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Social Marginalization, Ethnic Threat, and Radical Right-wing Support in Sweden: A Multilevel Analysis[1*]

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Abstract

With the aim of studying the role of contextual factors for explaining within-country variation in the vote share of the radical right-wing party, the Sweden Democrats, in the 2014 Swedish election, we specify and test hypotheses pertaining to social marginality and ethnic threat. An important finding is that *change* (increase) is more important than the actual proportion of non-European immigrants for explaining the electoral support of the Sweden Democrats. Moreover, our results indicate that the increase in non-European born residents is positively associated with the vote share of the Sweden Democrats primarily in districts where the proportion of non-European-born residents was already high. This finding contradicts the defended neighborhood hypothesis, as well as the findings of Rink et al. (2009). This suggested tipping-point effect runs counter to the contact hypothesis, while being more in line with ethnic threat and group position theories. Also, our results suggest that a higher level of aggregation, such as at the municipal or region labor market level, is sometimes more relevant when measuring contextual explanations than the more fine-grained level of voting districts. The social marginalization hypothesis receives mixed support.

[1] The order of the authors is alphabetical; the two authors contributed equally to this article. We thank Anton B. Andersson and Tina Goldschmidt for valuable comments.

Introduction

Radical right-wing parties have emerged and become established in many European countries during the past few decades. These parties differ in several ways, but share a fundamental core of ethno-nationalist xenophobia (or nativism), anti-establishment populism, and sociocultural conservatism, expressed on issues related to national identity, traditional family values, and law and order (Rydgren 2005, 2007; Mudde 2007).

While support for radical right-wing parties is generally widespread, there are important variations at both national and sub-national levels. Whereas cross-national variation has received a lot of attention in the previous literature, there are to date few studies that systematically try to understand within-country variations. In this paper we test the extent to which contextual factors explain sub-national variation (across 5837 voting districts, 290 municipalities, and 73 labor market regions) in the voting share of the Sweden Democrats in the 2014 parliamentary election. Previous studies have suggested that support for radical right-wing parties is stronger in areas that are socioeconomically deprived and/or where there is a high proportion of foreign-born residents (e.g., Coffé et al. 2007, Lubbers et al. 2002). However, the empirical support for these explanations varies, as will be further discussed below, and there are also conflicting theories arguing that a high concentration of immigrants in an area is likely to increase the prevalence of interethnic interaction, which in turn tends to undermine prejudice and outgroup hostility (i.e., the contact hypothesis, see e.g., Allport 1954). The more recently developed halo effect hypothesis combines these conflicting predictions, suggesting that support for radical right-wing parties is more likely higher in areas that are ethnically homogenous but geographically close to areas with a large proportion of foreign-born residents (Bowyer 2008, Rydgren and Ruth 2013).

We will study the variation in the electoral share of the Sweden Democrats at three different levels simultaneously by performing multi-level analysis. One reason for this is

methodological, that is, to account for the ways in which voting districts are clustered within municipalities and regional labor markets. Another reason, however, is substantial: to test which level of aggregation is most appropriate for investigating variation in electoral support for radical right-wing parties such as the Sweden Democrats. Voting districts are more homogenous than municipalities or nations, and studies of small geographical areas are more likely to capture the daily interactions between residents than studies of larger areas. Hence, voting districts – usually including between 1000 and 2000 voters – proxy experienced neighborhood settings, and are likely to be a better measure when testing the contact hypothesis and, possibly, ethnic threat and group position theories. The municipality level, however, is arguably the smallest relevant *political* contextual area in which welfare-based resources are decided and distributed. It is, theoretically, possible that ethnic competition and social marginalization play out primarily at this level. The proportion of immigrants within the voting district (neighborhood) may be less important than the proportion within the municipality, if voters' concern is competition over welfare resources. Regional labor markets, finally, which are geographic units in which municipalities are nested, may be the relevant *economic* contextual area. This may be the best measure for studying ethnic competition, for example, if voters' concern is competition over jobs and labor market chances.

Unlike previous contextual studies that have mainly focused on the effect of the proportion of foreign-born residents on radical right-wing voting, we make an important contribution by also exploring the potential impact of an *increase* in a foreign-born population (see also Rink et al. 2009).

In the paper we specify and test three hypotheses, derived from the previous literature. First, we expect that the vote share of the Sweden Democrats is higher in socioeconomically marginalized districts. Second, we expect that there will be a positive association between the

proportion of foreign-born residents and the vote share of the Sweden Democrats. Considering that the Sweden Democrats, like other radical right-wing parties, mobilizes against migrants from Africa and the Middle East in particular, we also expect that this association is stronger for the proportion of non-European-born residents than for other foreign-born groups. Finally, based on the halo effect hypothesis, we expect that the vote share of the Sweden Democrats is higher in ethnically homogenous districts that are geographically close to heterogeneous districts.

The results from the multilevel analyses render mixed support for our hypotheses. An important finding is that change (increase) in non-European-born residents explains radical right-wing party support better than the actual proportion of non-European-born residents. Contrary to previous findings (Rink et al. 2009), moreover, our results suggest that increase of non-European migrants in already heterogeneous areas is the primary driver of this association. In addition, our results suggest that a higher level of aggregation, such as the municipal or regional labor market level, is sometimes more relevant when trying to capture contextual factors than the more fine-grained voting district level.

