of low-skilled workers, median income, mean highest attained education, and share of male individuals (see Norris 2005; Kitschelt 2007; Coffé et al. 2007; Rydgren and Ruth 2011, 2013; Strömblad and Malmberg 2015; Hartevelde et al. 2015; Rydgren and Tyrberg 2016).¹⁷ These controls are included in Γ_i from equation 1.¹⁸

The parameters in (1) are estimated using OLS as well as 2SLS. The validity of the OLS estimates relies on the assumption that the number of notices are exogenous to local conditions, and accurately measures precinct-level economic distress. If any, or both, of these assumptions are violated, the OLS estimator will be biased. It is possible

¹⁷ Following Goldsmith-Pinkham et al. (2018), I compute the first principal component of the industry shares and examine how well a set of observable characteristics correlate with the first principal component. Table A3 in the Online Appendix shows OLS estimates of the first principal component of industry shares in 2006 regressed on the share of high and low-skilled foreign-born, share of low-skilled workers, median income, mean highest attained education, number of eligible voters, share of employed, share of male individuals, and municipal fixed effects. The \bar{R}^2 ranges from 0.85 to 0.89, which suggests that these controls are closely linked with the sectoral composition in 2006.

¹⁸ Descriptive statistics for the controls, as well as the outcomes and layoff notices, can be found in Table A4 in the Online Appendix. Table A5 in the Online Appendix includes detailed descriptions of each variable.

that the 2SLS and OLS estimates differ even if layoff notices are, conditional on the controls in $\mathbf{\Gamma}_i$, exogenously allocated across precincts, and unrelated to local conditions. If the two methods measure different types of economic distress, the estimates might still differ. For instance, the number of layoff notices in each precinct not predicted by the Bartik instrument might pick up economic distress only among workers that receive notices, while the instrumented version captures economic distress in a more broader sense. Another possibility is that the estimates differ as a result of the 2SLS capturing the *Local Average Treatment Effect* (LATE) of the complier precincts, i. e., the precincts where the actual number of notices were high (low) when they were predicted, by the Bartik instrument, to be high (low). In this case, the OLS estimates, possibly capturing the average treatment effect, would differ from the 2SLS estimates. For comparison, both estimates will be presented in the next section.

4 Results

The 2SLS estimates of the effect of layoff notices on voting for the SD are presented in Table 2. The first column for each social group estimates regression model (1) without the inclusion of controls, while the second column adds the controls mentioned in Section 3.3. The change in votes for the SD is regressed separately on the number of layoff notices for each group, controlling for the number of notices received by members of the other groups.¹⁹ The Bartik measure for each group is used to instrument for actual notices for the same group. For the four different social groups, only layoff notices among native-born low-skilled has a positive effect on voting for the SD (Panel A, specification (1) to (2)).²⁰ The estimates for high-skilled workers – both native-born and foreign-born – suggest a negative effect of layoff notices on support for the SD (Panel B). Table A6 in the Online Appendix shows 2SLS and OLS estimates of the effect of layoff notices including all social groups on support for the SD. Both these estimates are positive but much smaller than the estimates of the separate effect of layoff notices received by low-skilled natives.

¹⁹ Table A8 in the Online Appendix presents results for 2SLS and OLS estimates of a regression model where all social groups have been included simultaneously. The 2SLS estimates differ slightly from when SD votes are regressed separately on notices for each group, and has to do with the Bartik instrument for each group being used as instrument for layoff notices for all groups. The OLS estimates of separated regressions and the regression where all groups have been included are almost the same.

²⁰ Figure A3 in the Online Appendix illustrates the relationship between the number of (predicted) notices among low-skilled native-born workers and change in SD votes.

Table 2: Δ SD and layoff notices 2007-2010, skill level-origin combinations (2SLS)

Dep. variable: Δ SD	Panel A : Native-born			
	Low-skilled (1)	(2)	High-skilled (3)	(4)
Notices	0.863*** (0.101)	0.461*** (0.087)	-0.033 (0.208)	-0.466** (0.219)
First stage F-stat.	8223.65	1676.00	7676.17	854.46
Obs.	5657	5657	5657	5657
Controls	No	Yes	No	Yes
Dep. variable: Δ SD	Panel B : Foreign-born			
	Low-skilled (1)	(2)	High-skilled (3)	(4)
Notices	0.192 (0.131)	0.058 (0.113)	-1.957** (0.960)	-1.462*** (0.474)
First stage F-stat.	21960.75	5066.00	5406.70	661.97
Obs.	5657	5657	5657	5657
Controls	No	Yes	No	Yes

Notes: 2SLS estimates of regression model (1) with layoff notices 2007-2010 based on skill level-origin combinations. Panel **A** shows estimates for native-born workers, while Panel **B** shows estimates for foreign-born workers. Dependent variable is Δ SD, and is the change in votes between the 2006 and 2010 national elections for the Sweden Democrats. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

Since the outcome is measured as change in the number of votes, and the measure of economic distress is the precinct-level number of layoff notices, the slope coefficient in Table 2 can be interpreted as the increase in the change in SD votes from one additional worker receiving a notice. The slope coefficient for column (2) in Panel **A** suggests that for every second low-skilled native-born worker receiving a notice, the Sweden Democrats gained one additional vote. The total number of layoff notices for low-skilled native-born workers in the years 2007 to 2010 is 121,000, and together with the estimated slope coefficient of 0.46 (column (2), Panel **A**), this yielded 56,000 additional votes for the SD. Between 2006 and 2010, the SD gained more than 177,000 new voters.²¹ This means that the new votes resulting from layoff notices account for more than 31 percent of the increase in votes for the SD.

Another way to interpret the results is to compare the standard deviation of layoff notices for 2007-2010 with the standard deviation in the change in SD votes.²² The change in Δ SD from a one standard deviation increase in the number of notices among

²¹ Based on data from val.se and own calculations.

²² See descriptive statistics in Table A4 in the Online Appendix.

low-skilled native-born workers accounts for 33 percent of a one standard deviation in the change in SD votes. This is similar in magnitude to the interpretation we get from comparing SD votes due to layoff notices among low-skilled native-born workers to the total increase in SD votes.

One drawback of matching aggregated individual-level data with election precinct-level election outcomes is that changes in vote shares do not tell us anything about which group of voters are actually changing their voting behavior. For instance, layoff notices among high-skilled native and foreign-born workers do not necessarily influence voting for members of same groups. The negative estimated slope coefficients in Table 2 could be resulting from, for instance, low-skilled native-born workers decreasing their support for the SD, as economic distress among other groups means that they experience less *relative deprivation* (Rydgren 2005). Another potential explanation is that members of the high-skilled social groups are more in favor of low-skilled immigration, as this decreases the cost of goods and services produced by low-skilled workers, without increasing their labor market competition.

Between 2007 and 2010, 38,000 high-skilled native-born workers received layoff notices. Based on the estimated effect of layoff notices among high-skilled native-born workers in column (4) of Table 2, this decreased SD votes by 18,000. Together with the increased SD votes resulting from layoff notices among low-skilled native-born workers, the net effect of layoff notices among native-born workers account for 21 percent of the total increase in SD votes.

