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Diversity and Community Trust in Swedish Local Communities / Susanne Wallman Lundåsen, Dag Wollebæk

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Diversity and Community Trust in Swedish Local Communities

Abstract

This paper analyses the effect of immigration-related diversity on different forms of trust through the hierarchical analysis of three levels of approximately 5,000 respondents nested in over 800 neighbourhoods and 33 municipalities. The data set is based on a unique survey that was specially designed to measure different forms of trust and to test the effects of context. Building on previous findings about the effect of diversity on various forms of trust in Sweden, we discuss three mechanisms through which diversity may drive down community trust in diverse settings – dissimilarity, perceptions of unfairness and asymmetry of information and norms – and explore these empirically. In particular, we examine under which conditions asymmetry of information and norms and perceptions of unfairness affect community trust, and how it interacts with diversity. Our analysis reveals that norm asymmetry and perceptions of unfairness affect community trust negatively but the negative effects are more pronounced in the most diverse local communities.

Introduction

The question of trust and diversity is both politically sensitive and of crucial importance to the future viability of European societies. The recent growth of anti-immigration right-wing parties in countries such as the Netherlands, Austria, and France, as well as several Nordic countries, including Sweden, suggests that increasing ethnic and religious diversity is inciting a negative response in significant segments of these populations.

In the literature on diversity and trust, there has been some disagreement regarding whether trust is affected by diversity. In a previous paper Wollebæk et al., (2012) argued that this confusion may partially originate from the use of different methods for conceptualising and measuring trust. The purpose of this article is to build on this previous work and examine in greater detail the ways in which trust is affected by diversity in the local community. We

argue that community trust is a more relevant indicator than generalized trust when the potential effects of diversity are studied in cross-sectional data.

We use survey data (N=6,453) purposefully collected in 33 Swedish municipalities to explore how community level variables, such as diversity, can affect the spatially bounded forms of trust. Although limited to Sweden, the range of questions in the trust battery is more extensive than what is generally available from other studies, such as the latest editions of the World Values Survey (WVS).

The paper proceeds as follows: First, we summarise the main theoretical arguments for expecting a (negative) relationship between diversity and trust. We then discuss the Swedish case. We present the apparent paradox that trust levels appear to remain high in Sweden at the same time as the number of immigrants from culturally distant countries increases sharply. We argue that a possible explanation for this paradox lies in the failure of existing research to acknowledge the spatial character of trust. We then discuss three mechanisms through which diversity may drive down community trust in diverse settings – dissimilarity, perceptions of unfairness, norm asymmetry and information asymmetry – and explore these empirically.

Why Should Diversity Erode Trust? Dissimilarity, perceptions of unfairness, and norm and information asymmetry

In a 2007 article, Putnam posits a negative relationship between trust and diversity based on data from the US.¹ The US is undeniably a special case in terms of the type and history of

¹ In a similar vein, Putnam and Campbell (2010) have recently argued that religious diversity and distance tends to drive down trust as Muslims tend to provoke distrust from other Americans.

immigration. Nonetheless, the article triggered an extensive academic debate in Europe and elsewhere (see Morales' Introduction to this special issue for a detailed discussion).

The overarching argument is that diversity is potentially a source of conflict. In a diverse setting, people will tend to limit their solidarity to the in-group, while distrusting out-groups (Putnam, 2007: 142; Gustavsson & Jordahl, 2008). The conflict potential of immigrant-related ethnic differences can be disentangled into two mechanisms: dissimilarity and perceptions of unfairness. These detrimental effects are exacerbated by two other factors, namely asymmetric information about the "others" due to a lack of social interaction and asymmetric norms.

First, when groups of people are dissimilar in fundamental ways, the logic of what is referred to by social psychologists as *homophily* is invoked: humans tend to prefer to interact with others who are similar to themselves (McPherson et al., 2001; Letki, 2008; Mouw, 2006). As Putnam (2007: 149) stated, diversity appears to "make people pull in like a turtle". Homogenous settings instead decrease cultural distance and increase the probability that norms will be shared and known. These conditions facilitate communication, cooperation, and trust (Thisted Dinesen & Sønderskov, 2012).

Ostrom (2000) has underlined the importance of social norms that are shaped over time with regard to cooperation. Social norms consist of collective expectations regarding the behaviour of others or common values (Knight, 2003:358). A heterogeneous setting can increase norm asymmetry (Knight, 2003) because of the co-existence of either different social groups with different social statuses or of groups with different cultural backgrounds. In some cases, the differences in norms may lead to diverging views on the common good of society, less solidarity between groups and more conflicts over scarce resources.

If different ethnic groups have different social norms and conflicting views on which behaviour is appropriate, cooperation and trust become less likely. In the case of

Sweden, most non-Nordic immigrants tend to hail from countries with lower levels of trust and, hence, they are more likely to have been raised to not trust others. In turn, those born in Sweden may expect immigrants to not be trustworthy, as data demonstrate that only a handful of Western countries are included in what the Swedes regard as their cultural sphere (cf. Mångfaldsbarometern, 2011). Distrust is also connected to stereotyping and negative preconceptions about others (Hardin, 2003). Distrust can therefore be maintained and perhaps even strengthened in contexts where individuals are socially isolated (Fetchenhauer & Dunning, 2010; Uslaner, 2012). This is also in line with previous studies that have found that social interaction between different groups tends to have a cushioning effect on trust (Marschall & Stolle, 2004; Uslaner, 2012; Morenoff et al., 2001).² Moreover, individuals are likely to receive asymmetric information about the trustworthiness of others. They are almost never going to receive any information about whether they were right or wrong in distrusting someone while they are much more likely to receive information about the trustworthiness of others when they choose to trust (Fetchenhauer & Dunning, 2010; Yamagishi, 2001).