Socioeconomic marginalization, group position theory and the halo effect

Contextual explanations of the upsurge of radical right-wing parties often involve perceptions of threats among the national majority. First, the concept of socioeconomic marginalization suggests that radical right-wing parties receive greater support in deprived areas. There are several reasons for this assumption, starting with the idea that conflicts between in-groups and out-groups are likely to intensify when there is competition over scarce resources (Blalock 1967; Coffé et al. 2007). To the extent that radical right-wing parties or other actors articulate tacit discontent by framing immigrants as a reason for socioeconomic problems such in-group/out-group conflicts may be intensified (Rydgren 2003a). Accordingly, radical

right-wing parties would be expected to gain votes in regions that are poor in socioeconomic resources. In addition, people living in these areas may feel that they have been let down by the established political parties, and are thus prone to be mobilized by radical right-wing parties' anti-establishment messages (Rydgren 2003b). Another issue related to socioeconomic marginalization is the concept of *welfare chauvinism*, suggesting that in-groups exclude out-groups out of fear of losing what they have, in particular in terms of welfare benefits. In other words, there is potentially an unwillingness to accept social distributions to immigrants, and to pit the putative costs of immigration against benefits that support the native-born elderly and sick, which may be more pronounced and more easily translated into radical right-wing party voting in disadvantaged areas (Kitschelt 1995; Rydgren 2003a).

Empirical studies show mixed results when testing socioeconomic explanations of radical right-wing party support. Although this theoretical framework has proven useful when measuring individual differences (e.g., Rink et al. 2009), it is less so when clarifying national variation. The correlation between unemployment and radical right-wing party voting has occasionally been statistically insignificant (Lubbers et al. 2002, Swank and Betz 2003), negative (Knigge 1998; Arzheimer and Carter 2006), or found to be dependent on the level of immigration (Golder 2003). To date, Jackman and Volpert (1996) are the only scholars who have found a positive and significant relationship between the unemployment rate and support for radical right-wing parties when measuring cross-national variation. Regarding income levels, previous studies have shown a variation in correlations with voting results at sub-national levels. The results by Coffé et al. (2007) indicate that high average income is positively associated with voting results for the radical right-wing party Vlaams Blok in Belgium, whereas Valdez (2014) found support in Sweden for the expected negative

relationship with voting results for the Sweden Democrats at the labor market level, but not at the municipal level (but see Rydgren and Ruth 2011).

Second, another form of perceived threat frequently associated with voting support for radical right-wing parties relates to the concentration of immigrants within the contextual area. According to *group position theory*, the increased presence of a minority group poses a threat to the social position of the majority. People tend to favor their own group over others, thus enhancing xenophobia and anti-immigrant attitudes among the in-group towards the out-group (Blumer 1958; Hjerm 2007). Related to this is the somewhat narrower *ethnic competition hypothesis*, which states – similarly to the economic threat mentioned previously – that voters turn to radical right-wing parties in order to reduce competition for housing and social welfare, and to promote cultural hegemony if there is a large proportion of immigrants (Pettigrew 1957, Bowyer 2008).

The ethnic competition hypothesis receives some support in cross-national studies. Lubbers et al. (2002) and Knigge (1998) found a positive correlation between the number of immigrants and the electoral success of radical right-wing parties, whereas Norris (2005) failed to establish a similar relationship between ethnic heterogeneity and radical right-wing party voting. Stockemer (2015) argued that the individual perceptions of immigrants explain the electoral success of radical right-wing parties, not the number of foreign-born citizens present. Moving to the sub-national level, Rydgren and Ruth (2011) showed a positive correlation in Sweden between the proportion of immigrants and electoral support for the Sweden Democrats at the municipal level, but not at the level of voting districts (Rydgren and Ruth 2013), whereas Strömblad and Malmberg (2015) did find such a relationship at the district level, but only where unemployment rates were high. Focusing on the local level in Belgium, Rink et al. (2009) noticed a curvilinear relationship, suggesting that an increase in

immigrants matters more for radical right-wing party voting when the existing group of migrants is small rather than large.

The finding of Rink et al. (2009) is in line with the *defended neighborhood theory*, according to which anti-immigrant sentiment arises when there is a rapid increase in ethnically different migrants into a previously homogenous area. As discussed by Green et al. (1998), this is only an initial reaction that is likely to be dampened when contact between the majority and minority groups increases. Rink et al. (2009) mentions the *contact hypothesis* as a potential explanation for their finding of the curvilinear relationship, which is a theory in direct opposition to the ethnic competition hypothesis. It presupposes that a higher presence of immigrants undermines prejudice, since it increases interactions between members of different ethnic groups (Allport 1954). In order for contact to be effective in altering prejudice, it must reach below the surface. In other words, changed attitudes are most likely achieved following contact that leads people to do things together. The optimal conditions for these positive effects is when there is equal status between majority and minority groups in the pursuit of common goals, intergroup cooperation, and institutional support sanctioning the contact (i.e., by local atmosphere, custom, or law) (Allport 1954: 276ff).

The contact theory is rendered support in other studies as well. Pettigrew and Tropp (2006) found that intergroup contact clearly reduces inter-group prejudice with regard to both ethnic and other encounters. Findings by McLaren (2003) implied that friendship with members of minority groups reduces the willingness to expel legal immigrants, and on a similar note Schneider (2008) showed that having immigrants as friends, colleagues, or living in the same area decreased anti-immigrant attitudes. Focusing on the specifics of radical right-wing party support, Biggs and Knaus (2012) found that membership in the British National Party is less likely when living in a neighborhood with a substantial proportion of foreign-born, non-whites, or South Asians. The correlation existed at the city-level as well

when the degree of segregation was low, whereas high segregation was linked to increased likelihood of membership, which is more in line with the ethnic competition hypothesis. Rydgren (2008) also found some support for the contact theory when exploring voting for radical right-wing parties in Western Europe, but only in two of the six countries included in the analysis. In the remaining four, voters who lacked immigrant friends were neither less nor more likely than others to vote for radical right-wing parties.

As pinpointed by Schneider (2008) and Biggs and Knaus (2012), among others, one should consider the potential for selection bias when exploring the correlation between immigrant-dense regions and support for radical right-wing parties, since people sharing xenophobic attitudes are more likely to move to areas where immigrants are less present. However, according to Biggs and Knaus (2012), previous studies suggest that contact outweighs such self-selection.

