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Getting Used to Diversity? Immigration and Trust in Sweden

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This paper studies what effect past regional experiences of immigration has on how people react to recent immigration in terms of social trust. The effect of present-day diversity on trust is compared across two groups of regions in Sweden: one group with low levels of past immigration and one group with high levels of past immigration. The results clearly show that people in regions with high levels of past immigration decrease their trust as a reaction to present-day diversity while people in the other regions do not.

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This paper studies what effect past regional experiences of immigration has on how people react to recent immigration in terms of social trust. The effect of present-day diversity on trust is compared across two groups of regions in Sweden: one group with low levels of past immigration and one group with high levels of past immigration. The results clearly show that people in regions with high levels of past immigration decrease their trust as a reaction to present-day diversity while people in the other regions do not.

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1. INTRODUCTION

The share of the population born abroad has increased markedly in Western countries since the 1960s (Özden et al., 2011; United Nations, 2015). The social implications of these population movements can be far-reaching. This is true not the least for the levels of social (or "generalized") trust, the belief that people in general can be trusted, in the destination countries. Several empirical studies show a negative correlation between ethnic diversity and a population's level of such trust (e.g. Knack and Keefer, 1997; Alesina and La Ferrara, 2002; Putnam, 2007). This is a cause for concern because high levels of trust in a society also correlate with economic development (Knack and Keefer, 1997; Tabellini, 2010) and political efficiency (La Porta et al., 1997). However, a number of papers (e.g. Paxton, 2002; Bjørnskov, 2006, 2008; Ariely, 2014) find that there is no such relationship between trust and diversity. Thus, there is more to this story than what first meets the eye.

Lower social trust in more diverse societies corresponds well with experimental evidence confirming an in-group bias in behavioral games. It is widely confirmed across different cultural contexts that people discriminate between groups they consider themselves members of (the *in-group*) and groups that they do not belong to (*out-groups*; e.g., Allport, 1954). Individuals are more willing to cooperate with and trust other members of in-groups than members of out-groups (Balliet et al., 2014), which explains the negative correlation between diversity and social trust. Diversity also lowers trust by making people feel less connected to society, making them *hunker down*: They trust everyone less, including members of in-groups (Putnam, 2007).

However, the delineations between in- and out-groups may change over time. Groups living side by side over extended periods of time intermingle, and the borders between them can slowly dissipate; once-salient dividers can become irrelevant, and others can take their place (Putnam, 2007). Through intergenerational transfers of norms from parent to child and through assimilation from the general population, the experiences of past generations shape the norms and trust of the present generation (Bisin and Verdier, 2001; Bisin et al., 2004; Guiso et al., 2008; Tabellini, 2010). Over generations, changes to norms can accumulate and groups once considered isolated from each other can be brought closer until 'our new 'us' incorporate[s] 'them'' (Putnam, 2007, p. 162). This would suggest that past experiences of immigrants, potentially reaching back generations, could moderate the negative effect of present-day immigration on trust. If this is correct, the levels of trust in regions with a history of immigration should be less affected by new immigration. However, group membership is not easily eroded (Akerlof and Kranton, 2000). If initial contacts between different groups lead to conflict (Blumer, 1958), cross-generational transfers could instead increase the saliency of different groups over time. If this is true, regions with high levels of immigration in the past should react more negatively to new immigration.

Despite the wealth of studies on the relationship between diversity and generalized trust, this potentially moderating effect of historical diversity remains untested. This study aims to bring a long-term perspective into the diversity-and-trust literature by studying how past immigration moderates the effect of present-day immigration on trust: Are individuals that are embedded in localities that have historically been strongly exposed to diversity in fact better able to cope with the challenges of contemporary migration movements?

To offer an initial test, the paper uses data from Sweden, a country with a varied experience of immigration across time and regions. The country has a high and increasing rate of diversity, having Europe's fourth highest share of population born abroad, an increase from the 12th position in 1990 (United Nations, 2015). Previous research is split on whether a negative relationship exists between present-day diversity and trust in the country (Gustavsson and Jordahl, 2008; Wallman Lundåsen and Wollebeak, 2013; Lundstedt and Nissling, 2016). The single-country design applied here offers the advantage of keeping many potentially confounding

variables constant including political and legal institutions and historical development trajectories. It also deals with the issue of potentially poor cross-country comparability of survey measures of trust caused by cultural differences in the interpretation of survey questions (Reeskens and Hooghe, 2008).