Compared to the 2SLS estimates, the OLS estimates of the effects of layoff notices among high and low-skilled native-born workers are closer to zero, as shown in Table 3. Similar to the 2SLS estimates, the OLS estimates show a positive effect on voting for the Sweden Democrats only for low-skilled native-born workers, while the estimates suggest a negative effect for high-skilled workers, both native and foreign-born. For low-skilled native-born workers, the OLS estimate in column (2) suggests that for every fifth layoff notice received, the SD gain one additional vote. Based on the total number of layoff notices for low-skilled native-born workers between 2007 and 2010, this led to roughly 22,000 votes for the SD, which explains 12 percent of the party's total increase of 177,000 votes. The change in ΔSD from a one standard deviation increase in layoff notices among low-skilled native-born workers accounts for almost 13 percent of a one standard deviation

Table 3: Δ SD and layoff notices 2007-2010, skill level-origin combinations (OLS)

Dep. variable: Δ SD	Panel A : Native-born			
	Low-skilled (1)	(2)	High-skilled (3)	(4)
Notices	0.552*** (0.100)	0.178*** (0.052)	-0.144 (0.132)	-0.151** (0.060)
Adj. R-square	0.156	0.655	0.137	0.654
Obs.	5657	5657	5657	5657
Controls	No	Yes	No	Yes
Dep. variable: Δ SD	Panel B : Foreign-born			
	Low-skilled (1)	(2)	High-skilled (3)	(4)
Notices	0.064 (0.096)	-0.080 (0.077)	-1.138** (0.463)	-0.334** (0.166)
Adj. R-square	0.128	0.653	0.134	0.653
Obs.	5657	5657	5657	5657
Controls	No	Yes	No	Yes

Notes: OLS estimates of regression model (1), with layoff notices 2007-2010 based on skill level-origin combinations. Panel **A** shows estimates for native-born workers, while Panel **B** shows estimates for foreign-born workers. Dependent variable is Δ SD, and is the change in votes between the 2006 and 2010 national elections for the Sweden Democrats. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

of Δ SD.

The 2SLS and OLS estimates of the effect of layoff notices among low-skilled foreign-born workers are close to and not statistically different from zero. For high-skilled foreign-born workers, both 2SLS and OLS estimates a negative and statistically significant slope coefficient. However, a very small number of layoff notices were received by high-skilled foreign-born workers (less than mean of 1 layoff notice per precinct for the whole time period), which makes the estimated effect on SD support for this group rather unreliable and quantitatively insignificant (see Table A5).

4.1 Survey evidence and sensitivity analysis

The use of precinct-level layoff notices and election results has one major drawback: the estimated relationship does not necessarily say anything about whether those who received layoff notices are actually changing their voting behavior. For instance, individuals might be motivated to vote for the SD when a family member or a close friend is likely to be laid off. To examine the individual-level relationship between unemployment

Table 4: Survey data on self-perceived unemployment risk and voting intentions

	Low-skilled	High-skilled
	(1)	(2)
Unemp. risk	0.014* (0.008) [0.074]	-0.009* (0.005) [0.069]
Male	0.049*** (0.014)	0.025 (0.016)
Year of birth	0.001** (0.000)	0.001* (0.001)
Union member	0.014 (0.014)	0.041** (0.016)
City vs. rural	-0.012 (0.008)	-0.018* (0.009)
Adj. R-square	0.030	0.026
Obs.	806	465

Notes: Data from Riks-SOM 2010. OLS estimates of a regression model where the dependent variable is *Vote SD* = 1[SD is most preferred party]. The regressor of interest, *Unemp. risk*, captures respondents self-perceived risk of unemployment, and ranges from 1 to 4, with 1 corresponds to “no risk” and 4 corresponds to “very large risk”. Added controls: *Male* = 1[Respondent is male]; *Year of Birth*; *Union member* = 1[Respondent reported union membership]; *City vs. Rural* = 1[Respondent resides in a city] ‘***’, ‘**’ and ‘*’ indicate statistical significance at 1%, 5% and 10% levels, based on heteroscedasticity-consistent standard errors (in parentheses), and *p*-values in brackets.

risk and voting for the SD, I use data from the Riks-SOM survey for 2010. The survey asks respondents to name their most preferred party, and to report their self-perceived unemployment risk.

One drawback of using survey data is that the responses capture stated preferences instead of actual outcomes. The aggregated precinct-level data use both actual layoff notices and election results. Instead, the survey respondents are asked to report their experienced unemployment risk and which of the political parties they prefer the most. Another caveat is that the results from the survey data have no causal interpretation. With the survey data, I can only test correlations between self-reported unemployment risk and stated preferences for the SD.

Table 4 presents the estimates from the survey data for both low and high-skilled respondents. A dummy indicating whether the SD is the respondent’s most preferred party is regressed on a Likert scale-type variable capturing self-reported unemployment risk. Controls for age, gender, union membership and city vs. rural are added. The evidence is in line with the aggregate-level results: unemployment risk is (negatively) positively associated with support for the SD among (high-skilled) low-skilled respondents, as can be seen in column (1) for low-skilled, and column (2) for high-skilled. Although these

estimates have no causal interpretation, they corroborate the evidence provided by the precinct-level analysis. In addition, there are no statistically significant differences in the estimated coefficients for the other covariates when comparing between low and high-skill respondents. Only for the self-reported unemployment risk are the estimated coefficients different.

The Online Appendix presents additional results from several robustness checks. These include the inclusion of a larger set of control variables, modified versions of the outcome, as well as using different definitions of skill level. The estimates from these different specifications are in line with the main results presented in Section 4.

5 Mechanism

What has been shown so far is that exogenous shocks to economic distress, unrelated to immigration, increase support for anti-immigration parties. However, this applies only to low-skilled native-born workers, which could potentially imply that members of this group attribute their impaired economic situation to immigration. If this is the case, we expect the effect of layoff notices on voting for radical right parties to be even greater in areas with a large presence of immigrants. Voters might be more likely to blame immigration for changes to their personal economic circumstances if they, at the same time, observe immigrants or refugees in their neighborhood. This section presents evidence of immigration influencing the effect that layoff notices has on support for the Sweden Democrats. I also show that notices do not increase voting for other anti-EU parties. This section focuses on the 2SLS estimates for native-born workers, while the OLS estimates for foreign-born are presented in the Online Appendix.

5.1 Immigration and economic distress

To examine how immigration influences the effect that layoff notices have on SD support, I create a precinct-level measure of the share of immigrants in the years leading up to the financial crisis.²³ These shares are constructed as the number of foreign-born indi-

²³ It is unlikely that immigration is caused by layoff notices. However, since this cannot be ruled out, the share of foreign-born is measured at 2006, prior to the years used for the measure of economic distress. Using any other year between 2006 and 2010 does not change the results since the precinct-level shares of foreign-born individuals are highly correlated over time (see Table A13 in the Online Appendix).

viduals divided by the total number of eligible voters in each precinct, and are separated into shares of high and low-skilled. There are two important limitations to this measure. First, the administrative data only comprise Swedish citizens or others with a permanent or temporary residence permit and excludes asylum seekers. Thus, the measure of immigration most likely underestimates the true visibility of minorities in each precinct. Second, this measure does not capture exogenously given exposure to minorities. As immigrants with a residence permit are allowed to settle anywhere in the country, exposure is potentially correlated with local conditions. The estimated main effect of this measure when included in the regression model in (1) therefore does not necessarily have a causal interpretation.