Knight (2003) argues that asymmetric norms may have two effects. First, they may reduce the willingness to cooperate and establish trust between different groups. Second, they may impact perceptions of fairness. A sense of unfairness fuelled by great social distances between groups undermines a sense of shared fate and casts doubts on whether rules are just. This may lead to difficulties in maintaining a belief in the good intentions of others in social interactions (Habyarimana et al., 2009; cf. Rothstein & Uslaner, 2005). Widespread perceptions of unfair treatment and discrimination are likely to exacerbate the problems connected to simply being dissimilar (Knight, 2003; Rothstein & Uslaner, 2005). Suspicion and prejudices could be viewed as mutual when the minority groups believe that the majority

² However Stolle and Harell's (2013) research indicates that the positive effects on trust from having ethnically diverse social ties may be limited to the younger cohorts as values and preconceptions about others in general are less malleable after adulthood.

population discriminates against them and, in turn, the majority group believes that minorities participate more often in free riding and take advantage of the system.

Thus, in largely heterogeneous contexts in which there are few social ties between groups, the mechanisms that maintain and facilitate trust are lacking and instead we can expect negative perceptions to flourish.

The Apparent Absence of a Relationship between Trust and Diversity in Sweden

Sweden is historically a relatively homogeneous country with limited social divisions. Due to recent waves of immigration, however, Sweden can no longer be considered homogeneous in ethnic terms. In fact, Sweden now has one of the highest proportions of first-generation immigrants in Europe. The share of the population that is born outside Sweden has increased from about 9% in 1990 to 11% in 2000 and 15.4 % in 2012 (Statistics Sweden, 2013). This proportion is higher than that in countries such as Great Britain, the Netherlands and France and similar to that of a classical immigrant country such as the US (Statistics Sweden, 2010).

The bulk of the increase in the Swedish population by 1.5 million people in the last five decades is due to immigration (Statistics Sweden, 2008). In 2009 (the year of the survey), non-Nordic first generation immigrants constituted 1.07 million individuals, which corresponds to approximately 11.5 % of the total population. Immigration, or ethnic heterogeneity, is often much more visible in certain urban areas of the country.

According to Andersson (2007), Swedish immigrant-dense urban communities tend to resemble those in the rest of Europe in terms of residential segregation. Studies that have compared immigrant-dense communities in Sweden over time contend that the exodus of inhabitants with a Swedish ethnic background from these communities (the so-called “white

flight”) is less relevant for this concentration than the magnitude of the inflow of immigrants (labelled as “white avoidance”) (Andersson, 2007). Notably, the geographical concentration of immigrants with the same ethnic background is also uncommon in Sweden. With very few exceptions, neighbourhoods with few native Swedes are multi-ethnic in character (Andersson & Bråmås, 2008). Although residential segregation does exist, in general, it does not follow specific ethnic patterns other than the presence of either a majority of Swedes or a minority of Swedes (Andersson & Bråmås, 2008; Kumlin & Rothstein, 2010).

Theoretically, this rapid increase in diversity should lead to a decrease in trust rates. However, until very recently, this decrease had yet to surface at the aggregate, national level. Despite increasing immigration, the available data on generalised trust indicated continuously high and stable – or even increasing – rates of generalised trust. The proportion agreeing that “most people can be trusted” increased from 60% in 1996 to 71% in 2009 (Wollebæk, 2011).³ The most recent wave of the World Values Survey carried out in 2011, however, indicates that the growth in trust levels has been halted or even reversed (Lindberg & Svensson, 2012). 65 % now express trust in “most people”, which is slightly lower than the result from the last WVS round (68% in 2006). Almost the entire decline is found among young people. Among those aged 29 and younger, 68 % expressed generalized trust in 2006, compared to 50 % in 2011. It is too soon to conclude whether this result is a random fluctuation, or if it may reflect that the impact of growing up in multi-ethnic contexts or the dire social consequences of the financial crisis may be visible only among younger cohorts.

Of particular interest in this context is also the finding that the proportion expressing distrust in their neighbourhood is up from 10 to 18 %, whereas the proportion trusting their neighbourhood “completely” is down from 40 to 30 % (Lindberg & Svensson, 2012). The larger magnitude in the negative shift in local community trust displayed in the WVS

³ The figures are from the World Values Survey (1996) and the European Values Study (2009). In the WVS waves of 1999 and 2006, the trusting alternative was chosen by 66 and 68 % respectively.

compared to generalized trust indicates that the former is a much more malleable form of trusting attitude.

Furthermore, within the “big picture” of persisting high levels of generalized trust, there is also room for local variations. A recent study by Thisted Dinesen and Sonderskov (2012) casts doubt on whether national level trends and local level trends necessarily coincide. National levels of (generalized) trust may increase while levels in local immigrant dense areas decrease. Thisted Dinesen and Sonderskov’s study did not control for immigrant background; consequently, it is not possible to determine whether their results reflect a negative effect at the individual level (immigrants feel less trust) or whether there is a localised overall decrease in trust.

Finally, this high generalized trust coexists with a more cautious attitude towards immigration. According to the last wave of the European Values Study (2008/09), 62% of Swedes believe that immigration will result in more crime.⁴ The rise of the anti-immigrant party, *Sverigedemokraterna* (Swedish Democrats), in certain parts of Sweden suggests that a small but increasing minority of Swedes are fiercely opposed to increased ethnic diversity. While surveys (*Mångfaldsbarometern*, 2011) indicate that the majority of the population appears to have become somewhat more tolerant towards immigrants over time, there is little doubt that a smaller group has become increasingly hostile.