The paper is organized as follows: Section 2 discusses the connection between diversity and social trust and highlights the importance of historical context. Section 3 gives an overview of the Swedish experience of immigration in the 20th century and presents the data and method. Section 4 presents the results, which indicate that borders between groups are reinforced over time. Section 5 concludes with a discussion of the results and their implications.

2. DIVERSITY, HISTORY AND TRUST

The effect of increasing diversity on trust in the Western world has gathered considerable attention among social scientists. In general, a negative connection is expected: As diversity in one's surrounding increases, people stop identifying with their neighborhood and withdraw from society (Putnam, 2007). Several studies found a negative relationship between diversity and trust using both aggregate country-level studies (Knack and Keefer, 1997; Zak and Knack, 2001; Delhey and Newton, 2005, Finseraas and Jakobsson, 2012), cross-country individual-level studies (Anderson and Paskeviciute, 2006; Gesthuizen et al., 2008; Stolle et al., 2008; Hooghe et al., 2009; Kesler and Bloemraad, 2010) and individual-level single-country studies (Alesina and La Ferrara, 2002; Costa and Kahn, 2003; Duffy, 2004; Pennant, 2005; Leigh, 2006; Putnam, 2007; Soroka et al., 2007; Gustavsson and Jordahl, 2008; Letki, 2008; Wallman Lundåsen and Wollebeak, 2013; Ivarsflaten and Strømsnes, 2013; Dinesen and Sønderskov, 2015). But there also exists a few studies that do not find this negative relationship. These include both cross-country (Paxton, 2002; Bjørnskov, 2006, 2008; You, 2012; Ariely, 2014) and single-country studies (Tolsma et al., 2009; Sturgis et al., 2011; Lundstedt and Nissling, 2016). As such, the debate on diversity and trust is not settled.

So far, the literature has focused only on the effect of contemporary or recent diversity on trust. However, given the dynamic nature of the saliency of group membership, diversity in a society could also have long-lasting effects. The experiences of one generation can have effects on the norms and preferences in a society lasting across decades, even centuries (Tabellini, 2010; Nunn and Wantchekon, 2011). Parents try to raise children with preferences and norms similar to their own and children also adapt to the general norms of the population through socialization (Bisin and Verdier, 2001; Bisin et al., 2004; Dohmen et al., 2012; Ljunge, 2014). Societal norms, therefore, result from the experiences of not just the present population, but also of past generations (Guiso et al., 2008).

Together with other norms and preferences, the saliency of group identifiers may also change over time. Even though initial interactions between groups could lead to conflict and hunkering, as shown by the empirical literature, over time the group delineations could become blurred as people intermingle across distinct groups (Putnam, 2007).² The negative effect of diversity on

¹ Two studies, Marschall and Stolle (2004) and Kazemipur (2006) even find a significantly positive effect in Detroit, Michigan, and Canada, respectively. However, the former result appears to be driven by increases in trust among the minority population and the latter by the Quebec province, which has low levels of both trust and diversity.

² This theory resembles Allport's (1954) contact hypothesis, that increased interaction across groups increases trusts between groups as interaction enables members to see beyond the stereotypes connected to the different groups. However, in Putnam's theory, the crux of the argument is not that intergroup trust increases, but that the group borders themselves change.

trust could therefore dissipate over time. Putnam exemplifies this argument with the decreasing importance of religion as a group divider in the American Midwest in the 1950s. At that time and place, religion was one of the most salient group identifiers and the vast majority of marriages occurred within these groups. Just 30 years later, religion had lost its saliency as a group divider (at least between Catholics, mainline Protestants and Jews), and for marriages it had become "hardly more important than left- or right-handedness" (p. 160). The change was not caused by religion losing importance in individuals' lives over this period, rather the change reflected which dividers were deemed important for identifying out-groups (Putnam, 2007). A logical inference is that other group identifiers can also become irrelevant over time as people interact across groups. If this hypothesis were correct, the saliency of group identifiers based on country of origin and ethnicity should decrease over time as natives and immigrants intermingle and thereby reduce between-group boundaries. As a result, one would expect trust levels of individuals located in regions with high levels of immigration in the past to be less affected by contemporary immigration, simply because individuals have become accustomed to intergroup exchange. This also suggests Hypothesis 1.

H1: The negative effect of immigration on social trust is greater for people in regions that experienced low levels of immigration in the past.