The ethnic composition of local immigrant populations must also be considered. An important aspect raised in the previous literature is the differences across minority groups, rather than measuring immigrants, which is a heterogeneous umbrella category. As shown by Ford (2011), there are large variations in attitudes towards immigrants, where white migrants are preferred over non-whites. In addition, the empirical results indicate a hierarchy of preferences between the groups within each racial category. In line with these findings, Ford and Goodwin (2010) showed that the presence of a large Muslim community within the constituency increased radical right-wing party support in Britain, while such a correlation did not exist when looking at other immigrant groups. In fact, support was actually lower in areas with larger black (non-Muslim) populations. Similarly, a study by Coffé et al. (2007) indicated a positive correlation between voting for a radical right-wing party and the presence of Turkish or Maghrebian immigrants, but not for other minority groups. This finding can be linked to the fact that radical right-wing parties often single out immigration from Muslim

countries as particularly problematic (Zaslove 2004; Rydgren 2008). Hence, disregarding variations within the immigrant group can result in misleading conclusions.

A narrower version of the group position theory is the *halo effect hypothesis*, which holds that anti-immigrant attitudes are most common in areas close to neighborhoods with a higher concentration of immigrants, rather than within such neighborhoods (e.g., Bowyer 2008). The underlying reasons relate to aspects from both ethnic competition theory and contact theory. With regard to ethnic competition, areas bordering neighborhoods with a high proportion of immigrants are often lower middle-class districts, where there is a fear of losing economic position and social status (Rydgren and Ruth 2013). On the other hand, residents within areas with a higher proportion of immigrants are more likely to have friendly interactions with members from different ethnic groups, thus reducing stereotypes (Allport 1954). As discussed by Rydgren and Ruth (2013), an assumption regarding the halo effect can be based on Miles's (1989: 15) distinction between the *experienced* and the *imagined* 'other'. The former indicates that direct contact and interaction with the 'other' is expected to occur in immigrant-dense areas, whereas those living in bordering neighborhoods are more likely to face the imagined 'other', without experiencing the contact (Miles 1989; Rydgren and Ruth 2013). According to the contact theory, the actual interaction is key when undermining prejudice, and such interethnic interaction occurs less frequently when living close to immigrant-dense areas rather than within such areas.

The halo effect has received some support in the previous literature. In Sweden, Rydgren and Ruth (2013) found a positive correlation between the neighboring district with the highest immigration level and voting for the Sweden Democrats in voting districts with a low proportion of immigrants, when controlling for socioeconomic factors. Similarly, Valdez (2014) showed that anti-immigrant attitudes are more likely to translate into votes for the Sweden Democrats in neighborhoods where resident contact with immigrants is fleeting.

With focus on variation within Britain, Bowyer (2008) investigated support for the British National Party and found it to be concentrated in homogenous areas within ethnically diverse cities. Hence, these results suggest the relevance of testing the halo effect hypothesis further on new and unexplored electoral results.

Hypotheses

Based on the previous research, as discussed above, we stipulate three hypotheses to be tested.

H1: We expect that there will be a higher vote share for the Sweden Democrats in socioeconomically marginalized districts.

H2a: In line with the group position theory, we expect a positive association between the proportion of foreign-born residents and the Sweden Democrats' vote share.

H2b: We expect to find a stronger positive association between the proportion of *non-European*-born residents and voting support for the Sweden Democrats than what is the case for European-born residents.

H3: Testing for the halo hypothesis, we expect that the voting support of the Sweden Democrats is higher in ethnically homogenous districts that have neighboring heterogeneous districts.

Radical right-wing parties in Sweden

While radical-right wing parties have been present in many Western European parliaments since the 1980s and 1990s – and in some instances longer than that – Sweden was an exception for a long time (Rydgren and van der Meiden 2016). Aside from the right-wing populist party New Democracy, which obtained 6.7 percent of the votes in the parliamentary election in 1991 but then imploded and was voted out of parliament in 1994 (Rydgren 2006), no radical right-wing party in Sweden had come close to winning representation in the Swedish parliament until the 2010 election.

The Sweden Democrats was formed in 1988 as a direct successor to the Sweden Party, which in turn was a merger between the Swedish Progress Party and the BBS (Keep Sweden Swedish). The Sweden Democrats (SD) has its roots in Swedish fascism, and the party has tried to put up a more respectable façade since the end of the 1990s (Rydgren and van der Meiden 2016; Erlingsson et al. 2014; Widfeldt 2015). The Sweden Democrats received 5.7 percent of the votes in the 2010 election, and 12.9 percent in the 2014 election, which means that they currently occupy 49 seats out of 349 in the Swedish parliament. In addition, they are represented in a majority of local governments, holding roughly ten percent of the total seats nationwide (Valmyndigheten 2014).

Empirical studies suggest that voters support the Sweden Democrats foremost because of the immigration issue, and over 90 percent of those voting for the Sweden Democrats want to reduce immigration. Another distinguishing characteristic of Sweden Democrats voters is their low level of trust in political parties, politicians, and the media (Rydgren and van der Meiden 2016).

Electoral system

Sweden has three levels of political decision-making: the local municipal assemblies, regional county councils, and the national parliament. Elections for all levels are held on the

last Sunday in September, every fourth year. The electoral system is based on proportional representation, and the country is divided into twenty-nine electoral constituencies for national elections. There are 349 mandates for the national parliament, out of which 310 are 'fixed' and assigned according to the number of citizens who are eligible to vote there. The remaining thirty-nine are adjustment mandates, which are distributed in order to assure a more proportional distribution nationally. The Electoral Authority decides before each election how many of the fixed mandates each electoral constituency gets.

Sweden has 290 municipalities at the local level, each subdivided into voting districts. For the 2014 election, there were 5837 voting districts. The size of the districts vary, but they usually include between 1000 and 2000 voters. The smallest district consists of a few hundred voters, and the largest more than 2000. The arrangement of voting districts is decided by the County Administrative Boards of Sweden, in accordance with suggestions given by the municipal assemblies, and may vary somewhat from one election to another (Valmyndigheten 2016). Municipalities and voting districts will constitute two of the contextual levels of this study. In addition, we will also consider regional labor markets, which is a geographic unit in which municipalities are nested. Statistics Sweden identifies the region as a closed unit in terms of labor supply and demand, based on commuting patterns and other aspects.

