# Why Are Immigrants Underrepresented in Politics? Evidence from Sweden 

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#### Abstract

Widespread and persistent political underrepresentation of immigrant-origin minorities poses deep challenges to democratic practice and norms. What accounts for this underrepresentation? Two types of competing explanations are prevalent in the literature: accounts that base minority underrepresentation on individual-level resources and accounts that emphasize local political opportunity structures. Due to the paucity of data suitable for testing these explanations, very little empirical research exists today that can adjudicate between these theories. Using registrybased micro-data covering the entire Swedish adult population between 1991 and 2010 our study is able to empirically evaluate these alternative explanations. We examine election outcomes to municipal councils over the course of six elections and find that when comparing immigrants and natives with comparable individual-level resources and who face similar political opportunity structures a large representation gap remains. We argue that our findings are consistent with discrimination by party gatekeepers and probe the plausibility of this explanation for the underrepresentation of immigrants.


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## 1. Introduction

Immigrants are severely underrepresented in city halls and national parliaments around the world. In most European countries and even in traditional immigration destinations like the United States, Canada, and Australia, parity ratios - the share of immigrants who hold elected office divided by their share in the population - fall well below one (Bloemraad 2013). This lack of descriptive representation occurs even though immigrants have settled in advanced democracies for several decades and have done so in great numbers. In many advanced industrialized democracies the foreign-born now constitute well over ten percent of the population.

The fact that substantial parts of the population face barriers when seeking to enter electoral politics poses deep challenges to democratic practice and norms. Minority representatives often articulate the interests of minority constituents, and, in doing so, introduce perspectives to deliberative decision-making processes that would otherwise remain ignored (e.g., Gutmann and Thompson 2004, Karpowitz et al. 2012, Mansbridge 1999, Tate 2003). The presence of minority representatives can also lessen minority groups' sense of marginalization. Descriptive representation can signal that the political system is inclusive of minority voices and, further, that the majority society accepts or even welcomes diversity (e.g., Bloemraad 2013, Chauchard 2014, Mansbridge 1999, Phillips 1995).

Finally, and most dramatically, it has been argued that the political exclusion of immigrantorigin minorities has contributed to riots, as politically marginalized immigrant groups in France, Belgium, Great Britain and elsewhere have taken their grievances to the streets (Bleich et al. 2010, Dancygier 2010). A recent example of such disturbances occurred in Sweden, where the foreign-born constitute fifteen percent of the population. The riots erupted in Stockholm's
suburbs and subsequently spread to immigrant neighborhoods in other towns. One of the chief reasons attributed to immigrants' discontent is the inequality they experience in the labor market and in the political arena. As one police officer remarked, rioting "is the only way [immigrants] can get the attention of politicians and the media" (Higgins 2013). Thus, even though descriptive representation does not necessarily ensure that legislation reflects minority concerns, ${ }^{1}$ scholars have identified a host of other beneficial consequences.

What, then, accounts for the widespread and persistent political underrepresentation of immigrant-origin minorities? Existing research typically distinguishes between resource-based and context-based explanations. Scholars stressing the importance of resources point to differences in groups' income and education levels as critical variables in explaining variation in electoral participation and representation. Others draw attention to the broader context (often referred to as opportunity structures), which can consist of party systems, electoral rules, and other context-level factors. ${ }^{2}$

What is the importance of individual resources and political opportunity structures in explaining variation in immigrant representation? And are individuals holding similar resources and facing similar political opportunity structures treated identically, irrespective of whether they are

[^0]natives or immigrants? One severe obstacle to answering these questions is the lack of adequate data that can adjudicate between these sets of factors. Existing research often examines variation in the composition of legislatures, usually city councils or national parliaments. This approach has yielded valuable insights, and it is especially useful for assessing how local contexts shape aggregate rates of minority representation. ${ }^{3}$ But it also has major shortcomings.

First, rather than just looking at those who occupy legislatures, we should consider what distinguishes winning candidates from the rest of the population that does not hold elected office. Second, studying the make-up of legislatures does not provide information about the individuallevel characteristics that help or hinder immigrants' access to parliaments and, further, whether these characteristics matter differently for immigrants than they do for natives. For instance, to gain a fuller understanding of the sources of underrepresentation we would like to know not only whether highly educated immigrants are more likely to run for office and win than are their less educated counterparts; we should also test whether education provides the same boost for immigrants as it does for natives or whether immigrants' educational attainment needs to exceed that of natives for these groups to achieve equality in election outcomes. In a similar vein, we should consider whether and how electoral and party contexts matter within and across groups.

Unfortunately, data constraints typically thwart such efforts. Identifying the immigrant background of elected officials - let alone their individual characteristics - is difficult, especially going back in time, and is therefore rarely done. ${ }^{4}$ As a result of these challenges, a recent

[^1]symposium on descriptive representation concluded that "Scholarship on minority representation in Europe is in its infancy" (Bloemraad and Schönwälder 2013, 572). Yet, without knowledge of the personal features of immigrant and native candidates and the population as a whole, we cannot assess how much of the underrepresentation is due to the fact that immigrants tend to be poorer, less educated and younger - characteristics that usually reduce the likelihood of political engagement - and how much is accounted for by variation in the opportunity structures these groups face.

This article seeks to overcome some of these limitations. We employ unique data that cover the whole Swedish adult population over the course of two decades. Our dataset contains a host of contextual and individual-level variables, including whether an individual ran for and won local office. The data, based on government registers, allow us to annually observe over six million individuals located in 290 municipalities, spanning six election cycles between 1991 and 2010. This rich data source permits us to test the major competing hypotheses put forth in the literature.

Our central findings are twofold: First, immigrant underrepresentation is not primarily driven by group differences in the distribution of personal traits or opportunity structures. We consider variables such as education, income, employment status, age, as well as local economic conditions, socio-demographic characteristics of electorates, and electoral institutions, and find that differences in their distribution across immigrants and natives only account for a small portion of the representation gap. Rather, the return to these characteristics is much lower for immigrants than it is for natives. Second, we uncover important time trends. In the two decades under study individual resources and opportunity structures account, on average, for only one third of the representation gap. In the early 1990s differences in these sets of factors explain a mere 16 percent of the immigrant-native representation gap, but by 2010 they explain almost
fifty percent of the gap. This shift has been accompanied by enhanced electoral inclusion. In the early 1990s, natives were two and a half times more likely to win office than were immigrants, but by 2010 this number had fallen to two. Over time, then, equal cases are treated more equally, and immigrants begin securing more similar electoral rewards from their individual endowments and contextual environments.

In light of these findings - a large but decreasing representation gap and substantial but declining differences in the returns to characteristics - we turn our attention to the role of discrimination in the electoral process. Even if immigrants possess similar individual-level resources and confront identical opportunity structures, party elites and voters may harbor reservations when evaluating immigrant candidates that are absent when it comes to the recruitment and election of natives (e.g., Bhavnani 2013, Brouard and Tiberj 2011, Fisher et al. 2014, Norris and Lovenduski 1995, Terkildsen 1993). As a result, immigrants may not reap the same rewards from favorable individual resources or opportunity structures as do natives. We conduct several tests to probe whether it is plausible to assume that discrimination helps account for immigrants' underrepresentation and conclude that our results are consistent with the notion that party gatekeepers discriminate against immigrants, but that such discrimination is lessening over time.

These findings contribute to scholarship examining immigrants' socio-political inclusion as it unfolds on the ground in several ways. ${ }^{5}$ First, to the best of our knowledge, ours is the first paper to examine election outcomes across immigrants and natives at the individual level. Moreover,

[^2]we do so over a nineteen-year period, covering six elections, which permits us to reveal notable changes over time. Second, we go beyond comparing aggregate rates of representation among immigrants and natives and study variation at the individual level. This article is thus the first to comprehensively test resource-based accounts. Third, our access to individual level-data allows us to employ a decomposition technique (widely used by sociologists and labor economists) that measures the extent to which immigrants' underrepresentation results from differences in individuals' characteristics and the opportunity structures they face as opposed to differences in returns to these factors.

The rest of this paper proceeds as follows. We first briefly review the relevant literature, focusing on the juxtaposition of resource-based and context-based accounts. We next provide background about Sweden's postwar immigration history and of immigrants' political inclusion and then discuss our data and methods. The empirical analysis then proceeds in two steps. We first present simple linear regressions across groups at the individual level. These demonstrate that individual resources and opportunity structures tend to have smaller effects on winning council seats among immigrants than they do among natives. To evaluate the relative importance of these factors in contributing to the representation gap we then use the decomposition technique mentioned above. This analysis reveals two things: First, differences in returns appear to be most critical in explaining immigrant underrepresentation. Second, while remaining substantial throughout, differences in returns have decreased significantly over time. In a final empirical section we assess the role of discrimination in explaining these findings. We show (i) that gains in immigrant representation are unlikely to be caused by two alternative mechanisms, changes in immigrants' political engagement/mobilization or candidate partisanship; (ii) that native Swedes' attitudes towards immigration have grown more tolerant as the representation
gap narrows; (iii) that much of the improvement in representation is driven by those who are most likely to face discrimination, immigrants from poorer and culturally more distant regions; and (iv) that though party gatekeepers place this group of immigrants on less competitive list positions than they do natives, over time placement becomes more similar across groups. In the conclusion we discuss the implications of our findings for future research.

## 2. Existing Research on Immigrant Political Representation

Existing research argues that both individual-level and contextual factors shape rates of minority representation in legislatures. At the individual level, socio-economic status (SES) has long been found to influence political participation (e.g., Wolfinger and Rosenstone 1980, Persson 2011). In addition to the direct effects of SES (which in our analyses consists of income, education and employment) on participation, those with higher levels of SES are said to possess the civic skills that are conducive to political engagement (Verba, Schlozman, and Brady 1995). Furthermore, socio-demographic characteristic such as gender and age also feature prominently in this literature. Do the same socio-economic and demographic individual characteristics that lead natives to enter politics also matter for immigrants? Prior research on immigrant-origin populations finds that age, education, income, and employment are significant predictors of political participation, though these variables do not perform as reliably among immigrants as they do among natives (e.g., Fennema and Tillie 1999, Maxwell 2010, Ramakrishnan 2005, Strömblad and Adman 2010).

When socio-economic backgrounds vary systematically across groups, as they often do, these differences may go a long way in explaining differences in representation, even in the absence of discrimination based on immigrant status. As mentioned, however, because information on the
individual characteristics of elected candidates is generally unavailable, existing work has not been able to address these questions definitively. Case studies do suggest that the background characteristics that promote political success among natives may not be sufficient to propel immigrants into elected office. In France, for instance, politically active and educated immigrantorigin elites that lobby for well-organized constituencies often fail to make the transition from community organizer to elected politician. Yet, this outcome is not pre-ordained. In British cities, by contrast, such individuals stand a relatively higher chance of obtaining a local council seat (Garbaye 2005, Maxwell 2012).

To account for these differences, research has focused on cross-national variation in political opportunity structures, such as citizenship and integration regimes. Continuing with the example just given, France's citizenship regime (open but assimilationist) supposedly discourages ethnically-based campaigning whereas British multiculturalism has been said to favor such mobilization. ${ }^{6}$ Additionally, electoral institutions may play a role. Local electoral rules place a premium on spatially concentrated, well-organized minority groups in Britain, where elections are held at the ward level. When the entire municipality forms one electoral district, as is the case in France, Sweden, and in many other European countries, these characteristics play less of a role (Bird 2005, Trounstine and Valdini 2008). Another prominent variable pertains to the district magnitude. As the number of available seats (per capita) rises, some have argued that party leaders may be more willing to balance the slate and to allocate spots to underrepresented minorities. ${ }^{7}$ Additional contextual variables refer to the partisan and demographic environment:

[^3]Left parties are generally more hospitable to including immigrants as candidates and as voters (e.g., Bird et al. 2011, Dancygier 2013). Further, some have maintained that liberal, welleducated voters of the majority population promote the electoral incorporation of ethnic minorities (Browning et al. 1984).

While scholars have zeroed in on some of the contextual variables that may be conducive to parity in minority representation, we know much less about how individual immigrants fare in the electoral process. For example, do immigrants and natives with equal socio-economic profiles face equal chances of winning? Or do the characteristics that help the political careers of natives fail to provide the same advantages to migrants? Prior work has argued that discrimination against immigrant-origin office-seekers by party elites has a significant impact on minority underrepresentation (e.g., Brouard and Tiberj 2011, Norris and Lovenduski 1995, Soininen 2011). This also seems to be true in the Swedish context. Interviewing 20 immigrant party activists (all prior candidates) in 1999, Blomqvist (2005) found that immigrants expressed frustration with party leaders' reluctance to allocate influential party posts to immigrants or to put them on winnable list positions. As one interviewee put it: Placing immigrants on top list positions is "very controversial...It is as if we are let into the yard but not the house." Another concurred: "I'm skeptical that the party would ever place [immigrants] on an electable position, or a very powerful position. They use immigrant politicians, but only as tools" to capture some of the immigrant vote (Blomqvist 2005, 90; authors' translations).

If such unequal treatment is widespread one would expect that socioeconomic and political advancement do not go hand in hand, though empirical evidence on this point remains scant. Similarly, we do not know, for instance, whether natives and immigrants benefit in the same way from permissive electoral institutions. In sum, the literature has focused on individual resources
and political opportunity structures as the main factors driving immigrant underrepresentation, but we do not have a good grasp of how these sets of variables shape the election chances of individual immigrants.

## 3. Immigration and Immigrant Political Representation in Sweden

This article begins to answer some of these questions by examining immigrant representation in Sweden. To situate our study, we now provide a brief description of Sweden's immigration history and of immigrants' political incorporation, showing that these resemble developments found in many other European countries. The lessons we draw in this paper should thus travel beyond the Swedish case.

## Immigration Flows

In the postwar decades Sweden's immigrant population was, to a large extent, made up of labor migrants who had moved from the less developed parts of Europe to perform blue-collar jobs in the manufacturing sector. ${ }^{8}$ When the oil crises hit in the 1970s, unemployment soared and demand for foreign labor dwindled. As a consequence, migration policy became harsher in many European countries, including in Sweden (Lundh and Olsson 1999). Since the 1970s, refugees and family reunification migrants have dominated. The military coup of Pinochet in 1973, the

[^4]1979 revolution in Iran and the persecution of the democratic movement in Poland during the early 1980s are examples of catalysts for such developments. ${ }^{9}$

In 1991, the start date of our study, the share of the foreign born in Sweden stood at 9.4 percent, and by 2010 it had reached 14.7 percent (see Figure 1). Sweden's numbers are very similar to those of several other European countries (e.g. Germany, Belgium, Austria; the overall mean is 13.8 percent, see right panel), which have had a similar migration history, beginning with labor migration followed by refugee and family migration.

The most sizable inflow has been from Middle Eastern conflict zones, notably Iraqi refugees who constituted the largest number of migrants (over 100,000 ) to Sweden during this period, followed by the former Yugoslavia, Iran, Lebanon, Turkey and Somalia (Statistics Sweden 2012). The distribution of national origins during our period of study has thus shifted, as depicted in Figure 2. The number of immigrants from the Asian region, which includes the Middle East, tripled between 1991 and 2010. In 2010, people born in Iraq and Iran together comprised nearly half of this regional category. There has also been a doubling of the number of immigrants from non-Nordic European countries. This is partly due to Sweden joining the European Union, but the main driver here was the civil war in the former Yugoslavia. Refugees from this region account for the largest group of non-Nordic European immigrants. Finally, the number of immigrants born in Africa has quadrupled during our study period, in large part due to

[^5]refugee flows in the wake of the Somali civil war. We address these compositional differences in our analyses below. ${ }^{10}$

Placing these developments in comparative context, Figure 3 shows that the contemporary Swedish experience is not unusual. In 2010, 31.4 percent of Sweden's migrants hailed from Western Europe (defined here as the EU-15, Norway and Switzerland), compared to the country average of 31.0 percent. The same year, 47.3 percent of migrants in Sweden originated from within the OECD, while the average figure in OECD countries is 43.5 percent. Moreover, just as in Sweden, in many of these countries the composition shifted with migrants coming from Western European or OECD countries comprising relatively fewer recent migrants (Messina 2007, 39-46).