On the other hand, group identifiers do not automatically erode, even over time. Group membership is an important determinant of behavior and individuals largely shape their identity based on their group memberships (Akerlof and Kranton, 2000). Members of a group form positive views of the qualities of the other members of the same group, especially in relation to out-group members (Tajfel and Turner, 1979). Experiments have shown that, as a result of such in-group bias, people are more willing to trust and cooperate within their groups than across group boundaries and also act more fairly toward in-group members (Balliet et al., 2014). Participants are quick to identify themselves as members of groups, and even group allocations based on intentionally meaningless categorizations leads to in-group biases (Chen and Li, 2009).

Each person has several in-groups simultaneously and the relative importance of group memberships is affected by the context and the proximity of other groups (Putnam, 2007). According to conflict theory (Blumer, 1958), interaction between different groups leads to conflict and prejudice as the different groups seek control over limited assets like public resources, property and power. As conflict arises between groups, the distinction between them becomes more important. If interactions between groups led to increased saliency of in- and outgroups, this saliency could also be transferred across generations through parent—child socialization (Bisin and Verdier, 2001; Bisin et al., 2004). As such, the relative importance of different group dividers is the result of both personal experience and intergenerational transfers of norms. If this is the case, the native—immigrant group identifier should be more salient in regions with a history of diversity than in other regions. This suggests Hypothesis 2.

H2: Immigration's negative effect on social trust is greater for people in regions that experienced high levels of immigration in the past.

Not all diversity is expected to have the same effect on trust (Hooghe et al., 2009). People are more likely to trust those that they are familiar with and whose behavior they can predict (Lewis and Weigert, 1985). Cultural differences, in terms of religion, traditions, languages, as well as in how and whom people trust, are likely to make it harder to familiarize one self with another group. The negative effect of diversity on trust is therefore thought to increase the more distant, i.e. different, two cultures are (Uslaner, 2002). This should hold true in both of the cases described by the two previous hypotheses. This leads to the last hypothesis of this paper.

H3: Immigration has a greater negative effect on trust as its originating distance increases.

Most previous research on diversity and trust does not differentiate between different cultural backgrounds more than as groups in a fractionalization index. However, there is some evidence that the effects of immigration depends on the cultural origin of the immigrants. For instance, immigrants from Muslim countries have a greater negative effect than total immigration in predominantly Christian countries (Hooghe et al., 2009).

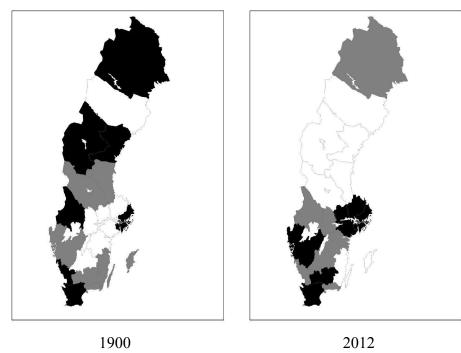


Figure 1. Relative share of the population born abroad in different counties 1900 and 2012 (Statistics Sweden, n.d.a, b, c). Darker areas represent relatively higher shares of foreign-born population.

3. METHOD AND DATA

3.1 Research setting: Sweden's immigration experience in the 20th century

By the beginning of the last century, about 1% of the Swedish population was born abroad. Since then, the share of the Swedish population born abroad gradually increased to reach approximately 15% by 2010 (SCB 2015a). In 1900, the foreign-born population in Sweden consisted mainly of people from the other Nordic countries and Western Europe. Immigrants during this period were often headed toward the logging and mining industries in the middle and north of the country (Institute for Social Sciences, Stockholm University, 1941). Immigration increased slowly until the Second World War. Following the war, Sweden experienced an economic boom and large groups of labor migrants from the other Scandinavian countries, Greece, Yugoslavia as well as Italy settled in Sweden with their families (Swedish Migration Agency, n.d.). These coincided with war refugees from the Baltics and Finland. This emigration mainly concentrated in the southern parts of Sweden. From the 1960s and onwards, the number of refugees coming to Sweden increased markedly. The trend continued for decades with large numbers of refugees arriving from the Iranian Revolution came in the 1980s, the Yugoslavian Wars in the 1990s, and

the Iraqi war in the 2000s (Swedish Migration Agency, n.d.). In total, people born in the Middle East and Yugoslavia or its resulting republics made up a third of all people born abroad in Sweden in 2010 (Statistics Sweden (SCB), 2015a). Refugees are often initially allocated to reception centers, located around the country. This could have strong effects on the level of diversity in municipalities: The share of the population in the municipality Sorsele in Northern Sweden born abroad increased by 6.5 percentage points in just the five years leading up to 2011 (SCB, n.d.a, b) after opening up new refugee reception centers. Following this initial allocation refugees have often settled in and around the larger cities in Sweden (Lundh and Ohlsson, 1999)³.