Layoff notices for high and low-skilled native-born workers are separately interacted with the share of immigrants, and the results are presented in Table 5. For each social group, the first specification interacts the number of layoff notices with the share of total immigrants in each precinct, while the second column separates immigrants into high and low-skilled. These two are also separately interacted with the number of notices.²⁴ The interaction between the share of total immigrants with layoff notices is positive and statistically significant for low-skilled native-born (specification (1)). When immigration is divided in high and low-skilled immigration, the interaction for the former is negative while the interaction for the latter is positive, and both are statistically significant at at least 5 percent (specification (2)). Layoff notices among low-skilled native-born workers are more likely to result in support for the Sweden Democrats in areas with a large share of low-skilled immigrants, and less likely to do so when the share of high-skilled immigrants is high. In areas with a one standard deviation larger than the mean share of low-skilled immigrants, the effect of layoff notices among low-skilled native-born workers is increased by 36 percent.²⁵ At the same time, a one standard deviation larger than the mean share of high-skilled immigrants decreases the effect of layoff notices among low-skilled native-born workers by 23 percent.

For layoff notices among high-skilled natives, the estimate for the interaction with high-skilled immigrants is positive, while it is negative for low-skilled immigrants with a

²⁴ The measures of immigration are interacted with the Bartik instrument and used as instruments in the 2SLS estimation.

²⁵ Computed by multiplying the slope coefficient for the interaction between predicted notices and share of low-skilled immigrants by one standard deviation in low-skilled immigrants, and dividing it by the main effect of the predicted number of notices (specification (2)).

Table 5: Δ SD, native-born layoff notices 2007-2010, and share of foreign-born (2SLS)

Dep. variable: Δ SD	Low-skilled native-born		High-skilled native-born	
	(1)	(2)	(3)	(4)
Notices	0.486*** (0.091)	0.429*** (0.096)	-0.464** (0.224)	-0.599*** (0.202)
Notices \times Immigrants	0.006*** (0.002)		-0.002 (0.006)	
Notices \times Low-sk. immigrants		0.013*** (0.003)		-0.014 (0.010)
Notices \times High-sk. immigrants		-0.025** (0.010)		0.026* (0.014)
Low-sk. immigrants	-0.288*** (0.076)	-0.288*** (0.076)	-0.587*** (0.088)	-0.587*** (0.088)
High-sk. immigrants	0.473*** (0.154)	0.473*** (0.154)	0.427** (0.172)	0.427** (0.172)
First stage F-stat.	837.85	560.44	428.66	301.88
Obs.	5657	5657	5657	5657
Controls	Yes	Yes	Yes	Yes

Notes: 2SLS estimates of regression model (1), with layoff notices 2007-2010 based on skill level-origin combinations, and interactions with share of high and low-skilled foreign-born in 2006. Dependent variable is Δ SD, and is the change in votes between the 2006 and 2010 national elections for the Sweden Democrats. The main effect for immigration has been included in the regression model but omitted from the table. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

p -value close to 0.1 (specification (4)).²⁶ The main effect of layoff notices among high-skilled native-born workers is negative, and becomes less negative in neighborhoods with a large share of high-skilled immigrants, and more negative where the share of low-skilled immigrants is high. Similar to the estimated interaction effects for layoff notices among low-skilled native-born workers in column (2), these estimates suggest that notices received by native-born workers of a particular skill have a larger effect on support for the SD in areas with a larger concentration of foreign-born workers of the same skill.

The estimates for the interaction terms suggest that visibility of immigrants increases the likelihood of natives supporting anti-immigration parties due to economic distress, however, only when natives and immigrants are of the same skill level. The different signs of the two estimates for the interaction terms of the share of high and low-skilled immigrants with the number of layoff notices received by low-skilled native-born workers lend support to theories predicting that workers of a particular skill level are likely to expect increased competition from immigrants with the same skill (cf. Borjas et al. 1996, 1997). At the same time, these results are also in line with theories suggesting that

²⁶ The estimated slope coefficients for the two interaction terms are statistically different from each other at 1 percent.

natives are less likely to oppose high-skilled immigrants that are expected to make net contributions to the welfare state (Facchini and Mayda 2009; Hainmueller and Hiscox 2010). Instead, natives resist low-skilled immigrants that are believed to put pressure on the welfare system. This concern receives additional attention when the threat of unemployment increases. However, the predictions from theories on welfare concerns apply to both high and low-skilled natives, meaning that the interaction term between layoff notices among native workers and high-skilled immigrants should be negative for both high and low-skilled natives (see Table 1). This is not the case, as indicated by the results in specification (4) in Table 5, which instead suggest that layoff notices received by high-skilled native-born workers has a more positive effect on support for the SD when the share of high-skilled immigrants is high. This further supports theories on expected labor market competition from immigration.

The Bartik instrument predicts the number of layoff notices by the local sectoral composition, and is exogenous given observable local characteristics. One of these characteristics is the share of immigrants, which means that the variation in layoff notices is not caused by immigration. Nevertheless, economic distress among low-skilled native-born workers increases support for anti-immigration parties. Job insecurity among the members of this group is attributed to immigration, in particular in areas with higher presence of low-skilled immigrants. Conversely, low-skilled natives are less likely to attribute economic distress to immigration where minorities are less visible. These results are in line with similar findings in Strömblad and Malmberg (2015).

The Online Appendix presents results for layoff notices among foreign-born workers interacted with immigrants (Table A17), as well as OLS estimates for all four social groups (Table A18). Similar to the results in Section 4, the OLS estimates are in line with the 2SLS estimates, and smaller in magnitude.

5.2 Other anti-globalization parties: the Left Party

Related to ethno-nationalism and social conservatism is economic nationalism, specifically protectionism and opposition to supranational organizations. Globalization is believed to limit state-level decision making and to only benefit economic and political elites. If voters blame their impaired economic situation on international political and trade agreements, they could potentially be attracted to the extreme right based on their anti-trade and

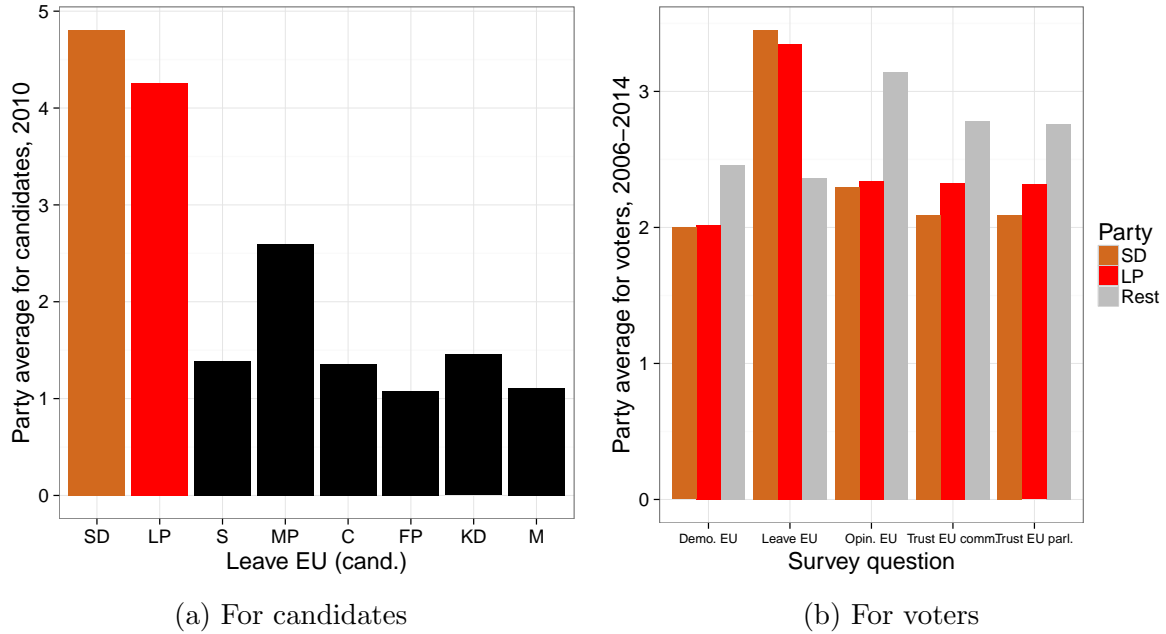
anti-EU stance (Dippel et al. 2015; Colantone and Stanig 2016). As noted by Zaslove (2004), left-wing parties have traditionally been known for opposing globalization, and in Swedish politics, this role has been taken on by the *Left Party (Vänsterpartiet)*. If economic anxiety leads to anti-globalization sentiment, we would expect the Left Party to increase their vote share in areas with high number of layoff notices.

