PER STRÖMBLAD AND BO MALMBERG
2014:1

Ethnic segregation and xenophobic party preference

*Exploring the influence of the presence of visible
minorities on local electoral support for the
Sweden Democrats*

ABSTRACT

This paper presents a comprehensive analysis of the influence of neighbourhood level presence of visible minorities on xenophobic party support. Drawing on previous research on the variation in the success rate of xenophobic political parties in Europe, considering contact and conflict theories suggested in the literature, we explore variation in electoral preferences for the Sweden Democrats. Focusing, in particular, on previous inconclusive evidence concerning contextual influences of the share of foreign born in different socioeconomic settings, we examine relationships between the presence of visible minorities at the neighbourhood level, controlling for the level of unemployment and education both in terms of potentially additive and interactive effects. Utilising aggregate level data for all electoral districts in Sweden, our contribution is built on a GIS-based novel methodological approach, through which neighbourhoods with a fixed population size is empirically defined for each individual in each electoral district. Thus measuring contact patterns, while in regression analyses also taking into account additive as well as interactive effects of aggregate level unemployment and education, we find that increased exposure of visible minorities unambiguously leads to an increase in xenophobic voting if the district level unemployment is high. Where unemployment is low, however, the effect of increased exposure may instead lead to reduced xenophobic party support, due to complex interaction effects involving aggregate education level. The results are discussed in the light of possible public policy measures to combat unemployment in multicultural democracies.

Contact information

Per Strömblad
Linnaeus University
Centre for Labour Market and Discrimination Studies
per.stromblad@lnu.se

Bo Malmberg
Stockholm University
Department of Human Geography
bo.malmberg@humangeo.su.se

Acknowledgement

We thank John Östh for the contextual data used in this paper and for help with data analysis. The contextual data was generated by the EquiPop software John Östh has developed.

In this paper, we present a comprehensive analysis of the influence of neighbourhood level presence of visible minorities on xenophobic party support. Increasing ethnic diversity in many established democracies has triggered different political responses. Challenged by socioeconomic as well as socio-geographic cleavages, governments (from left to right) have searched for policy tools that may promote integration and ‘social cohesion’ in an era of migration and globalisation (cf. Bay, Strömblad and Bengtsson 2010; Borevi 2008; Musterd 2005). Another response to increasing ethnic diversity has been the emergence of political parties that share a clearly identifiable nationalistic agenda, favouring measures to reduce immigration and strongly opposing ‘multicultural policies’. Parties fitting such a profile—which we in this paper will refer to as xenophobic parties—are currently active in a wide array of democracies and have also managed to gain representation in a number of national parliaments (cf. Arzheimer 2009; Rydgren 2008; Van der Brug, Fennema and Tillie 2005). Moreover, there is a long-term trend towards increasing electoral support for these political parties, at least in Western Europe (Norris 2005, Ch. 1; cf. Mudde 2013).

Still, there are considerable spatial differences in xenophobic party support—both between and within countries. This has attracted scholarly attention and there are now a number of studies that analyse both individual and contextual level determinants of the appeal of xenophobic parties (cf. Rydgren and Ruth 2013; Arzheimer 2009; Jesuit, Paradowski, and Mahler 2009; Rink, Phalet and Swyngedouw 2009; Golder 2003; Lubbers, Gijsberts and Scheepers 2002). In this paper, we contribute to the growing body of research on structural conditions for the xenophobic party support by focusing on the potential importance of neighbourhood level presence of visible minorities when it comes to electoral support for the Sweden Democrats (*Sverigedemokraterna*); a fairly recent member of the family of established xenophobic parties in Western Europe, represented in the Swedish parliament for the first time in 2010.

Utilising detailed contextual information for electoral districts (the smallest unit in official Swedish election statistics) along with a neighbourhood-based measure of population compositions, we explore the determinants of spatial differences in the voting share of the Sweden Democrats. The overall question explored is to what extent, and under which conditions, the ethnic composition of the neighbourhood population may stimulate or counteract xenophobic attitudes. Drawing on theoretically derived explanations focused on either ‘contact’ or ‘conflict’ in the literature (cf. Arzheimer 2009), we put forward and examine contrasting hypotheses of such influences. Further, following suggestions of other important structural conditions in previous research, we focus on how levels of unemployment and education may influence the relationship between visible minority presence and xenophobic voting (cf. Rydgren and Ruth 2013; Bowyer 2008; Bjørklund 2007; Golder 2003).

Our analyses provide us with answers to three more specified questions. First, does neighbourhood presence of visible minorities increase or decrease xenophobic voting? Second, is the effect of such presence conditional on the level of unemployment within the local electorate? And third, is the effect of such presence conditional on the educational level of the local electorate?

The results suggest that the relationships between visible minority presence and xenophobic party support are more complex than what has been demonstrated in previous research. The paper presents evidence for negative as well as positive relationships between the presence of visible minorities and local support for the Sweden Democrats. Due to complex interaction effects, demonstrated by our empirical analyses, the differences in outcomes turns out to be a question of the specific socioeconomic conditions in terms of local area unemployment and education levels.

Explaining xenophobic party support—supply vs. demand

A growing number of studies have aimed to explain variations in the support for xenophobic (or, with optional labels, ‘right-wing populist’, ‘radical right’ or ‘anti-immigrant’) parties.¹ A common denominator of such parties tend to be a nationalistic agenda and a highly critical and restrictive stance on issues concerning immigration and integration of immigrants (cf. Arzheimer 2009, 259; Norris 2005, Ch. 2;). This has led scholars to focus on attitudes towards immigrants and immigration along with individual level demographic and socioeconomic characteristics as potential determinants xenophobic party voters support (cf. Rydgren 2008; Holmberg 2007; Lubbers, Gijsberts and Scheepers 2002). However, even controlling for individual level characteristics, significant inter-country variations remain unexplained and this is the case also if institutional factors, such as the construction of the electoral system (e.g. its degree of proportionality), are taken into account (cf. Norris 2005).