The Impact of Diversity on Community Trust

The absent overall negative relationship between immigration and generalized trust could be interpreted in different ways. On the one hand, it may be seen as proof that the concerns regarding the detrimental consequences of increasing diversity are exaggerated, at least in a

⁴ The percentage refers to the proportion placing themselves closer (positions 1 to 5) to the alternative “will make it [crime rates] worse” rather than “will not make it worse” on a ten-point scale (N=1108). The corresponding figure for Great Britain is 67.7%, 46.4% for France, and 77% for West Germany. At 68%, the corresponding average percentage in the EVS as a whole is slightly higher than that in Sweden.

Swedish context. On the other hand, it could be seen as an indication that the currently most widely used measurement and conceptualization of trust may not be fully able to capture important social change.

Social trust has conventionally been conceived of as a dichotomy or a continuum, with degree of familiarity between the truster and the trustee as the distinguishing criterion. At one end is trust between people known to each other (particularized trust) and, at the other, trust in strangers or people in general (generalized trust). Generalized trust, which was originally part of an index of misanthropy (Rosenberg, 1956), has received the most scholarly attention, as it correlates strongly with a wide set of social phenomena, such as pro-democratic attitudes (Tilly, 2004).

How useful is this unidimensional framework when grappling with the complex relationship between diversity and trust in empirical research? The theoretical linkage between increasing ethnic diversity in a local community and a weakened sense of trust in “most people”, i.e. generalized trust, is tenuous. It is by no means certain that a more apprehensive approach towards the local context, caused, for example, by increasing norm asymmetry in an individual’s lived space, translates into more cautious views of mankind. Most people are able to distinguish between how they conceive their immediate surroundings and how they regard the world as such. Further, it is fair to say that the literature regards generalized trust as a relatively stable value and emphasize the role of primary socialization and experiences in formative years (Uslaner, 2002), although there are variations in degree between how culturalist and experiential approaches view the malleability of this basic value (cf. Thisted Dinesen, 2011; Putnam, 2000). The theoretical reasons to expect changes in trust in our friends and acquaintances, i.e. particularized trust, are even weaker.

Thus, it is perhaps not realistic to expect recent immigration to immediately affect trust levels, be it at the individual or aggregate level. Indeed, a number of studies, by Hooghe

et al. (2009); Tolsma et al, (2009); Gijssberts et al., (2011); and Lolle and Torpe (2011) report no effects of diversity on generalized trust, and Morales and Echazarra, (this issue) and Uslaner, (2012) even reveal positive effects.

The main limitation of the generalized-particularized trust dichotomy is that, in distinguishing only on the basis of familiarity, it is insensitive to context. Illustratively, perhaps, the items measuring trust in neighbours and other people in the local community that are now included in the EVS and WVS have proven to be difficult to fit into the dichotomy – such measures have been treated as both generalized trust and particularized trust in previous research (Freitag & Traunmüller, 2009; Naef & Schupp, 2009; Putnam, 2007; Sturgis & Smith, 2010).

We believe some of these inconsistencies may stem from the fact that these types of trust are not bounded in degree of familiarity, but in spatial terms. Community trust is neither the sum of the particularized trust we place in specific neighbours, nor mere reflections of our generalized conceptions of the benevolence or malevolence of mankind. Rather, it is built upon socially formed perceptions of a shared, lived space (Wollebæk et al., 2012).⁵ The differences between neighbourhoods are visible to those who live there. The real estate market reveals that, everything else being equal, people are prepared to pay more to live in particular areas rather than other areas partly because of these differences.⁶ Preconceptions about trust and related characteristics of the community are based upon both personal experiences as well as elements of reputation and collective memory.

In our view, therefore, a distinct category, which we label community trust, should supplement the generalized-particularized dichotomy. Unless measures sensitive to locality and context are employed, empirical research may misrepresent or altogether neglect the importance and character of the relationship between diversity and trust. Other previous

⁵ This paragraph is based primarily on Wollebæk et al. (2012).

⁶ This detail also raises methodological issues with regard to separating context effects from compositional effects (Manski, 1993; Brännström, 2006).

studies have also used a related perspective, collective efficacy, related to social problems and crime rates in different neighbourhoods (Morenoff et al., 2001). Local communities that were characterized with high levels of collective efficacy were less afflicted by urban violence and had more social cohesion according to Morenoff et al. (2001).

We consider it to be more plausible that rapid demographic change in a local community should affect trust within the same spatial boundaries rather than generalized trust. Indeed, empirical studies using measures of trust in neighbours appear to reach more often the conclusion that diversity has a negative impact, whereas studies that use measures of generalized trust find less or no evidence of negative effects (cf. Sturgis et al. 2011; Morales & Echazarra, this issue).⁷

This pattern does not imply that diversity and generalized trust are unrelated. Indeed, if the assumption that generalized trust is a relatively stable value formed during childhood and adolescence holds, it is reasonable to expect a time lag. Any detrimental effects that diversity may have on generalized trust may not be observable instantaneously. The data at hand and, indeed, the short history of immigration in the Nordic countries prevent us from drawing empirically informed conclusions on this matter. Nonetheless, one could hypothesise that living in a community characterised by low trust or distrust among residents is likely to damage generalized trust over time. If continued negative experiences are made locally, or if residents increasingly withdraw from the social contacts which could have corrected the information asymmetry regarding the trustworthiness of others (cf. Fetchenhauer & Dunning, 2010), and new generations spend their formative years in low-trust contexts, even generalized trust is likely to suffer. Although much more empirical work needs to be done on this topic, the recent decline in generalized trust among the younger generation apparent in the latest Swedish WVS wave (see above) could be indicative of such a development.