Data and methods

In order to test our hypotheses we use multilevel regression analyses, including three separate levels: voting districts (n=5837), municipalities (n=290) and labor market regions (n=73). The purpose of doing a multilevel analysis is to allow us to explore the clustered nature of the data, which exists within the mentioned levels (Gelman et al. 2006).

The data used for the analyses come from several national registers, including Statistics Sweden, the Swedish National Council for Crime Prevention, the Swedish Social Insurance Agency, and the Municipal and County Data Base. Our main dependent variable is the share of votes for the Sweden Democrats in the national election of 2014, using the 5837 voting districts as the units of observation. Hence, we have the advantage of analyzing a large number of units as well as including the total number of districts, rather than a selection of cases.

In order to capture social marginality on the independent side we include variables on the voting district level measuring long-term unemployment rate, income, educational level, ill health and share of blue-collar workers.[2] For the ethnic competition hypothesis we use the proportion of the population that is foreign born. This is divided into subcategories, allowing for a test of hypothesis H2b. We test both the total share of foreign born and the *change* in the share of foreign born, since support for the Sweden Democrats might be higher in areas that have experienced a more pronounced increase of foreign-born residents. Since the number of voting districts does not remain constant over the years, we lose a small number of cases when including the change variable. As a result, the N is somewhat lower in the models including these variables.

Finally, for the halo hypothesis we include the share of foreign born in the neighboring district with the highest proportion of immigrants. In order to fully measure the effect, we subtract the proportion of foreign born in the neighboring district from the share within the district, using this outcome as the main independent variable. That way, we can capture potential differences in population composition within the district compared to the neighboring district.

[2] Blue collar workers include the share of working age population employed in agriculture, forestry, fishing, manufacturing, mining, energy, environmental activities, or construction.

At the municipal level we include similar variables as the ones listed above (see Table 1). In addition, we include a measure of population density within the municipalities, which may influence the likelihood of intergroup contact (Valdez 2014). Finally, at the level of the labor market regions we once again include a measure of the unemployment level within the region.

To balance the risk of omitted variables we also include variables that are theoretically likely to have an impact on both the main independent and dependent variables. At the district level we control for distance to the largest city within the municipality, with the expectation that support for the Sweden Democrats is stronger in the peripheral areas. At the municipal level we include the number of crimes per 100,000 citizens, population size, and gross regional product, which aims to measure municipal prosperity. In addition, when testing hypotheses H2 and H3 we also control for the main independent variables used in the socioeconomic marginality model. Descriptive statistics are presented in Table 1.[3]

[Table 1 about here]

Results

In order to investigate the variance between the different levels we estimated the intraclass correlation (ICC) for the municipalities and labor market regions. The correlations are based on multilevel analyses, including only the main dependent variable at the district level, and allowing for random intercepts at the labor market region and municipal levels. The results indicate clustering at the labor market region level and variation within municipalities (see Table A1 in the Appendix).

[3] We initially also tested for the share of the population on social welfare benefits at the district level, as well as education, mean income, and unemployment at the municipal level, but these variables were excluded due to multicollinearity. Moreover, including them did not change the main result. Neither did population increase, which was tested for as a measurement of municipal prosperity.

We proceeded with multilevel modeling to account for this clustering, while controlling for variables at the labor market region and municipal levels and exploring the variation in slopes for the main independent variables. In Table 2 we tested the socioeconomic marginality hypothesis (H1). Model 1 shows the effect of the main independent variables at the district level when allowing the intercepts at the labor market region and municipal levels to vary. The results show mixed support for the socioeconomic marginality hypothesis (H1). As expected, share of blue collar employed and ill health are positively correlated with the voting shares of the Sweden Democrats, while high education shows a negative correlation. Contrary to expectations, however, long-term unemployment and low income also show negative correlations. The results are statistically significant when including the control variables at all three levels in Model 2. In Models 3 and 4 we allow for random slopes for the main independent variables. Most results are robust at these specifications, although the strength of some variables changes. The coefficients for long-term unemployment, ill health, and share of blue collar employed become weaker, while high education shows a stronger correlation. Low income, however, turns positive when allowing the slope to vary. This result is more in line with H1, but it is not statistically significant, indicating that the result is not robust. All in all, Models 3 and 4 suggest that the effect of the socioeconomic variables differs to some extent between districts. Model 5 shows the effects of the voting district level variables when controlling for municipal fixed effects, with similar results as in previous models. Finally, moving the focus to the two levels of higher aggregation, it is interesting to note the strong positive association between the share of long-term unemployment at the regional labor market level and electoral support of the Sweden Democrats. While not statistically significant, it indicates to some extent that the relevant context of social marginalization is not always at the voting district level but at levels of higher aggregation, which are more important for structuring voters' labor market chances.

Overall, we argue that hypothesis H1 receives at least limited support.

[Table 2 about here]

In Table 3 we present the results of the models testing group position theory, that is, hypotheses H2a and H2b. In Model 1-4 we tested the effect of the proportion of foreign-born population on the vote share of the Sweden Democrats, while Model 5-8 explores the effects of the *change* in the foreign-born population. Models 1-4 show that the proportion of residents born outside of Europe has a consistently negative effect on the voting shares of the Sweden Democrats, whereas the opposite is the case for the proportion of residents born in the Nordic and European countries. This result runs counter to our expectation but confirms the findings of Rydgren and Ruth (2013), who found similar results when investigating the effect on the vote share of the Sweden Democrats in the 2010 election.

However, in Models 5-8, when testing the effect of changes in the proportion of non-European born residents within voting districts, we find a positive association when including control variables, suggesting that an increase in non-European immigration is correlated with higher a vote share for the Sweden Democrats. While the result is below the threshold of statistical significance in Model 6, it becomes significant in Model 7 when allowing the slope to vary, indicating that the effect differs between districts. A potential explanation for this, in line with defended neighborhood hypothesis, would be that the effect of an increase in the proportion of residents born outside of Europe depends on the already existing proportion of foreign-born residents. In order to investigate this idea further, we broke down the analyses

into three different samples of voting districts with low, medium, and high proportions of non-European born residents[4]. Results are presented in Table A2 (see Appendix).