Scholarly efforts in this field have generated a number of interesting findings regarding cross-country variations in electoral support (e.g. Rydgren 2008; Norris 2005). Here, it has been shown to be useful to distinguish between ‘demand’ factors (e.g. the actual preferences for

¹ There is a clear lack of consensus on how parties of this kind preferably should be labelled. The frequently utilised description ‘right-wing’ may in several cases in fact be misleading, since their ideological position on a classic left-right axis may often be somewhere in the centre (sometimes even leaning to the left, e.g. on issues concerning welfare policies). The common denominator of being highly critical to immigration, particularly immigration from ‘unfamiliar’ cultures, has lead some scholars to suggest ‘anti-immigrant’ parties as a sensible tag (e.g. Van der Brug, Fennema and Tillie 2005). In this study, we have chosen to use the label ‘xenophobic’, since cultural protectionism often seems to be the main reason for these parties’ argument against immigration (i.e. the migrant does not necessarily have to be an ‘enemy’, as long as she or he is prepared to be completely assimilated in what is perceived to be the majority culture), and arguably this seems to fit the case of the Sweden Democrats quite well (cf. Hellström and Nilsson 2010).

restrictive immigration policies within the electorate) and ‘supply’ factors (e.g. the very presence of a reasonably well organised and serious party), in particular if demand and supply oriented factors also are considered in conjunction with institutionally determined differences (Rydgren 2009, 2008; Norris 2005). For instance, for a given level of xenophobic preferences in a country, and where a party organisation is established in order to take advantage of these opinions, such a party is more likely to succeed in the ‘electoral market’ in a proportional representation system (such as Denmark) than in a majoritarian system (such as the United Kingdom).

Arguably, it can be difficult to determine if demand precedes supply, or if it should be depicted the other way around. Van der Brug, Fennema and Tillie argue that supply-oriented studies are to be preferred: ‘Socio-structural models cannot take us very far because structural conditions are so similar across the countries of Western Europe that they do not help us to explain country differences in the success of anti-immigrant parties’ (2005, 540). Such a focus on supply-side factors is warranted because socioeconomic differences to a high extent are assumed to explain the *demand* for xenophobic parties. Thus, if socioeconomic differences (among a group of countries, or in a given region) are small, something else must account for empirically observed variations in support.

The importance of socioeconomic factors for xenophobic party demand is often phrased in terms of a ‘loser hypothesis’ (Rydgren and Ruth 2011, 206–208; Holmberg 2007, 162; Van der Brug, Fennema and Tillie 2005, 540). The idea here is that certain groups in society are left behind in the globalisation era, which results in a weak and insecure attachment to the labour market, and that such groups (more or less instinctively) will seek out someone to blame. Resentment among such ‘losers of modernity’ might quite plausibly be directed toward asylum seekers or immigrants and, as a consequence, a party arguing for more restrictive immigration policies can become politically attractive.

Although empirical evidence in support for the ‘loser hypothesis’ is not always as clear-cut as expected (Norris 2005, Ch. 6; cf. Lubbers, Gijsberts and Scheepers 2002, 364) lower-educated and unemployed people are in general more likely to vote for xenophobic parties. This pattern also seems to be valid in Sweden (Holmberg 2007, 162). Still, the socio-economic argument cannot, as noted above, explain much of the between-country variation in demand for xenophobic parties (Lubbers, Gijsberts and Scheepers 2002, 364).

On the other hand, if the aim is to analyse within-country variations in support, the loser hypothesis can be of greater value. This follows from the fact that both supply-side factors and

institutional conditions will be essentially the same across the election districts of a single country (cf. Rydgren and Ruth 2011). Thus, it can be argued that empirically observed variation in xenophobic party support should, in principle, reflect differences in demand across local settings.² Examples of scholars that have adopted this approach include Rydgren and Ruth (2013; 2011), Bowyer (2008), as well as Rink, Phalet and Swyngedouw (2008). They all focus on intra-country variation in xenophobic party support and consider spatial differences in demographic and socioeconomic conditions along with social climate and group conflict in local environments as potential explanatory factors.

Moreover, within-country variations in support for xenophobic parties (regionally or locally) can be at least as pronounced as between-country variation. For example, it may be noted that in the 2010 Swedish municipal elections the electoral share of the Sweden Democrats varied between 0 and 35 percent on the electoral district level (SCB 2010). In this case (as well as in other similar single-country observations) the variation in suggested institutional and structural factors must be regarded as minimal: And this opens up for a consideration of other factors. For example, as in this paper, an analysis of the extent to which the presence of visible minorities can explain local differences in the success of the Sweden Democrats.³

Support for the Sweden Democrats—a question of conflict or contact?

Originally formed in 1988 as a manifest expression of outright racist movements in Sweden (Larsson and Ekman 2001), the Sweden Democrats has since then managed to quite radically transform its image in a democratically legitimate and credible direction (cf. Hellström and Nilsson 2010). Hence, while the party in its early days was dismissed as consisting of racist criminals and hooligans, scholars and political commentators would currently include it in the (Western) European family of, more or less ‘new’, radical right-wing populist parties.