Summing up, Sweden has a mix of migrants from within and outside of Europe. Like in most Western European countries, migration from the poorer and more conflict-ridden parts of the world has been substantial. Given the sustained and sizable nature of immigration, migrants have begun to make their presence felt politically as well.
${ }^{10}$ Note that these differences could undermine our interpretation of declining discrimination if immigrants from Africa and the Middle East were more accepted than those from other regions. If this were the case, our results would be an artefact of the change in the distribution of national origins. However, this seems not to be the case, at least when judged by the perceptions of cultural distance. In a study of Swedish attitudes towards immigrants based on a 2013 survey, Mella et al. (2013) show that Somalis, Iranians and Iraqis are perceived as significantly more culturally distant than Chileans. Studies of discrimination across different origin groups in other realms (cited below) also cast doubt on this alternative explanation.

## Political Inclusion

Immigrant political participation has a long history in Sweden. The Voting Rights Reform of 1975 granted all residents who lacked Swedish citizenship (regardless of country of birth) but who had lived in Sweden for three or more years the right to vote and run in local elections. This reform, which has also occurred in other European countries, created a significant expansion of the electorate, especially in municipalities with a large immigrant population (Vernby 2013). ${ }^{11}$ Furthermore, thanks to Sweden's relatively liberal citizenship regime, many first-generation immigrants and their descendants are Swedish citizens. In all of the analyses below we define immigrants as individuals who were born outside of Sweden and who were eligible to run for office (note that the analyses will include controls for citizenship status). ${ }^{12}$

Turning to representation, our focus is on municipal councils. As is the case in most West European countries, councilors are elected using a party-list proportional system in at-large contests, though larger municipalities are partitioned into several electoral districts. ${ }^{13}$

[^6]Municipalities play a large role in the provision of goods and services, including in key areas, such as social assistance and education. Additionally, municipalities have independent taxation rights. In 2010, the average municipal income tax rate was approximately 21 percent. They also employ a large share of the labor force; in 2010 about 17 percent of the employed worked in the municipal sector. In view of these important functions, underrepresentation of minorities in local government must be considered a serious problem, potentially hampering the efficiency with which constituents' interests are channeled, and hurting the overall legitimacy of the political system. The fact that municipal politics are a crucial springboard towards national politics in Sweden (Lundqvist 2013) further underscores the importance of studying who is elected at the local level.

Similar to the situation in many other advanced democracies, in Sweden immigrants are underrepresented in municipal politics. Some have argued that local party elites critically influence this outcome (Soininen 2006, Soininen and Etzler 2006, Bäck and Öhrvall 2004). Local Swedish elections operate by a party-list system, where local nomination committees largely control who gets nominated and how candidates are ranked on the list. These committees generally collect suggestions for nominees among local members and party associations. ${ }^{14}$ Committees then put together a list that is finalized at a special meeting. Although in some party organizations rank-and-file members have a chance to make changes to the list, this rarely occurs. If changes do take place, they are typically meant to ensure a more equal representation

[^7]of women. Last, most criteria for selection are informal in nature, rather than laid down by party rules, thereby permitting considerable discretion. The degree of "trust for a nominee" or a "sense of shared identity...can be important factors" in determining selection (Soininen 2011, 153; Soininen and Etzler 2006). ${ }^{15}$

Party gatekeepers are thus highly influential in deciding who is on the list and on what position. Though voters may, since 1998, cast preference votes for specific candidates, the list position still nearly exclusively determines winning. This is in part because only about one third of voters actually cast preference votes (the remainder endorses the list as proposed by the party). Moreover, voters can cast only one preference vote which they generally award to candidates who already occupy the highest list positions. Indeed, on average, the candidate on the top spot obtains more than a third of a party's preference votes; candidates whose list position does not guarantee election only very rarely obtain preference votes (Folke et al. 2014). ${ }^{16}$ Moreover, to get elected via preferences votes, a candidate must obtain five percent of the party's total vote. Since the reform, candidates who were elected via preference votes (and who would not have been elected in their absence) have filled less than one percent of seats (Folke and Rickne 2012). For all practical purposes, then, Sweden still has a closed list system, or what some have called "closed lists in disguise" (cf. Folke et al. 2014, 2). This institutional setting empowers local party elites, allowing for discriminatory practices by party gatekeepers. Voter preferences for or

[^8]against specific candidates within the same party will not make much of a difference in determining who ends up being elected.

As the literature has pointed out, immigrants appear to face significant obstacles to getting nominated and elected in this setting. Our data confirm this picture, but also reveal important signs of change. Figure 4 shows that the share of seats held by immigrants has increased from 4.2 percent in 1991 to 7.6 in 2010. Since this increase outpaced the growth in the immigrant population, the parity ratio rose from .45 to .51 . By 2010 , then, the picture is one of steady improvements amid persistent underrepresentation. In the next section we address what factors help account for this representation gap as well as its narrowing over time.

## 4. Data and Methods

Our data combine information from various administrative registers held by Statistics Sweden. Most importantly, we have complete information on all individuals who ran for local office in the six elections that took place in Sweden's 290 municipalities from 1991 to 2010, covering approximately 13,000 council seats per election. ${ }^{17}$ The candidacy data are then linked to population-wide registers containing information on a range of individual characteristics, such as age, gender, region of birth, family status, education, income, and residential location. ${ }^{18}$

[^9]Our data cover all adults living in Sweden who are eligible to run for office. Natives and immigrants (irrespective of citizenship) will thus enter the dataset once they turn 18, and, in the case of immigrants, once they have lived in Sweden for at least three years. The average native appears in our dataset 4.7 times (out of a maximum of 6 elections), whereas the corresponding figure for immigrants is 3.7. Further, among winning candidates in 2010, natives had accumulated more political experience, having been nominated and elected more frequently than immigrants. ${ }^{19}$ However, looking at only those who won office for the first time in 2010, natives had, on average, been nominated 0.9 times in prior years whereas immigrants had run, on average, 0.7 times, suggesting that recently immigrants who enter the electoral arena begin winning at a slightly quicker pace.

We next discuss our empirical approach (see the Appendix for a more detailed explanation). To explain the political underrepresentation of immigrants we employ the Oaxaca-Blinder decomposition technique (Blinder 1973, Oaxaca 1973), which has been widely used by sociologists and economists to study racial and gender wage gaps and discrimination in the labor market more generally (e.g., Reimers 1983, Oaxaca and Ransom 1994, Blackaby et al. 1998, Fortin et al. 2011). This technique builds on the simple idea that an observed difference in outcomes between two groups can be attributed to differences in characteristics on the one hand and to differences in the returns to these characteristics across the two groups on the other. For instance, the representation gap could be caused by immigrants possessing fewer of the resources

[^10]conducive to a political career, or because individual resources of immigrants and natives are rewarded differently by voters and party gatekeepers.

In line with most other applications of the OB-decomposition technique we proceed from a simple linear model of the following type
$Y_{i j}=\boldsymbol{X}_{i j} \boldsymbol{\beta}_{j}+\varepsilon_{i j}, j=N, I$
where $Y_{i j}$ is a dichotomous variable indicating whether individual $i$ in group $j$ was elected to local office in a particular election, $\boldsymbol{X}_{i j}$ is a vector of individual characteristics and political context factors, $\boldsymbol{\beta}_{j}$ is the vector of corresponding regression coefficients, and $\varepsilon_{i j}$ is an individualspecific residual. We choose a linear probability model over alternatives such as logit or probit partly because the statistical properties of the OB-decomposition technique are more wellestablished in the linear case, and partly because this eases computation and interpretation (all the main results remain very similar when employing logistic regression; see the Appendix).

The key idea behind the OB-decomposition is that we can use the results from the group-wise regressions in equation (1) to decompose the mean outcome difference between the groups into two different components, often referred to as the explained and the unexplained part. More formally, the mean outcome gap may be conveniently written as
$\bar{Y}^{N}-\bar{Y}^{I}=\left(\bar{X}^{N}-\bar{X}^{I}\right) \beta^{*}+\left[\bar{X}^{N}\left(\beta^{N}-\beta^{*}\right)-\bar{X}^{I}\left(\beta^{I}-\beta^{*}\right)\right]$
where overbars denote means and $\beta^{*}$ is a nondiscriminatory coefficient vector that would be observed in the absence of discrimination. The first term of the right hand side of equation (2) is the so-called explained part and indicates how much of the gap is due to the two groups having different characteristics. The second term, typically called the unexplained part, captures the
extent to which the gap depends on different returns to these characteristics. More concretely, in the present case the explained and unexplained parts indicate how much of the representation gap depends on natives and immigrants having different $X$ 's and how much depends on them having different $\beta$ 's, respectively. ${ }^{20}$

As should be clear from this description, the OB-decomposition technique is a complement rather than a substitute for more well-known regression approaches. The different techniques help answer different types of questions. Traditional regression analysis estimates the effect of $X$ on $Y$ and can indicate how much of the total variation in $Y$ is explained by the full set of $X$ 's.
${ }^{20}$ A much discussed issue is how to construct the nondiscriminatory coefficient vector $\beta^{*}$ used in the decomposition. Many suggestions have been made (e.g., Fortin et al. 2011), most of which express the nondiscriminatory vector as a weighted average of the regression coefficients for the two groups, i.e.,

$$
\begin{equation*}
\beta^{*}=\delta \beta^{N}+(1-\delta) \beta^{I} \tag{3}
\end{equation*}
$$

What sets the different approaches apart is the choice of the weighting factor $\delta$. For instance, if $\delta$ is set to 1 the coefficient vector in the absence of discrimination is assumed to equal the regression vector currently observed for natives, whereas it is assumed to equal the coefficient vector of immigrants if $\delta$ is set to 0 . Here, we will follow a recent suggestion by Sloczynski (2013) and set $\delta$ equal to the share of immigrants in the pool of eligible candidates, i.e., the population proportion of one group will be used to weight the coefficients of the other group. At first sight this weighting procedure might appear somewhat counterintuitive but, as Sloczynski shows, it has several attractive features, and it means that the unexplained part will be equivalent to the population average treatment effect.

However, by further decomposing the regression results we can also estimate the relative importance of various observed and unobserved factors in explaining the overall variation in $Y$.

Further, while matching would be a useful tool for uncovering how much of the representation gap is due to unobserved factors (such as discrimination), the basic logic of creating a matched sample of individuals who are similar on the observables makes the technique less suitable for answering questions about how much of the representation gap is due to differences in observables across groups. In other words, matching won't be able to tell us the relative importance of the explained and unexplained part in accounting for the overall representation gap. Though we do not employ matching as our main technique for this reason, we nonetheless use it to check the robustness of our OB-findings regarding the unexplained part (see below).

In the present study we use the decomposition method to examine to what extent the representation gap between natives and immigrants is due to differences in characteristics between the two groups or due to the two groups having different returns to these characteristics. The unexplained part in our model can be interpreted as the expected difference in the probability of becoming elected to local office for natives and immigrants with identical observed individual characteristics and political opportunity structures. Correspondingly, we conceptualize discrimination broadly, as equal cases being treated differently on the basis of their immigrant status (cf. Pager and Shepherd 2008, 182). We should also note, however, that though the unexplained part is often attributed to discrimination, in practice it also captures unmeasured variables that may be relevant in producing gaps across groups. We address this issue below by providing several mechanism probes that support the plausibility of the interpretation that discrimination is at work.

## 5. Empirical Results

We conduct the analysis in two steps. Before turning to the decomposition we present simple linear regressions that examine how standard individual-level characteristics and political opportunity structures affect the likelihood of obtaining office, and how these effects vary across groups and over time. In the second step, we use these regression results to decompose the overall representation gap into theoretically relevant components as just outlined.

Note that since winning and being nominated on an electable list position are so closely linked candidate success depends in large part on the list position - we only discuss results on winning. We repeated the analyses for nomination as well, and the results are similar to the ones we present below (see the Appendix).

## What Factors Account for Getting into Office?

We begin our analysis by running separate regressions for natives and immigrants for each of the six elections held during the period 1991 to 2010. The dependent variable is a dichotomous variable indicating whether or not a particular individual was elected. For reasons of space Table 1 only displays the regression results for the elections held in 1991, 2002, and 2010 (the results for the remaining elections follow the overall pattern). To ease interpretation, Figure 5 depicts these results graphically for 1991 and 2010 (see the Appendix for summary statistics).

To gauge the importance of individual resources we include the standard set of independent variables, such as Gender (an indicator for female), Age (in years), Age squared, Number of Children (under the age of 11), Employment Status (1 for employed individuals, 0 for all others), Family Income (the log of equivalized disposable household income), and Years of Education. For immigrants we further include Years of Residence in Sweden and whether or not they are

Swedish Citizens. Both of these variables are expected to have a positive effect on representation (Bird et al. 2011).

The demographic and socioeconomic variables largely behave as one would expect. Among natives, being male, middle-aged, and employed raises the probability of election (interestingly, being female has less of a negative effect among immigrants). Increases in education and income also make it more likely that native Swedes win elections, while having young children has the opposite effect. Turning to immigrants, we observe that, all else equal, length of residence and citizenship are positively related to the probability of being elected. As for the common demographic and socioeconomic variables all coefficients estimates point in the same direction, but effects tend to be smaller among immigrants. For example, in 1991 being employed is associated with a .22 percentage point increase in the probability of winning a seat among natives, but the effect for immigrants is only .08 . Likewise, an additional year of schooling raises the probability of election by .06 percentage points among natives, but is only associated with a .02 point increase among immigrants. The results also show, however, that these differences narrow over time. By 2010, the gains from an additional year of education have shrunk to .04 points for natives, but remain at .02 for immigrants.

The overall trends are broadly supportive of the notion that individual-level endowments yield higher returns among natives: The same rise in income or education, for instance, is associated with a larger increase in the probability of winning among natives. Formal tests (available upon request) reject the hypothesis that the estimated effects of individual level characteristics are equal across groups (see also Figure 5). At the same time, these dynamics become less pronounced over time. More recently, the electoral process appears to treat immigrants and
natives who possess equal individual characteristics more equally, even though substantial differences persist.

Based on prior research we should also expect minority political representation to depend on a number of opportunity structure covariates at the contextual - in our case municipal - level, such as party systems, electoral rules, and the size and ethnic composition of the immigrant group. To measure the opportunity structure, we operationalize some of the main concepts mentioned in the above-cited literature (cf. Bird et al. 2011). With regard to the electoral system, Seats-to-Voters is the ratio of council seats to the electorate; Effective Number of Parties ${ }^{21}$ indicates the (adjusted) number of parties with seats in the local council; and Disproportionality ${ }^{22}$ measures the difference between party vote and seat shares. Together, these variables capture the openness of the electoral system, with increases in seats per voter and in the number of parties and decreases in disproportionality denoting more permissive contexts. Left Share ${ }^{23}$ measures the percentage of votes received by leftist parties. ${ }^{24}$ Turning to the demographic composition of the local electorate, Native Education is the average years of education among natives in the
${ }^{21}$ This index is defined as $\left(\sum s_{i}^{2}\right)^{-1}$, where $s_{i}$ is the seat share of party $i$.
${ }^{22}$ We use the Gallagher index, i.e., $G=\sqrt{.5\left(\sum\left(v_{i}-s_{i}\right)^{2}\right)}$, where $v_{i}$ and $s_{i}$ indicate votes and seat shares of party $i$, respectively.
${ }^{23}$ Leftist parties refer to the Left party, the Social Democratic party, and the Green Party.
${ }^{24} \mathrm{We}$ also ran models including a variable measuring the vote share obtained by the far-right Sweden Democrat (beginning in 1998, when the party first competed on a large scale). This variable was statistically insignificant in all years and has no effect on our findings (see the Appendix).
electorate, Immigrant Share indicates the percentage of foreign born in the electorate, and Ethnic Concentration measures the concentration of the immigrant group with respect to country of origin. ${ }^{25}$

Disregarding for the moment the estimated effects of Seats-to-Voters, Table 1 shows that the contextual variables do a fairly poor job of explaining between-municipality variation. Effective Number of Parties and Disproportionality are insignificant for both immigrants and natives. The partisan landscape appears to matter more: Immigrants are more likely win office as support for leftist parties increases. Yet, considering that the coefficient provides the estimated change in election chances for a change from no left party votes to all left party votes the effect is quite modest. The share of educated natives primarily has a negative influence on the election chances of natives. However, taking the cross-municipality variation of this factor into account (sd. = 0.65 ) this effect size should also be deemed modest.