The experience of immigration has thus differed across the Swedish counties. Figure 1 shows the relative distribution of foreign-born population across Sweden's 21 counties in 1900 and 2012. Some of the counties with large foreign-born shares today have a long history of such diversity, whereas others have seen this share increase only recently. Likewise, some of the counties that today have comparatively low levels of diversity once had relatively high levels.

3.2 Method and data

To find if the effect of present-day immigration on social trust is affected by previous regional experiences of immigration, this paper uses regressions in split samples, studying if the effect differs between regions with high and low levels of historical diversity. The OLS regressions⁴ take the form

$$Trust_{it} = \alpha + \beta_1 X_{mt-1} + \beta_2 I_{it} + \beta_3 Z_{mt-1} + Municipality_m + \beta_4 Y E A R_t + v_{it}, \tag{1}$$

The individual data are gathered from the SOM survey. The sample used by SOM is nationally representative and is based on registry data of all Swedish residents. The sample used in this paper includes only respondents who were raised in Sweden and whose parents were both raised in Sweden. This group is the one most likely affected by present and historical levels of diversity in the region as the trust levels of both first- and second-generation immigrants are positively correlated to the trust levels of their country of origin (Ljunge, 2014). The final sample is a repeated cross-section with 42,072 respondents from 1998 to 2013. The SOM survey includes the social trust question: 'In your opinion, to what extent is it generally possible to trust

³ The main exception to these general trends is Norrbotten, the northernmost county. Due to the long border it shares with Finland, Norrbotten has for centuries had a large Finnish-born minority present. Excluding this county does not change the results. Neither does excluding Scania, the southernmost county, another possible outlier. It is located just across a narrow strait from the Danish capital and has a long history of Danish presence.

⁴ Using a limited dependent variable, like the one used here, suggests the use of an ordered-logit regression (McCullagh, 1980). The paper presents the more easily interpreted OLS results but the results are robust to using such an estimator, see Supplementary Information, Table B1.

⁵ The data do not identify country of birth. Nor does it include information on the grandparents of the respondents so third-generation immigrants cannot be identified. However, the difference in trust between the native population and third-generation immigrants is likely small as the trust level in the region of destination has a strong effect on even the first generation of immigrants (Dinesen, 2012; Dohmen et al., 2012). For second-generation immigrants, the effect of local trust is stronger than even that of the trust levels of the parents' country of origin (Ljunge, 2014).

people?' The respondents assess their trust level on a scale from 0 (low trust) to 10 (high trust). The use of survey data to capture the levels of generalized trust is standard in the trust literature (e.g., Knack and Keefer, 1997; 2000; Zak and Knack, 2001).

In the regressions, diversity is measured as the change in the share of the population born abroad over five years as a sudden increase of diversity could plausibly have an effect over more than just one year. Earlier studies for the most part use static measures, but there is prior evidence that dynamic measures have a greater effect (Hooghe et al., 2009). The share of population born abroad proved to have less statistical significance in all instances and the paper therefore only presents results from the regressions using change in diversity as the variable of interest. The change in diversity is measured at the municipal level, the lowest level of government in Sweden. The average population of the municipalities is 34,000. Due to this small size, municipal-level measures are likely to be more precise when it comes to measuring an individual's actual exposure to diversity than measures at, for instance, the state or country level. To test the hypothesis that the effect of trust differs depending on cultural distance, the change in foreign-born population is split into two groups; Nordic-born and non-Nordic-born immigrants. The Nordic countries share a long history and many cultural similarities and Nordic immigration is thus expected to have a smaller effect according to H3.