Following up their breakthrough four years earlier, the Sweden Democrats managed to gain representation in the Swedish parliament in the 2010 general elections. Winning 5.7 percent of the vote for the Swedish parliament (*Riksdagen*), they managed to pass the 4 percent threshold for taking part in the distribution of seats by a fairly comfortable margin. The party nearly doubled its share of the votes in comparison with the previous elections (held in 2006). Thus expanding the number of parties represented in the parliament to eight for the first time ever, the Sweden Democrats’ successful efforts also resulted in the loss of overall majority for the ruling

² In this study, we disregard potential variations in factors such as local party organisation and municipal level party competition (but see Loxbo 2010).

³ Although outside the scope of this study, it may be noted that scholarly work also has been directed toward possible *consequences* of the relative success of xenophobic parties. Aside from investigating their actual degree of influence in policy formulation studies have also explored how other, more ‘mainstream’, parties, respond to the challengers in terms of rhetoric as well as coalition building (Dahlström and Sundell 2012; Dahlström and Esaiasson 2011; Boréus 2010; Loxbo 2010).

centre-right coalition. While the party's more long-term imprint on the political scene remains to be evaluated, Sweden is now included in the group of western European countries in which right-wing populist or xenophobic parties have managed to gain parliamentary representation. Notably, Sweden thus no longer represents a 'deviant case' in the Scandinavian context either.⁴

As already stated, however, preferences for the Sweden Democrats are highly unevenly distributed across local settings in Sweden. Before taking advantage of this empirical variation to tackle the questions of our own study, we take a closer look on theoretically possible answers.

First, the above mentioned loser-hypothesis' intellectual debt to more general conflict theory should be acknowledged (Blumer 1958; cf. Putnam 2007). Typically formulated in terms of the likely result of a struggle over limited resources, conflict theory suggests that 'in-groups' will regard 'out-groups' with suspicion, or even hostility. Hence, immigrants (and in particular perhaps immigrants in need of support from the welfare state, such as the recently arrived and asylum seekers) may be regarded as a burden by native Swedes who themselves, because of gloomy possibilities on the labour market themselves feel deprived and frustrated. Hence, to the extent that such people frequently may observe immigrants in their own neighbourhood, their resentment may be translated into a willingness to support a xenophobic political party such as the Sweden Democrats.

Secondly, however, 'conflict' is not the only theoretically possible option given the exposure of immigrants in the neighbourhood. The far more optimistic 'contact hypothesis' of social-psychology (Allport 1954; cf. Rydgren 2008, 756) suggests that prejudice and xenophobia will be reduced as a consequence of (non-hostile) encounters. Hence, where people actually have a fair chance to meet and interact with each other, 'out-groups' progressively will be regarded with less suspicion. In this study, such a more optimistic scenario would translate into the hypothesis that native Swedes interacting with immigrants in the neighbourhood will develop more empathic feelings that rather may turn them away from xenophobic political preferences.

At the same time, it is reasonable to believe that structural conditions other than the ethnically defined population composition of neighbourhoods may facilitate conflict and discourage contact (or the other way round). Taking urban socioeconomic differences into account, we will in this study explore if local levels of unemployment and education may influence the relationship between ethnic composition and xenophobic party support. While both mentioned

⁴ Looking over the borders to Sweden's neighbouring countries, the Sweden Democrats has much in common with the Progress Party in Norway and the Danish Peoples' Party in Denmark, in both cases well established in their respective polities (see also Dahlström and Esaiasson 2011)

socioeconomic variables are utilised as control variables in our statistical models (thereby taking account of potential spurious effects of local ethnic composition), it seems reasonable to examine the potential presence of interaction effects as well.

A hypothesis previously explored in the literature is that the effect on xenophobic party support of the share of immigrants in a society is conditioned by the overall level of unemployment (Arzheimer 2009; Jesuit, Paradowski, and Mahler 2009; Golder 2003). The reasoning behind is that immigration need not promote xenophobia in settings where unemployment is low. However, immigrants may be scapegoated in times of economic crises and increasing unemployment rates. Thus, the mechanism of the conflict hypothesis may not be ‘activated’ as long as socioeconomic conditions are perceived as acceptable.

Specifically, we may in this study assume that a high level of unemployment in the local context would increase the risk for negatively interpreted competition and conflict as a result of inter-ethnic encounters. For native Swedes, that is, a greater exposure to visible minorities in the residential area is assumed to promote more xenophobic reactions if the same area suffers from a high level of unemployment, than if local labour market conditions are more auspicious. Seemingly poor socioeconomic prospects in the neighbourhood is thus expected to affect the strength of the association between visible minority exposure and xenophobic party support.

Previous empirical evaluations of hypotheses of this kind tend to be mixed, suggesting a need for further research. In a study of voting patterns in 19 countries (with in total 165 national elections) between 1970 and 2000, Golder (2003) finds that higher levels of immigration tend to increase the support for right-wing populist parties, irrespective of the rate of unemployment; at the same time, however, a analogous positive effect of unemployment is only observed when there is a high share of immigrants in the population. Jesuit, Paradowski, and Mahler (2009) also find support for a similar positive interaction effect between immigration rate and unemployment in their study of regional voting shares for extreme right parties in 14 countries in the 1990s and 2000, as does Boomgaarden and Vliegenthart (2007) in a study of the role of news media in the Netherlands when it comes to vote intention for anti-immigrant parties. In a study based on individual-level election survey data in Flanders (Belgium), Rink, Phaet, and Swyngedouw (2009), however, do not find a significant interaction effect when analysing votes for (the xenophobic party) the Vlaams Blok. Neither is Arzheimer (2009) able to reproduce Golder’s findings in a study based on a comprehensive 1980–2002 set of Eurobarometer survey data. Instead, studying variation in vote intention for extreme right parties, he finds that the interaction effect of unemployment and immigration is negative, suggesting that the effects of these variables do not reinforce each other.