With regard to the local immigrant composition, the main pattern is one of different but small effects across groups - positive among natives and negative among immigrants. These findings may at first appear counter-intuitive. Note, however, that even though there is a positive relationship between the share of immigrants in the population and the share of immigrants
${ }^{25}$ Immigrant concentration is expressed in terms of the Herfindahl index, i.e., $H=\sum d_{i}^{2}$, where $d_{i}$ is the share of the group coming from region $i$. Ideally, $i$ would denote a specific country, but for reasons of confidentiality we only have access to a variable distinguishing between 27 different regions. For immigrants from significant sending countries (e.g., Poland, Iran, Iraq, and Turkey) the region code is that of the country, but for those from other countries the region code also includes neighboring countries (see the Appendix for the classification).
among elected councilors at the municipality level (not shown), if the share of seats held by immigrants does not rise in direct proportion to the immigrant population - that is, if the elasticity of the share of immigrants among the elected to the share of immigrants in the population is less than one - obtaining a seat on the council becomes more difficult for an immigrant as the number of fellow migrants increases. In our sample this elasticity is consistently below one. ${ }^{26}$

Turning at last to Seats-to-Voters, the effect of this variable dwarfs the effects of the other opportunity structure covariates. Given that the size of the local assembly does not perfectly reflect the number of voters in a municipality there will be a strong and mechanic negative relationship between the size of the electorate and the chance of getting elected. More precisely, since the ratio of council seats to the electorate is equivalent to the overall probability of being elected the interesting question is not whether or not the estimated effect of this variable is significantly different from zero. The null hypothesis should instead be that the ratio of seats to the electorate is related to election chances within different subgroups of the electorate in a one-to-one fashion. In other words, when discrimination at the group-level is absent, getting elected

[^11]becomes a simple accounting exercise: As more seats are available per voter, the probability of election increases, and it does so in identical fashion across groups.

We can reject this null hypothesis in all elections. In the native sample the effect of Seats-toVoters is slightly larger than one, implying that the reason why natives stand better chances in some municipalities than in others is almost entirely due to the fact that the ratio of seats to voters varies across municipalities of different size. This is also important among immigrants, but much less so. Whereas a one percentage point increase in Seats-to-Voters is expected to raise the probability of election by more than one percentage point for natives, the corresponding estimate for immigrants is only two thirds of a percentage point.

To summarize, the results in Table 1 tell us a great deal about how individual resources and local opportunity structures matter for natives and immigrants seeking elected office. Many variables have stronger effects among natives, furnishing preliminary evidence that similar individual or local characteristics do not yield the same returns across groups. To better evaluate this question and to assess the relative importance of the two sets of factors in explaining the representation gap we next turn to the decomposition technique outlined earlier.

## What Factors Account for the Representation Gap?

Table 2 presents the results of the Oaxaca-Blinder decomposition of the representation gap. ${ }^{27}$ In the first three rows we observe significant gaps in the probability of election across groups. In
${ }^{27}$ The table disaggregates the explained part only. In principle, it is also possible to provide a decomposition of the unexplained part. In practice, things are complicated by the fact that the outcome of the detailed decomposition of the unexplained part will often depend on arbitrary scaling decisions (e.g., Jones and Kelley 1984: 334).

1991, natives were about two and a half times more likely to be elected than were immigrants (. 23 percent vs. .09 percent), but the representation gap shrank by more than a quarter between 1991 and 2010 - from . 14 to .10 percentage points. Yet, by 2010 natives were still twice as likely to be elected as were immigrants. We do see convergence over time, but a notable representation gap remains.

In the following rows we report estimates of the explained and unexplained parts of this gap. We have further decomposed the explained part into four broad factors included in the previous regressions: Demographics (age, age squared, gender, number of young children); SocioEconomic Status (SES) (education, employment status, and income); Opportunity Structure (number of parties, disproportionality, native education, immigrant share, ethnic concentration and left share); and Seats-to-Voters. We consider Seats-to-Voters as part of the political opportunity structure, but because its effect is so much larger we present it separately here. ${ }^{28}$
${ }^{28}$ For natives time of residence is indistinguishable from age, and citizenship is nearly constant. Therefore these two variables do not enter the regression for natives. Following Aldashev et al. (2008) we modify the decomposition to take the unequal sets of variables into account. The departure point is the two regression equations for natives $(\mathrm{N})$ and immigrants $(\mathrm{I})$, respectively:
$Y_{i}^{N}=\beta_{0}^{N}+\boldsymbol{X}_{\boldsymbol{i}}^{N} \boldsymbol{\beta}^{\boldsymbol{N}}+\varepsilon_{i}^{N}$
$Y_{i}^{I}=\beta_{0}^{N}+\boldsymbol{X}_{\boldsymbol{i}}^{\boldsymbol{I}} \boldsymbol{\beta}^{\boldsymbol{I}}+\boldsymbol{Z}_{\boldsymbol{i}}^{\boldsymbol{I}} \boldsymbol{\gamma}+\varepsilon_{i}^{I}$
where $\beta_{0}$ denotes the intercept; $\boldsymbol{X}$ is a vector of common covariates across the two groups; and $\boldsymbol{Z}$ is a vector of covariates included only in the equation for immigrants (time of residence and citizenship). In the first step we regress election for local office within the immigrant group on the full set of covariates according to equation 4 (including time of residence and citizenship). In

Differences in these observable characteristics only account for 16 percent of the representation gap in 1991 (. 022 out of the total .136 percentage point difference). That is, the fact that immigrants and natives feature different individual characteristics or face varying opportunity structures hardly contributes to immigrants' political underrepresentation. Instead, the bulk of the gap is due to different returns to the various independent variables across the two groups. Put differently, in 1991 immigrants faced substantial barriers to entering electoral politics, and most of these barriers ( 84 percent) were attributable to differences in returns to observable characteristics. Over time, however, the unexplained portion of the gap decreases considerably. the second step we estimate a constrained regression, in which time of residence and citizenship are excluded and the vector of slope coefficients is restricted to the values obtained in step one. That is, we estimate the following regression equation:
$Y_{i}^{I}=\delta_{0}^{N}+\boldsymbol{X}_{\boldsymbol{i}}^{I} \boldsymbol{\beta}^{I}+\vartheta_{i}^{I}$
with the restriction that $\boldsymbol{\beta}^{I}$ in equation 6 is equal to $\widehat{\boldsymbol{\beta}}^{I}$ from equation 5 . The constant term $\delta_{0}^{N}$ in the constrained regression will capture the effects of average time of residence and average citizenship since:
$E\left(Y_{i}^{I}\right)=\hat{\beta}_{0}^{I}+\overline{\boldsymbol{X}}_{i}^{I} \widehat{\boldsymbol{\beta}}^{I}+\overline{\boldsymbol{Z}}_{\boldsymbol{i}}^{I} \hat{\gamma}^{I}=\left(\hat{\beta}_{0}^{I}+\overline{\boldsymbol{Z}}_{\boldsymbol{i}}^{I} \hat{\gamma}^{I}\right)+\overline{\boldsymbol{X}}_{i}^{I} \widehat{\boldsymbol{\beta}}^{I}=\hat{\delta}_{0}^{I}+\overline{\boldsymbol{X}}_{i}^{I} \widehat{\boldsymbol{\beta}}^{I}$

Thus, the explained part of the decomposition indicates how much of the representation gap is accounted for by different characteristics excluding time of residence and citizenship. The average effects of these variables are instead included in the unexplained part. An alternative, but in our view inferior, approach would be to exclude time in country and citizenship from the analysis altogether. In the Appendix we show that the overall findings look very similar when excluding these covariates from the analysis.

By 2010, differences in average characteristics account for nearly half of the immigrants’ underrepresentation.

A closer look at the results provides further insights. The negative contribution to the representation gap of demographics implies that differences in age, gender and family size between natives and immigrants have, if anything, worked to the benefit of the latter group. The relative importance of differences in socio-economic factors has increased somewhat over time, albeit from a low level. Likewise, most of the variables derived from the opportunity structure literature do not explain very much of the representation gap. Although these variables become slightly more important over time, they still account for only 6 to 7 percent of the overall gap at the end of the period. The most consequential contextual variable is instead Seats-to-Voters. In 1991 about 22 percent of the overall representation gap is attributable to this variable. In 2010 this figure reached 36 percent.

Figure 6 displays these patterns and summarizes the findings. The sources of the representation gap have shifted over the years, from differences in returns to basic socio-demographic factors at the beginning (the unexplained portion typically attributed to discrimination), towards a situation where group differences in the distribution of these characteristics are increasingly influential. Specifically, the fact that immigrants, more so than natives, live in large municipalities with low seats-to-voter ratios has become more important.

In line with these results, we also find that a significant and negative immigrant effect remains when we match immigrants and natives on all the variables included in Table 1 (except for Citizenship and Time in Country), but that this immigrant penalty declines substantially over time. With the matching technique, the magnitude of the immigrant effect decreases by almost
two thirds between 1991 and 2010, which corresponds fairly well with the drop in the unexplained part found when using the O-B decomposition (see the Appendix).

## 6. Is Discrimination an Important Driver of the Representation Gap?

In this section we probe whether it is plausible to assume that discrimination by party gatekeepers is at least partly responsible for the sizable unexplained portion of the representation gap. Our main strategy will be to turn from the cross-sectional evidence that we have thus far relied on to movements in the unexplained portion of the representation gap over time. Stated differently, we view the unexplained part as an estimate of the upper bound of discrimination and now investigate whether discrimination is a plausible explanation for why and how this estimate changes over time.

To do so, we assess five mechanisms: First, we examine a competing hypothesis, namely that increased political interest and participation among immigrants leads to a narrowing of the representation gap. Second, we discuss the possibility that the decrease in the representation gap is due to trends in the electoral success of parties that are more inclusive of immigrants. Third, we turn to the behavior of natives and provide three pieces of evidence that are consistent with the notion that discrimination is critical but also declining over time. First, we show that native attitudes towards immigrants are relatively hostile, but that they have become more favorable over time. Next, we demonstrate that immigrants who encounter more discrimination in other realms - those from less developed and culturally more distant countries - are also less likely to win office, but that their chances have improved. Last, we show that party gatekeepers are prone to placing immigrants on unfavorable list positions. Yet, this bias diminishes over the years, making it more likely that nominated immigrant candidates actually win office.

Though we conceptualize discrimination broadly as equal cases being treated unequally in the electoral process, the unexplained part of the OB-decomposition captures all unobserved heterogeneity, not just variation caused by unequal returns to the socio-demographic and human capital variables we include. That the unexplained part diminishes from 84 to 52 percent could thus be related to immigrants becoming more actively involved in electoral politics as they become permanent settlers. Rising immigrant political interest and mobilization could pave the way for greater representation. This alternative hypothesis is, however, not borne out by immigrants' electoral behavior. Specifically, as Figure 7 shows (upper panel), we actually observe a decline in turnout levels from 1991 to 2002, precisely the time when immigrant representation increases most noticeably. Similar to trends among natives, immigrant turnout rates do not return to 1991 levels until 2010. Moreover, if political interest and mobilization were important drivers of representation, we would expect the relative turnout of immigrants (compared to natives) to increase over time. As can be seen in Figure 7, however, this is not the case. Finally, existing research suggests that, if anything, changes in immigrant representation drive immigrant turnout. Scholars have found that immigrant candidates in Sweden tend to mobilize the co-ethnic vote (Blomqvist 2000 and 2004, Schierenbeck \& Schütt 2004), and that knowing that fellow countrymen run for office has a strong positive effect on turnout among immigrants (Bäck 2004).

It is unlikely, then, that changes in immigrant mobilization can account for large portions of the unexplained variation. Furthermore, we may think of turnout as proxying political interest and investigate whether political interest rises among those who may plausibly win a council seat. To do so, we restrict the sample to immigrants and natives who are most likely to win office. For our sample, we rely on the previous regression results (Table 1) to predict the likelihood of winning
office (separately by group) and then keep the top decile within each group. Among this group, we again observe that immigrant turnout declines as gains in representation rise (lower panel). Though the turnout gap narrows towards the end of the period, increases in immigrant representation precede this trend. It is not the case, then, that shifts in political interest parallel shifts in representation.

Another hypothesis is based on partisanship. If the propensity of immigrants to run for certain parties is higher than that of natives, immigrants' electoral success will vary with the success of those parties. We therefore examined immigrant candidates' partisanship and found that throughout the study period, the Left Party, the Social Democratic Party, and the Green Party have been most inclusive of immigrant candidates (see the Appendix). Our analyses thus already control for this alternative explanation. Though we find that immigrants were more likely to become elected in areas where voter support for these parties was higher (see Table 1 and Figure 5), ${ }^{29}$ the decomposition (Table 2 and Figure 6) reveals that the opportunity structure variables, of which the leftist parties' vote share is part, explain only a small fraction of the representation gap.

We now turn to the behavior of natives. The first plausibility test relates to the attitudinal context. If discrimination in the electoral process is significant but decreasing, it is reasonable to assume that such trends should also be reflected in mass attitudes. Sensing a more tolerant electorate, party elites may be more willing to run immigrant candidates, and voters are more likely to elect them. Survey data confirm this conjecture. Figure 8 depicts the percentage of

[^12]respondents surveyed in nationally representative polls who stated that current levels of overall and refugee immigration should be maintained or increased. ${ }^{30}$ Even though large segments of the population still hold anti-immigration sentiments, tolerance has increased significantly. ${ }^{31}$ The trend was most pronounced during the 1990s (paralleling increases in the parity ratio). In the aftermath of the September 11 attacks it was temporarily halted, but since then acceptance of immigration has continued to rise.

These attitude trends are in line with the idea that discriminatory behavior is becoming less prevalent. Yet, tolerant survey responses do not necessarily imply tolerant behavior (Hainmueller and Hopkins 2014). In a further mechanism probe we therefore disaggregate our results by the immigrant population. If native Swedes become less likely to discriminate against immigrant office-seekers we should observe improvements in representation as well as an equalization of returns to endowments across different types of groups. More precisely, national origin (and the

[^13]associated cultural differences) should matter less over time. Previous research has shown that immigrants in Sweden originating from less developed countries tend to experience greater discrimination. For example, in field experiments applicants with Arabic names had a lower probability of succeeding when applying to rent a flat than did observationally equivalent applicants with Swedish sounding names (Ahmed and Hammarstedt 2008 and Bengtsson et al. 2012). Surveys of self-perceived discrimination likewise show that respondents born in nonOECD countries (in Africa, Latin America and the Middle East) report more instances of discrimination than those born in OECD countries (Lange 2000, Myrberg 2007). ${ }^{32}$

If we are correct that decreases in discrimination help explain the reduction of the representation gap, our results should not be driven by Finns and Norwegians winning office, but should apply to immigrants from less developed countries. In fact, when we break down the immigrant category into those originating from OECD vs. those hailing from non-OECD countries, ${ }^{33}$ we find that the narrowing of the gap is largely caused by immigrants from outside the OECD. At the beginning of the period, natives were 6.5 times more likely to win a seat on the city council than were immigrants from relatively poorer countries, but by 2010 this gap was down to 2.5 . Figure 9 (upper panel) shows the steep climb in the share of municipal seats held by non-OECD immigrants. The rising parity ratio (lower panel) indicates that the improvements in

[^14]representation are not simply due to the population growth of this group (note that the electorate from OECD countries declined slightly while its seat share has remained steady).

We also observe convergence in the factors associated with representation. When regressing individual resources on election, Figure 10 (which is analogous to the results in Table 1 and Figure 5 above) does demonstrate that individual resources and the seats-to-voter ratio have the smallest effect among non-OECD migrants. This result is not surprising given existing research on origin-based discrimination. However, these group-based differences diminish over time. When running the OB-decomposition on non-OECD immigrants (see the Appendix) we find comparable results: The unexplained part decreases considerably, accounting for 82 percent of the gap in 1991 and for 56 percent in 2010. These results are consistent with the notion that voters and gatekeepers are becoming more willing to support immigrant candidates.

In a final probe, we shed further light on this idea by examining nomination decisions of party elites. As mentioned, lists are relatively closed: Voters cannot influence the list composition, and they usually cannot alter the ranking of specific candidates on the list via preference votes. ${ }^{34}$ If discrimination has an impact on immigrants' chances of being elected, a proximate cause will therefore lie in the local party's nomination and ranking decisions. Research is scant, but, as mentioned earlier, interview studies have documented prejudice and discrimination against immigrants in some Swedish local party organizations (Blomqvist 2005, Soininen and Etzler

[^15]2006, Soininen 2011). Such negative attitudes may well have an impact on immigrants' decision on whether or not to become a member and on their commitment to the local party organization and may therefore present a hurdle to equal representation. According to Soininen (2011) candidate selection committees are often unwilling to place immigrants on party lists, especially in high positions, because of prejudice among themselves, or among local party members and voters (cf. Norris and Lovenduski 1995).