[Table 3 about here]

The effect of an increase in the proportion of non-European-born residents on the vote share of the Sweden Democrats is negative in districts where the existing proportion in 2004 was low or medium, while there is a positive association in districts that already had a high proportion of residents who were born outside of Europe. This suggests that there is an interaction effect, and that an increase in the proportion of non-European residents has a positive impact on the vote share of the Sweden Democrats only if the existing proportion in the district is already high. This finding contradicts the defended neighborhood hypothesis and indicates that the results reported in Rink et al. (2009) cannot be generalized to the Swedish case.

Overall, it seems like the *changes* in the proportion of non-European-born residents is a better factor than the actual proportion of non-Europeans for explaining the variation in the electoral support for the Sweden Democrats. Another important finding is the consistently clear and positive association between an increase in the proportion of non-European residents at the *municipal level* and the voting share of the Sweden Democrats. This result is statistically significant throughout all model specifications. Again, this suggests that a higher level of aggregation is sometimes a more relevant context than the more fine-grained voting

[4] The levels in the three different samples are based on the empirical distribution of the proportion of non-European born residents in the voting districts, so that each sample consists of approximately the same number of residents in total. The levels for 2004: low = <2%, medium = 2-5.5%, high = >5.5%. The levels for 2014: Low = <4 %, Medium = 4-9 %, High = >9 %.

districts. The municipality level is arguably the smallest relevant *political* contextual area in which welfare-based resources are decided and distributed. Seen from that perspective, it makes sense that an increase in the proportion of non-European-born residents is more consistently strongly and positively associated with the voting results of the Sweden Democrats at the municipality level than at the voting district level. It is within the former context that ethnic competition and welfare chauvinism are more likely to play out. This also suggests that ethnic competition theory receives support, while group position theory – for which, we assume, the voting district level would be a more relevant context – receives less support in our study.

Finally, in Table 4 we test the halo hypothesis (H3). Again, we include random intercepts in Models 1-2, allow a random slope for the main independent variable in Model 3, and test for municipal fixed effects in Model 4. We find negative, albeit statistically insignificant, associations for all three immigrant categories throughout all model specifications.

[Table 4 about here]

However, the results differ slightly when splitting the sample in districts with low, medium and high proportions of non-European-born residents (Table A3, see Appendix). Here we find a positive association in districts with low levels of non-European-born residents. The result is below the traditional standard threshold of statistical significance, but above 0.8 in Model 1. In the remaining models, with higher levels, the effect is still negative and mainly statistically insignificant. Hence, to some extent the halo effect hypothesis is supported as well and is dependent on the level of non-European-born residents within the own district. This is in line with the theoretical assumption, since it indicates that the

ethnically homogenous districts that abut multicultural areas are more likely to vote for a radical right-wing party.[5]

Conclusions

Voter support for the radical right-wing parties in Europe is neither even nor stable, but varies both between and within countries. Previous literature discussing these variations has often focused on socioeconomic deprivation and the proportion of foreign-born residents as contextual explanatory factors (Rydgren 2017). Despite a vast literature within this field, within-country variations are still under-researched. With this in mind, the aim of this study was to further explore these theoretical assumptions, by studying variation in voter support for the Sweden Democrats in the 2014 election across 5837 voting districts, 290 municipalities, and 73 regional labor markets.

The results both confirm and contradict previous findings. The expectation that the vote share for the Sweden Democrats is higher in socioeconomically marginalized districts is partly supported. While low income and long-term unemployment show a negative correlation with the vote share of the Sweden Democrats, which goes against our expectations, we find the expected association for high education (negative), as well as the share of blue collar employed, and ill health (positive). As for the group position theory, a higher proportion of non-European-born residents is shown to be negatively correlated with the voter support of the Sweden Democrats, whereas the other two immigrant groups (Nordic

[5] Turning to the control variables, we find a primarily positive and robust correlation between population size and the vote share of the Sweden Democrats, indicating that residents in bigger municipalities vote for the party more often than in other municipalities – when controlling for factors pertaining to social marginalization and/or ethnic group position at the levels of voting districts and municipalities. A district's distance to the city and gross regional product has a negative effect on the vote share of the Sweden Democrats, whereas an increase in crime at the municipal level shows a positive correlation. The standard deviations for these coefficients are high, however, indicting that the results are not fully reliable.

and European) are positively associated. These results are counterintuitive, since radical right-wing party propaganda often target non-European-born residents more than others (e.g., Zaslove 2004; Rydgren 2008), but it confirms the findings of Rydgren and Ruth (2013). However, importantly, when measuring the *increase* of non-European-born residents, we find a positive association with the vote share of the Sweden Democrats. Our results thus indicate that *change* is more important than the actual proportion of immigrants for explaining the electoral support of radical right-wing parties. Most previous studies have used static measures of proportions rather than dynamic measures, and so this finding is an important contribution. Moreover, our results indicate that the increase in non-European born-residents is positively associated with the vote share of the Sweden Democrats, primarily in districts where the proportion of non-European-born residents was already high. This finding runs contrary to the defended neighborhood hypothesis, as well as to the findings of Rink et al. (2009). This indicated tipping-point effect contradicts the contact hypothesis, while being more in line with the ethnic threat and groups position theories. It is possible that the rhetorical message of radical right-wing parties, which stresses increasing immigration as a threat, hits closer to home in areas where the proportion of non-European residents is already high *and* increasing.

The halo effect hypothesis is given some limited support. Our findings indicate that the vote share of the Sweden Democrats is larger in districts with a low proportion of non-European residents but that border on districts with a high share.