Before presenting the estimates from using the change in vote share of the left-wing party as the outcome in (1), we look at the similarity of the political candidates of the SD and the Left Party when it comes to preferences for the European Union.²⁷ The mean values for candidates from each party is presented in Figure 4a, and clearly shows how close candidates from the SD and the Left Party are in the EU question. Regarding their voters, Figure 4b shows average responses from Riks-SOM for statements related to the European Union. Voters who indicated that they prefer the SD or the Left Party give very similar responses to questions about whether Sweden should leave the EU (*Leave EU*), if democracy in the EU is working well (*Demo. EU*), and about their general views on the EU (*Opin. EU*). For these questions, SD and Left Party voters differ from voters of other parties. For questions about trusting EU organizations (*Trust EU comm.* and *Trust EU parl.*), the similarities between the left-wing party and the SD are less clear. Still, the anti-EU stance of the left-wing party's candidates and their voters is evident. It is also important to note that the Left Party oppose the *Transatlantic Trade and Investment Partnership* (TTIP), the *Comprehensive Economic and Trade Agreement* (CETA), and the *Trade in Services Agreement* (TISA), while none of these are (publicly) opposed by the Sweden Democrats.

The estimated effects of layoff notices among native-born workers on the support for the Left Party are presented in Table 6. The 2SLS estimates suggest that layoff notices among low-skilled native-born workers decreased votes for the LP, while it had no effect for high-skilled native-born workers. These result challenges the idea of economic distress affecting voting for far-right parties through anti-globalization sentiment. However, one should be careful in interpreting these results. The Left Party are usually considered a part of the Left bloc, together with the Social Democratic Party and the Green Party, and thus, part of the establishment. This could potentially help to explain the different effects of layoff notices on voting for the LP and the SD, as support for populist parties are partly

²⁷ Unfortunately, the surveys do not include any questions related to globalization or international trade agreements.

Figure 4: Statements related to the European Union



Notes: Average responses for survey questions related to the European Union. In 4a, averages are presented for all parties in the national parliament in 2010, based on survey data from Valpejl2010. In 4b, averages are presented for the Sweden Democrats, the Left Party, and all other parties in the national parliament, based on survey data from Riks-SOM (2006 to 2014).

driven by anti-establishment sentiments (see, for instance, Guiso et al. 2017). In addition, the survey evidence in Figure 4 uses questions related to support for the European Union, and are not necessarily good proxies for attitudes towards globalization. Unfortunately, the surveys do not include any questions related to globalization or international trade agreements.

In the Online Appendix, 2SLS estimates for layoff notices among foreign-born workers are presented (Table A19), as well OLS estimates for all social groups (Table A20).²⁸

6 Conclusion

With the recent electoral success of radical right parties in many European countries, a growing literature in different fields of social science is trying to explain their success. Most studies focus on the causal link between immigrant visibility and anti-immigrant sentiment while a recent wave of papers in economics instead emphasizes the role job displacement and insecurity. This study examines the economic factors behind the increased support for the extreme right by using detailed election precinct-level data on

²⁸ Table A21 in the Online Appendix presents 2SLS estimates of interactions of immigration and layoff notices, with Left Party voting as the dependent variable.

Table 6: Δ LP and native-born layoff notices 2007-2010 (2SLS)

Dep. variable: Δ LP	Low-skilled native-born	High-skilled native-born
	(1)	(2)
Notices	-0.277*** (0.086)	-0.391 (0.338)
First stage F-stat.	1676.00	854.46
Obs.	5657	5657
Controls	No	Yes

Notes: 2SLS estimates of regression model (1) with layoff notices 2007-2010 based on skill level-origin combinations. Dependent variable is Δ LP, and is the change in votes between the 2006 and 2010 national elections for the Left Party. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

the number of layoff notices as a proxy for economic distress, and election results for the 2006 and 2010 national elections in Sweden.

The results in this paper show that layoff notices among low-skilled native-born workers increase support for anti-immigration parties. Theories on the effects of immigration state that native workers of a particular skill are expected to oppose immigration of the same skill due to fear of labor market competition. In addition, concerns regarding strain on public finance and competition for access to welfare services make both high and low-skilled natives more likely to oppose low-skilled immigration. Estimates of the interaction between layoff notices and the share of high-skilled and low-skilled immigrants in each precinct suggest that changes to economic status is attributed to immigration as a result of labor market concerns. In areas with a high share of low-skilled immigrants, the effect of layoff notices among low-skilled native-born workers on support for the SD is larger, while the opposite is true for the effect of layoff notices among high-skilled natives.

The opposite estimated signs of the interactions between low and high-skilled immigration and economic distress among low and high-skilled natives suggest that concerns related to constraints on welfare by immigration are of lesser importance, as depicted in Table 1. An alternative explanation to why low-skilled native-born workers are more likely to support radical right parties is that they are attracted by the anti-globalization and anti-trade policies proposed by these parties. In this paper, I show that layoff notices among low-skilled native-born workers do not increase voting for the anti-globalization and anti-EU Left Party. These results go against the idea of increased support for the Sweden Democrats being channelized through increased anti-globalization attitudes.

The effect of layoff notices estimated in this study is exacerbated by the presence of

low-skilled immigrants, which suggests that voters do attribute changing economic conditions to immigration. This interpretation is based on results from aggregated precinct-level data, and future research on when, and why, native-born voters blame immigrants for changes to the local economic environment unrelated to immigration could enhance our understanding of why radical right parties are successful.

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A Online Appendix for “Economic Distress and Support for Radical Right Parties – Evidence from Sweden”

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Replication and data availability

This paper employs data from Swedish registers. In order to process and store such data, one needs to adhere to several rules and regulations. Therefore, the empirical analysis has been conducted through a secured remote desktop system, where the data was stored on a server. This prevents me from making the data available online. Should a reader wish to gain access to these data in order to replicate the analysis, they should order the data from *Statistics Sweden* (SCB) (please follow this link: <https://www.scb.se/vara-tjanster/bestalla-mikrodata/>). Before such a process of ordering data can begin, however, one must seek approval from the Ethical Review Board.

Sensitivity analysis

As discussed in Section 3.3, the Bartik instrument allows a causal interpretation if the sectoral composition affects SD support only through its effect on layoff notices. It is assumed that the 2SLS estimates capture the causal effect of layoff notices on the change in SD votes, conditional on the observable characteristics, which are shown to be highly correlated with the first principal component of the industry shares (Table A3). This means that the inclusion of additional controls that we expect to be correlated with both support for SD and layoff notices should not alter the estimated effect.