⁷ Öberg et al. (2011) and Thisted Dinesen and Sonderskov (2012) report negative effects of diversity on trust in neighbours and generalised trust.

Thus, in the present work, we take the non-existent relationship between diversity and generalized and particularized trust at the local level in Sweden as a given, and focus on the mechanisms that may drive down trust in the local community. As discussed above, we see the coexistence of dissimilar and asymmetric norm systems, perceptions of unfairness and information asymmetry as three such mechanisms.

We interpret responses to a question of whether there is too much (or too little) cultural diversity in the local community as an indicator of perceived norm asymmetry⁸. Further, we examine a question of whether people with foreign background are positively or negatively discriminated against as an indicator of perceived unfairness. We compare the potential impact of ethnic dissimilarity and perceived unfairness with indicators of perceived socioeconomic differences. Finally, we examine whether lack of information (information asymmetry) about the trustworthiness of others due to lack of social contact could account for some of the negative relationship between diversity and community trust.

Attitudes towards community diversity, unfair treatment of immigrants and asymmetric information are not expected to affect community trust if most neighbours belong to the majority population. Therefore, we expect to find a relationship between these evaluations and community trust in very diverse contexts only.

H1) Perceptions of “too much” cultural diversity in the local community are negatively related to community trust in very diverse contexts.

H2) Perceptions of unfair treatment of immigrants are negatively related to community trust in more⁹ diverse contexts.

H3) Lack of contact between neighbours is negatively related to community trust in very diverse contexts.

⁸ The question wording was “In your opinion please rate whether you think there is too little or too much in your municipality of the phenomena listed below...”.

⁹ More diverse contexts refer to the relative differences between the sampled local communities.

Method

We use data from a survey mailed to a representative sample of 400 residents in each of 33 different municipalities in Sweden in 2009. The survey was conducted by Statistics Sweden. The questionnaire was specifically designed to capture different forms of trust, its antecedents and behavioural consequences.

The survey was designed to ensure sufficient variation in contextual variables. First, all of the Swedish municipalities (290) were classified as being high or low regarding measurements of the following: immigration-related diversity (percentage of population born in a non-Nordic country), socioeconomic deprivation (unemployment rates and rates of residents receiving social welfare), and church attendance and crime rates.¹⁰ A matrix containing the various combinations (high and low for the four contextual level variables) was constructed and contained 16 subgroups. Statistics Sweden randomly drew two municipalities from each subgroup. One municipality was added (Malmö) to include one of the three major urban areas in Sweden.¹¹ The municipality of Sundbyberg, which is also included in the sample, is part of the greater metropolitan area of Stockholm. Overall, 33 municipalities were sampled and, within each municipality, a random sample of residents between the ages of 18 and 85 was drawn. The sample was drawn from the total population register (RTB) maintained by Statistics Sweden.

¹⁰ The cultural and (in the case of Scandinavia) linguistic proximity among the Nordic countries is such that in our view, interpreting the presence of residents originating from other Nordic countries as a representation of diversity would be misleading. There are also similarities among the Nordic countries with regard to levels of trust. The same delineation of who is considered “foreign” is used at the individual level.

¹¹ Malmö represents an interesting case in the Swedish context, as it is the most diverse urban area in Sweden. Approximately one third of the individuals in this area are first-generation immigrants and, in a relatively small urban area, highly diverse neighbourhoods are within walking distance of the city centre and thus, diversity is clearly present in the local community. In contrast, in Stockholm, immigrant communities are more geographically distant from the city centre.

In total, 6,463 responses were received, constituting a response rate of 50.1 % in relation to the net sample.¹² In total, 459 first-generation immigrants responded to the survey; out of these, 274 were from areas outside the Nordic countries, and the overall response rate of the non-Nordic group is markedly lower, corresponding to 37.2% (in comparison with 51.3% of those born within the Nordic countries).¹³ The total number of respondents used in the construction of the trust indices (5,113) is lower because of missing values. The response rate in the municipalities varied between 45% and 59% (with a standard deviation of 3.28). The response rate was weakly correlated with generalized (.15) and particularized (.14) trust levels in the municipalities but moderately correlated with community trust (.46).¹⁴ It is possible that respondents exhibiting high community trust could have responded more frequently than others. However, this response frequency would most likely strengthen rather than weaken our primary argument; the contextual variation between municipalities with regard to the community trust variable would be even larger than our analyses demonstrate.¹⁵

Given the nested structure of the sample, multilevel modelling is the most appropriate method of analysis (Hox, 2002). We utilised HLM3-analysis in which the municipality (level 3 in the analyses), the lowest administrative level in Sweden, and the Small Area Market Statistics (SAMS) area, an even smaller geographical subunit, are the group levels used. The SAMS areas (level 2 in the analyses) are based upon voting districts in smaller municipalities and upon neighbourhood divisions created by the municipalities

¹² In general, response levels are decreasing in Sweden. We suggest different reasons for why the response levels may appear low; the upper age limit of the sample was high (85), which indicates that a higher-than-usual proportion of ineligible (because of bad health) is most likely included in the sample; a mail survey tends to result in a lower response and, given the large sample size and because of high costs, we did not provide phone reminders; the number of ineligible is most likely underestimated because only those who directly contacted the survey administrators were eliminated; the survey consisted of 20 pages, rendering it quite demanding, and no symbolic compensation was awarded in return for participation.