On a final note, let us stress one implication of the multilevel analyses. There has been a tendency in the previous literature to argue that, for methodological reasons, more fine-grained areas of observations are to be preferred over more aggregated levels. The stated main reason is that more fine-grained areas come closer to the individual-level and are a better proxy for intergroup interactions, making ecological fallacy less severe. While we

agree with that, our findings indicate that more aggregated areas of observations may sometimes be more (theoretically) *relevant* than more fine-grained areas. For example, our finding that changes in the proportion of non-European-born residents is more consistently associated with support of the Sweden Democrats at the municipality level than at the voting district level is arguably due to the fact that the municipality level is more politically relevant. It is at this level that political decisions are made and resources are allocated. Similarly, that unemployment is positively associated with the voter share of the Sweden Democrats at the level of regional labor markets but not at the level of voting districts, may be due to the fact that regional labor markets are more economically relevant, by being more consequential for people's opportunities for employment. In our view, future studies should take this into consideration when further testing contextual explanations.

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Table 1. Descriptive statistics

Level	Variable	Year	N	Mean	Sd	Min	Max
District	SD vote share	2014	5837	13.08	5.68	0.57	36.89
	% Long-term unemployment	2014	5837	3.34	2.11	0	18.79
	% High education	2014	5837	25.20	13.26	5.36	78.34
	% Low income	2014	5837	24.61	9.74	7.60	94.625
	% Blue collar employed	2014	5837	22.91	10.51	3.52	64.55
	Ill health days per capita (16-64 years)	2014	5837	26.51	10.38	0.002	91.76
	% Nordic-born	2014	5837	2.56	2.06	0	46.06
	% European-born	2014	5837	3.21	2.17	0	26.86
	% Non-European-born	2004	5976	6.23	8.55	0	65.26
	% Non-European-born	2014	5837	9.83	10.76	0	66.01
	Change in Nordic-born %	2014-2004	4785	-0.49	1.02	-10.02	7.42
	Change in European-born %	2014-2004	4785	1.14	1.40	-5.10	17.58
	Change in non-European-born %	2014-2004	4785	3.02	5.01	-53.13	45.35
	% Nordic-born in neighboring district with highest share - % Nordic-born in own district	2014	5835	0.36	1.75	-11.14	24.01
	% European-born in neighboring district with highest share - % European-born in own district	2014	5835	0.81	2.09	-11.71	21.59
	% Non-European-born in neighboring district with highest share - % non-European-born in own district	2014	5835	7.25	10.33	-34.25	54.28
	District's distance to biggest city in municipality (km)	2014	5837	8.14	9.39	0.04	113.99
Municipal	Change in crime per 100 000 citizen	2009-2014	290	-928.96	1621.12	-7193	3048
	Change in non-European-born %	2014-2004	290	3.10	1.68	0.5	10.9
	% Long-term unemployment	2013	290	3.63	1.33	1	8.90
	Gross regional product/citizen in 1000 SEK	2013	290	299	127	119	1245
	% Blue collar employed	2010	290	25.03	11.28	4.34	66.61
Labor market region	% Long-term unemployment	2014	73	1.80	0.56	0.62	3.73

Comment: The variables measuring change on the district level have a lower N number due to variation in arrangement of voting districts between the elections. The neighboring variables have two fewer units because these voting districts do not have neighbors.

Table 2. Dependent variable: SD vote share in the 2014 national election (Socioeconomic marginalization)

	1	2	3	4	5
District level					
% Long-term unemployment	-0.474*** (0.042)	-0.471*** (0.043)	-0.310*** (0.072)	-0.423*** (0.046)	-0.474*** (0.095)
% Population with high education	-0.161*** (0.006)	-0.160*** (0.006)	-0.239*** (0.013)	-0.189*** (0.007)	-0.158*** (0.024)
% Population with low income	-0.029*** (0.005)	-0.027*** (0.005)	-0.027*** (0.005)	0.005 (0.011)	-0.027 (0.016)
% Blue collar employed	0.228*** (0.008)	0.247*** (0.009)	0.215*** (0.009)	0.238*** (0.013)	0.248*** (0.016)
Ill health days/capita	0.053*** (0.005)	0.054*** (0.005)	0.037*** (0.005)	0.038*** (0.008)	0.055*** (0.013)
Distance to biggest city in municipality (km)		-0.012* (0.005)	0.003 (0.005)	0.006 (0.005)	-0.010 (0.009)
Municipal level					
% Blue collar employed		-0.074*** (0.017)	-0.071*** (0.017)	-0.044* (0.019)	
Gross regional product		-0.001 (0.001)	-0.002 (0.001)	-0.003* (0.001)	
Population size (Ln)		0.435* (0.184)	0.622*** (0.176)	0.651*** (0.183)	
Labor market region level					
% Long-term unemployment		0.821 (0.733)	0.767 (0.729)	1.028 (0.705)	
Municipal-fixed effects					Yes
Fixed intercept	10.399*** (0.592)	6.524** (2.292)	7.161*** (2.226)	4.284 (2.278)	9.993*** (0.979)
Random intercept (Municipality)	4.549 (0.501)	3.893 (0.436)	4.009 (0.319)	4.751 (0.459)	
Random intercept (Labor market region)	9.297 (1.934)	8.881 (1.875)	2.923 (0.332)	2.757 (0.320)	
Random slope (Long-term unemployment)			0.754 (0.065)		
Random slope (High education)			0.124 (0.011)		
Random slope (Low income)				0.083 (0.010)	
Random slope (Blue collar employed)				0.145 (0.011)	
Random slope (Ill health)				0.059	
Log likelihood	-13942.002	-13921.413	-13540.965	-13524.529	
R^2					0.8213
Election districts	5837	5837	5837	5837	5837
Municipalities	290	290	290	290	290
Labor market regions	73	73	73	73	

Note: Standard errors in parentheses. Levels of significance: *p< 0.05, ** p< 0.01, ***p< 0.001.