In order to examine this, I estimate the coefficients of regression model (1) with an additional set of controls: the number of individuals collecting unemployment benefits in 2006 (both stock and flow), the number of workers employed in manufacturing in 2006, and the number of workers receiving layoff notices in manufacturing in 2006. I also control for a measure of the overall unemployment risk by assigning an estimated risk level to each worker based on the share of their colleagues (with the same skill level) who received a layoff notice in 2006. Lastly, the change in SD votes between the 2002 and the 2006 national elections is added to account for precinct-specific time trends in SD support.

Table A1 presents the 2SLS estimates for the effect of layoff notices on SD votes when including additional controls. Comparing these estimates to those presented in Table 2, the additional control variables do not change the estimated slope coefficient for layoff notices. These results suggest that the inclusion of the observable characteristics correlated with first principal component effectively controls for factors related to both industry shares and support for the SD.

Table A1: Δ SD and layoff notices 2007-2010, additional control variables

Dep. variable: Δ SD	Native-born		Foreign-born	
	Low-skilled (1)	High-skilled (2)	Low-skilled (3)	High-skilled (4)
Notices	0.481*** (0.100)	-0.544** (0.238)	0.043 (0.113)	-1.539*** (0.467)
First stage F-stat.	1478.24	771.67	4918.07	622.68
Obs.	5657	5657	5657	5657
Controls	Yes	Yes	Yes	Yes

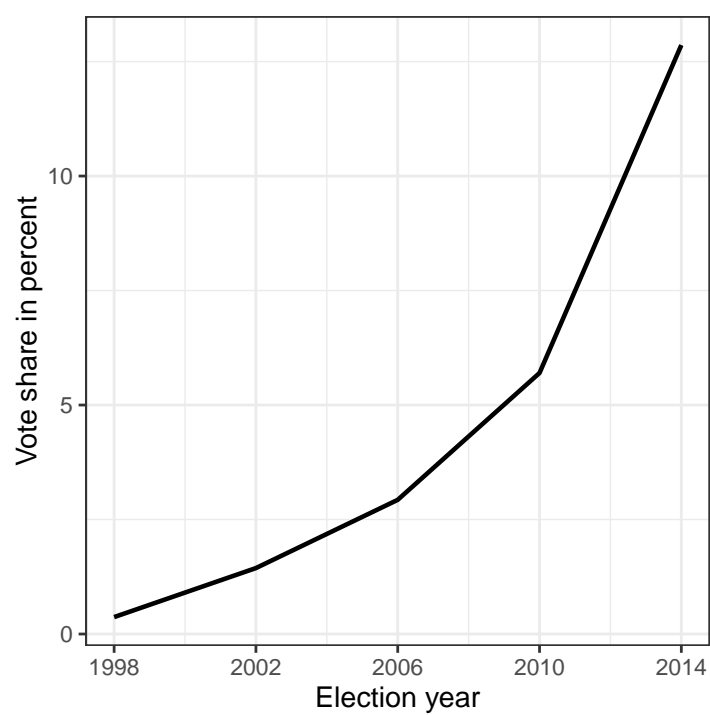
Notes: 2SLS estimates of regression model (1) with layoff notices 2007-2010 based on skill level-origin combinations, with additional control variables. Dependent variable is Δ SD, and is the change in votes between the 2006 and 2010 national elections for the Sweden Democrats. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

Furthermore, I presents results using modified versions of the outcome, as well as different definitions of skill level. The results in Table A9 are based on changes in vote share instead of the change in the number of votes, and notices as share of eligible voters instead of the number of layoff notices. In Table A10, skill level is based on occupational classification (SSYK, similar to ISCO) instead of highest attained education level.¹ The estimates presented in both tables are very similar to those presented in Table 2: using different definition of high and low-skilled, or using vote shares instead of number of votes

¹ Workers employed in occupations coded as requiring secondary education and post-secondary education less than 2 years or less are coded as low-skilled. Table A11 describes how each category group is translated into skill levels.

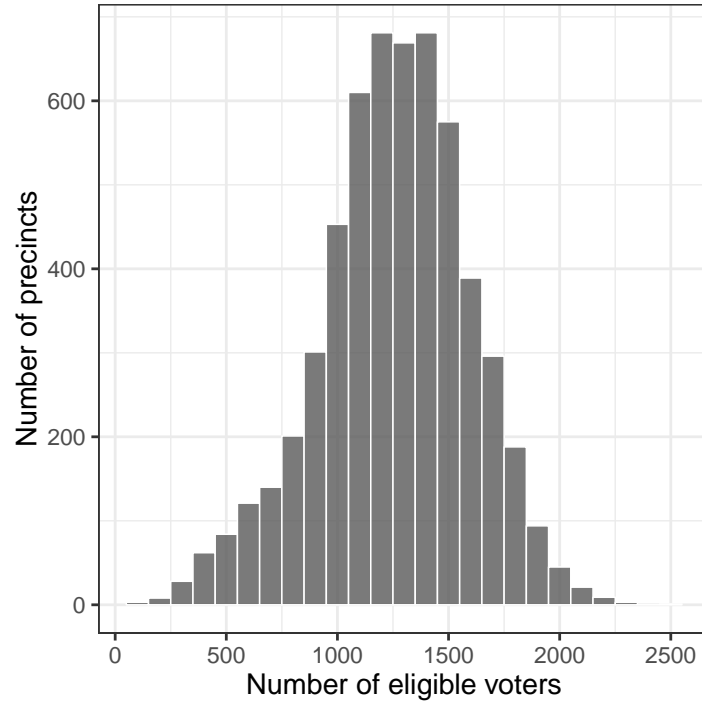
do not alter the results. The same holds for when election outcomes for the local elections are used instead of the national elections. Table A12 shows estimates of equation (1) using the change in votes in the municipal elections as outcome. Although the magnitude of the estimates differ slightly, they point in the same direction as when election results for the national elections are used.

Figure A1: SD vote share in national elections, 1998-2014



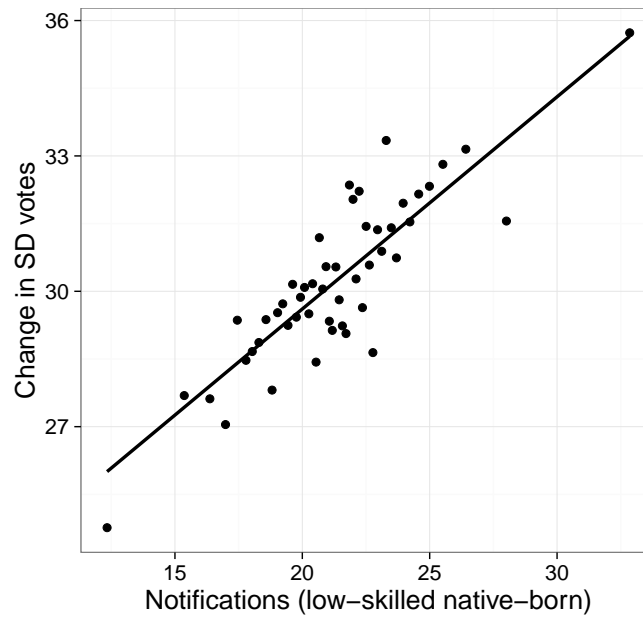
Notes: SD vote share in national elections 1998, 2002, 2006, 2010, and 2014. Source: Statistics Sweden.

Figure A2: Eligible voters, 2010 national election



Notes: Histogram of the distribution of precinct-level eligible voters in the 2010 national election.