To capture historical differences in diversity across regions, the sample is split between those regions with above-average levels of diversity in the past and those with below-average levels. The split is made at the county level. While people often move across municipality borders, about 85% of all moves are made within the same county (SCB, 2015b), making comparisons over time more reliable at the latter level. There are 21 counties in Sweden, the borders of which are more or less the same as in 1810, with the exception of three mergers. Municipalities otherwise affected by county-changes during the period (Andersson, 1993) are removed from the sample. As historical levels of diversity could theoretically have an effect over several generations, splits are made at four different points in time. The four points are the years 1900, 1930, 1960 and 1990 (SCB, n.d.b, c, 1960). These time periods cover the pre-World War I, Interwar and post-World War II periods, as well as more recent experiences, covering the spectrum of the Swedish 20th century experience of immigration.

The regressions include controls previously used in the literature: age, gender, residential area, income, schooling and employment situation, decade-of-birth, municipal unemployment level, population, industry structure, housing segregation, crime rate, GDP per capita, and Gini

⁶ The results from using the share of population born abroad are available upon request. Change in fractionalization was used as an alternative measure with results similar to the ones presented here; see Supplementary Information, Table B2. These results are in line with the main results.

⁷ To further split non-Nordic immigrants into European and non-European parts lead to similar results between the two groups, although the former have a somewhat stronger effect, see Supplementary Information, Table B3.

⁸ An alternative specification would be to use interaction terms. However, due to very high correlations between the interaction variable and the diversity variables such regressions are likely to suffer from multicollinearity. The two specifications test the same hypotheses, but interaction terms makes the assumption that the effect is continuous whereas split samples makes the assumption that the effect is discrete. Split samples puts fewer restrictions on the relationship between trust and diversity and with the control variables, letting also their effect differ depending on historical differences in diversity. The main results are robust to splitting the sample either by the historic share on non-Nordic immigration and by the median share of immigrants. The latter results are, however, in general weaker indicating that the effect is stronger in those counties with the highest share of historic immigration see Supplementary Material, Tables B4 and B5.

Table 1. Diversity and trust, all immigration

	Year split is based o	n	19	00	1930 1		960 1990			
Sample	z car spire is oused to	Full	Low	High	Low	High	Low	High	Low	High
Change in diversity	Foreign change	-4.12 (2.62)	2.13 (4.79)	-7.29** (3.04)	2.05 (4.55)	-7.81** (3.16)	2.66 (5.20)	-6.77** (2.95)	5.85 (4.35)	-8.40*** (3.01)
Individual controls	Woman	0.17*** (0.03)	0.09** (0.04)	0.21*** (0.04)	0.11*** (0.03)	0.21*** (0.04)	0.10** (0.04)	0.20*** (0.03)	0.09** (0.03)	0.22*** (0.04)
	Age	0.03*** (0.00)	0.03*** (0.01)	0.03*** (0.00)	0.03*** (0.01)	0.03*** (0.00)	0.03*** (0.01)	0.03*** (0.00)	0.03*** (0.01)	0.03*** (0.00)
	Rural	-0.08*** (0.03)	-0.08* (0.04)	-0.08** (0.04)	-0.08** (0.04)	-0.08* (0.04)	-0.05 (0.04)	-0.10*** (0.04)	-0.04 (0.04)	-0.12*** (0.04)
	Retired	-0.30*** (0.04)	-0.24*** (0.07)	-0.32*** (0.05)	-0.23*** (0.06)	-0.34*** (0.05)	-0.17** (0.07)	-0.36*** (0.05)	-0.20*** (0.07)	-0.36*** (0.05)
	Unemployed	-0.39*** (0.05)	-0.34*** (0.10)	-0.42*** (0.07)	-0.32*** (0.09)	-0.44*** (0.07)	-0.39*** (0.10)	-0.40*** (0.07)	-0.35*** (0.09)	-0.42*** (0.07)
	Student	0.13*** (0.05)	0.08 (0.08)	0.17** (0.06)	0.05 (0.07)	0.19*** (0.07)	0.06 (0.08)	0.17*** (0.06)	0.09 (0.07)	0.16** (0.07)
	Low income	-0.70*** (0.03)	-0.76*** (0.06)	-0.68*** (0.04)	-0.74*** (0.05)	-0.68*** (0.04)	-0.73*** (0.06)	-0.69*** (0.03)	-0.72*** (0.05)	-0.69*** (0.04)
	Medium income	-0.29*** (0.02)	-0.35*** (0.04)	-0.26*** (0.03)	-0.33*** (0.04)	-0.26*** (0.03)	-0.32*** (0.04)	-0.27*** (0.03)	-0.29*** (0.04)	-0.29*** (0.03)
	University	0.62*** (0.02)	0.63*** (0.04)	0.62*** (0.03)	0.64*** (0.04)	0.62*** (0.03)	0.62*** (0.04)	0.63*** (0.03)	0.64*** (0.04)	0.62*** (0.03)
Contextual controls	Segregation	0.16 (0.70)	-0.46 (1.10)	0.62 (0.87)	0.09 (1.02)	0.07 (1.02)	0.35 (1.02)	-0.21 (0.94)	-0.14 (0.97)	-0.09 (1.09)
	Unemployment	-1.71 (1.59)	1.93 (2.32)	-30.24* (1.88)	2.44 (2.20)	-3.70* (1.88)	1.07 (2.59)	-2.84 (1.74)	2.71 (2.19)	-6.02*** (1.85)
	Crime	-0.11 (0.11)	-0.17 (0.17)	-0.11 (0.14)	-0.22 (0.15)	0.00 (0.15)	-0.35** (0.16)	0.12 (0.14)	-0.19 (0.15)	0.01 (0.15)
	Population	0.19 (0.33)	0.01 (0.62)	0.12 (0.41)	0.12 (0.62)	0.08 (0.44)	-0.06 (0.79)	0.32 (0.38)	-0.14 (0.69)	0.18 (0.52)
	Gini	-0.32 (0.90)	-0.14 (1.33)	-0.94 (1.18)	0.27 (1.26)	-1.51 (1.29)	0.69 (1.06)	-1.40 (1.27)	0.77 (1.03)	-1.89 (1.34)
	Industry	-1.93 (1.22)	-1.87 (1.71)	-3.05* (1.72)	-1.73 (1.66)	-2.42 (1.77)	-3.26* (1.76)	-0.25 (1.72)	-4.03** (1.63)	1.54 (2.08)
	GDP	0.45 (0.40)	0.81 (0.72)	0.45 (0.49)	0.89 (0.61)	0.15 (0.60)	1.16** (0.57)	-0.30 (0.58)	0.99** (0.46)	0.67 (0.90)
	Constant	2.71 (4.38)	3.26 (7.91)	3.77 (5.38)	1.87 (7.57)	4.94 (6.33)	3.80 (9.60)	3.17 (5.56)	4.34 (8.15)	0.30 (8.26)
R^2		.06	.06							.06
Observations		42,072								
Number of municipalities		264	109	155	120	144	88	176	118	146