Comment: Model 1-2: Random intercept, labor market region and municipal level, Model 3-4: Random intercept, labor market region and municipal level, and random slope main independent variables, Model 5: OLS estimation with municipal-fixed effects and clustered robust standard errors at the municipal level.

Table 3. Dependent variable: SD vote share in the 2014 national election (Group position theory)

	1	2	3	4	5	6	7	8
District level								
% Nordic born	0.562*** (0.036)	0.241*** (0.027)		0.271*** (0.059)				
% European born	0.170*** (0.032)	0.152*** (0.023)		0.144** (0.055)				
% Non-European born	-0.066*** (0.005)	-0.146*** (0.005)	-0.105*** (0.010)	-0.145*** (0.019)				
Change Nordic born %					0.133* (0.056)	0.074 (0.042)		0.074 (0.060)
Change European born %					0.331*** (0.040)	0.095** (0.031)		0.090 (0.070)
Change non-European born %					-0.053*** (0.010)	0.003 (0.010)	0.110*** (0.017)	0.005 (0.046)
% Long-term unemployment						-0.393*** (0.051)	-0.521*** (0.053)	-0.383*** (0.110)
% Population with high education		-0.206*** (0.006)	-0.213*** (0.005)	-0.206*** (0.021)		-0.164*** (0.007)	-0.167*** (0.007)	-0.162*** (0.033)
% Population with low income						-0.040*** (0.007)	-0.042*** (0.007)	-0.042* (0.019)
% Blue collar employed		0.180*** (0.009)	0.198*** (0.009)	0.179*** (0.014)		0.244*** (0.010)	0.252*** (0.009)	0.244*** (0.019)
Ill health days/capita		0.042*** (0.005)	0.047*** (0.005)	0.041*** (0.008)		0.049*** (0.006)	0.051*** (0.006)	0.050*** (0.016)
Distance to biggest city municipality (km)		-0.023*** (0.005)	-0.018*** (0.005)	-0.021* (0.010)		-0.011* (0.005)	-0.008 (0.005)	-0.009 (0.010)
Municipal level								
Change non-European born %		0.514*** (0.094)	0.524*** (0.093)			0.521*** (0.096)	0.463*** (0.096)	
Change crime/citizens		0.0001	0.0001			0.0001	0.0002	
% Blue collar employed		-0.092*** (0.017)	-0.092*** (0.017)			-0.100*** (0.017)	-0.102*** (0.017)	
Gross regional product		-0.001 (0.001)	-0.001 (0.001)			-0.002 (0.001)	-0.002 (0.001)	
Population size (Ln)		0.418* (0.174)	0.492** (0.172)			0.258 (0.178)	0.363 (0.177)	
Labor market region level								
% Long-term unemployment		-0.639 (0.781)	-0.316 (0.750)			0.148 (0.738)	0.077 (0.764)	
Municipal fixed effects				Yes				Yes
Fixed intercept	13.582*** (0.495)	9.809*** (2.257)	8.881*** (2.206)	11.449*** (1.014)	15.329*** (0.419)	9.201*** (2.258)	8.197*** (2.281)	10.272*** (1.351)
Random intercept (Municipality)	8.143 (0.882)	3.215 (0.365)	1.851 (0.143)		8.571 (0.907)	3.306 (0.384)	1.731 (0.110)	
Random intercept (Labor market region)	11.889 (2.916)	10.458 (2.133)	3.087 (0.325)		7.734 (1.914)	8.865 (1.839)	3.119 (0.318)	
Random slope (% Non-European born)			0.089 (0.011)					
Random slope (Change non-European born %)							0.121 (0.018)	
Log likelihood	-15616.392	-13587.956	-13532.361		-12889.143	-11480.518	-11405.679	
R^2				0.8407				0.8237
Election districts	5837	5837	5837	5837	4785	4785	4785	4785
Municipalities	290	290	290	290	286	286	286	286
Labor market regions	73	73	73		72	72	72	

Note: Standard errors in parentheses. Levels of significance: *p< 0.05, ** p< 0.01, ***p< 0.001.
Comment: Model 1-2 & 5-6 Random intercept, labor market region and municipal level, Models 3 & 7: 6 Random intercept, labor market region and municipal level, and random slope main independent variable, Models 4 & 8: OLS estimation with municipal-fixed effects and clustered robust standard errors at the municipal level. Variables measuring long-term unemployment and low income on the district level are

excluded in Model 1-4 due to multicollinearity.

Table 4. Dependent variable: SD vote share in the 2014 national election (Halo effect hypothesis)

	1	2	3	4
District level				
Nordic born neighboring - % in own district	0.010	-0.034		-0.033
	(0.028)	(0.021)		(0.023)
European born neighboring - % in own district	-0.020	-0.025		-0.026
	(0.023)	(0.017)		(0.025)
Non-European born neighboring - % in own district	-0.006	-0.003	-0.007	-0.004
	(0.005)	(0.004)	(0.005)	(0.006)
% Long-term unemployment		-0.484***	-0.499***	-0.476***
		(0.043)	(0.043)	(0.092)
% Population with high education		-0.160***	-0.161***	-0.158***
		(0.006)	(0.006)	(0.023)
% Population with low income		-0.028***	-0.026***	-0.029
		(0.005)	(0.005)	(0.017)
% Blue collar workers		0.248***	0.246***	0.248***
		0.053***	0.053***	0.054***
Ill health days/capita		(0.005)	(0.005)	(0.012)
Distance to biggest city in municipality (km)		-0.011*	-0.013**	-0.010
		(0.005)	(0.005)	(0.009)
Municipal level				
Change non-European born %		0.528***	0.556***	
		(0.097)	(0.093)	
Change crime/citizens		0.0001	0.0001	
		(0.0001)	(0.0001)	
Population density (Ln)		0.196	0.228	
		(0.131)	(0.128)	
% Blue collar workers		-0.101***	-0.099***	
		(0.016)	(0.016)	
Gross regional product		-0.002	-0.002	
		(0.001)	(0.001)	
Labor market region				
% Long-term unemployment		0.074	-0.072	
		(0.726)	(0.715)	
Municipal fixed effects				Yes
Fixed intercept	15.548***	10.988***	11.066***	10.184***
	(0.422)	(1.499)	(1.477)	(0.926)
Random intercept (Municipality)	8.809	3.375	1.939	
	(0.922)	(0.389)	(0.114)	
Random intercept (Labor market region)	7.996	8.483	2.861	
	(1.966)	(1.833)	(0.309)	
Random slope (% Neighboring non-European born-own population)			0.029	
			(0.006)	
Log likelihood	-15819.298	-13899.414	-13887.856	
R^2				0.8215
Election districts	5835	5835	5835	5835
Municipalities	290	290	290	290
Labor market regions	73	73	73	