¹³ Some of the municipalities in the survey contain few immigrants from certain countries and, therefore, to avoid compromising the respondents' anonymity, Statistics Sweden could only report region of birth (not country).

¹⁴ The correlation between the Herfindahl index (municipality) and the response rate was moderate: 0.38.

¹⁵ The negative impact of diversity on community trust may potentially be even larger as respondents with low levels of community trust were less likely to respond to the survey.

themselves. In total, there are approximately 9,200 SAMS areas in Sweden and, although citizens are not aware of which of these areas they live in, to a large extent, the areas tend to coincide with natural borders of neighbourhoods. In the following portion of the paper, we refer to these smaller geographical units using the shorthand term “neighbourhood”.

Measurements: Individual level indicators

Community trust is captured by three items that ask respondents how much they trust “the people living in your area”, “neighbours” and “the people living in your municipality”, measured with 4-point Likert scales ranging from “do not trust at all” to “trust completely”. An index based on these items produces a Cronbach’s alpha of .80. To facilitate interpretation, community trust was re-coded as an index variable ranging from 0 to 100.

We measure the experience of norm asymmetry with items tapping into whether the respondents subjectively assess that there is too much (or too little) cultural diversity, as well as whether the respondent subjectively assess that there is (too much or) too little equality (“everyone is equally well off”), in the local community. These items tap whether there is a perceived dissimilarity within the local community. We operationalize perceived unfairness with questions measuring whether ethnic minorities or those with low economic resources are discriminated against (positively or negatively).¹⁶ Contact between neighbours is measured by responses to the question “how often do you talk or socialize with your neighbours”, divided into weekly (or more frequently), monthly or more seldom.

As individual control variables, we introduce SES variables (income and education), personality traits (Oliver & Srivastava, 1999), gender, age, residential tenure and variables indicating whether the respondent was cautioned as a child to not trust others (Stolle &

¹⁶ The question wording was “In your opinion are some groups [listed below] treated better or worse than others by public authorities...?”

Nishikawa, 2011). These variables are not shown in the table, but full results are available upon request.

Measurements: Neighbourhood Indicators

Regarding the aggregate levels, we rely upon official statistical data provided by Statistics Sweden, not on aggregate survey data. The average population in the 794 SAMS areas identified in our material is 1,195 (standard deviation of 1,349), and the median was 901. Each respondent within the sample is connected to both the municipality and the SAMS levels. We use the Herfindahl index – in this context, the probability that any two randomly selected individuals in a population belong to the same geographically defined, broad immigrant group – to capture the homogeneity/diversity of the population. As the cultural distances between immigrants from neighbouring Nordic countries are low, these groups have been counted as part of the majority population. Both first generation immigrants and children of two immigrants are counted as part of the immigrant population. The Herfindahl index varies from 0 (perfect heterogeneity), to 1 (perfect homogeneity). The groups used to compute the index are non-Nordic Europe, Latin America, North America, Asia, Africa and Oceania.¹⁷ The median income and Herfindahl index are also included as group-centred variables at the neighbourhood level in order to capture within-municipality variation.

Measurements: Municipality Indicators

The sizes of the surveyed municipalities varied. The mean population was 33,058 inhabitants, with a median of 14,659 (and standard deviation of 52,622); the largest municipality

¹⁷ The analyses reported in this paper have also been carried out with a Herfindahl index based only on non-Western immigrants, yielding similar results.

contained 286,000 inhabitants and, the smallest, 2,700. The Herfindahl index described above is also calculated for the municipalities. As control variables at the municipality level, we also introduce median income, population size and levels of education.