Do party leaders place immigrants on less desirable seats? Since preference votes have only very rarely influenced candidates' entry into town halls, we can answer this question by inspecting whether nominated immigrants stand less of a chance of winning than do nominated natives (we do not have information on candidates' list position). As discussed above, winning office is nearly impossible for candidates who are placed on low list positions, and low list placement has been a source of frustration among immigrant candidates. If nominated candidates improve their chances of winning, this, in turn, implies that they have been placed on more attractive positions. Figure 11 indeed suggests that immigrant candidates, especially those originating from outside the OECD, are less likely to win office. In 1991, only 14 percent of non-OECD immigrant candidates won seats compared to 20 percent of OECD immigrants and 24 percent of native candidates; non-OECD immigrants were rarely placed on competitive list positions. By 2010 it still remains difficult for this group to cross the electoral hurdle, but the gap with natives has lessened considerably. These results are in line with the qualitative work cited above as well as with our quantitative trends: Discrimination by party gatekeepers against immigrant officeseekers appears to play a critical but diminishing role in immigrants' political underrepresentation.

To summarize, trends in immigrants' political engagement, in natives' tolerance, and in nomination and election outcomes of immigrants hailing from poorer and culturally more distant countries support the notion that changes in discrimination help explain changes in immigrant representation.

## 7. Discussion and Conclusion

Though the political underrepresentation of immigrants is marked and widespread, the sources of this disadvantage are not well established. Investigating six election cycles spanning nearly two decades, 290 municipalities, approximately 13,000 seats, and over six million individuals per election this article is the first to examine what factors drive the immigrant-native representation gap by drawing on individual-level data covering the entire adult population of one country, Sweden. The size and composition of Sweden's immigrant population as well as its local electoral laws and party system resemble those of many other Western European countries. Our findings should thus resonate beyond the Swedish case.

Existing resource-based explanations receive little support in our analysis. Specifically, differences in groups' income and education levels are not critical variables. This finding implies that integration is not a linear process, where incorporation in the economic realm leads to incorporation in the electoral realm. By contrast, length of residence and citizenship reduce the representation gap.

Accounts of immigrant underrepresentation that draw attention to the broader opportunity structure - consisting of party systems, electoral rules, and other context-level factors - receive mixed support. While variables relating to the type or number of local parties do not matter much, we do find that immigrants' greater likelihood to live in more densely populated urban
areas - a feature that characterizes immigrant settlement across Europe - where fewer seats are available per voter has become increasingly important in contributing to their political underrepresentation. Though these municipalities are also more likely to be populated by more educated natives who generally exhibit more tolerance towards immigrants, our analyses indicate that increases in the size of the native educated electorate do not substantially raise immigrants' election chances. It may therefore be reasonable to conclude that immigrants' settlement patterns significantly influence their political careers. In light of this, one relatively easy fix is to increase the size of municipal councils such that the number of seats in urban municipalities reflects more closely the size of the electorate.

If differences in opportunity structures (with the exception of the ratio of seats to voters) and individual resources explain relatively little, then what does? To answer this question, we employ a decomposition technique that has been widely used to study economic disparities and that, we think, holds promise in the study of political inequality. Using this approach, we reveal that immigrants earn lower returns to many of the individual-level resources and political opportunity structures that increase the probability of election. This evidence suggests that discrimination may be a significant driver of immigrant underrepresentation. To further probe the plausibility of this interpretation we examine several mechanisms. Trends in immigrants' political behavior, native attitudes, and in election outcomes and list positions across immigrant candidates that vary in their cultural backgrounds all point toward discrimination being an important but declining force in immigrants' political underrepresentation.

Future work can extend our research in several ways. First, our results indicate that party gatekeepers discriminate by placing immigrants on less desirable list positions, but they cannot speak to the question of whether local party elites discourage immigrants from running in the
first place. However, we can build on our results by surveying the expectations and experiences of immigrants: Are immigrants less likely to make the initial decision to run and, if so, is this reluctance driven by expectations of discrimination? Further, do immigrants who have run for office report unequal treatment by party gatekeepers? A random sample of the foreign-born population would not capture a sufficiently large number of immigrants who consider competing for office, but our results allow us to restrict this sample to those individuals who possess the characteristics that are associated with running and winning, as revealed by our analyses. ${ }^{35} \mathrm{~A}$ follow-up study of these potential candidates is currently underway.

Second, though we have focused on proximate causes of immigrants' underrepresentation, the fact that residential patterns are increasingly important speaks to the wide-ranging role of discrimination. It is very likely that structural barriers and discrimination contribute to housing differences between natives and immigrants. ${ }^{36}$ Estimates of discrimination in the electoral process that are based on variables which are themselves partly caused by discriminatory practices in other realms (such as housing or employment) will consequently provide a conservative, lower bound estimate. We therefore recommend that future studies adopt a more comprehensive perspective when considering the sources of minority political underrepresentation. Such an approach should also be attuned to cross-national differences. Sweden's liberal and multicultural citizenship regime may be associated with party elites that are comparatively more open to including immigrant candidates compared to regimes that are more

[^16]assimilationist. ${ }^{37}$ Though it remains difficult to test such hypotheses definitively, replication of our work in other contexts may illuminate how contextual factors at the national level come into play.

Our research has helped show that a rich set of individual characteristics and contextual variables fails to explain much of the immigrant-native representation gap. This finding has troubling implications, not only for research on immigrant representation, but also for organizations and policy-makers seeking to address this issue. In view of our results, one key priority needs to be to establish more precisely the extent and nature of discrimination in the electoral process.

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Table 1: Determinants of Election to City Councils in Swedish Municipalities across Groups

|  | 1991 |  | 2002 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Natives | Immigrants | Natives | Immigrants | Natives | Immigrants |
| Demographics |  |  |  |  |  |  |
| Gender (female) | $\begin{gathered} -.125^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} -.023^{* *} \\ (.009) \end{gathered}$ | $\begin{gathered} -.052 * * * \\ (.004) \end{gathered}$ | $\begin{gathered} -.021^{* *} \\ (.007) \end{gathered}$ | $\begin{gathered} -.052 * * * \\ (.004) \end{gathered}$ | $\begin{gathered} -.015 * * \\ (.006) \end{gathered}$ |
| Age | .036*** | .013*** | .023*** | .010*** | .014*** | .008*** |
|  | (.001) | (.002) | (.001) | (.001) | (.001) | (.001) |
| Age-sq | $\begin{gathered} -.000^{* * *} \\ (.000) \end{gathered}$ | $\begin{gathered} -.000^{* * *} \\ (.000) \end{gathered}$ | $\begin{gathered} -.000^{* * *} \\ (.000) \end{gathered}$ | $\begin{gathered} -.000^{* * *} \\ (.000) \end{gathered}$ | $\begin{gathered} -.000^{* * *} \\ (.000) \end{gathered}$ | $\begin{gathered} -.000^{* * *} \\ (.000) \end{gathered}$ |
| Young children | $\begin{gathered} -.031^{* * *} \\ (.003) \end{gathered}$ | $\begin{aligned} & -.005 \\ & (.006) \end{aligned}$ | $\begin{gathered} -.044 * * * \\ (.003) \end{gathered}$ | $\begin{aligned} & .011^{*} \\ & (.005) \end{aligned}$ | $\begin{gathered} -.029 * * * \\ (.003) \end{gathered}$ | $\begin{aligned} & -.003 \\ & (.004) \end{aligned}$ |
| SES |  |  |  |  |  |  |
| Family income | $\begin{gathered} .031^{* * *} \\ (.003) \end{gathered}$ | $\begin{aligned} & .002 \\ & (.004) \end{aligned}$ | $\begin{gathered} .017^{* * *} \\ (.003) \end{gathered}$ | $\begin{aligned} & .002 \\ & (.002) \end{aligned}$ | $\begin{gathered} .015 * * * \\ (.002) \end{gathered}$ | $\begin{aligned} & .002 \\ & (.002) \end{aligned}$ |
| Years of education | $\begin{gathered} .059^{* * *} \\ (.001) \end{gathered}$ | $\begin{gathered} .019^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} .048^{* * *} \\ (.001) \end{gathered}$ | $\begin{gathered} .023^{* * *} \\ (.001) \end{gathered}$ | $\begin{gathered} .040^{* * *} \\ (.001) \end{gathered}$ | $\begin{gathered} .020^{* * *} \\ (.001) \end{gathered}$ |
| Employment status | $\begin{gathered} .225^{* * *} \\ (.006) \end{gathered}$ | $\begin{gathered} .083 * * * \\ (.011) \end{gathered}$ | $\begin{gathered} .199 * * * \\ (.005) \end{gathered}$ | $\begin{gathered} .093^{* * *} \\ (.009) \end{gathered}$ | $\underset{(.005)}{.161^{* * *}}$ | $\begin{gathered} .078^{* * *} \\ (.007) \end{gathered}$ |
| Immigrant Specific |  |  |  |  |  |  |
| Time in country |  | $\begin{gathered} .005^{* * *} \\ (.001) \end{gathered}$ |  | $\begin{gathered} .004^{* * *} \\ (.001) \end{gathered}$ |  | $\begin{gathered} .003^{* * *} \\ (.000) \end{gathered}$ |
| Citizenship |  | $\begin{gathered} .048^{* * *} \\ (.010) \end{gathered}$ |  | $\begin{gathered} .058^{* * *} \\ (.008) \end{gathered}$ |  | $\begin{gathered} .062 * * * \\ (.007) \end{gathered}$ |
| Opportunity structure |  |  |  |  |  |  |
| Effective nr. of parties | $\begin{aligned} & .007 \\ & (.004) \end{aligned}$ | $\begin{aligned} & -.004 \\ & (.010) \end{aligned}$ | $\begin{aligned} & .004 \\ & (.004) \end{aligned}$ | $\begin{aligned} & -.002 \\ & (.009) \end{aligned}$ | $\begin{aligned} & .005 \\ & (.002) \end{aligned}$ | $\begin{aligned} & -.010 \\ & (.006) \end{aligned}$ |
| Disproportionality | $\begin{aligned} & .002 \\ & (.002) \end{aligned}$ | $\begin{aligned} & .001 \\ & (.004) \end{aligned}$ | $\begin{aligned} & .002 \\ & (.002) \end{aligned}$ | $\begin{aligned} & .003 \\ & (.004) \end{aligned}$ | $\begin{gathered} -.000 \\ .002 \end{gathered}$ | $\begin{aligned} & -.001 \\ & (.004) \end{aligned}$ |
| Native education | $\begin{gathered} -.067^{* * *} \\ (.005) \end{gathered}$ | $\begin{aligned} & -.009 \\ & (.011) \end{aligned}$ | $\begin{gathered} -.048 * * * \\ (.005) \end{gathered}$ | $\begin{aligned} & -.013 \\ & (.009) \end{aligned}$ | $\begin{gathered} -.042 * * * \\ (.005) \end{gathered}$ | $\begin{aligned} & -.012 \\ & (.009) \end{aligned}$ |
| Immigrant share | $\begin{gathered} .168^{* * *} \\ (.045) \end{gathered}$ | $\begin{aligned} & .012 \\ & (.077) \end{aligned}$ | $\begin{aligned} & .122^{* *} \\ & (.034) \end{aligned}$ | $\begin{aligned} & -.141^{*} \\ & (.060) \end{aligned}$ | $\begin{gathered} .117^{* * *} \\ (.029) \end{gathered}$ | $\begin{aligned} & -.073 \\ & (.043) \end{aligned}$ |
| Ethnic concentration | $\begin{aligned} & .023 \\ & (.024) \end{aligned}$ | $\begin{gathered} -.195^{* * *} \\ (.050) \end{gathered}$ | $\begin{aligned} & .050 \\ & (.027) \end{aligned}$ | $\begin{aligned} & -.062 \\ & (.049) \end{aligned}$ | $\begin{aligned} & .076^{*} \\ & (.038) \end{aligned}$ | $\begin{aligned} & -.104 \\ & (.056) \end{aligned}$ |
| Left share | $\begin{aligned} & .032 \\ & (.025) \end{aligned}$ | $\begin{gathered} .405^{* * *} \\ (.076) \end{gathered}$ | $\begin{aligned} & .022 \\ & (.026) \end{aligned}$ | $\underset{(.060)}{.214^{* * *}}$ | $\begin{aligned} & .021 \\ & .023 \end{aligned}$ | $\underset{(.046)}{.212^{* * *}}$ |
| Seats to voters | $\begin{gathered} 110.238^{* * *} \\ (1.790) \end{gathered}$ | $\begin{gathered} 62.412 * * * \\ (4.678) \end{gathered}$ | $\begin{gathered} 104.348 * * * \\ (1.726) \end{gathered}$ | $\begin{gathered} 58.367 * * * \\ (4.458) \end{gathered}$ | $\begin{gathered} 103.895^{* * *} \\ (1.66) \end{gathered}$ | $\begin{gathered} 67.516^{* * *} \\ (3.817) \end{gathered}$ |
| Adj-R ${ }^{2}$ <br> Observations | $\begin{gathered} .004 \\ 5,634,068 \end{gathered}$ | $\begin{gathered} .002 \\ 503,999 \end{gathered}$ | $\begin{gathered} .003 \\ 5,959,168 \end{gathered}$ | $\begin{gathered} .002 \\ 769,369 \end{gathered}$ | $\begin{gathered} .003 \\ 6,176,394 \end{gathered}$ | $\begin{gathered} .002 \\ 995,282 \end{gathered}$ |

The dependent variable is a dummy indicating whether an individual won election. OLS coefficients; standard errors in parentheses. Significance levels: * $p=<.05$; ** $p=<.01 ;$ *** $p=<.001$

Table 2: Oaxaca-Blinder Decomposition Results 1991-2010

|  | $\mathbf{1 9 9 1}$ | $\mathbf{1 9 9 4}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 1 0}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Difference | .136 | .129 | .119 | .105 | .104 | .100 |
| P(Natives) | .229 | .223 | .215 | .208 | .202 | .194 |
| P(Immigrants) | .093 | .094 | .096 | .103 | .098 | .094 |
| Explained |  |  |  |  | .045 | .048 |
|  | $(.004)$ | $(.027$ | .036 | .042 | $(.003)$ | $(.003)$ |
| Demographics | -.014 | -.017 | -.013 | -.011 | -.007 | $(.002)$ |
|  | $(.003)$ | $(.002)$ | $(.002)$ | $(.002)$ | $(.001)$ | $(.008$ |
| SES | .003 | .009 | .013 | .012 | .014 | .013 |
|  | $(.000)$ | $(.001)$ | $(.001)$ | $(001)$ | $(.001)$ | $(.001)$ |
| Opp. structure | .002 | .000 | .003 | .007 | .008 | .006 |
|  | $(.003)$ | $(.003)$ | $(.003)$ | $(.003)$ | $(.002)$ | $(.002)$ |
| Seats to voters | .030 | .036 | .034 | .035 | .032 | .036 |
|  | $(.002)$ | $(.002)$ | $(.002)$ | $(.002)$ | $(.002)$ | $(.002)$ |
| Unexplained | .114 | .102 | .083 | .063 | .058 | .052 |
|  | $(.006)$ | $(.006)$ | $(.005)$ | $(.005)$ | $(.005)$ | $(.004)$ |

The first row reports the percentage point difference in winning a council seat across groups. The second/third row reports the percentage of natives/immigrants winning a seat. The second block ("Explained") reports the size of the representation gap that is due to differences in characteristics, and the third block ("Unexplained") reports the size of the representation gap that is attributable to differences in returns to characteristics. For included covariates, see Table 1. Standard errors are in parentheses.


Figure 1: Foreign-born population in Sweden, Western Europe and the United States. Sources: The On-line Statistical Database of Statistics Sweden and OECD (2012).


Figure 2: Foreign-born in Sweden by region of origin, 1990 and 2010. Source: Statistics Sweden (2012).


Figure 3: Distribution of Migrant Source Countries across Countries (2010). Source: World Bank (2014). Note: The data refer to migrant stocks where migrants are defined as the foreignborn. Where data on the foreign-born are not available, estimates are based on nationality status (see Ratha and Shaw (2007) for further clarification on the methodology).


Figure 4: Representation of Immigrants: Seat Shares and Parity Ratio

$\Delta$ Natives $\quad$ Immigrants
Note: The 'Seats to Voters' coefficient has been divided by 100.

Figure 5: Determinants of Election to Municipal Councils.
Group-wise regressions for two elections. Triangles and circles are point estimates; bars represent $95 \%$ confidence intervals.