Dependent variable: *Trust*. Standard errors clustered at the municipal level in parentheses. All regressions include municipal, year and cohort fixed effects. The regressions only include municipalities that have not changed county since 1900. * indicates 10% significance, ** 5% and ***1%.

coefficient. A full description of variables, correlations, and summary statistics can be found in Tables A1-3 in the Supplementary Material.

4. RESULTS

Table 1 presents the results from regressions with the full sample and with the sample split according to the share of population born abroad at different times in the past. For the full sample, the effect of new immigration is negative, but insignificant. However, this result hides a stark contrast between regions with high and low levels of historical diversity. In the regions with low levels of historical immigration the effects of new immigration on trust are insignificant. Respondents in regions with a history of immigration, however, react strongly to new immigration, supporting H2. The largest effect, found in the sample split by the level of diversity in 1990, demonstrates a decrease in *Trust* of 0.55 points should the foreign share increase by 6.5%, the maximum observed in the sample, a significant decrease. For comparison, the difference between the highest and lowest average social trust among the 27 countries in the European Social Survey 2010 is only 3.1 points (Denmark at 7.0 and Bulgaria at 3.9, respectively), making a change of 0.55 points economically significant.

To test H3 concerning the effect of immigration across different origins, Table 2 presents results from regressions with new immigration now split between Nordic and non-Nordic immigration. In the regression using the full sample H3 finds support as non-Nordic immigration is significantly negatively correlated with trust while Nordic immigration is not. In the split samples, Nordic immigration never has a significant effect on trust. The results for non-Nordic immigration, however, follow the same pattern as in Table 1 with new diversity having a significant effect but only in the *high* samples, confirming the importance of cultural distance. The most negative coefficient, -9.77, indicates a decrease of *Trust* of 0.7 points should the share of non-Nordic foreigners in a municipality increase by 7.2%, the maximum in the full sample.