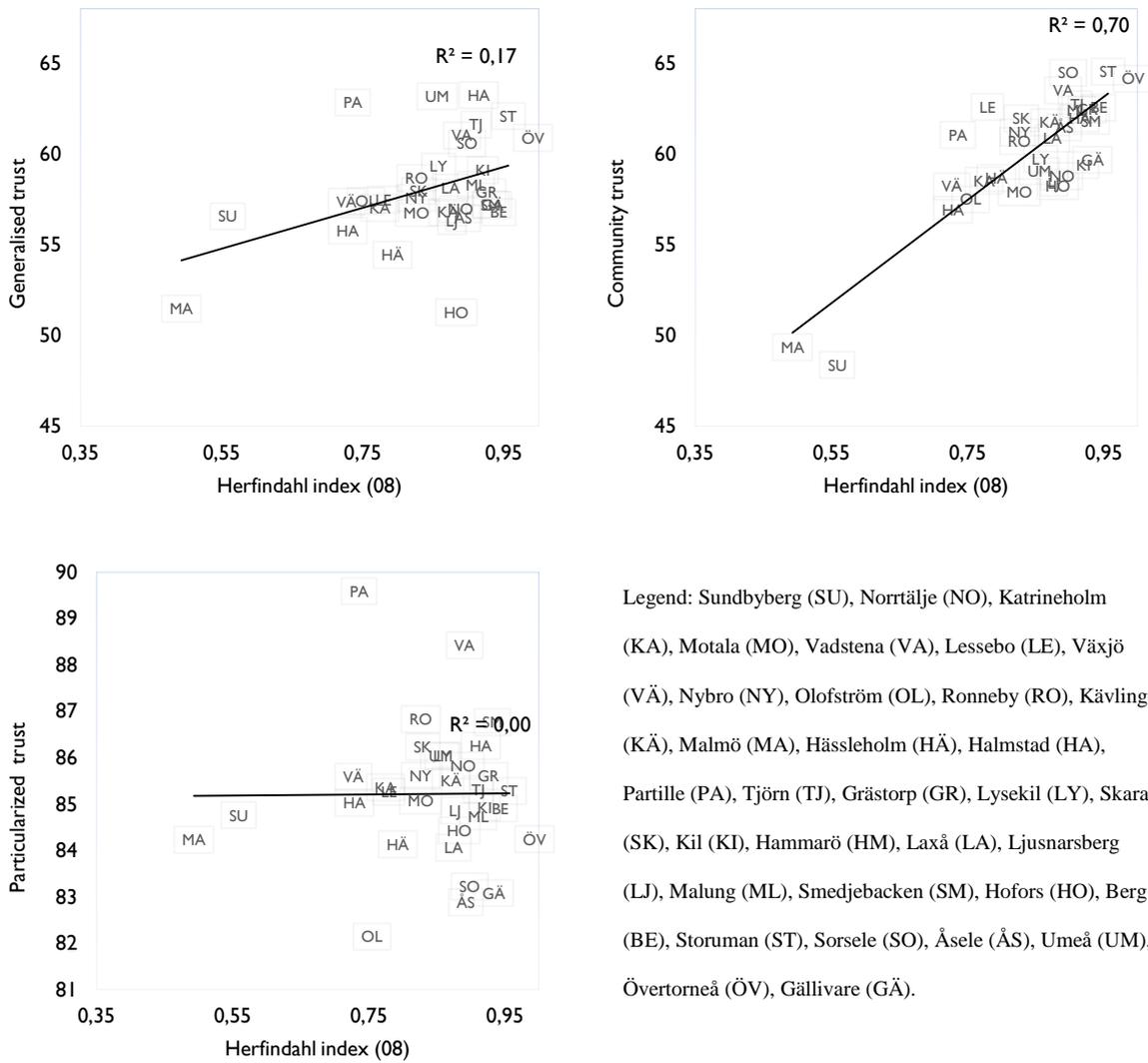
Diversity and Different Forms of Trust

As discussed before, we start our empirical analysis with a description of the bivariate aggregate relationship between immigrant-related diversity and the three forms of trust (Figure 1). The figure shows the distribution of the 33 communities along two axes, the vertical (Y) displaying the different forms of trust and the horizontal (X) displaying diversity in terms of the Herfindahl index (on which 1 equals perfect homogeneity).

In the short term, our data confirms that in Sweden only community trust is affected by increasing diversity. The figure shows that particularized trust is unrelated to diversity. Generalized trust is moderately negatively correlated with diversity at the aggregate level, but we have previously shown that this relationship does not hold up in multilevel analyses (Wollebæk et al., 2012). Furthermore, even the simple bivariate relationship disappears if the two metropolitan municipalities (Malmö, with a population of 250,000 people and a high proportion of immigrants, and Sundbyberg, a suburb of Stockholm) are excluded.

Community trust is however strongly and negatively related to diversity ($r^2=.70$, $r_{xy}=.84$). It may be argued that the effects of urbanisation and diversity are not easily distinguished, but even if we remove the two aforementioned urban municipalities from the analysis, we still find a strong correlation of .58. A linear and negative relationship between diversity and community trust is found even when analysing only the smaller, extra-urban municipalities. We will therefore proceed with analysing only community trust with multilevel methods in the next section.

Figure 1. Diversity and trust



Source: Trust survey and Statistics Sweden. N=33.

Diversity and Community Trust: Multilevel Analyses

Table 1 provides the results of the HLM3 analyses of community trust in which municipality and SAMS levels are the contextual levels used. The multi-level analyses in model 1 confirm that community trust is negatively and significantly influenced by local-level diversity. The results reveal significant and negative coefficients at both the municipal and neighbourhood (SAMS) levels. As the latter variable is group-mean centred, the results indicate that in addition to the variations between municipalities with high ethnic diversity, there is significant contextual *within*-municipality variation, such that neighbourhoods with high ethnic fractionalization exhibit less community trust than more homogeneous neighbourhoods. The most diverse neighbourhoods (5th percentile, H-index=.52) in the most diverse municipalities are predicted to score 12 points lower on the 100-point community trust index than the most homogeneous neighbourhoods (95th percentile, H-index=.97) in the most homogeneous municipalities. Overall, given that the relationships between diversity and community trust within municipalities and between municipalities are significant, the effect is non-negligible. In *addition to* these contextual effects, we find that an individual first- or second-generation immigrant background has a negative effect, which reduces community trust by about six scale points. This effect is independent of and occurs in addition to the ethnic composition of the neighbourhood and the municipality.¹⁸

¹⁸ We checked for a cross-level interaction of immigrant background, but the interaction term was insignificant.

Table 1. HLM3 Analysis of Community Trust (robust standard errors).

	Community trust	
	Model 1	Model 2
Intercept	62.16*** (.98)	61.86*** (.95)
<i>Municipality-level variables</i>		
Herfindahl index	13.07** (6.05)	8.61 (5.64)
Median income (1000 SEK)	-.015 (.017)	-.032* (.013)
Education (low)	.012 (.100)	.051 (.084)
Population size	-.009 (.010)	-.007 (.009)
Unemployment	-.067 (.873)	
<i>Neighbourhood-level variables (group-mean centred)</i>		
Herfindahl index	10.30** (4.01)	9.18* (3.63)
Median income (1000 SEK)	.044*** (.011)	.033* (.010)
<i>Individual-level variables</i>		
Minority background (=1)	-5.73 *** (1.26)	-6.77*** (1.17)
Contact with neighbours (1-3)		
Intercept		5.30*** (.40)
Interaction with Herfindahl		-6.67* (3.43)
Too little/much cultural diversity (1-4)		
Intercept		-1.76*** (.30)
Interaction with Herfindahl		4.00 (3.24)
Positive discrimination ppl with foreign background (0-2)		
Intercept		-2.00*** (.71)
Interaction with Herfindahl		11.25* (5.51)
Negative discrimination ppl with foreign background (0-2)		
Intercept		.71 (.48)
Interaction with Herfindahl		5.92 (3.21)
Too little equality (0-2)		-3.59*** (.61)
Negative discrimination ppl with low economic resources (0-2)		-2.54*** (.55)
Positive discrimination ppl with low economic resources (0-2)		-4.33* (1.76)
Individual variance	292.17	277.18
Neighbourhood variance	.41	.58
Estimation of level-3 variance components		
Intercept1/Intercept2		.091
Contact ngb/Intercept2		.98
Too much div/Intercept2		.35
Pos discr.for./Intercept2		.13
Neg.discr.for/Intercept2		1.60
N Individuals	4472	4472
N Neighborhoods	786	786
N Municipalities	33	33
Deviance		37877.47
LR-test of deviance, χ^2	757.85***	719.14***