Figure 6: Determinants of the Native-Immigrant Representation Gap. Results from Oaxaca-Blinder Decomposition

## Turnout in Municipal Elections, 1991-2010




Figure 7. Native and Foreign-Born Voter Turnout in Municipal Elections as a Share of Each Sub-Population. Shaded areas are $95 \%$ confidence intervals.

Positive Attitudes to Immigration, 1993-2010


Figure 8: Percentage of respondents agreeing that Sweden should increase or maintain current levels of immigration and refugee immigration with $95 \%$ Confidence Intervals (shaded areas). Source: Own calculations based on information in FSI (2013)


Figure 9: Representation of Immigrants: Seat Shares and Parity Ratios across Immigrant Groups


$$
\Delta \text { Natives } \quad \text { O OECD } \quad \text { Non-OECD }
$$

Note: The 'Seats to Voters' coefficient has been divided by 100.

Figure 10: Determinants of Election to Municipal Councils.
Group-wise regressions for two elections. Triangles and circles are point estimates; bars represent $95 \%$ confidence intervals.


Figure 11: Percentage of winning candidates among those who are nominated, by sub-group. Shaded areas are $95 \%$ confidence intervals.

# Online Appendix for: <br> "Why Are Immigrants Underrepresented in Politics? Evidence from Sweden" 

November 24, 2014

## Table of Contents

1. Additional Details on the Oaxaca-Blinder Decomposition
2. Table A1: Descriptive Statistics
3. Tables A2 \& A3: Main results using logistic regression
4. Tables A4 \& A5: Main results using nomination as the dependent variable
5. Table A6: Share of foreign-born among those nominated and elected by party
6. Table A7: OECD/non-OECD classification
7. Tables A8 \& A9: Additional Details on the Sample
8. Tables A10 \& A11: Main results broken down by natives vs. Non-OECD immigrants
9. Tables A12: Oaxaca-Blinder Decomposition, OECD vs. Non-OECD immigrants
10. Table A13: Oaxaca-Blinder Decomposition excluding Time in country and Citizenship
11. Table A14: Oaxaca-Blinder Decomposition accounting for Sweden Democrats
12. Figure A1: Matching Results: Immigrants vs. Natives
13. Figure A2: Matching Results: OECD vs. non-OECD Immigrants

## 1. Additional Details on the Oaxaca-Blinder Decomposition

This section explains our empirical approach in more detail. To explain the political underrepresentation of immigrants we employ the Oaxaca-Blinder decomposition technique (Blinder 1973, Oaxaca 1973), which has been widely used by sociologists and economists to study racial and gender wage gaps and discrimination in the labor market more generally (e.g., Reimers 1983, Oaxaca and Ransom 1994, Blackaby et al. 1998, Fortin et al. 2011). This technique builds on the simple idea that an observed difference in outcomes between two groups can be attributed to differences in characteristics on the one hand and to differences in the returns to these characteristics across the two groups on the other. For instance, the representation gap between immigrants and natives could be caused by immigrants possessing fewer of the resources conducive to a political career, or because individual resources of immigrants and natives are rewarded differently by voters and party gatekeepers.

In line with most other applications of the OB-decomposition technique we proceed from a simple linear model of the following type
$Y_{i j}=\boldsymbol{X}_{i j} \boldsymbol{\beta}_{j}+\varepsilon_{i j}, j=N, I$
where $Y_{i j}$ is a dichotomous variable indicating whether individual $i$ in group $j$ was elected to local office in a particular election, $\boldsymbol{X}_{i j}$ is a vector of individual characteristics and political context factors, $\boldsymbol{\beta}_{j}$ is the vector of corresponding regression coefficients, and $\varepsilon_{i j}$ is an individualspecific residual. We choose a linear probability model over alternatives such as logit or probit partly because the statistical properties of the OB-decomposition technique are more wellestablished in the linear case, and partly because this eases computation and interpretation (note, however, that all the main results remain very similar when basing the decomposition on logistic regression; see Tables A2 and A3).

The key idea behind the OB-decomposition is that we can use the results from the group-wise regressions in equation (1) to decompose the mean outcome difference between the groups into two different components, often referred to as the explained and the unexplained part. Since the regression plane passes through the means of $Y$ and $X$ the difference in election chances between natives and immigrants may be written as

$$
\begin{equation*}
\bar{Y}^{N}-\bar{Y}^{I}=\left(\bar{X}^{N}-\bar{X}^{I}\right) \beta^{I}+\bar{X}^{I}\left(\beta^{N}-\beta^{I}\right)+\left(\bar{X}^{N}-\bar{X}^{I}\right)\left(\beta^{N}-\beta^{I}\right) \tag{2}
\end{equation*}
$$

or
$\bar{Y}^{N}-\bar{Y}^{I}=\left(\bar{X}^{N}-\bar{X}^{I}\right) \beta^{N}+\bar{X}^{N}\left(\beta^{N}-\beta^{I}\right)+\left(\bar{X}^{N}-\bar{X}^{I}\right)\left(\beta^{N}-\beta^{I}\right)$
where overbars denote means; superscripts $N$ and $I$ denote natives and immigrants, respectively; and $\beta^{N}$ and $\beta^{I}$ are coefficients vectors (including the intercepts) from the linear models presented in equation (1). This results in a three-fold decomposition. The first term on the right-
hand side of equations (2) and (3) $-\left(\bar{X}^{N}-\bar{X}^{I}\right) \beta^{I}$ or $\left(\bar{X}^{N}-\bar{X}^{I}\right) \beta^{N}-$ amounts to the share of the mean outcome gap that is accounted for by group differences in the predictors. For instance, part of the difference in election chances between natives and immigrants may be explained by the fact that natives on average are more highly educated. The second term $-\bar{X}^{I}\left(\beta^{N}-\beta^{I}\right)$ or $\bar{X}^{N}\left(\beta^{N}-\beta^{I}\right)$ - instead captures the contribution of differences in the slopes. Continuing with the example of education, a higher return to schooling among natives will add to the gap in election chances. Finally, the third component $-\left(\bar{X}^{N}-\bar{X}^{I}\right)\left(\beta^{N}-\beta^{I}\right)$ - is an interaction effect. A positive interaction in equations (2) and (3) would imply that the influence among natives is greater for those factors for which natives have higher average values.

The difference between equations (2) and (3) concerns the viewpoint. Equation (2) is formulated using immigrants as the benchmark and the first two terms on the right-hand side measure how much election chances among immigrants would change if predictor levels and slopes were the same across the two groups. Analogously, equation (3) tells us how much election chances among natives would change given equal $X$ 's and coefficient vectors across the native and immigrant groups.

A common alternative to the decomposition described in equations (2) and (3) instead assumes that there is some nondiscriminatory coefficient vector $\beta^{*}$ that would be observed in the absence of discrimination. The mean outcome gap may then be written as
$\bar{Y}^{N}-\bar{Y}^{I}=\left(\bar{X}^{N}-\bar{X}^{I}\right) \beta^{*}+\left[\bar{X}^{N}\left(\beta^{N}-\beta^{*}\right)+\bar{X}^{I}\left(\beta^{*}-\beta^{I}\right)\right]$
This yields a two-fold decomposition. The first term of the right hand side of equation (4) is the so-called explained part and indicates, once again, how much of the outcome gap is due to the two groups having different characteristics. More concretely, in the present case the explained part indicates how much of the representation gap depends on natives and immigrants having different $X$ 's.

The second term, typically called the unexplained part, captures the extent to which the gap depends on different returns to these characteristics across the two groups. In the case at hand, the unexplained part can thus be interpreted as the expected difference in the probability of becoming elected to local office for natives and immigrants with identical observed individual characteristics and political opportunity structures. The unexplained part in this two-fold decomposition is often attributed to discrimination. ${ }^{1}$ Correspondingly, we conceptualize

[^18]\[

$$
\begin{equation*}
\bar{X}^{N}\left(\beta^{N}-\beta^{*}\right)+\bar{X}^{I}\left(\beta^{*}-\beta^{I}\right)=\bar{X}^{N} \gamma^{N}-\bar{X}^{I} \gamma^{I} \tag{5}
\end{equation*}
$$

\]

discrimination broadly, as equal cases being treated differently on the basis of their immigrant status (cf. Pager and Shepherd 2008, 182). We should also note, however, that though the unexplained part is often attributed to discrimination, in practice it also captures unmeasured variables that may be relevant in producing gaps across groups. We address this issue in the main text by providing several mechanism probes that support the plausibility of the interpretation that discrimination is at work.

A much discussed issue is how to construct the nondiscriminatory coefficient vector $\beta^{*}$ used in the decomposition. Many suggestions have been made (e.g., Fortin et al. 2011), most of which express the nondiscriminatory vector as a weighted average of the regression coefficients for the two groups, i.e.

$$
\begin{equation*}
\beta^{*}=\delta \beta^{N}+(1-\delta) \beta^{I} \tag{6}
\end{equation*}
$$

What sets the different approaches apart is the choice of the weighting factor $\delta$. For instance, if $\delta$ is set to 1 the coefficient vector in the absence of discrimination is assumed to equal the regression vector currently observed for natives, whereas it is assumed to equal the coefficient vector of immigrants if $\delta$ is set to 0 . However, we have no reason to assume that the coefficients from either the immigrant or the native group reflect nondiscrimination. Instead, we assume that negative discrimination of one group (i.e. immigrants) goes hand in hand with overvaluation of the other (i.e. natives), implying that $0<\delta<1$. Here, we will follow a recent suggestion by Sloczynski (2013) and set $\delta$ equal to the share of immigrants in the population, i.e., the population proportion of one group will be used to weight the coefficients of the other group. At first sight this weighting procedure might appear somewhat counterintuitive but, as Sloczynski (2013) shows, it has several attractive features, and it means that the unexplained part will be equivalent to the population average treatment effect.

[^19]
## 2. Descriptive Statistics

Table A1: Descriptive statistics

|  | 1991 |  | 2002 |  | 2010 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Natives | Immigrants | Natives | Immigrants | Natives | Immigrants |
| Gender |  |  |  |  |  |  |
|  | 0.503 | 0.520 | 0.506 | 0.519 | 0.504 | 0.520 |
| Age | $(0.500)$ | $(0.500)$ | $(0.500)$ | $(0.500)$ | $(0.500)$ | $(0.500)$ |
|  | 45.839 | 43.488 | 48.876 | 46.042 | 49.536 | 46.930 |
| Young children | $(17.446)$ | $(13.639)$ | $(18.622)$ | $(15.554)$ | $(19.240)$ | $(16.327)$ |
|  | 0.342 | 0.453 | 0.285 | 0.406 | 0.280 | 0.405 |
| Family income | $(0.739)$ | $(0.839)$ | $(0.667)$ | $(0.802)$ | $(0.667)$ | $(0.801)$ |
|  | 6.802 | 6.606 | 7.113 | 6.719 | 7.345 | 6.754 |
| Years of education | $(0.641)$ | $(0.641)$ | $(0.766)$ | $(1.672)$ | $(1.041)$ | $(2.194)$ |
|  | 10.522 | 10.513 | 11.213 | 11.180 | 11.702 | 11.581 |
| Employment status | $(2.682)$ | $(2.696)$ | $(2.687)$ | $(2.773)$ | $(2.625)$ | $(2.922)$ |
|  | 0.680 | 0.662 | 0.617 | 0.528 | 0.616 | 0.524 |
| Time in country | $(0.466)$ | $(0.472)$ | $(0.486)$ | $(0.500)$ | $(0.486)$ | $(0.500)$ |
|  |  | 20.413 |  | 22.800 |  | 23.502 |
| Citizenship |  | $(11.607)$ |  | $(14.032)$ |  | $(15.440)$ |
|  |  | 0.580 |  | 0.698 |  | 0.721 |
| Effective no. of parties | 4.091 | $(0.494)$ |  | $(0.459)$ |  | $(0.448)$ |
|  | $(0.636)$ | $(0.579)$ | $(0.585)$ | $(0.172$ | 4.271 | 4.277 |
| Disproportionality | 2.280 | 2.512 | 2.743 | 2.743 | $(0.617)$ | $(0.536)$ |
|  | $(1.146)$ | $(1.281)$ | $(1.151)$ | $(1.151)$ | $(1.057)$ | $(1.185)$ |
| Native education | 10.477 | 10.675 | 11.151 | 11.368 | 11.607 | 11.811 |
|  | $(0.602)$ | $(0.589)$ | $(0.667)$ | $(0.649)$ | $(0.656)$ | $(0.648)$ |
| Immigrant share | 0.101 | 0.140 | 0.128 | 0.173 | 0.156 | 0.205 |
|  | $(0.056)$ | $(0.066)$ | $(0.068)$ | $(0.077)$ | $(0.078)$ | $(0.086)$ |
| Ethnic concentration | 0.161 | 0.162 | 0.118 | 0.110 | 0.089 | 0.086 |
|  | $(0.108)$ | $(0.126)$ | $(0.086)$ | $(0.099)$ | $(0.055)$ | $(0.069)$ |
| Left share | 0.451 | 0.449 | 0.499 | 0.500 | 0.452 | 0.448 |
| Seats to voters | $(0.089)$ | $(0.080)$ | $(0.089)$ | $(0.077)$ | $(0.093)$ | $(0.080)$ |
| Observations | 0.002 | 0.002 | 0.002 | 0.001 | 0.002 | 0.001 |
|  | $(0.002)$ | $(0.002)$ | $(0.002)$ | $(0.001)$ | $(0.002)$ | $(0.001)$ |
|  | $5,634,068$ | 503,999 | $5,959,168$ | 769,369 | $6,176,394$ | 995,282 |

Note: The table displays means and standard deviations (the latter are in parentheses).

## 3. Main Results Using Logistic Regression

Table A2: Determinants of Election to City Councils in Swedish Municipalities across Groups, Logit Results

|  | 1991 |  | 2002 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Natives | Immigrants | Natives | Immigrants | Natives | Immigrants |
| Demographics |  |  |  |  |  |  |
| Gender | -. $577 * * *$ | -.214** | -.278*** | -.193*** | -.269*** | -.171*** |
|  | (.019) | (.094) | (.018) | (.072) | (.019) | (.067) |
| Age | .267*** | .250*** | .193*** | .151*** | .127*** | .096*** |
|  | (.006) | (.040) | (.005) | (.022) | (.004) | (.017) |
| Age-squared | -.002*** | -.002*** | -.002*** | -.002*** | -.001*** | -.001*** |
|  | (.000) | (.000) | (.000) | (.000) | (.000) | (.000) |
| Young children | .089*** | . 105 | . 016 | . 181 *** | -. 005 | -. 013 |
|  | (.014) | (.076) | (.016) | (.051) | (.003) | (.049) |
| SES |  |  |  |  |  |  |
| Family income | .458*** | .554*** | . 379 *** | .416*** | .217*** | .160*** |
|  | (.024) | (.133) | (.024) | (.089) | (.018) | (.013) |
| Years of education | .187*** | .170*** | .197*** | .211*** | .207*** | .248*** |
|  | (.003) | (.017) | (.004) | (.014) | (.004) | (.013) |
| Employment status | 1.717*** | 1.739*** | 1.268*** | 1.129*** | 1.094*** | 1.090*** |
|  | (.046) | (.222) | (.037) | (.121) | (.035) | (.108) |
| Immigrant Specific |  |  |  |  |  |  |
| Time in country |  | .043*** |  | . 027 *** |  | .028*** |
|  |  | (.005) |  | (.003) |  | (.003) |
| Citizenship |  | .807*** |  | .759*** |  | .972*** |
|  |  | (.136) |  | (.101) |  | (.108) |
| Opportunity Structure |  |  |  |  |  |  |
| Effective no. of parties | -.080*** | -. 144 | -.065*** | -. 058 | -.078*** | -.152** |
|  | (.018) | (.105) | (.004) | (.073) | (.017) | (.063) |
| Disproportionality | -. 195 *** | -. 265 *** | -. $173 * * *$ | -. $157 * * *$ | -. $165^{* * *}$ | -. $239 * * *$ |
|  | (.002) | (.059) | (.014) | (.049) | (.014) | (.047) |
| Native education | -. $607 * * *$ | -. $588 * * *$ | -. 629 *** | -. $463 * * *$ | -. 659 *** | -. 591 |
|  | (.024) | (.127) | (.023) | (.086) | (.025) | (.088) |
| Immigrant share | -. $573 * * *$ | -. 065 | -.653*** | -1.609** | -1.460*** | -1.973 |
|  | (.216) | (.873) | (.199) | (.636) | (.174) | (.496) |
| Ethnic concentration | . $524 * * *$ | -. 167 | . 669 | . 389 | 1.277*** | . 923 *** |
|  | (.085) | (.050) | (.093) | (.343) | (.129) | (.384) |
| Left share | -.860*** | 1.126 | -.713*** | . 433 | -.922*** | -. 002 |
|  | (.125) | (.714) | (.107) | (.479) | (.110) | (.412) |
| Seats to voters | 227.059*** | 234.109*** | 196.619*** | 194.532*** | 199.929*** | 214.605*** |
|  | (5.187) | (30.547) | (5.030) | (25.477) | (4.838) | (21.273) |
| Observations | 5,634,068 | 503,999 | 5,959,168 | 769,369 | 6,176,394 | 995,282 |

Note: The dependent variable is a dummy indicating whether an individual won election. Logit coefficients; standard errors are in parentheses. Significance levels: *p=<.05; ** $p=<.01 ;{ }^{* * *} p=<.001$.