Note: Standard errors in parentheses. Levels of significance: *p< 0.05, ** p< 0.01, ***p< 0.001.
Comment: Model 1-2: Random intercept, labor market region and municipal level, Model 3: Random intercept, labor market region and municipal level, and random slope main independent variable, Model 4: OLS estimation with municipal-fixed effects and clustered robust standard errors at the municipal level. Population size is excluded from the model due to high correlation with population density.

APPENDIX

TableA1. Intraclass correlation

	Labor market region level	Municipal level
ICC	0.2799	0.5906
Standard error	0.0516	0.0300
N	73	290

Table A2. Dependent variable: SD vote share in the 2014 national election (Group position theory in districts with different levels of non-European residents in 2004)

	Low %(<2)	Medium % (>2 <5.5)	High % (>5.5)
	1	3	5
District level variables			
Change non-European-born %	-0.074	-0.190***	0.030**
	(0.045)	(0.023)	(0.011)
% Long-term unemployment	0.020	0.415***	-0.527***
	(0.138)	(0.102)	(0.069)
% Population with high education	-0.295***	-0.206***	-0.108***
	(0.017)	(0.010)	(0.012)
% Population with low income	0.013	0.049***	-0.056***
	(0.024)	(0.014)	(0.009)
% Blue collar employed	0.166***	0.220***	0.255***
	(0.017)	(0.016)	(0.023)
Ill health days/capita	0.035**	0.025*	0.065***
	(0.013)	(0.010)	(0.010)
Distance to biggest city in municipality (km)	-0.040***	0.015	0.041
	(0.007)	(0.011)	(0.023)
Municipal level variables			
Change non-European-born %	0.506***	0.510***	0.632***
	(0.122)	(0.115)	(0.117)
Change crime/citizens	0.0002*	0.0002	-0.0001
	(0.0001)	(0.0001)	(0.0001)
% Blue collar employed	-0.079***	-0.101***	-0.135***
	(0.021)	(0.023)	(0.024)
Gross regional product	-0.005**	-0.001	-0.0002
	(0.002)	(0.002)	(0.001)
Population size (Ln)	0.879***	0.474*	-0.684****
	(0.218)	(0.222)	(0.247)
Labor market region variables			
% Long-term unemployment	-0.698	0.568	2.217**
	(0.806)	(0.794)	(0.779)
Fixed intercept	9.300***	5.816*	15.039***
	(2.686)	(2.768)	(3.133)
Random intercept (Municipality)	2.905	4.100	2.594
	(0.455)	(0.542)	(0.492)
Random intercept (Labor market region)	10.503	6.809	3.770
	(2.148)	(1.658)	(1.116)
Log likelihood	-3973.426	-3781.9225	-3579.6547
Election districts	1587	1668	1528
Municipalities	263	255	183
Labor market regions	72	63	49

Note: Standard errors in parentheses
Comment: Random intercept, labor market region and municipal level,

Table A3. Dependent variable: SD vote share in the 2014 national election (Halo effect hypothesis in districts with different levels of non-European residents in 2014)

	Low levels (<4)	Medium levels (>4 <9)	High levels (>9)
	1	3	5
District level			
Non-European born neighboring - % in own district	0.015	-0.004	-0.011
	(0.008)	(0.005)	(0.006)
% Long-term unemployment	0.008	0.296**	-0.511***
	(0.133)	(0.100)	(0.063)
% Population with high education	-0.278***	-0.163***	-0.117***
	(0.012)	(0.009)	(0.011)
% Population with low income	0.035	0.048***	-0.046***
	(0.019)	(0.011)	(0.008)
% Blue collar employed	0.176***	0.223***	0.287***
	(0.014)	(0.015)	(0.020)
Ill health days/capita	0.028*	0.033	0.059***
	(0.012)	(0.009)	(0.009)
Distance to biggest city in municipality (km)	-0.043***	0.024**	0.017
	(0.007)	(0.009)	(0.020)
Municipal level			
Change non-European born %	0.600***	0.414***	0.596***
	(0.122)	(0.114)	(0.117)
Change crime/citizens	0.0002	0.00003	-0.00002
	(0.0001)	(0.0001)	(0.0001)
Population density (Ln)	0.531***	0.548***	0.229
	(0.154)	(0.147)	(0.162)
% Blue collar employed	-0.090***	-0.094***	-0.121***
	(0.019)	(0.021)	(0.022)
Gross regional product	-0.002	-0.002	-0.002
	(0.002)	(0.001)	(0.001)
Labor market region			
% Long-term unemployment	-0.796	-0.213	1.392
	(0.776)	(0.699)	(0.745)
Fixed intercept	14.828***	8.762***	8.256***
	(1.716)	(1.534)	(1.720)
Random intercept (Municipality)	3.433	4.342	2.741
	(0.408)	(0.555)	(0.507)
Random intercept (Labor market region)	9.130	6.430	4.717
	(1.983)	(1.547)	(1.358)
Log likelihood	-4936.8265	-3988.0476	-4784.7548
Election districts	2019	1841	1975
Municipalities	276	276	215
Labor market regions	73	72	60

Note: Standard errors in parentheses

Comment: Random intercept, labor market region and municipal level. Population size is excluded from the model due to high correlation with population density.

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