Obviously, differences in design of the above mentioned studies may have affected the results. Notably, the choice between analysing macro level data or a combination of macro and micro level data is potentially consequential. Utilizing macro data exclusively, no individual level controls of possible contextual effects, let alone complex cross-level interaction effects, may be conducted. Hence, for example, in absence of information based on individual voters, a positive interaction effect of immigration and unemployment on xenophobic voting do not reveal how either immigrants (eligible to vote) or unemployed tend to vote—in general or in local settings with different characteristics. On the other hand, macro level data may provide opportunities to analyse a large number of cases, which at the same time more realistically may describe the social environments of voters. In our own study, we exploit this advantage, as we are able to define macro level variables for small geographic units. A similar approach would not have been possible in the mentioned cross-level studies, in which contextual properties were defined either for municipalities (Rink, Phalet, and Swyngedouw 2009) or entire countries (Arzheimer 2009).

The choice of level of analysis notwithstanding, we also suggest that an expectation of interaction may be formulate more optimistically in relation to the reasoning above. In the light of the previously discussed contact hypothesis, it seems reasonable to assume that inter-ethnic encounters more often result in mutual understanding and ‘peaceful coexistence’ in local contexts being characterised by a high level of education. To the extent that formal education may be regarded as a reasonable indicator of knowledge of social circumstances, such as how living conditions differ between groups in society, one may expect that higher educated social environments would provide more auspicious settings for inter-ethnic trust. Hence, among native Swedes residing in such local contexts, a greater exposure to visible minorities is assumed to promote less xenophobic reactions. Also in this scenario an interaction between visible minority exposure and socioeconomic conditions may be present, and should therefore be examined.

Summing up possible scenarios, we note that positive as well as negative effects of ethnic segregation on xenophobic response among members of the majority population are theoretically motivated and possible. Further, in both cases a simple additive effect (positive or negative) may potentially be reinforced given simultaneously present either unfavourable (i.e., a high rate of unemployment) or favourable (i.e., a high level of education) conditions in the local setting. Empirically, the specific outcome is hence a question that remains open, and this is even more true considering that combinations of socioeconomic profiles are possible as well. That is, studying local contexts (temporarily disregarding the ethnic composition of the population) one should not foreclose the possibility that high unemployment may be present in an area marked

also by a relatively high level of education; or vice versa, a case of low level of unemployment as well as education. In such socioeconomically ‘unbalanced’ settings, the net consequences of potential interactions between ethnic composition and socioeconomic conditions will be due to the relative strength of the considered interaction effects. In the empirical analysis following below, we present a comprehensive evaluation taking into account the various scenarios discussed here. Before this, however, we provide a more detailed description of our methodological approach and the utilised data set.

Methods and data⁵

In order to analyse the effect of ethnic segregation on xenophobic voting we have estimated a regression models with the voting share of the Sweden Democrats per electoral district in the 2010 parliamentary election as the dependent variable. In 2010, Sweden had 5668 geographical election districts with, on average, 1257 eligible voters per district. In the regressions, we analyse the effects of three aggregate level explanatory variables: exposure to immigrants that may be regarded as belonging to visible minorities, the rate of unemployment, and the proportion of higher educated persons. We will present regression estimates using each of these variables separately, simultaneously, as well as using models in which the principal explanatory variable, exposure to visible minorities, is interacted with unemployment and education level.

Data on the voting share of the Sweden Democrats have been downloaded from the website of the Swedish Election Authority (*Valmyndigheten*). Data on unemployment levels and education levels per electoral district have been generated using the PLACE database (at the Department of Social and Economic Geography, Uppsala University). For the years 1990–2008, the PLACE database contains individual level register data from Statistics Sweden on employment, income, education, place of birth, residential geocodes and family status for all residents in Sweden. The data has been aggregated using individual residential geocodes in combination with digital boundary data for the election districts available at the Election Authority website. The average value of unemployment experience and education level in 2008 have been computed by dividing the number of individuals with unemployment benefits, and the number of individuals with a tertiary education with the electoral district population in 2008.

In this paper individuals are categorized as belonging to a visible minority immigrant group if they were born in Latin America, Africa, or Asia. The classification is based on indications of how ‘otherness’ in terms of physical appearance is currently evaluated in the Swedish context (cf. Myrberg 2010; Socialstyrelsen 2010, Ch. 6). Country of origin is certainly not a perfect

⁵ Special thanks are due to John Östh who has prepared the dataset we have used in this paper.

measure of physical appearance but is used as a reasonable proxy, since other ethnic (or ‘race’) classifications are not used statistical authorities in Sweden.

Figure 1. A comparison of individualized, ‘egocentric’, neighbourhoods (utilized in this study) and administratively defined areas.

In order to measure local exposure to members of visible minorities, we have chosen not to use a simple aggregation to electoral district. The reason for this is, first, that exposure or contact is not restricted by electoral district boundaries and, second, that variation in district size makes electoral district aggregates a poor measure of local exposure. Instead, we have taken advantage of *EquiPop*, a newly developed GIS-based technique for measuring exposure using individual, ‘egocentric’, neighbourhoods with a fixed population size. The *EquiPop* software was developed by John Östh in order to address the modifiable areal unit problem (MAUP) in segregation measurement (Östh, Malmberg, and Anderson 2011) and it has also been used to analyse contextual influences on educational achievement (Anderson and Malmberg 2013) and attitudes to school choice (Malmberg, Anderson, and Bergsten forthcoming). The idea here is that exposure is measured using the population share of visible minorities among the nearest 50, 100, 200, ..., or 12 800 neighbours of an individual. The main advantage of this approach is that exposure can be measured in the same way irrespective of the size of the electoral district. It also accounts for the fact that administratively defined election districts do not restrict an individual’s contact patterns (see Figure 1, for an illustration of the difference).