Table A3: Oaxaca-Blinder Decomposition Results 1991-2010, Logit Results

|  | $\mathbf{1 9 9 1}$ | $\mathbf{1 9 9 4}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 1 0}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Difference | .136 | .129 | .119 | .105 | .104 | .100 |
| P(Natives) | .229 | .223 | .215 | .208 | .202 | .194 |
| P(Immigrants) | .093 | .094 | .096 | .103 | .098 | .094 |
| Explained | .025 | .036 | .044 | .051 | .048 | .049 |
|  | $(.001)$ | $(.001)$ | $(.002)$ | $(.002)$ | $(.001)$ | $(.001)$ |
| Demographics | -.027 | -.030 | -.022 | -.016 | -.007 | -.007 |
|  | $(.001)$ | $(.001)$ | $(.001)$ | $(.001)$ | $(.000)$ | $(.000)$ |
| SES | .017 | .027 | .029 | .030 | .022 | .021 |
|  | $(.001)$ | $(.001)$ | $(.001)$ | $(001)$ | $(.001)$ | $(.001)$ |
| Opp. structure | .022 | .026 | .023 | .026 | .024 | .025 |
|  | $(.001)$ | $(.001)$ | $(.001)$ | $(.001)$ | $(.001)$ | $(.001)$ |
| Seats to voters | .013 | .014 | .013 | .011 | .009 | .010 |
|  | $(.001)$ | $(.001)$ | $(.001)$ | $(.000)$ | $(.000)$ | $(.000)$ |
| Unexplained | .111 | .093 | .076 | .054 | .056 | .051 |
|  | $(.006)$ | $(.006)$ | $(.006)$ | $(.006)$ | $(.005)$ | $(.005)$ |

Note: The first row reports the percentage point difference in winning a local council seat across groups. The second/third row reports the percentage of natives/immigrants winning a seat. The second block ("Explained") reports the size of the representation gap that is due to differences in characteristics, and the third block ("Unexplained") reports the size of the representation gap that is attributable to differences in returns to characteristics. For included covariates, see Table 1. Standard errors are in parentheses.
4. Main results using nomination as the dependent variable

Table A4: Determinants of Nomination to City Councils across Groups

|  | 1991 |  | 2002 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Natives | Immigrants | Natives | Immigrants | Natives | Immigrants |
| Demographics |  |  |  |  |  |  |
| Gender | $\begin{gathered} -.443^{* * *} \\ (.008) \end{gathered}$ | $\begin{gathered} -.130^{* * *} \\ (.020) \end{gathered}$ | $\begin{gathered} -.286^{* * *} \\ (.007) \end{gathered}$ | $\begin{gathered} -.122 * * * \\ (.016) \end{gathered}$ | $\begin{gathered} -.276 * * * \\ (.007) \end{gathered}$ | $\begin{gathered} -.127^{* * *} \\ (.013) \end{gathered}$ |
| Age | .121*** | .055*** | .078*** | .041*** | .054*** | .034*** |
|  | (.002) | (.004) | (.001) | (.003) | (.001) | (.002) |
| Age-sq | $\begin{gathered} -.001^{* * *} \\ (.000) \end{gathered}$ | $\begin{gathered} -.001^{* * *} \\ (.000) \end{gathered}$ | $\begin{gathered} -.001 * * * \\ (.000) \end{gathered}$ | $\begin{gathered} -.000^{* * *} \\ (.000) \end{gathered}$ | $\begin{gathered} -.000^{* * *} \\ (.000) \end{gathered}$ | $\begin{gathered} -.000^{* * *} \\ (.000) \end{gathered}$ |
| Young children | $\begin{aligned} & .012^{*} * \\ & (.006) \end{aligned}$ | $\begin{aligned} & .006 \\ & (.013) \end{aligned}$ | $\begin{gathered} -.097 * * * \\ (.006) \end{gathered}$ | $\begin{gathered} .016 \\ (.010) \end{gathered}$ | $\begin{gathered} -.093 * * * \\ (.006) \end{gathered}$ | $\begin{aligned} & -.004 \\ & (.009) \end{aligned}$ |
| SES |  |  |  |  |  |  |
| Family income | $\begin{gathered} -.026^{* * *} \\ (.007) \end{gathered}$ | $\begin{aligned} & .007 \\ & (.008) \end{aligned}$ | $\begin{aligned} & .010^{* *} \\ & (.005) \end{aligned}$ | $\begin{gathered} .016^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} .019^{* * *} \\ (.004) \end{gathered}$ | $\begin{gathered} .014^{* * *} \\ (.003) \end{gathered}$ |
| Years of education | $\underset{(.002)}{.193 * * *}$ | $\begin{gathered} .099 * * * \\ (.004) \end{gathered}$ | $\begin{gathered} .155^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} .096^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} .148^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} .085^{* * *} \\ (.002) \end{gathered}$ |
| Employment status | $\begin{gathered} .636^{* * *} \\ (.012) \end{gathered}$ | $\begin{gathered} .264^{* * *} \\ (.024) \end{gathered}$ | $\begin{gathered} .341 * * * \\ (.010) \end{gathered}$ | $\underset{(.018)}{.201 * * *}$ | $\begin{gathered} .204^{* * *} \\ (.009) \end{gathered}$ | $\begin{gathered} .165^{* * *} \\ (.012) \end{gathered}$ |
| Immigrant Specific |  |  |  |  |  |  |
| Time in country |  | $\begin{gathered} .013 * * * \\ (.001) \end{gathered}$ |  | $\begin{gathered} .008^{* * *} \\ (.001) \end{gathered}$ |  | $\begin{gathered} .008^{* * *} \\ (.001) \end{gathered}$ |
| Citizenship |  | $\begin{gathered} .208 * * * \\ (.022) \end{gathered}$ |  | $\begin{gathered} .272^{* * *} \\ (.018) \end{gathered}$ |  | $\begin{gathered} .276^{* * *} \\ (.016) \end{gathered}$ |
| Opportunity structure |  |  |  |  |  |  |
| Effective nr. of parties | $\begin{aligned} & .126 \\ & (.009) \end{aligned}$ | $\begin{gathered} .091^{* * *} \\ (.022) \end{gathered}$ | $\begin{gathered} .056 * * * \\ (.000) \end{gathered}$ | $\begin{gathered} .051^{* * *} \\ (.018) \end{gathered}$ | $\begin{gathered} .035^{* * *} \\ (.006) \end{gathered}$ | $\begin{gathered} -.030^{* *} \\ (.014) \end{gathered}$ |
| Disproportionality | $\begin{gathered} .038^{* * *} \\ (.005) \end{gathered}$ | $\begin{aligned} & .022^{* *} \\ & (.010) \end{aligned}$ | $\begin{aligned} & .002 \\ & (.004) \end{aligned}$ | $\begin{aligned} & -.011 \\ & (.009) \end{aligned}$ | $\begin{aligned} & -.001 \\ & (.004) \end{aligned}$ | $\begin{gathered} -.014^{*} \\ (.008) \end{gathered}$ |
| Native education | $\begin{gathered} -.369^{* * *} \\ (.011) \end{gathered}$ | $\begin{gathered} -.176 * * * \\ (.026) \end{gathered}$ | $\begin{gathered} -.163^{* * *} \\ (.009) \end{gathered}$ | $\begin{gathered} -.066^{* * *} \\ (.019) \end{gathered}$ | $\begin{gathered} -192 * * * \\ (.010) \end{gathered}$ | $\begin{gathered} -.091 * * * \\ (.020) \end{gathered}$ |
| Immigrant share | $\begin{gathered} .298^{* * *} \\ (.092) \end{gathered}$ | $\begin{gathered} -.417^{* *} \\ (.176) \end{gathered}$ | $\begin{gathered} .441 * *, \\ (.071) \end{gathered}$ | $\begin{gathered} -.311 * * \\ (.129) \end{gathered}$ | $\underset{(.057)}{.271^{* * *}}$ | $\begin{gathered} -.483 * * * \\ (.093) \end{gathered}$ |
| Ethnic concentration | $\begin{gathered} .327^{* * *} \\ (.050) \end{gathered}$ | $\begin{aligned} & -.020 \\ & (.114) \end{aligned}$ | $\begin{gathered} .511^{* * *} \\ (.052) \end{gathered}$ | $\begin{aligned} & -.190^{*} \\ & (.106) \end{aligned}$ | $\underset{(.075)}{.672 * * *}$ | $\begin{gathered} -.547^{* * *} \\ (.122) \end{gathered}$ |
| Left share | $\begin{gathered} -.885^{* * *} \\ (.067) \end{gathered}$ | $\begin{gathered} .046 \\ (.173) \end{gathered}$ | $\begin{gathered} -.431^{* * *} \\ (.050) \end{gathered}$ | $\begin{gathered} .369^{* * *} \\ (.128) \end{gathered}$ | $\begin{gathered} -.450 * * * \\ (.045) \end{gathered}$ | $\underset{(.101)}{.536^{* * *}}$ |
| Seats to voters | $\begin{gathered} 371.273^{* * *} \\ (3,672) \end{gathered}$ | $\begin{gathered} 210.928^{* * *} \\ (1.067) \end{gathered}$ | $\begin{gathered} 324.362 * * * \\ (3.339) \end{gathered}$ | $\begin{gathered} 231.386^{* * *} \\ (9.567) \end{gathered}$ | $\begin{gathered} 312.414 * * * \\ (3.286) \end{gathered}$ | $\begin{gathered} 225.579 * * * \\ (8.294) \end{gathered}$ |
| $\operatorname{Adj}-\mathrm{R}^{2}$ |  | $\begin{gathered} .007 \\ 502000 \end{gathered}$ | $\begin{gathered} .009 \\ 5.959168 \end{gathered}$ | $\begin{gathered} .006 \\ 769.369 \end{gathered}$ | $\text { . } 003 .$ | $\begin{aligned} & .006 \\ & \hline 0050 \end{aligned}$ |
|  | $5,634,068$ | 503,999 | 5,959,168 | $769,369$ | $6,176,394$ | 995,282 |

Note: The dependent variable is a dummy indicating whether an individual ran in an election. OLS coefficients; standard errors in parentheses. Significance levels: * $p=<.05 ; * * p=<.01$; *** $p=<.001$

Table A5: Oaxaca-Blinder Decomposition Results for Nomination, 1991-2010

|  | $\mathbf{1 9 9 1}$ | $\mathbf{1 9 9 4}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 1 0}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Difference | .490 | .451 | .357 | .301 | .287 | .318 |
| P(Natives) | .977 | .931 | .833 | .786 | .769 | .764 |
| P(Immigrants) | .487 | .480 | .476 | .479 | .483 | .446 |
| Explained |  |  |  |  |  |  |
|  | .106 | .114 | .128 | .159 | .191 | .177 |
| Demographics | $(.008)$ | $(.008)$ | $(.007)$ | $(.006)$ | $(.006)$ | $(.005)$ |
|  | -.052 | -.057 | -.044 | -.028 | -.019 | -.021 |
| SES | $(.006)$ | $(.005)$ | $(.004)$ | $(.004)$ | $(.003)$ | $(.003)$ |
|  | .007 | .026 | .035 | .030 | .039 | .035 |
| Opp. structure | $(.002)$ | $(.002)$ | $(.002)$ | $(.002)$ | $(.002)$ | $(.002)$ |
|  | .048 | .037 | .015 | .031 | .043 | .044 |
| Seats to voters | $(.007)$ | $(.006)$ | $(.006)$ | $(.006)$ | $(.005)$ | $(.005)$ |
|  | .103 | .108 | .122 | .127 | .128 | .119 |
| Unexplained | $(.005)$ | $(.004)$ | $(.004)$ | $(.004)$ | $(.004)$ | $(.004)$ |
|  | .384 | .337 | .229 | .149 | .096 | .141 |

Note: The first row reports the percentage point difference in running for a local council seat across groups. The second/third row reports the percentage of natives/immigrants running for a seat. The second block ("Explained") reports the size of the nomination gap that is due to differences in characteristics, and the third block ("Unexplained") reports the size of the nomination gap that is attributable to differences in returns to characteristics.

## 5. Share of foreign-born among those nominated and elected by party

Table A6: Foreign-born as a \%-share of Elected (Nominated) by party, 1991-2010

|  | $\mathbf{1 9 9 1}$ | $\mathbf{1 9 9 4}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 1 0}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| The Conservatives | 3.8 | 3.5 | 4.0 | 5.1 | 5.6 | 6.7 |
| The Centre Party | $(4.4)$ | $(4.4)$ | $(5.4)$ | $(6.1)$ | $(7)$ | $(7.6)$ |
|  | 1.2 | 1.2 | 1.2 | 1.2 | 2 | 2.4 |
|  | $(1.9)$ | $(1.8)$ | $(2.2)$ | $(2.4)$ | $(3.6)$ | $(3.8)$ |
|  | 3.5 | 4 | 4.2 | 7.9 | 7.8 | 6.9 |
|  | $(4.4)$ | $(5.2)$ | $(6.3)$ | $(7.4)$ | $(9.1)$ | $(8.7)$ |
| The Green Party | 3.3 | 2.8 | 4.5 | 5.9 | 6.5 | 7.1 |
|  | $(4.4)$ | $(4.8)$ | $(5.4)$ | $(7.5)$ | $(9.1)$ | $(9.8)$ |
| The Social Democrats | 6.7 | 7.8 | 8.8 | 11.5 | 12.6 | 12.6 |
|  | $(7.9)$ | $(7.9)$ | $(9)$ | $(11.5)$ | $(13.6)$ | $(12.4)$ |
| The Left Party | 5.1 | 5.6 | 5.9 | 7.3 | 7.6 | 8.8 |
|  | $(6.1)$ | $(6.3)$ | $(7.5)$ | $(8.6)$ | $(9.7)$ | $(10.5)$ |

Note: Entries are the percentage share of foreign-born as a share among the elected by party and year. Entries in parentheses are the share of foreign-born among the nominated by party and year. Figures are from Statistics Sweden (http://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START__
$\qquad$ ME ME0107 $\qquad$ ME0107A/ME0107T08/).