Figure A3: ΔSD and layoff notifications among low-skilled native-born workers from 2007 to 2010



Notes: Binscatter plot for change in SD votes and the number of layoff notifications (fitted values from first stage regression) among low-skilled native-born workers. Controls and municipal fixed effects added.

Table A2: Education level

Classification	Skill level
1 Compulsory education less than 9 years	Low
2 Compulsory education 9 years	
3 Secondary education maximum 2 years	
4 Secondary education 3 years	
5 Tertiary education less than 3 years	High
6 Tertiary education 3 years or more	
7 Tertiary preparatory education	

Notes: Translated from Swedish to English. Based on variable *Sun2000niva* in *LISA* (Statistics Sweden).

Table A3: First principal component of industry shares in 2006 and observable characteristics

Dep. variable:	PC1, <i>low-skilled native</i> (1)	PC1, <i>high-skilled native</i> (2)	PC1, <i>low-skilled foreign</i> (3)	PC1, <i>high-skilled foreign</i> (4)
Low-sk. immigration, stock 2006	-0.508*** (0.080)	-0.027 (0.027)	-1.038*** (0.114)	0.044*** (0.014)
High-sk. immigration, stock 2006	1.397*** (0.261)	-0.401*** (0.123)	0.030 (0.102)	-1.112*** (0.063)
Share low-skilled 2006	0.714*** (0.152)	0.952*** (0.186)	0.111 (0.078)	0.045 (0.032)
Pre-tax median income 2006	0.848*** (0.206)	-0.863*** (0.210)	0.275*** (0.074)	0.108*** (0.026)
Avg. Education 2006	-15.112*** (4.956)	3.845 (4.419)	4.619* (2.623)	1.355** (0.681)
Eligible voters 2010	0.033*** (0.004)	-0.026*** (0.001)	-0.005*** (0.001)	-0.003*** (0.001)
Share employed 2006	0.619*** (0.099)	-0.708*** (0.044)	-0.241*** (0.060)	-0.057*** (0.013)
Share male 2006	42.071** (19.892)	28.259*** (9.903)	18.309*** (4.901)	12.370*** (1.686)
Adj. R-square	0.852	0.858	0.891	0.872
Obs.	5657	5657	5657	5657

Notes: OLS estimates of first principal component of industry shares in 2006 regressed on share of immigrants in 2006 (high and low-skilled), share of low-skilled in 2006, pre-tax median income in 2006, mean highest attained education in 2006, number of eligible voters in 2010, share employed (15-74 years) in 2006, share male residents in 2006. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

Table A4: Descriptive statistics

Variable	Mean	Median	St. dev.	Min	Max
Panel A: Outcomes					
Δ SD	30.218	27.000	19.109	-10.434	171.073
Δ LP	0.882	0.000	14.028	-72.040	117.293
Panel B: Measures of economic distress					
Notifications 2007-10	33.028	29.937	16.908	0.000	247.328
Notifications 2007-10, low-sk. native-born	21.298	18.428	13.837	0.000	188.512
Notifications 2007-10, high-sk. native-born	6.644	5.833	4.559	0.000	34.846
Notifications 2007-10, low-sk. foreign-born	3.750	2.009	5.094	0.000	57.061
Notifications 2007-10, high-sk. foreign-born	1.335	0.996	1.535	0.000	14.390
Bartik 2007-10	25.810	24.408	10.635	1.859	110.317
Bartik 2007-10, low-sk. native-born	16.973	15.304	9.290	0.977	80.867
Bartik 2007-10, high-sk. native-born	5.379	4.457	3.579	0.000	30.471
Bartik 2007-10, low-sk. foreign-born	2.585	1.568	3.019	0.000	35.983
Bartik 2007-10, high-sk. foreign-born	0.877	0.640	0.806	0.000	7.122
Panel C: Control variables					
Share low-sk. foreign-born 2006	9.876	6.144	11.827	0.000	124.762
Share high-sk. foreign-born 2006	4.428	2.964	4.174	0.000	62.520
Share low-sk. 2006	68.351	72.406	14.288	12.714	93.548
Median pre-tax income 2006	23.024	22.329	2.615	13.692	45.874
Avg. education level 2006	3.735	3.616	0.522	2.645	5.544
Eligible voters 2006	1256.153	1272.000	338.781	121.000	2523.000
Share employed 2006	64.637	65.505	8.772	23.955	86.242
Share male 2006	0.504	0.503	0.021	0.356	0.661

Notes: Descriptive statistics for outcomes, measures of economic distress, and control variables. All variables are described in Table A5 in the Online Appendix.

Table A5: Description of variables in regression models

Variables	Definition	Source
Panel A : Outcomes		
ΔSD	Change in vote share for the <i>Sweden Democrats</i> from 2006 national election to 2010 national election	Election Authority
ΔLP	Change in vote share for the <i>Left Party</i> from 2006 national election to 2010 national election	Election Authority
Panel B : Measures of economic distress		
Layoff notifications	Total number of workers receiving layoff notifications, 2007-2010	SCB
Layoff notifications, j	Number of workers from social group j receiving layoff notifications, 2007-2010	SCB
Panel C : Control variables		
Eligible voters 2010	Number of eligible voters in the 2010 national election	Election Authority
Share immigration, stock 2006	Share of foreign-born individuals in 2006	SCB
Low-sk. immigration, stock 2006	Share of low-skilled foreign-born individuals in 2006	SCB
High-sk. immigration, stock 2006	Share of high-skilled foreign-born individuals in 2006	SCB
Avg. education 2006	Average of highest attained education level in 2006	SCB
Pre-tax median Income 2006	Pre-tax median income in 2006	SCB
Share employed 2006	Share of employed workers in 2006	SCB

Notes: Data provided by Statistics Sweden (SCB) and the Swedish Election Authority (www.val.se).

Table A6: Δ SD and layoff notifications 2007-2010, 2SLS and OLS

Dep. variable: Δ SD	2SLS		OLS	
	(1)	(2)	(3)	(4)
Notices	0.628*** (0.076)	0.236*** (0.069)	0.392*** (0.063)	0.072 (0.044)
Adj. R-square	-	-	0.120	0.652
First-stage F-stat.	6010.88	1792.78	-	-
Obs.	5657	5657	5657	5657
Controls	No	Yes	No	Yes

Notes: 2SLS and OLS estimates of regression model (1). Dependent variable is Δ SD, and is the change in votes between the 2006 and 2010 national elections for the Sweden Democrats. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

Table A7: SD votes 2010 and layoff notifications 2007-2010, controlling for SD votes in 2006

Dep. variable: SD votes 2010	Panel A: 2SLS			
	Native-born		Foreign-born	
	Low-skilled (1)	High-skilled (2)	Low-skilled (3)	High-skilled (4)
Notices	0.458*** (0.095)	-0.464** (0.218)	0.052 (0.115)	-1.434*** (0.456)
First stage F-stat.	1608.13	853.95	5062.74	658.54
Obs.	5657	5657	5657	5657
Controls	No	Yes	No	Yes
Dep. variable: SD votes 2010	Panel B: OLS			
	Native-born		Foreign-born	
	Low-skilled (1)	High-skilled (2)	Low-skilled (3)	High-skilled (4)
Notices	0.175*** (0.052)	-0.146** (0.058)	-0.082 (0.077)	-0.326** (0.164)
Adj. R-square	0.890	0.890	0.890	0.890
Obs.	5657	5657	5657	5657
Controls	Yes	Yes	Yes	Yes