Moreover, this approach makes it possible to address questions about which neighbourhood scale is the most relevant to use if one is interested in the relation between local exposure and voting behaviour. Using EquiPop on individual level data results in separate exposure values for every single residential location. However, since voting patterns are not observed at that level, EquiPop based exposure levels have been aggregated to election districts in the same way as individual level data on education and unemployment.

In the estimates presented below exposure values are based on the share of visible minorities among the 800 nearest neighbours. This is somewhat lower than the average size of an electoral district and corresponding to an area served by 2–4 bus stops (Transportforskningsdelegationen 1981). Below we also demonstrate, however, that the exposure effect is not heavily dependent on the precise choice of neighbourhood size.

In this paper, we use the empirically defined egocentric neighbourhoods only for the exposure variable and not for education and unemployment. The motivation for this is that we use election districts as ‘quasi-individuals’ in the statistical analysis. The unemployment level in a district, thus, represents the average expected experience of an individual in the district, and the proportion of higher educated is an indicator of the average individual level of education in the district. An alternative specification would have been to see unemployment and education as contextual variables based the idea that voting behaviour is influence not by individual education and labour market experiences but by how one’s world view has been influenced by the experiences and education levels of ones neighbours. In that case, using measures based on individualized neighbourhoods would have been more appropriate. We acknowledge that estimating such models would have been of interest but that such an analysis falls outside the scope of the present paper.

The hypothesis of that exposure to visible minority groups effects xenophobic voting can be seen as relevant primarily for members of the majority population. To circumvent the fact that our data does not give votes by ethnic groups we have, therefore, made the assumption that visible minority never vote for xenophobic parties. Given this assumption, the voting share for the Sweden Democrats in the non-visible minority group can be obtained by dividing the number of Sweden Democrats vote with the number of voters reduced by the number of visible minority voters (for a similar approach, see Bowyer 2008, 615). As an approximation we have here used the number of voters multiplied by the share of non-visible minority population in the electoral district as the denominator.

Results

In this section, we present a comprehensive test of the relationship between visible minority exposure and xenophobic party support at the electoral district level, taking into account socioeconomic differences both in terms of potentially additive and interactive effects.

The main findings are reported in Table 1. Although our analyses involve a limited set of independent variables, an exhaustive test of their possible combinations for our purposes requires, as reflected in the table, nine separate model estimations.

Table 1 reports OLS estimates for the nine different models specifications of the effect of visible minority (VM) exposure, unemployment rates and educational levels on xenophobic party support. A logarithmic transformation of each variable has been applied, and hence estimates may be interpreted as ‘elasticity coefficients’, representing the expected percentage change in xenophobic party support for a percentage change in the respective independent variable. Starting with the simple bivariate model (presented in column 1), including only our main explanatory factor, VM Exposure, as independent variable (while columns 2 and 4 report corresponding analyses for Unemployment and Education respectively), the complexity gradually increases until the final model (presented in column 9) by means of which all additive and interactive effects may be jointly evaluated.⁶

Table 1. Predicting electoral district xenophobic party support

	1	2	3	4	5	6	7	8	9
Intercept	-2.949 (0.012)	-3.357 (0.018)	-3.366 (0.019)	-0.933 (0.042)	-0.910 (0.041)	-1.234 (0.053)	-1.079 (0.054)	-0.996 (0.081)	-0.435 (0.092)
VM Exposure	0.019 (0.007)		0.008 (0.007)		0.083 (0.006)	0.073 (0.006)	-0.101 (0.019)	-0.089 (0.043)	-0.569 (0.057)
Unemployment		0.377 (0.014)	0.376 (0.014)			0.135 (0.014)	-0.022 (0.021)	0.129 (0.014)	-0.098 (0.023)
Education				-0.650 (0.013)	-0.691 (0.014)	-0.632 (0.015)	-0.616 (0.015)	-0.713 (0.026)	-0.810 (0.027)
Exposure*Unemployment							0.134 (0.014)		0.188 (0.000)
Exposure*Education								0.056 (0.015)	0.138 (0.016)
<i>N</i>	5515	5515	5515	5515	5515	5515	5515	5515	5515
<i>RSQ</i>	0.001	0.111	0.111	0.296	0.320	0.332	0.343	0.334	0.352

Note: Entries are OLS regression coefficients with standard errors in parentheses (bold font represent statistically significant effects, $p < 0.01$). The dependent variable, in all nine models, is electoral district percentage of votes cast for the Sweden Democrats (SD) in the 2010 parliamentary election. For all included variables, a logarithmic transformation has been applied.

⁶ However, it should perhaps be noted that we did not find it theoretically motivated to specify also three-way interaction effects.

Considering the regression results, several interesting observations may be made. Before allowing for interactive specifications (i.e. making a temporary stop at column 6 in the table), we note that results largely confirm previously established empirical patterns concerning political preferences for Sweden Democrats evaluated with individual level data (Holmberg 2007). While unemployment seems to be a factor positively associated with xenophobic party support, high education instead seems to act as a vaccination against xenophobia (as may be noted, this conclusion also holds when the two variables are jointly entered in the regression equation, as reflected in column 6). With a contextual interpretation, still bearing in mind that this study exclusively uses aggregate level data, a reasonable conclusion is thus that local contexts marked by high unemployment, in which large shares of the population also lack higher education, are fertile grounds for a development of xenophobic political preferences.