## 6. Classification of Immigrant Groups

Table A7: Country Classifications

| OECD | Non-OECD |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Finland | Bosnia-Herzeg. | Dom. Rep. | Israel | Mauritius | Afghanistan |
| Denmark | Yugoslavia | El Salvador | Yemen | Mozambique | Bangladesh |
| Norway | Croatia | Grenada | Jordan | Namibia | Bhutan |
| Iceland | Macedonia | Guatemala | Kuwait | Niger | Brunei |
| Ireland | Slovenia | Haiti | Lebanon | Nigeria | India |
| UK | Poland | Honduras | Libya | Rwanda | Kampuchea |
| Germany | Estonia | Jamaica | Morocco | Sao tome | Maldives |
| Greece | Latvia | Mexico | Palestine | Senegal | Mongolia |
| Italy | Lithuania | Nicaragua | Qatar | Seychelles | Nepal |
| Malta | Albania | Panama | Saudi Arabia | Sierra Leone | Oman |
| Monaco | Armenia | Saint Lucia | South Yemen | Swaziland | Pakistan |
| Portugal | Azerbaijan | St. Vincent | Syria | Tanzania | Sikkim |
| San Marino | Bulgaria | St. Kitt. Nevis | Tunisia | Togo | Sri Lanka |
| Spain | Georgia | Chile | Angola | Uganda |  |
| Vatican City | Kazakhstan | Bolivia | Arab Republic | Zaire |  |
| Andorra | Kyrgyzstan | Brazil | Benin | Zambia |  |
| Belgium | Moldova | Colombia | Botswana | Zanzibar |  |
| France | Romania | Ecuador | Burkina Faso | Zimbabwe |  |
| Liechtenstein | Russia | Guyana | Burundi | Iran |  |
| Luxembourg | Soviet Union | Paraguay | Central Africa | Iran |  |
| Netherlands | Tajikistan | Peru | Comoros | Turkey |  |
| Switzerland | Turkmenistan | Suriname | Equatorial Guinea | Hong Kong |  |
| Austria | Ukraine | Uruguay | Ivory Coast | Japan |  |
| Canada | Uzbekistan | Venezuela | Gabon | China |  |
| US | Belarus | Djibouti | Ghana | Taiwan |  |
| Australia | Czech Rep. | Eritrea | Guinea | North Korea |  |
| Fiji | Slovakia | Ethiopia | Guinea Bissau | South Korea |  |
| Kiribati | Czechoslovakia | Somalia | Cameroon | Burma |  |
| Micronesia | Hungary | Sudan | Cape Verde | The Philippines |  |
| Nauru | Antigua | Algeria | Kenya | Indonesia |  |
| Palau | Bahamas | Bahrain | Congo P. Rep. | Laos |  |
| Papua New G. | Barbados | Cyprus | Lesotho | Malay Fed. |  |
| Solomon Isl. | Belize | Egypt | Liberia | Malaysia |  |
| Tonga | Costa Rica | Fr. Morocco | Madagascar | Singapore |  |
| Vanuatu | Cuba | UAE | Malawi | Thailand |  |
| Samoa | Dominica | Gaza area | Mauritania | Vietnam |  |

Note: This table presents a classification that roughly corresponds to countries' membership in the OECD in 1990. In some cases the classification is no longer current (e.g., Israel or Estonia are now OECD members). Some smaller countries that do not send many immigrants to Sweden appear in our data as part of a larger grouping (e.g., Fiji through Samoa belong to the Australian region).

## 7. Additional Details on the Sample

Table A8: Nomination and Elections across Observations and Individuals
Observations Individuals

|  | Natives | Immigrants | Natives | Immigrants |
| :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  |
| All | $35,471,130$ | $4,410,203$ | $7,548,832$ | $1,163,137$ |
| Nominated | 298,361 | 20,854 | 142,580 | 11,584 |
| Elected | 74,957 | 4,253 | 37,665 | 2,409 |

Note: On average a native individual appears 4.7 times (out of the maximal 6) in the sample, whereas the corresponding figure for immigrants is 3.7 . In order to be included in the data an individual needs to live permanently in Sweden, and to be eligible to run for local office. Consequently Swedes will enter the data once they have turned 18, whereas immigrants will enter the data once they have turned 18 and have lived a sufficiently long time in Sweden (3 years) to be able to run for local office.

Table A9: Previous Nomination and Election by Group

|  | Natives | Immigrants | Total |
| :--- | :---: | :---: | :---: |
| Elected in 2010 |  |  |  |
| Times previously nominated | 2.42 | 1.89 | 2.38 |
| Times previously elected | 1.56 | 1.19 | 1.54 |
|  |  |  |  |
| First time elected in 2010 | 0.89 | 0.69 | 0.87 |
| Times previously nominated |  |  |  |

## 8. Main results broken down by natives vs. non-OECD immigrants

Table A10: Determinants of Election to City Councils in Swedish Municipalities across Groups

|  | 1991 |  | 2002 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Natives | Non-OECD | Natives | Non-OECD | Natives | Non-OECD |
| Demographics |  |  |  |  |  |  |
| Gender (female) | $\begin{gathered} -.125 * * * \\ (.004) \end{gathered}$ | $\begin{aligned} & .015 * \\ & (.008) \end{aligned}$ | $\begin{gathered} -.052 * * * \\ (.004) \end{gathered}$ | $\begin{gathered} -.022 * * * \\ (.008) \end{gathered}$ | $\begin{gathered} -.052 * * * \\ (.004) \end{gathered}$ | $\begin{gathered} -.013 * * \\ (.007) \end{gathered}$ |
| Age | $\begin{gathered} .036^{* * *} \\ (.001) \end{gathered}$ | $\begin{gathered} .005^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} .023 * * * \\ (.001) \end{gathered}$ | $\begin{gathered} .010^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} .014^{* * *} \\ (.001) \end{gathered}$ | $\begin{gathered} .006^{* * *} \\ (.001) \end{gathered}$ |
| Age-sq | $\begin{gathered} -.000 * * * \\ (.000) \end{gathered}$ | $\begin{gathered} -.000^{* *} \\ (.000) \end{gathered}$ | $\begin{gathered} -.000^{* * *} \\ (.000) \end{gathered}$ | $\begin{aligned} & -.000 \\ & (.000) \end{aligned}$ | $\begin{gathered} -.000^{* * *} \\ (.000) \end{gathered}$ | $\begin{aligned} & -.000 \\ & (.000) \end{aligned}$ |
| Young children | $\begin{gathered} -.031^{* * *} \\ (.003) \end{gathered}$ | $\begin{aligned} & -.005 \\ & (.005) \end{aligned}$ | $\begin{gathered} -.044 * * * \\ (.003) \end{gathered}$ | $\begin{gathered} .014^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} -.029 * * * \\ (.003) \end{gathered}$ | $\begin{gathered} .001 \\ (.004) \end{gathered}$ |
| SES |  |  |  |  |  |  |
| Family income | $\begin{gathered} .031^{* * *} \\ (.003) \end{gathered}$ | $\begin{gathered} .002 \\ (.003) \end{gathered}$ | $\begin{gathered} .017 * * * \\ (.003) \end{gathered}$ | $\begin{gathered} .002 \\ (.003) \end{gathered}$ | $\begin{gathered} .015 * * * \\ (.002) \end{gathered}$ | $\begin{gathered} .002 \\ (.002) \end{gathered}$ |
| Years of education | $\begin{gathered} .059 * * * \\ (.001) \end{gathered}$ | $\begin{gathered} .010^{* * *} \\ (.002) \end{gathered}$ | $\begin{gathered} .048 * * * \\ (.001) \end{gathered}$ | $\begin{gathered} .017 * * * \\ (.002) \end{gathered}$ | $\begin{gathered} .040 * * * \\ (.001) \end{gathered}$ | $\begin{gathered} .017 * * * \\ (.001) \end{gathered}$ |
| Employment status | $\begin{gathered} .225 * * * \\ (.006) \end{gathered}$ | $\begin{gathered} .037 * * * \\ (.010) \end{gathered}$ | $\begin{gathered} .199 * * * \\ (.005) \end{gathered}$ | $\begin{gathered} .067 * * * \\ (.009) \end{gathered}$ | $\begin{gathered} .161^{* * *} \\ (.005) \end{gathered}$ | $\begin{gathered} .062 * * * \\ (.008) \end{gathered}$ |
| Immigrant Specific |  |  |  |  |  |  |
| Time in country |  | $\begin{gathered} .003^{* * *} \\ (.001) \end{gathered}$ |  | $\begin{gathered} .005 * * * \\ (.001) \end{gathered}$ |  | $\begin{gathered} .004^{* * *} \\ (.000) \end{gathered}$ |
| Citizenship |  | $\begin{gathered} .013 \\ (.009) \end{gathered}$ |  | $\begin{gathered} .034^{* * *} \\ (.011) \end{gathered}$ |  | $\begin{gathered} .032 * * * \\ (.009) \end{gathered}$ |
| Opportunity structure |  |  |  |  |  |  |
| Effective nr. of parties | $\begin{gathered} .007 \\ (.004) \end{gathered}$ | $\begin{gathered} .010 \\ (.010) \end{gathered}$ | $\begin{gathered} .004 \\ (.004) \end{gathered}$ | $\begin{gathered} -.016 \\ (.011) \end{gathered}$ | $\begin{gathered} .005 \\ (.002) \end{gathered}$ | $\begin{gathered} -.015 * * \\ (.007) \end{gathered}$ |
| Disproportionality | $\begin{gathered} .002 \\ (.002) \end{gathered}$ | $\begin{aligned} & .009^{* *} \\ & (.004) \end{aligned}$ | $\begin{gathered} .002 \\ (.002) \end{gathered}$ | $\begin{gathered} -.001 \\ (.005) \end{gathered}$ | $\begin{aligned} & -.000 \\ & .002 \end{aligned}$ | $\begin{gathered} -.009 * * \\ (.004) \end{gathered}$ |
| Native education | $\begin{gathered} -.067 * * * \\ (.005) \end{gathered}$ | $\begin{gathered} .004 \\ (.011) \end{gathered}$ | $\begin{gathered} -.048 * * * \\ (.005) \end{gathered}$ | $\begin{gathered} -.010 \\ (.011) \end{gathered}$ | $\begin{gathered} -.042 * * * \\ (.005) \end{gathered}$ | $\begin{gathered} .010 \\ (.010) \end{gathered}$ |
| Immigrant share | $\begin{gathered} .168^{* * *} \\ (.045) \end{gathered}$ | $\begin{gathered} -.017 \\ (.078) \end{gathered}$ | $\begin{aligned} & .122 * * \\ & (.034) \end{aligned}$ | $\begin{gathered} -.281 * * * \\ (.070) \end{gathered}$ | $\begin{gathered} .117 * * * \\ (.029) \end{gathered}$ | $\begin{gathered} -.100^{* *} \\ (.047) \end{gathered}$ |
| Ethnic concentration | $\begin{gathered} .023 \\ (.024) \end{gathered}$ | $\begin{gathered} .106 \\ (.074) \end{gathered}$ | $\begin{gathered} .050 \\ (.027) \end{gathered}$ | $\begin{gathered} .083 \\ (.108) \end{gathered}$ | $\begin{aligned} & .076^{*} \\ & (.038) \end{aligned}$ | $\begin{aligned} & .136 \\ & (.123) \end{aligned}$ |
| Left share | $\begin{gathered} .032 \\ (.025) \end{gathered}$ | $\begin{gathered} .299 * * * \\ (.086) \end{gathered}$ | $\begin{gathered} .022 \\ (.026) \end{gathered}$ | $\begin{gathered} .305^{* * *} \\ (.073) \end{gathered}$ | $\begin{aligned} & .021 \\ & .023 \end{aligned}$ | $\begin{gathered} .324^{* * *} \\ (.056) \end{gathered}$ |
| Seats to voters | $\begin{gathered} 110.238^{* * *} \\ (1.790) \end{gathered}$ | $\begin{gathered} 39.878^{* * *} \\ (5.643) \end{gathered}$ | $\begin{gathered} 104.348^{* * *} \\ (1.726) \end{gathered}$ | $\begin{gathered} 37.890^{* * *} \\ (5.946) \end{gathered}$ | $\begin{gathered} 103.895 * * * \\ (1.66) \end{gathered}$ | $\begin{gathered} 59.092^{* * *} \\ (4.811) \end{gathered}$ |
| Adj-R ${ }^{2}$ <br> Observations | $\begin{gathered} .004 \\ 5,634,068 \end{gathered}$ | $\begin{gathered} .001 \\ 200,469 \end{gathered}$ | $\begin{gathered} .003 \\ 5,959,168 \end{gathered}$ | $\begin{gathered} .002 \\ 453,378 \end{gathered}$ | $\begin{gathered} .003 \\ 6,176,394 \end{gathered}$ | $\begin{gathered} .002 \\ 675,943 \end{gathered}$ |

Note: The dependent variable is a dummy indicating whether an individual won election. OLS coefficients; standard errors in parentheses. Significance levels: * $p=<.05 ;{ }^{* *} p=<.01 ;{ }^{* * *} p=<.001$.

| Table A11: Oaxaca-Blinder Decomposition Results 1991-2010, Non-OECD immigrants |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 9 9 1}$ | $\mathbf{1 9 9 4}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 1 0}$ |
| Difference | .193 | .181 | .154 | .129 | .123 | .116 |
| P(Natives) | .229 | .223 | .215 | .208 | .202 | .194 |
| P(Immigrants) | .035 | .042 | .061 | .079 | .079 | .078 |
| Explained |  |  |  |  |  |  |
|  | .036 | .038 | .035 | .044 | .053 | .051 |
| Demographics | $(.006)$ | $(.006)$ | $(.005)$ | $(.005)$ | $(.005)$ | $(.004)$ |
|  | -.003 | -.008 | -.017 | -.015 | -.009 | -.011 |
| SES | $(.004)$ | $(.004)$ | $(.004)$ | $(.004)$ | $(.003)$ | $(.003)$ |
|  | .000 | .005 | .007 | .005 | .007 | .008 |
| Opp. structure | $(.001)$ | $(.002)$ | $(.002)$ | $(001)$ | $(.001)$ | $(.000)$ |
|  | .003 | .001 | .014 | .021 | .018 | .009 |
| Seats to voters | $(.005)$ | $(.005)$ | $(.005)$ | $(.005)$ | $(.004)$ | $(.003)$ |
|  | .036 | .041 | .030 | .034 | .037 | .044 |
| Unexplained | $(.006)$ | $(.001)$ | $(.004)$ | $(.005)$ | $(.004)$ | $(.003)$ |
|  | .158 | .143 | .119 | .085 | .069 | .065 |
|  | $(.007)$ | $(.007)$ | $(.006)$ | $(.007)$ | $(.006)$ | $(.005)$ |

Note: The first row reports the percentage point difference in winning a local council seat across groups. The second/third row reports the percentage of natives/immigrants winning a seat. The second block ("Explained") reports the size of the representation gap that is due to differences in characteristics, and the third block ("Unexplained") reports the size of the representation gap that is attributable to differences in returns to characteristics. For included covariates, see Table 1. Standard errors are in parentheses.

## 9. Oaxaca-Blinder Decomposition, OECD vs. Non-OECD immigrants

Table A12: Oaxaca-Blinder Decomposition Results 1991-2010, OECD vs. Non-OECD Immigrants

|  | 1991 | 1994 | 1998 | 2002 | 2006 | 2010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Difference | . 095 | . 095 | . 076 | . 058 | . 052 | . 051 |
| P (OECD) | . 131 | . 137 | . 137 | . 137 | . 131 | . 128 |
| P(Non-OECD) | . 035 | . 042 | . 061 | . 079 | . 079 | . 078 |
| Explained | $\begin{gathered} .078 \\ (.005) \end{gathered}$ | $\begin{gathered} .092 \\ (.005) \end{gathered}$ | $\begin{aligned} & .095 \\ & (.007) \end{aligned}$ | $\begin{aligned} & .083 \\ & (.008) \end{aligned}$ | $\begin{aligned} & .080 \\ & (.008) \end{aligned}$ | $\begin{aligned} & .076 \\ & (.007) \end{aligned}$ |
| Demographics | $\begin{aligned} & .008 \\ & (.002) \end{aligned}$ | $\begin{aligned} & .005 \\ & (.003) \end{aligned}$ | $\begin{aligned} & .009 \\ & (.005) \end{aligned}$ | $\begin{gathered} .008 \\ (.006) \end{gathered}$ | $\begin{gathered} .016 \\ (.006) \end{gathered}$ | $\begin{aligned} & .010 \\ & (.007) \end{aligned}$ |
| SES | $\begin{aligned} & -.003 \\ & (.001) \end{aligned}$ | $\begin{aligned} & -.000 \\ & (.002) \end{aligned}$ | $\begin{aligned} & -.004 \\ & (.002) \end{aligned}$ | $\begin{aligned} & -.014 \\ & (.001) \end{aligned}$ | $\begin{aligned} & -.015 \\ & (.001) \end{aligned}$ | $\begin{aligned} & -.012 \\ & (.001) \end{aligned}$ |
| Opp. structure | $\begin{aligned} & .002 \\ & (.004) \end{aligned}$ | $\begin{aligned} & .007 \\ & (.003) \end{aligned}$ | $\begin{aligned} & .008 \\ & (.003) \end{aligned}$ | $\begin{aligned} & .004 \\ & (.004) \end{aligned}$ | $\begin{aligned} & .011 \\ & (.004) \end{aligned}$ | $\begin{aligned} & .007 \\ & (.003) \end{aligned}$ |
| Seats to voters | $\begin{aligned} & .033 \\ & (.003) \end{aligned}$ | $\begin{aligned} & .039 \\ & (.003) \end{aligned}$ | $\begin{aligned} & .036 \\ & (.003) \end{aligned}$ | $\begin{aligned} & .038 \\ & (.003) \end{aligned}$ | $\begin{aligned} & .036 \\ & (.003) \end{aligned}$ | $\begin{aligned} & .042 \\ & (.003) \end{aligned}$ |
| Time in country | $\begin{gathered} .038 \\ (.005) \end{gathered}$ | $\begin{gathered} .045 \\ (.005) \end{gathered}$ | $\begin{gathered} .051 \\ (.007) \end{gathered}$ | $\begin{gathered} .059 \\ (.008) \end{gathered}$ | $\begin{gathered} .052 \\ (.007) \end{gathered}$ | $\begin{gathered} .045 \\ (.008) \end{gathered}$ |
| Citizenship | $\begin{aligned} & .001 \\ & (.000) \end{aligned}$ | $\begin{aligned} & -.003 \\ & (.001) \end{aligned}$ | $\begin{aligned} & -.005 \\ & (.001) \end{aligned}$ | $\begin{aligned} & -.012 \\ & (.002) \end{aligned}$ | $\begin{aligned} & -.020 \\ & (.003) \end{aligned}$ | $\begin{aligned} & -.016 \\ & (.002) \end{aligned}$ |
| Unexplained | $\begin{gathered} .017 \\ (.009) \\ \hline \end{gathered}$ | $\begin{aligned} & .003 \\ & (.009) \\ & \hline \end{aligned}$ | $\begin{array}{r} -.019 \\ (.010) \\ \hline \end{array}$ | $\begin{aligned} & -.025 \\ & (.011) \end{aligned}$ | $\begin{aligned} & -.029 \\ & (.011) \\ & \hline \end{aligned}$ | $\begin{aligned} & -.025 \\ & (.010) \\ & \hline \end{aligned}$ |

Note: The first row reports the percentage point difference in winning a council seat across groups. The second/third row reports the percentage of OECD/Non-OECD immigrants winning a seat. The second block ("Explained") reports the size of the representation gap that is due to differences in characteristics, and the third block ("Unexplained") reports the size of the representation gap that is attributable to differences in returns to characteristics. For included covariates, see Table 1. Standard errors are in parentheses.