Notes: 2SLS (Panel A) and OLS (Panel B) estimates of regression model (1) with SD votes in 2010 as outcome, and controlling for SD votes in 2006. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

Table A8: Δ SD and layoff notifications 2007-2010, for all skill level-origin combinations

Dep. variable: Δ SD	2SLS (1)	OLS (2)
Low-skilled native-born	0.524*** (0.086)	0.177*** (0.052)
High-skilled native-born	-0.777*** (0.218)	-0.164*** (0.061)
Low-skilled foreign-born	-0.002 (0.118)	-0.060 (0.083)
High-skilled foreign-born	-0.440 (0.548)	-0.141 (0.175)
Adj. R-square	-	0.655
First stage F-stat.	445.02	-
Obs.	5657	5657
Controls	Yes	Yes

Notes: 2SLS and OLS estimates of regression model (1), with notifications 2007-2010, where layoff notifications for all social groups have been included. Dependent variable is Δ SD, and is the change in votes between the 2006 and 2010 national elections for the Sweden Democrats. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

Table A9: Change in SD vote share and layoff notifications 2007-2010

Dep. variable: Δ SD vote share	Panel A: 2SLS			
	Native-born		Foreign-born	
	Low-skilled (1)	High-skilled (2)	Low-skilled (3)	High-skilled (4)
Notifications	0.387*** (0.124)	0.522 (0.572)	0.051 (0.249)	-0.426 (1.547)
First stage F-stat.	767.78	368.78	2744.28	256.67
Obs.	5663	5663	5663	5663
Controls	Yes	Yes	Yes	Yes
Dep. variable: Δ SD vote share	Panel B: OLS			
	Native-born		Foreign-born	
	Low-skilled (1)	High-skilled (2)	Low-skilled (3)	High-skilled (4)
Notifications	0.152*** (0.049)	-0.052 (0.081)	-0.137 (0.110)	-0.438** (0.170)
Adj. R-square	0.525	0.523	0.524	0.524
Obs.	5663	5663	5663	5663
Controls	Yes	Yes	Yes	Yes

Notes: 2SLS (Panel A) and OLS (Panel B) estimates of regression model (1) with the change in SD vote shares between 2006 and 2010 as outcome. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

Table A10: Δ SD and layoff notifications 2007-2010, skill-level based on SSYK

Dep. variable: Δ SD	Panel A: 2SLS			
	Native-born		Foreign-born	
	Low-skilled (1)	High-skilled (2)	Low-skilled (3)	High-skilled (4)
Notifications	0.581*** (0.075)	-0.240 (0.150)	0.035 (0.123)	-5.048*** (1.556)
First stage F-stat.	1880.13	1020.96	4446.85	154.48
Obs.	5663	5663	5663	5663
Controls	Yes	Yes	Yes	Yes
Dep. variable: Δ SD	Panel B: OLS			
	Native-born		Foreign-born	
	Low-skilled (1)	High-skilled (2)	Low-skilled (3)	High-skilled (4)
Notifications	0.205*** (0.054)	-0.030 (0.068)	-0.067 (0.069)	-0.560** (0.245)
Adj. R-square	0.647	0.645	0.645	0.645
Obs.	5663	5663	5663	5663
Controls	Yes	Yes	Yes	Yes

Notes: 2SLS (Panel A) and OLS (Panel B) estimates of regression model (1) with Δ SD as the outcome, where workers' skill-level is based on SSYK codes (see Table A11). '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

Table A11: Skill level based on occupational classification

1-digit (2012)	SSYK code	Name of occupation category	Skill level
0		Armed forces	—
1		Legislators, senior officials and managers	High
2		Professionals	High
3		Technicians and associate professionals	High
4		Clerks	Low
5		Service workers and shop sales workers	Low
6		Skilled agricultural and fishery workers	Low
7		Craft and related trades workers	Low
8		Plant and machine operators and assemblers	Low
9		Elementary occupations	Low

Notes: Description of 1-digit *Swedish Standard Classification of Occupations* (SSYK) occupation categories. Source: Statistics Sweden (SCB).

Table A12: Δ SD and layoff notifications 2007-2010, local elections

Dep. variable: Δ SD (local)	Panel A: 2SLS			
	Native-born		Foreign-born	
	Low-skilled (1)	High-skilled (2)	Low-skilled (3)	High-skilled (4)
Notices	0.313*** (0.107)	-0.576** (0.277)	0.181 (0.112)	-0.623 (0.443)
First stage F-stat.	1676.00	854.46	5066.00	661.97
Obs.	5657	5657	5657	5657
Controls	Yes	Yes	Yes	Yes
Dep. variable: Δ SD (local)	Panel A: OLS			
	Native-born		Foreign-born	
	Low-skilled (1)	High-skilled (2)	Low-skilled (3)	High-skilled (4)
Notices	0.138*** (0.038)	-0.088 (0.055)	-0.016 (0.060)	-0.176 (0.202)
Adj. R-square	0.725	0.725	0.725	0.725
Obs.	5657	5657	5657	5657
Controls	Yes	Yes	Yes	Yes

Notes: 2SLS estimates of regression model (1). Dependent variable is the change in votes between the 2006 and 2010 local elections for the SD. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

Table A13: Correlation matrix for share of immigrants

	Share immigrants 2006	Share immigrants 2007	Share immigrants 2008	Share immigrants 2009	Share immigrants 2010
Share immigrants 2006	1.000	0.998	0.995	0.990	0.985
Share immigrants 2007	0.998	1.000	0.998	0.994	0.989
Share immigrants 2008	0.995	0.998	1.000	0.998	0.994
Share immigrants 2009	0.990	0.994	0.998	1.000	0.998
Share immigrants 2010	0.985	0.989	0.994	0.998	1.000

Notes: Pearson correlation coefficients for share of immigration each year from 2006 to 2010.

Table A14: Examples of SD motions to parliament

Year	Motion name	Summary of Motion
2011	Motion 2011/12:K376	Allow the state to recall wrongly granted citizenships
2014	Motion 2014/15:1112	Court defendants in need of interpreter have to cover the cost of their interpreter
2014	Motion 2014/15:1109	End quotas based on immigration for new recruits to the police force and firefighters
2014	Motion 2014/15:2911	Prohibit dual citizenship and only allow individuals who have been Swedish citizens for at least 10 years to run for parliament, or to take any position in the government
2016	Motion 2016/17:790	Ban the Muslim veil
2016	Motion 2016/17:7935	Forbid the Islamic call to prayer

Notes: Examples of motions proposed by the Sweden Democrats in the national parliament, 2011-2016. Source: Riksdagen.se.