Turning our attention to the principal explanatory variable (but still postponing the assessment of interactive specifications), we note a positive effect of VM Exposure; which, moreover, becomes significantly larger once both socioeconomic variables are included as well. When entered as the only explanatory model the parameter estimate for VM Exposure is significantly different from zero but very small (and the model variance explained is minimal, as reflected in the RSQ-value). This pattern is primarily a consequence of the ‘suppressor variable’ (Davis 1988) character of Education in these estimations (comparing columns 1 and 5 is informative in this respect). Seemingly, the level of education tend to be comparatively higher in electoral districts in which a large share of the population is frequently exposed to members of visible minorities than in contexts where the opposite is true.

The positive effect of VM Exposure, although its magnitude is not remarkable (studying the coefficients in the full additive model in column 6, we observe that a ten percent increase in VM-exposure is expected to trigger a little less than a one percent increase in xenophobic party support), seems to be a result in support of the conflict hypothesis. Sweden born voters who in their neighbourhoods are more likely to meet (or merely spot) members of visible minorities seem to be somewhat more inclined to prefer political solutions proposed by the Sweden Democrats, rather than tending to avoid this party as predicted by the contact hypothesis.

Moreover, as verified by the robustness check reported in Figure 2, the effect of VM exposure is not strongly influenced by changes in neighbourhood definition. The effect is somewhat stronger when large-scale neighbourhoods are used but the effect is not dramatic.

Figure 2: Parameter estimate of VM exposure variable with varying definitions of neighborhood size, controlling for unemployment and education (cf. column 6 in Table 1).

Figure 3A. Interaction effects: predicting xenophobic party support depending on unemployment rate – areas with low level of education.

Figure 3B. Interaction effects: predicting xenophobic party support depending on unemployment rate – areas with high level of education.

Moving further to the specifications allowing for interactive effects, a considerably more complex empirical result structure is revealed. First, relaxing the assumption that the effect of VM Exposure is constant regardless of local levels of unemployment and education, we note

that an increase in the presence of visible minorities, given specific circumstances, in fact may trigger a distinct *negative* effect on xenophobic party support; that is, a result that (in sharp contrast to above discussed observations) instead seems to support the contact hypothesis. In certain settings, a larger share of immigrants belonging to visible minorities seems to be associated with notably less support for the Sweden Democrats among native Swedes.

Interestingly, the specific circumstances behind such an outcome is a combination of favourable labour market conditions (a low unemployment rate) *and* a more unfavourable socioeconomic structure in terms of education (a low proportion of higher educated residents). Studying parameter estimates from the specification of the full model (reported in column 9), it should be noted that both interaction terms are positive (while also being highly statistically significant). Hence, the now observable negative effect of VM Exposure will drop off as a consequence of either escalating unemployment or education level, or both, in a local context. Consequently, at a certain combination of values of the socioeconomic variables the effect of VM Exposure will eventually become positive instead; that is, an expanding ethnic diversity in the neighbourhood would, again in line with the conflict hypothesis, encourage more xenophobic voting.

To scrutinise these result further, we utilize the regression estimates (again, from the full model) in a prediction equation, which in turn provides the combinations of hypothetical outcomes displayed in Figure 3. In both versions of this graphical representation of the complex interaction effects, we let the main explanatory variable, VM Exposure, vary between its theoretical minimum and maximum (i.e. between 0 percent and 100 percent residents belonging to visible minorities in an empirically defined neighbourhood). In addition, each graph also displays differences in hypothetical outcomes between situations of low and high unemployment (fixed in the prediction equation at 1 percent and 10 percent, respectively). The difference between the upper graph (3A) and the lower graph (3B) is due to that the other socioeconomic variable, the proportion of highly educated residents, is kept constant at, in the first case a low level (fixed at 10 percent) and in the second case a high level (fixed at 40 percent).

Studying first Figure 3A, the highly contradictory predicted consequences, due to the more specific socioeconomic conditions, of an increase in VM Exposure are readily observable. For residential areas with a high level of unemployment (represented by the solid line in the graph), the results suggest a strong positive effect, in harmony with the conflict hypothesis. Notably, one would expect a particularly sharp increase in xenophobic voting in residential areas, previously completely without any inhabitants belonging to visible minorities, but in which

ethnic diversity is then slightly expanded (as suggested by the graph, from 0 to about 10 percent VM exposure).

At the same time, however, we note that the expected scenario would be roughly mirror-reversed in local areas marked by a very low rate of unemployment (represented by the dashed line in the graph). In this case, the results suggest that a more ethnically diverse neighbourhood would generate less xenophobic party support, a development thus in agreement with the contact hypothesis. However, also according to this prediction, such a negative effect of VM Exposure would be significantly more pronounced in a scenario where the neighbourhood population composition changes from first being marked by a complete absence of members of visible minorities to, thereafter, include a limited share.

The latter observation from the graph—when comparing with the graph in Figure 3B as well—also helps us to elucidate the previously mentioned combination of socioeconomic conditions that appear necessary to generate a *negative* effect of VM Exposure on xenophobic party support. We note that such an effect would exclusively be observed in local areas where labour market attachment is generally strong, at the same time as the level of education in general is low. This somewhat ‘inconsistent’ (although in practice of course feasible) mixture of area level characteristics is portrayed precisely by the left-most part of the dashed line in Figure 3A, where we detect the sharp decrease in xenophobic party preferences. The contrast in relation to the corresponding predictions depicted in Figure 3B is quite evident. Recall that in the latter case, predictions are based on hypothetical settings in which the level of education is high. Given such a state of affairs, the differences between more or less ethnically diverse areas barely seem to be reflected in any changes in terms of xenophobic attitudes (as suggested by the almost flat dashed line in this graph). Yet, also when holding education level constant on a high level, a concurrently present high rate of unemployment (again depicted by the solid line) seem to trigger a xenophobic response as a result of an increased neighbourhood presence of visible minorities.