Comments on Table: The table above shows the OB-decompositions for OECD vs. Non-OECD immigrants. The following are noteworthy: First, the representation gap has decreased substantially over time (the reduction is $46 \%$ ). Second, in all years Seats to voters and Time in country account for the lion's share of the explained part. One important reason why Non-OECD immigrants are less likely to be elected to local office is that they tend to live in larger municipalities and have been in Sweden for a shorter time in Sweden. Third, the unexplained part is positive in 1991 and 1994, but negative in the remaining years, suggesting that there was more discrimination against Non-OECD immigrants in the early years, but less in later years. Here it should, however, be noted that the effects of Time in country and Citizenship are not automatically included in the unexplained part as was the case for the Native vs. Immigrant comparison. If the effect of these variables would be added to the unexplained part in the same way as they are for the native vs. immigrant comparison we should get a positive unexplained part for all years.

## 10. Oaxaca-Blinder Decomposition excluding Time in country and Citizenship

Table A13: Oaxaca-Blinder Decomposition Results, excluding Time in country and Citizenship

|  | $\mathbf{1 9 9 1}$ | $\mathbf{1 9 9 4}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 1 0}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Difference | .136 | .129 | .119 | .105 | .104 | .100 |
| P(Natives) | .229 | .223 | .215 | .208 | .202 | .194 |
| P(Immigrants) | .093 | .094 | .096 | .103 | .098 | .094 |
|  |  |  |  |  |  |  |
| Explained | .038 | .044 | .050 | .055 | .056 | .059 |
|  | $(.003)$ | $(.003)$ | $(.003)$ | $(.003)$ | $(.002)$ | $(.002)$ |
| Demographics | -.003 | -.006 | -.004 | -.002 | .000 | .000 |
|  | $(.003)$ | $(.002)$ | $(.002)$ | $(.001)$ | $(.001)$ | $(.001)$ |
| SES | .004 | .011 | .016 | .014 | .016 | .016 |
|  | $(.002)$ | $(.000)$ | $(.001)$ | $(000)$ | $(.001)$ | $(.001)$ |
| Opp. structure | .006 | .003 | .004 | .009 | .009 | .007 |
|  | $(.003)$ | $(.003)$ | $(.003)$ | $(.003)$ | $(.002)$ | $(.002)$ |
| Seats to voters | .030 | .036 | .034 | .033 | .031 | .036 |
|  | $(.003)$ | $(.002)$ | $(.002)$ | $(.003)$ | $(.002)$ | $(.002)$ |
| Unexplained | .098 | .086 | .069 | .050 | .047 | .041 |
|  | $(.006)$ | $(.006)$ | $(.005)$ | $(.005)$ | $(.005)$ | $(.004)$ |

Note: The first row reports the percentage point difference in winning a council seat across groups. The second/third row reports the percentage of natives/immigrants winning a seat. The second block ("Explained") reports the size of the representation gap that is due to differences in characteristics, and the third block ("Unexplained") reports the size of the representation gap that is attributable to differences in returns to characteristics. Standard errors are in parentheses.

## 11. Oaxaca-Blinder Decomposition accounting for Sweden Democrats

| Table A14: Oaxaca-BlinderDecomposition Results, Accounting for SD <br> support |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 1 0}$ |
| Difference | .119 | .105 | .104 | .100 |
| P(Natives) | .215 | .208 | .202 | .194 |
| P(Immigrants) | .096 | .103 | .098 | .094 |
|  |  |  |  |  |
| Explained | .036 | .041 | .045 | .047 |
|  | $(.003)$ | $(.003)$ | $(.003)$ | $(.002)$ |
| Demographics | -.013 | -.011 | -.008 | -.008 |
|  | $(.002)$ | $(.002)$ | $(.001)$ | $(.001)$ |
| SES | .013 | .012 | .013 | .013 |
|  | $(.001)$ | $(001)$ | $(.001)$ | $(.001)$ |
| Opp. structure | .003 | .007 | .008 | .007 |
|  | $(.003)$ | $(.003)$ | $(.002)$ | $(.002)$ |
| Seats to voters | .034 | .033 | .031 | .035 |
|  | $(.002)$ | $(.002)$ | $(.002)$ | $(.002)$ |
| SD vote share | .000 | -.000 | .000 | .000 |
|  | $(.000)$ | $(.000)$ | $(.000)$ | $(.000)$ |
| Unexplained | .083 | .063 | .058 | .052 |
|  | $(.005)$ | $(.005)$ | $(.005)$ | $(.004)$ |

Note: The first row reports the percentage point difference in winning a council seat across groups. The second/third row reports the percentage of natives/immigrants winning a seat. The second block ("Explained") reports the size of the representation gap that is due to differences in characteristics, and the third block ("Unexplained") reports the size of the representation gap that is attributable to differences in returns to characteristics. In addition to the covariates included in Table 1 these analyses also include the vote share of the Sweden Democrats in the municipality. Standard errors are in parentheses.

Comments on Table: The table shows what the OB-result look like when including the vote share of the Sweden Democrats as an independent variable. This can only be done for the years 19982010, because before 1998 there is no information on the vote shares of the Sweden Democrats (SD). Nonetheless, this does not seem to matter since the results above are virtually identical to those presented in the main text. The reason is that the variable measuring the vote share of the SD is close to zero and statistically insignificant in all years. That is, there is no relationship between the overall electoral support for SD in a municipality and the likelihood of electing immigrants to local office.

## 12. Matching Results: Immigrants vs. Natives

Matching Estimates, Natives vs. Immigrants


Figure A1: The Immigrant Effect - Matching Results

Comments on Figure: The figure presents the results from comparing the election probabilities of natives and immigrants using nearest-neighbor propensity score matching (with replacement). We match on all covariates in Table 1 except Citizenship and Time in country. A single match is used for each observation (ties are broken randomly), and a caliper of .0001 is used to exclude a fairly small number of bad matches. The grey areas represent 95-percent confidence intervals for the estimated effects. For computational reasons the standard errors used for this calculation were obtained through bootstrapping the "average treatment effect" (using 250 replications). Although the validity of this bootstrap procedure has been subject of discussion, preliminary analysis suggest that in this case the bootstrap procedure produces confidence intervals very similar to those obtained when using the more accurate, but also considerably more computationally-intensive approach, developed by Abadie and Imbens (which is included in Stata's teffects command). Yet, the exact size of the confidence intervals should be interpreted with some care.

## 13. Matching Results: OECD Immigrants vs. non-OECD Immigrants



Figure A2: The non-OECD Immigrant Effect - Matching Results

Comments on Figure: The figure presents the results from comparing the election probabilities of OECD and Non-OECD immigrants using nearest-neighbor propensity score matching (with replacement). In the leftmost graph we have matched on all the covariates in Table 1, including Citizenship and Time in Country. Note that by matching on these two variables we are unable to achieve a good covariate balance; there is little overlap between the distribution of propensity scores for OECD and non-OECD immigrants, respectively. Because the timing of arrival is (on average) different between OECD and non-OECD immigrants, there are considerable difficulties inherent in matching on Time in country. The same is, to some extent, true for Citizenship, which later waves of refugee migrants have been more prone to acquire than have the labor migrants from the 1960s and 1970s.

In the rightmost graph we exclude Time in country and Citizenship from the matching model. In both cases we have used a caliper of .0001 to exclude a fairly small number of bad matches. The grey areas represent 95 -percent confidence intervals for the estimated effects. For computational reasons the standard errors used for this calculation were obtained through bootstrapping the "average treatment effect" (using 250 replications). Although the validity of this bootstrap procedure has been subject of discussion, preliminary analysis suggest that in this case the bootstrap procedure produces confidence intervals very similar to those obtained when using the more accurate, but also considerably more computationally-intensive approach, developed by Abadie and Imbens (which is included in Stata's teffects command). Yet, the exact size of the confidence intervals should be interpreted with some care.


[^0]:    ${ }^{1}$ Women's representation has been linked to policy that is more in line with "women's interests" (see, e.g., Bratton and Ray 2002, Chattopadhyay and Duflo 2004, and Svaleryd 2009), but findings for ethnic minority representation are mixed (see, e.g., Cameron et al. 1996 and Dunning and Nilekani 2013). Also see Pitkin (1967) for a critical view.
    ${ }^{2}$ For recent overviews, see, Bird et al. (2011), Bloemraad and Schönwälder (2013), Givens and Maxwell (2012), and Hochschild et al. (2013).

[^1]:    ${ }^{3}$ See, for instance, Dancygier (2014), Ruedin (2009), and Trounstine and Valdini (2008).
    ${ }^{4}$ But see Schönwälder et al. (2011) who collect information on individual characteristics of immigrant-origin councilors in Germany.

[^2]:    ${ }^{5}$ For recent studies that examine variation in immigrant inclusion outcomes, see, for example, Adida (2014), Adida et al. (2010), Hainmueller and Hangartner (2013), Hopkins (2010), and Maxwell (2012).

[^3]:    ${ }^{6}$ See, e.g., Koopmans et al. (2005) and Michon and Vermeulen (2013).
    ${ }^{7}$ For a discussion, see Bloemraad (2013), Dancygier (2014) and Schönwälder (2013).

[^4]:    ${ }^{8}$ The majority came from the other Nordic countries-mostly Finland-but there were also significant inflows from Greece, Italy, Poland and Yugoslavia (Lundh and Ohlsson 1999, Nilsson 2004).

[^5]:    ${ }^{9}$ During this time the largest inflows came from Poland, Chile, Turkey, Iran and India (Nilsson 2004).

[^6]:    ${ }^{11}$ In the EU-27, Norway and Switzerland, non-EU citizens can vote (but not run) in local elections in Belgium, Estonia, Hungary, and Luxembourg. They can vote and run in Denmark, Finland, Ireland, Lithuania, the Netherlands, Norway, Sweden, Slovenia, and Slovakia. In the UK, nationals originating from the former Commonwealth can vote and stand in local elections. In Switzerland, voting rights vary by canton (Geyer 2007).
    ${ }^{12}$ This means that individuals living in Sweden, but born abroad to Swedish parents, are counted as immigrants in our data. This group is, however, likely to be very small.
    ${ }^{13}$ Municipalities with over 24,000 voters must have at least two districts and those with fewer than 6,000 must have no more than one.

[^7]:    ${ }^{14}$ Local party associations commonly include a women's league, a youth league and, in the case of the Social Democrats, a trade unionist league. Research has shown that these associations within the local party may hamper attempts to nominate immigrants (Soininen and Etzler 2006).

[^8]:    ${ }^{15}$ For example, seniority or incumbency are not formal requirements for (re)nomination.
    ${ }^{16}$ Folke et al. $(2014,9)$ attribute this outcome in part to psychological biases arising from individuals' tendency to pick top-ranked persons by default.

[^9]:    ${ }^{17}$ Elections were held every three years until 1994, after which the interval was changed to four years. There were four instances of municipality splits during the study period, resulting in an increase from 286 municipalities before 2002 to 290 from 2002 onwards.
    ${ }^{18}$ Unfortunately we do not have information on individuals' Swedish language fluency or religion.

[^10]:    ${ }^{19}$ Specifically, in 2010 elected natives had been nominated/elected an average of 2.42/1.56 times; the corresponding figures for immigrants are 1.89/1.19. See the Appendix for more details.

[^11]:    ${ }^{26}$ This result could suggest a ceiling effect. Parties may allocate more seats to immigrants as a municipality's immigrant population rises, but only up to a point (note, however, that further tests did not reveal curvilinear effects of Immigrant Share or Ethnic Concentration). An alternative, but perhaps reinforcing, mechanism could also be at work: As the immigrant population rises in number and concentration, so can native hostility and, as a result, parties' reluctance to field immigrant candidates. On the connection between group size and hostility, see, e.g., Blalock (1967) and Hainmueller and Hangartner (2013).

[^12]:    ${ }^{29}$ The same pattern obtains with regard to the likelihood of becoming nominated (see the Appendix).

[^13]:    ${ }^{30}$ The data in Figure 8 come from two surveys and are based on random samples of 18 to 79 year olds (including immigrants) from the Swedish Population Register. The increase in the share with positive views by far outpaces the increase in the share of the Swedish population that is foreign-born (see Figure 1). The average number of respondents for the left/right panel in Figure 8 was 1,247/1,553.
    ${ }^{31}$ Admittedly, acceptance of more immigration is conceptually distinct from political tolerance towards immigrants. The latter implies a willingness to grant political rights to immigrants even if one dislikes them (Sullivan et al. 1982). However, due to lack of time-series data on political tolerance towards immigrants in Sweden and relying on the assumption that acceptance and tolerance are empirically related we use acceptance of immigrants as a proxy for tolerance.

[^14]:    ${ }^{32}$ On origin effects see also Brader et al. (2008) and Hainmueller and Hangartner (2013).
    ${ }^{33}$ In some cases we have to rely on regions rather than countries, and the OECD/non-OECD classification that we are able to use is somewhat outdated; see the Appendix for information on the categorization.

[^15]:    ${ }^{34}$ If anything, research shows that, controlling for list position, immigrants receive more preferential votes than natives (Folke et al. 2014). However, because of the limited impact of the preferential voting system, the responsibility for representational parity lies with the local party organizations.

[^16]:    ${ }^{35}$ For a similar approach in the context of women's representation, see Lawless and Fox (2010).
    ${ }^{36}$ On discrimination in the labor and housing markets see Ahmed and Hammarstedt (2008), Åslund and Skans (2012), Bengtsson et al. (2012), and Carlsson and Rooth (2007).

[^17]:    ${ }^{37}$ On the relationship between multiculturalism and discrimination, see Wright and Bloemraad (2012).

[^18]:    ${ }^{1}$ To see why, it is useful to further decompose the second term on the right-hand side of equation (4). Let $\beta^{N}=$ $\beta^{*}+\gamma^{N}$ and $\beta^{I}=\beta^{*}+\gamma^{I}$, where $\gamma^{N}$ and $\gamma^{I}$ denote vectors of discrimination coefficients for natives and immigrants, respectively. For example, if immigrants are discriminated in terms of their returns to schooling on the probability of being elected we should expect $\gamma^{I}<0$ and $\gamma^{N}>0$. The unexplained part of equation (4) can now be expressed as

[^19]:    In essence equation (5) means that the unexplained component of the gap can be divided into discrimination in favor of natives $\left(\bar{X}^{N} \gamma^{N}\right)$ and discrimination against immigrants $\left(-\bar{X}^{I} \gamma^{I}\right)$.