Note: *** $p < 0.000$; ** $p < 0.01$; * $p < 0.05$. Controls in models 2, 4, 5 and 6: personality traits (agreeableness, conscientiousness, stability, openness, extraversion), age, gender, individual income (quintiles), cautioned by parents not to trust certain types of people when growing up, individual level of education and residential tenure (years) in community. Individual level variables (level 1) and municipality level (level 3) are grand-mean centred; neighbourhood level variables (level 2) are group centred. Random slopes are used for cross-level interactions.

Source: Trust survey and Statistics Sweden for aggregate level data.

Immigrant-dense neighbourhoods generally have lower income levels. It is possible that the observed relationship between neighbourhood immigration and low community trust could exist because of such social factors. Therefore we control for relative socioeconomic deprivation by introducing neighbourhood levels of income. Including this variable in the model weakens but does not eliminate the relationship between immigration and community trust.¹⁹ Ivarsflaten and Strømsnes (this issue) find unemployment²⁰ to be negatively related to trust. Model 1 shows that no such relationship is apparent at the municipal level in our data. Thus, the negative relationship between diversity and community trust holds even when controlling for a range of variables that measure social conditions.

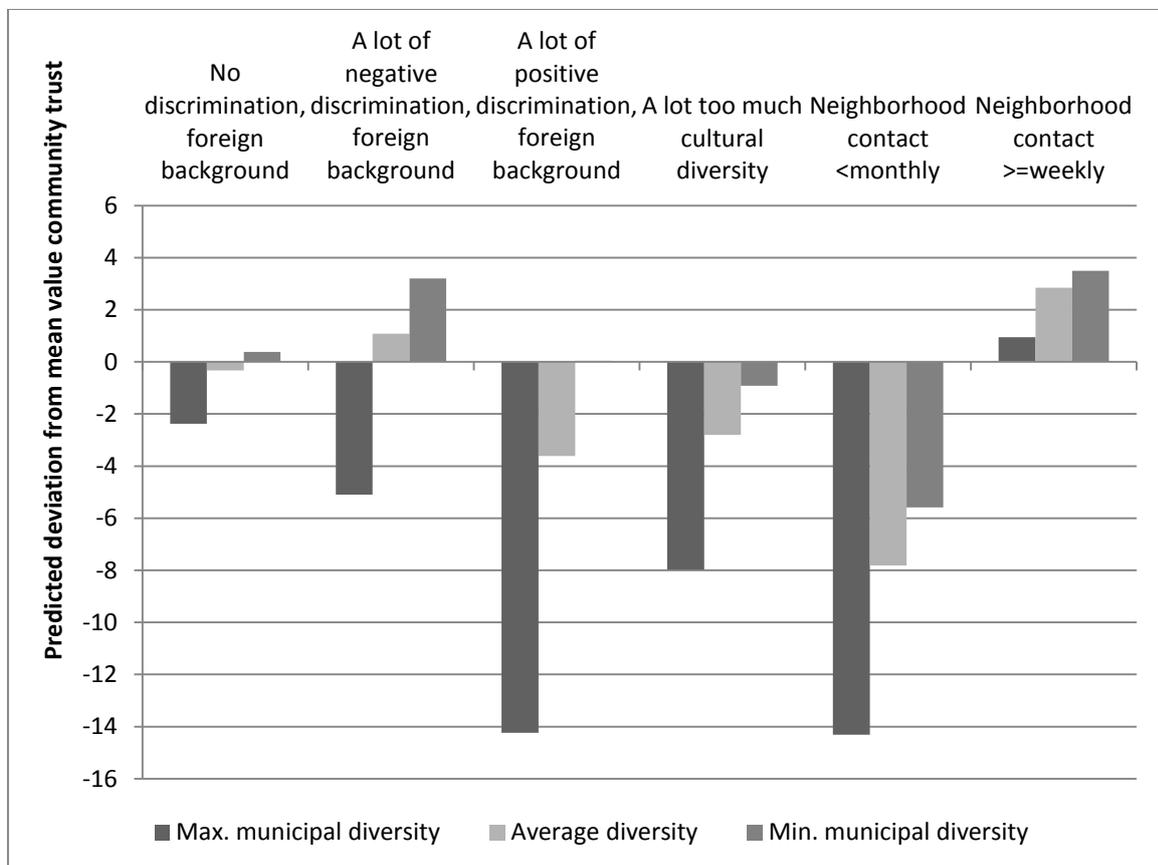
In model 2 we introduce the variables designed to capture the different mechanisms affecting community trust negatively. We hypothesized that perceptions of there being too much dissimilarity, perceptions of unfairness and asymmetric information about out-groups would be negatively related to community trust, and that this relationship should mainly be visible in more diverse contexts. Model 2 confirms that perceiving that there is too much cultural diversity in the local community is negatively related to community trust. The interaction with the Herfindahl index is in the expected direction, but insignificant ($p = .23$). Similarly the belief that immigrants are positively discriminated by public authorities also is negatively correlated with community trust. The significant interaction term indicates that

¹⁹ Without controls for neighbourhood median income, the predicted difference between the most and least homogeneous neighbourhood in the most and least homogeneous municipalities is 16 instead of 12 points on the scale.