Hence, in contrast to the largely parallel shifts of curves in the graphs when the aggregate level of education is varied (compare for instance the location of the solid lines of Figure 3A and 3B), different rates of unemployment seem to be able to generate diametrically opposed consequences of increasing ethnic diversity.

Where, then, does this result leave us? Clearly, the more complex interaction analyses must be regarded as worthwhile. Based on this examination, we may conclude that ethnic segregation—in terms of local differences in population shares of visible minority groups—tend to influence

xenophobic party support in different ways depending on local socioeconomic conditions. Quite in harmony with one of our hypothesis motivating the interaction model specifications, the exposure to members of visible minorities does not seem to provoke a xenophobic response before unemployment reaches some critical level. Hence, a conflict interpretation among native Swedes is not necessarily a ‘default’ outcome of increasing ethnic diversity in the near social environment. But, once local labour market opportunities seem sufficiently gloomy, a step in the direction of mistrust and suspicion may be much shorter. In any case, this result warrant a more nuanced version of the conflict hypothesis.

Recalling our expectations concerning the other interaction effect, however, the empirical results seem to tell a different story. A possible contextually driven stimulation of inter-ethnic contacts, which in turn should be reflected in less xenophobic party response, is obviously not amplified by a higher level of education in the local context.

Conclusion and discussion

Does inter-ethnic contacts in every-day life stimulate or counteract xenophobic attitudes, and to what extent does local levels of unemployment and education influence the relationship between contacts and xenophobic voting? In this paper, we have addressed these questions through analyses of electoral support for the Sweden Democrats. Utilizing the methodological innovation of egocentric neighbourhoods to measure voters’ exposure to members of visible minorities, our most important finding is the critical role of the unemployment rate for the development of xenophobic political responses. In electoral districts with low unemployment levels, increased exposure generates either lower support for the Sweden Democrats (in areas with a low level of education) or no significant differences in preferences of this kind (in areas with a high level of education). In districts with many unemployed, on the other hand, increased exposure of visible minorities unambiguously leads to an increase in xenophobic voting. Hence, in accordance with the results obtained by others (Boomgaarden and Vliegenthart 2007; Golder 2003; Jesuit, Paradowski, and Mahler 2009), our results suggest that increasing rates of unemployment may trigger a rapid expansion of xenophobic voting in local context that previously have been characterised by a high share of visible minorities and, still, low levels of xenophobia among representatives of the majority population.

During the next 30–40 years, Europe will be facing a rapidly aging population and a possible decline in its working age population. A possible remedy for this challenge would be immigration from non-European countries on a massive scale. However, with increasing electoral support from right-wing xenophobic party, a liberalisation of migration policies is becoming unlikely. Europe, thus, is face with a policy dilemma. On one hand an increasing

need for immigration for reasons of economic sustainability. On the other hand, changes in the opinion that hinder the adoption of a more open policy.

We argue that the results of this study highlights the importance of segregation generated socio-geographic patterns when it comes to policy makers actual abilities to manage the European dilemma (cf. Uslander 2012, Ch. 9). If it is the case that increased exposure to immigrant groups systematically leads to increased support for xenophobic parties, then the dilemma is probably close to impossible to solve.

What we do know, however, is that some countries have experienced extended periods with large inflows of migrant. This would not have been possible if these flows would have generated strong demand for stricter immigration policies. A preliminary conclusion from this observation is that there is no simple linear relationship between increased exposure to immigrant groups and voting behaviour. Instead, it is likely that the effect of exposure is mediated by other social factors and that, depending on context, increased exposure can lead either increased resistance to immigration or to increasing support for openness.

Moreover, from a policy point of view, a possible conclusion of this paper is that the most important strategy for reducing the electoral support for xenophobic parties is to reinstate much more vigorous anti-unemployment policies than are currently implemented in Sweden and other EU-countries. If the model we have estimated above gives a correct picture, then high levels of immigration are compatible with low levels of support for xenophobic parties if unemployment is low. On the other hand, if anti-inflationary, austerity policies are given priority and high levels of unemployment are accepted then our model indicates that there is little hope for combining high levels of immigration with low levels of xenophobia. That unemployment can have this negative effect on our ability to live together peacefully is, of course, not a new insight. It was perhaps the most important lesson learned from the Great Depression and it served as a basis for the full-employment policies that were generally adopted after the Second World War.