To further test the three hypotheses, Table 3 presents results from Wald tests of the differences in coefficient size of the variables of interest between samples. For the change in total foreign share, the coefficients are significantly different at the 10% level for all splits except for the split based on immigration in 1960. For the Nordic and non-Nordic immigration, the coefficients for the former are never significantly different across the splits while the coefficients for the latter are significantly different at the 10% level for the splits based on the level of diversity in 1900 and 1960 and at the 5% level for the splits based on diversity in 1930 and 1990.

Although there are clear differences between the groups for all splits, those splits based on data from 1930 and 1990 produce marginally stronger differences between the two samples than those based on data from 1900 and 1960. Without wanting to over-interpret this difference, the results for the 1900 split might be due to the low number of non-Nordic immigrants at the time. Only 0.3% of the population was born outside of the Nordic countries in 1900 (SCB, 2015a). The results could also indicate that the effect of past immigration, although consistent for decades, does eventually fade away. The comparably weak results for 1960 could instead be explained by the fact that many immigrants at the time were labor migrants. While it is not unlikely that labor immigration could lead to conflict if foreigners are seen to compete with natives for scarce jobs (Blumer, 1958), the economic boom and the relative abundance of jobs in Sweden following the War presumably lessened such conflicts. Instead, working alongside foreigners could have

Table 2. Diversity and trust, Nordic and non-Nordic immigration

Year split is based on			1900		1930		1960		1990	
Sample		Full	Low	High	Low	High	Low	High	Low	High
Change in diversity	Nordic change	8.85 (5.92)	27.15 (19.47)	2.86 (6.46)	2.13 (13.77)	3.20 (6.87)	19.74 (15.82)	5.26 (6.57)	14.57 (8.96)	1.80 (7.46)
	Non-Nordic change	-5.36** (2.70)	1.91 (4.76)	-8.95*** (3.18)	2.01 (4.54)	-9.77*** (3.29)	2.47 (5.17)	-8.47*** (3.06)	4.77 (4.53)	-9.31*** (3.07)
Individual controls	Woman	0.17*** (0.03)	0.09** (0.04)	0.21*** (0.04)	0.10*** (0.03)	0.21*** (0.04)	0.10** (0.04)	0.20*** (0.03)	0.09** (0.03)	0.22*** (0.04)
	Age	0.03*** (0.00)	0.03*** (0.01)	0.03*** (0.00)	0.03*** (0.01)	0.03*** (0.00)	0.03*** (0.01)	0.03*** (0.00)	0.03*** (0.01)	0.03*** (0.00)
	Rural	-0.08*** (0.03)	-0.08* (0.04)	-0.08** (0.04)	-0.08** (0.04)	-0.08* (0.04)	-0.05 (0.04)	-0.10*** (0.04)	-0.04 (0.04)	-0.12*** (0.04)
	Retired	-0.30*** (0.04)	-0.24*** (0.07)	-0.32*** (0.05)	-0.23*** (0.06)	-0.34*** (0.05)	-0.17** (0.07)	-0.36*** (0.05)	-0.20*** (0.07)	-0.36*** (0.05)
	Unemployed	-0.39*** (0.05)	-0.34*** (0.10)	-0.42*** (0.07)	-0.32*** (0.09)	-0.44*** (0.07)	-0.39*** (0.10)	-0.40*** (0.07)	-0.35*** (0.09)	-0.42*** (0.07)
	Student	0.13*** (0.05)	0.08 (0.08)	0.17** (0.06)	0.05 (0.07)	0.19*** (0.07)	0.06 (0.08)	0.17*** (0.06)	0.09 (0.07)	0.16** (0.07)
	Low income	-0.70*** (0.03)	-0.76*** (0.06)	-0.68*** (0.04)	-0.74*** (0.05)	-0.68*** (0.04)	-0.73*** (0.06)	-0.69*** (0.03)	-0.72*** (0.05)	-0.69*** (0.04)
	Medium income	-0.29*** (0.02)	-0.35*** (0.04)	-0.26*** (0.03)	-0.33*** (0.04)	-0.26*** (0.03)	-0.32*** (0.04)	-0.27*** (0.03)	-0.29*** (0.04)	-0.29*** (0.03)
	University	0.62*** (0.02)	0.63*** (0.04)	0.62*** (0.03)	0.64*** (0.04)	0.62*** (0.03)	0.62*** (0.04)	0.63*** (0.03)	0.64*** (0.04)	0.62*** (0.03)
Contextua controls	lSegregation	0.35 (0.68)	-0.31 (1.10)	0.78 (0.86)	0.18 (1.02)	0.23 (1.02)	0.35 (1.02)	0.08 (0.95)	-0.07 (0.97)	0.16 (1.08)
	Unemployment	-1.32 (1.47)	1.76 (2.34)	-2.68 (1.76)	2.22 (2.21)	-2.98* (1.79)	0.95 (2.60)	-2.28 (1.62)	2.62 (2.18)	-5.51*** (1.79)
	Crime	-0.12 (0.11)	-0.16 (0.17)	-0.12 (0.14)	-0.23 (0.15)	-0.00 (0.16)	-0.38** (0.17)	0.11 (0.14)	-0.19 (0.15)	-0.01 (0.15)
	Population	0.11 (0.32)	0.05 (0.62)	0.07 (0.40)	0.14 (0.62)	-0.01 (0.44)	-0.04 (0.79)	0.20 (0.38)	-0.18 (0.69)	0.11 (0.52)
	Gini	-0.31 (0.89)	-0.08 (1.35)	-0.84 (1.16)	0.35 (1.27)	-1.47 (1.26)	0.73 (1.08)	-1.45 (1.24)	0.82 (1.03)	-1.94 (1.32)
	Industry	-1.75 (1.21)	-1.80 (1.68)	-2.63 (1.74)	-1.81 (1.64)	-1.87 (1.79)	-3.23* (1.76)	0.08 (1.71)	-3.99** (1.63)	1.74 (2.07)
	GDP	0.47 (0.40)	0.87 (0.72)	0.44 (0.50)	0.94 (0.61)	0.09 (0.60)	1.17** (0.57)	-0.33 (0.58)	0.99** (0.46)	0.62 (0.89)
	Constant	3.46 (4.35)	2.57 (7.95)	4.36 (5.37)	1.60 (7.54)	6.04 (6.34)	3.76 (9.52)	4.59 (5.61)	4.82 (8.15)	1.35 (8.28)
R^2		.06	.06	.06		.06	.05	.06	.05	.06
Observation	ons	42,072								
	f municipalities		109			144	-	176		146
	t variable: Trust									