Table A15: Δ SD and layoff notices 2007-2010, Bartik instrument at commute zone level

Dep. variable: Δ SD		Panel A : Native-born			
		Low-skilled		High-skilled	
		(1)	(2)	(3)	(4)
Notices		0.673*** (0.206)	0.091 (0.092)	-2.854* (1.556)	1.958 (2.889)
First stage F-stat.		821.80	54.22	101.37	36.15
Obs.		5668	5668	5668	5668
Controls		No	Yes	No	Yes
Dep. variable: Δ SD		Panel B : Foreign-born			
		Low-skilled		High-skilled	
		(1)	(2)	(3)	(4)
Notices		-4.019 (2.898)	-1.442 (2.579)	-4.510*** (1.711)	-0.398 (1.040)
First stage F-stat.		136.95	42.45	525.56	20.93
Obs.		5668	5668	5668	5668
Controls		No	Yes	No	Yes

Notes: 2SLS estimates of regression model (1) with layoff notices 2007-2010 based on skill level-origin combinations. The Bartik instrument varies on commute zone level instead of precinct level. Panel **A** shows estimates for native-born workers, while Panel **B** shows estimates for foreign-born workers. Dependent variable is Δ SD, and is the change in votes between the 2006 and 2010 national elections for the Sweden Democrats. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

Table A16: Δ SD and layoff notices 2007-2010, Bartik instrument at municipal level

Dep. variable: Δ SD	Panel A : Native-born			
	Low-skilled (1)	(2)	High-skilled (3)	(4)
Notices	0.855*** (0.223)	0.239 (1.958)	-2.073** (0.838)	-2.008 (2.223)
First stage F-stat.	533.09	731.66	311.06	735.47
Obs.	5668	5668	5668	5668
Controls	No	Yes	No	Yes
Dep. variable: Δ SD	Panel B : Foreign-born			
	Low-skilled (1)	(2)	High-skilled (3)	(4)
Notices	-3.031 (2.298)	0.345 (3.763)	-6.404*** (2.136)	-7.544 (7.667)
First stage F-stat.	196.38	884.15	489.56	519.10
Obs.	5668	5668	5668	5668
Controls	No	Yes	No	Yes

Notes: 2SLS estimates of regression model (1) with layoff notices 2007-2010 based on skill level-origin combinations. The Bartik instrument varies on municipal level instead of precinct level. Panel **A** shows estimates for native-born workers, while Panel **B** shows estimates for foreign-born workers. Dependent variable is Δ SD, and is the change in votes between the 2006 and 2010 national elections for the Sweden Democrats. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

Table A17: Δ SD, foreign-born layoff notifications 2007-2010, and share of foreign-born (2SLS)

Dep. variable: Δ SD	High-skilled foreign-born		Low-skilled foreign-born	
	(1)	(2)	(3)	(4)
Notices	0.041 (0.125)	0.010 (0.124)	-1.378*** (0.516)	-1.481*** (0.531)
Notices \times Immigrants	0.001 (0.003)		-0.006 (0.009)	
Notices \times Low-sk. immigrants		0.005 (0.004)		0.121* (0.065)
Notices \times High-sk. immigrants		-0.016* (0.009)		-0.376** (0.166)
Low-sk. immigrants	-0.563*** (0.076)	-0.563*** (0.076)	-0.494*** (0.063)	-0.494*** (0.063)
High-sk. immigrants	0.500*** (0.158)	0.500*** (0.158)	0.718*** (0.211)	0.718*** (0.211)
First stage F-stat.	2533.68	1688.97	335.36	256.60
Obs.	5657	5657	5657	5657
Controls	Yes	Yes	Yes	Yes

Notes: 2SLS estimates of regression model (1), with layoff notifications 2007-2010 based on skill level-origin combinations, and interactions with share of high and low-skilled foreign-born in 2006. Dependent variable is Δ SD, and is the change in votes between the 2006 and 2010 national elections for the Sweden Democrats. The main effect for immigration has been included in the regression model but omitted from the table. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

Table A18: Δ SD, layoff notifications 2007-2010, and share of foreign-born (OLS)

Dep. variable: Δ SD	Native-born low-skilled		Native-born high-skilled		Foreign-born low-skilled		Foreign-born high-skilled	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Notices	0.217*** (0.048)	0.172*** (0.045)	-0.153** (0.072)	-0.179*** (0.065)	-0.097 (0.081)	-0.094 (0.080)	-0.184 (0.180)	-0.307* (0.177)
Notices \times Immigrants	0.006*** (0.002)	- -	0.009* (0.005)	- -	-0.003 (0.002)	- -	-0.002 (0.006)	- -
Notices \times Low-sk. immigrants	-	0.012*** (0.003)	-	-0.010** (0.004)	-	0.002 (0.002)	-	0.009 (0.010)
Notices \times High-sk. immigrants	-	-0.017** (0.007)	-	0.014 (0.020)	-	-0.010 (0.007)	-	-0.043 (0.030)
Adj. R-square	0.653	0.657	0.650	0.654	0.650	0.653	0.648	0.653
Obs.	5657	5657	5657	5657	5657	5657	5657	5657
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: OLS estimates of regression model (1), with layoff notifications 2007-2010 based on skill level-origin combinations, and interactions with share of high and low-skilled foreign-born in 2006. Dependent variable is Δ SD, and is the change in votes between the 2006 and 2010 national elections for the Sweden Democrats. The main effect for immigration has been included in the regression model but omitted from the table. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

Table A19: ΔLP and foreign-born layoff notifications 2007-2010 (2SLS)

Dep. variable: ΔLP	Low-skilled foreign-born	High-skilled foreign-born
	(1)	(2)
Notices	0.032 (0.080)	0.705 (0.552)
First stage F-stat.	5066.00	661.97
Obs.	5657	5657
Controls	No	Yes

Notes: 2SLS estimates of regression model (1) with layoff notifications 2007-2010 based on skill level-origin combinations. Dependent variable is ΔLP , and is the change in votes between the 2006 and 2010 national elections for the Left Party. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

Table A20: ΔLP and layoff notifications 2007-2010, based on skill level-origin combinations (OLS)

Dep. variable: ΔLP	Native-born		Foreign-born	
	Low-skilled (1)	High-skilled (2)	Low-skilled (3)	High-skilled (4)
Notices	-0.035 (0.025)	0.085 (0.090)	0.170* (0.095)	0.299 (0.201)
Adj. R-square	0.241	0.239	0.240	0.240
Obs.	5657	5657	5657	5657
Controls	Yes	Yes	Yes	Yes

Notes: OLS estimates of regression model (1) with layoff notifications 2007-2010 based on skill level-origin combinations. Dependent variable is ΔLP , and is the change in votes between the 2006 and 2010 national elections for the Left Party. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).

Table A21: ΔLP , layoff notifications 2007-2010, and share of foreign-born (2SLS)

Dep. variable: ΔLP	Native-born low-skilled		Native-born high-skilled		Foreign-born low-skilled		Foreign-born high-skilled	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Notices	-0.304*** (0.097)	-0.301*** (0.109)	-0.465 (0.315)	-0.408 (0.566)	0.165 (0.119)	0.042 (0.100)	-0.241 (0.428)	1.082* (0.562)
Notices \times Immigrants	0.002 (0.003)		-0.013 (0.014)		-0.001 (0.004)		-0.039*** (0.009)	
Notices \times Low-sk. immigrants		0.007 (0.006)		0.020 (0.037)		0.004 (0.006)		-0.016 (0.093)
Notices \times High-sk. immigrants		-0.016 (0.023)		0.019 (0.058)		-0.041*** (0.015)		-0.062 (0.258)
First stage F-stat.	865.34	560.44	427.58	301.88	2692.81	1688.97	354.91	256.60
Obs.	5657	5657	5657	5657	5657	5657	5657	5657
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: 2SLS estimates of regression model (1), with layoff notifications 2007-2010 based on skill level-origin combinations, and interactions with share of high and low-skilled foreign-born in 2006. Dependent variable is ΔLP , and is the change in votes between the 2006 and 2010 national elections for the Left Party. The main effect for immigration has been included in the regression model but omitted from the table. '***', '**' and '*' indicate statistical significance at 1%, 5% and 10% levels, based on clustered standard errors (74 commuting zones).