References

- Allport, G. W. 1954. *The Nature of Prejudice*. Cambridge: Addison-Wesley.
- Anderson, E. K., and B. Malmberg. 2013. 'Contextual effects on educational attainment in individualized neighborhoods: Differences across gender and social class.' In SPADE Working Paper 2013:10: Stockholm University Linnaeus Center on Social Policy and Family Dynamics in Europe.
- Arzheimer, K. 2009. 'Contextual Factors and the Extreme Right Vote in Western Europe, 1980–2002.' *American Journal of Political Science* 53:259–275.
- Bay, A-H., P. Strömblad and B. Bengtsson 2010. 'An Introduction to Diversity, Inclusion and Citizenship in Scandinavia.' In Bengtsson, B, P. Strömblad and A-H. Bay (eds.): *Diversity, Inclusion and Citizenship in Scandinavia*. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Bjørklund, T. 2007. 'Unemployment and the Radical Right in Scandinavia: Beneficial or Non-Beneficial for Electoral Support?'. *Comparative European Politics* 5:245–263.
- Blumer, H. 1958. 'Race Prejudice as a Sense of Group Position.' *Pacific Sociological Review* 1:3–7.
- Boomgaarden, H. G., and R. Vliegenthart. 2007. 'Explaining the rise of anti-immigrant parties: The role of news media content.' *Electoral Studies* 26: 404–417.
- Boréus, K. 2010. 'Including or Excluding Immigrants? The Impact of Right-Wing Populism in Denmark and Sweden.' In Bengtsson, B, P. Strömblad and A-H. Bay (eds.): *Diversity, Inclusion and Citizenship in Scandinavia*. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Borevi, K. 2008. 'Mångkulturalism på reträtt.' In Gustavsson, S., J. Hermansson and B. Holmström (eds.): *Statsvetare ifrågasätter*. Uppsala: Acta Universitatis Upsaliensis.
- Bowyer, B. 2008. 'Local context and the extreme right support in England: The British National Party in the 2002 and 2003 local elections.' *Electoral Studies* 27:611–620.
- Dahlström, C. and P. Esaiasson 2011. 'The immigration issue and anti-immigrant party success in Sweden 1970–2006: A deviant case analysis.' *Party Politics* 19:343–364.
- Dahlström, C. and A. Sundell 2012. 'A losing gamble. How mainstream parties facilitate anti-immigrant party success.' *Electoral Studies* 31:353–363
- Davis, J. A. 1988. *The Logic of Casual Order*. Beverly Hills: Sage Publications.
- Golder, M. 2003. 'Explaining variation in the success of extreme right parties in western Europe.' *Comparative Political Studies* 36:432–466.
- Hellström, A. and T. Nilsson 2010. '"We Are the Good Guys". Ideological positioning of the nationalist party Sverigedemokraterna in contemporary Swedish politics.' *Ethnicities* 10:55–76.
- Holmberg, S. 2007. 'Sverigedemokrater – vilka är dom och vad vill dom?' In Holmberg, S and L. Weibull (eds.): *Det nya Sverige*. Göteborg: Göteborgs universitet, SOM-institutet.
- Jesuit, D. K., P. R. Paradowski, and V. A. Mahler. 2009. 'Electoral support for extreme right-wing parties: A sub-national analysis of western European elections. *Electoral Studies* 28:279–290.
- Larsson, S. and M. Ekman 2001. *Sverigedemokraterna – den nationella rörelsen*. Stockholm: Ordfront.
- Loxbo, K. 2010. 'The Impact of the Radical Right: Lessons from the Local Level in Sweden, 2002–2006.' *Scandinavian Political Studies* 33: 295–315.
- Lubbers, M., M. Gijsberts and P. Scheepers 2002. 'Extreme right-wing voting in Western Europe.' *European Journal of Political Research* 41:345–378.
- Malmberg, B., E. Anderson, and Z. Bergsten. Forthcoming. 'Composite geographical context and school choice attitudes in Sweden: A study based on individually defined, scalable neighborhoods.' *Annals of the Association for American Geographers*.
- Mudde, C. 2013. 'Three decades of populist radical right parties in Western Europe: So what? The 2012 Stein Rokkan Lecture.' *European Journal of Political Research* 52:1–19.
- Musterd, S. 2005. 'Social and Ethnic Segregation in Europe: Levels, Causes, and Effects.' *Journal of Urban Affairs* 27:331–348.

- Myrberg, G. 2010. 'Who is an Immigrant?' In Bengtsson, B, P. Strömblad and A-H. Bay (eds.): *Diversity, Inclusion and Citizenship in Scandinavia*. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Norris, P. 2005. *Radical Right. Voters and Parties in the Electoral Market*. Cambridge: Cambridge University Press.
- Putnam, R. D. 2007. 'E Pluribus Unum: Diversity and Community in the Twenty-first Century. The 2006 Johan Skytte Prize Lecture.' *Scandinavian Political Studies* 30:137–174.
- Rink, N., K. Phalet and M. Swyngedouw 2008. 'The Effects of Immigrant Population Size, Unemployment, and Individual Characteristics on Voting for the Vlaams Blok in Flanders 1991–1999.' *European Sociological Review* 25:411–424.
- Rydgren, J. 2008. 'Immigration sceptics, xenophobes or racists? Radical right-wing voting in six West European countries.' *European Journal of Political Research* 47:737–765.
- Rydgren, J. 2009. *How Party Organization Matters: Understanding the Ups and Downs of Radical Right-Wing Populism in Sweden*. Department of Sociology Working Paper Series, no 17. Stockholm: Stockholms universitet.
- Rydgren, J., and P. Ruth 2011. 'Voting for the Radical Right in Swedish Municipalities: Social Marginality and Ethnic Competition?' *Scandinavian Political Studies* 34:202–225.
- Rydgren, J., and P. Ruth. 2013. 'Contextual explanations of radical right-wing support in Sweden: socioeconomic marginalization, group threat, and the halo effect.' *Ethnic and Racial Studies* 36 (4):711–728.
- SCB 2011. *Allmänna valen 2010 Del 3, Kommunfullmäktige den 19 september 2010*. Stockholm: Statistiska centralbyrån.
- Socialstyrelsen 2010. *Social Rapport 2010*. Stockholm: Socialstyrelsen.
- Transportforskningsdelegationen 1981. *Planeringshandbok för kollektivtrafik*. Stockholm: TFD.
- Uslaner, E. M. 2012. *Segregation and Mistrust. Diversity, Isolation, and Social Cohesion*. Cambridge: Cambridge University Press.
- Van der Brug, W., M. Fennema and J. Tillie 2005. 'Why Some Anti-Immigrant Parties Fail and Others Succeed. A Two-Step Model of Aggregate Electoral Support.' *Comparative Political Studies* 38:537–573.
- Östh, J., B. Malmberg, and E. K. Anderson. 2011. 'Introducing EquiPop'. 6th international conference on population geographies, June 15, 2011.