Dependent variable: *Trust*. Standard errors clustered at the municipal level in parentheses. All regressions include municipal, year and cohort fixed effects. The regressions only include municipalities that have not changed county since 1900. * indicates 10% significance, ** 5% and ***1%.

Table 3. Wald tests of difference between coefficients

	Year split is based on							
	1900	1930	1960	1990				
Foreign change	9.42*	9.86*	9.43	14.25*				
Nordic change	24.29	-1.07	14.48	12.77				
Non-Nordic change	10.86*	11.78**	10.94*	14.08**				

The table presents the difference between the coefficients in the *low* and *high* samples (coefficient in the *low* sample-the coefficient in the *high* sample) and whether this difference is significantly different from zero. Significance is based on a Wald test. * indicates 10% significance and ** 5%.

dampened the saliency of group dividers somewhat. However, as the effect is still clearly there for all splits, these differences are of minor importance.

Based on these results, it seems that the group divider Swede/non-Swede (or rather, Nordic/non-Nordic) is more important in those regions that have more past experiences with immigration. Thus, as expected by H2, people do not get used to diversity over time; rather, diversity makes people increasingly turn toward their own group.

5. DISCUSSION

By studying the correlation between changes in diversity and trust across Swedish regions with varying levels of historical diversity, this study sheds light on how the effect of new diversity today depends on the population's earlier experiences. The results presented here reveal that the population in regions with relatively higher levels of historical diversity reacts more negatively to new immigration. This result gives strong support to Hypothesis 2 and it seems that early exposure to diversity leads to group identifiers becoming more salient over time, giving support to conflict theory in the long run. This is the opposite of what is hypothesized by Putnam (2007), who instead suggested that group borders erode away after generations of interaction across groups. The result is driven by immigration coming from non-Nordic countries. This gives support for H3, that immigration from culturally distant countries has a more negative effect than immigration from countries sharing a similar culture as the destination country.

Different countries have different experiences of immigration. For instance, Sweden accepted a relatively large number of refugees during the sample years. These refugees were to a large extent initially allocated around the country by the authorities. As such, the Swedish experience of immigration differs from that of many other Western countries. Further research is therefore needed to test the effect of history in different countries and contexts to see under what conditions the relationship found here is generalizable.

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