²⁰ The data set does unfortunately not contain neighbourhood level unemployment rates.

this is, as expected, mainly the case in diverse municipalities. The belief that immigrants are negatively discriminated by public authorities is not significantly related to community trust. As regards information asymmetry, contact with neighbours is significantly related to community trust. Again, the interaction term indicates that the relationship is visible mainly in diverse settings. As a robustness check, the analyses were also conducted with each interaction separately and this did not affect the results (see table A1 in the Appendix).

Figure 2. Perceptions of too much cultural diversity, perceptions of unfairness and community trust



Note: Predicted deviation from mean value community trust index, Model 4 in Table 1.

Source: Trust Survey and Statistics Sweden for aggregate level data.

Figure **Fel! Hittar inte referenskölla.2** provides a graphical presentation of the results in Model 2. The figure shows that persons residing in the most diverse contexts who think there is too much cultural diversity in the municipality trust their community eight

points less on a 1-100 scale. Thinking that there is too much cultural diversity is particularly negatively connected with community trust in the most diverse local communities. The figure also shows that those who feel that public authorities treat persons with immigrant backgrounds a lot better than others display significantly lower trust levels than those who reject this notion. It is only within diverse municipalities that perceived positive discrimination of people with foreign background is negatively related to community trust (cf. Kumlin & Rothstein 2010). The results show that those who live in the most homogenous municipality and who believe that immigrants are positively discriminated score on the mean value on community trust while those who live in the most diverse municipalities score about 14 points below the mean value on the community trust. The relationship between trust and perceptions of *negative* discrimination is weaker, but follows the same pattern, although the interaction term with municipal diversity fails to reach the 95% significance levels ($p \leq .067$). The result conforms to the expectation of an interaction effect between perceptions of unfair treatment and actually living in a diverse community. Model 4 in table 1 also shows, however, that perceptions of there being too much social inequality in the local community are negatively related to community trust.

Finally, lack of contact between neighbours show a strong, negative relationship with community trust. Again, the relationship is visible only in the most diverse contexts. Lack of contact with neighbours seems to matter the most for those who live in highly diverse neighbourhoods. Those who live in the most diverse municipality and seldom interact with neighbours score about 14 points below those who live in the most homogeneous municipality, all other variables being equal.

In summary, the results conform to our expectations. Community trust is quite strongly related to contextual immigrant-related diversity, and this relationship does not disappear when controlling for individual- and contextual-level factors, including social

factors such as inequality, personal income and neighbourhood income. Having negative perceptions about diversity matters for individual community trust levels especially in diverse communities, and having perceptions about unequal treatment of immigrants also matters especially in the diverse communities.

Conclusion

Our results demonstrate that residents in ethnic heterogeneous contexts are less trusting towards their local communities and that perceptions of too much dissimilarity, unfairness and asymmetric norms, and asymmetric information access are negatively related to community trust in the most diverse contexts mainly. Generalized and particularized trust however, are not correlated with community level diversity in Sweden. These results follow the line of a number of other previous studies that have indicated that there are negative correlations between neighbourhood diversity and trust. However, we like to suggest some more detailed interpretations of our results.

Negative perceptions of dissimilarity, having negative attitudes towards immigrants and living in a highly diverse neighbourhood are negatively related to community trust. This result suggests that diversity is most negative for those individuals who dislike diversity and still live in highly diverse neighbourhoods. These individuals who live in communities that they perceive as too culturally diverse may react as the turtles referred to by Putnam²¹ in respect to their local community. Previous interpretations of similar results have suggested that individuals in this group frequently lack the sufficient resources to move away from their present community (Stolle and Harell, 2013).

²¹ Even though the article by Putnam (2007:148) mentions trust in more general terms the measurement used to illustrate the negative correlation is trust in neighbours, equivalent to our measure of community trust.

The negative relationship between trust and diversity may also come from the greater norm asymmetry in the local community, which in turn, may have a negative impact on trust (Knight, 2003). We demonstrated that a perception of unfairness exacerbated the impact of cultural distance; the belief that immigrants are favoured by public authorities correlates with lower levels of community trust at the individual level (cf Kumlin & Rothstein, 2010). This conforms to previous studies that show that distrust in the capacity of authorities to treat everybody equally and disregard ethnic background in their judgements may harm levels of trust towards people in general (Kumlin & Rothstein, 2010). The belief that public authorities treat immigrants more favourably than those of Swedish origin has a particularly strong negative correlation with community trust in highly diverse neighbourhoods. The perceptions of unfairness are therefore also connected to the other people who are present in the living context of the respondents.

It is also important to keep in mind that high levels of neighbourhood diversity in the Swedish context are also strongly correlated with relative socioeconomic deprivation. Is ethnic diversity or social inequality to blame for the lack of community trust or social cohesion? It is indeed difficult to disentangle the two factors in cross-sectional empirical research, but our results indicate that both processes are at work. Economic conditions matter, independently of diversity, and diversity depresses community trust, regardless of economic conditions. Thus, we are faced with two mechanisms that create *dissimilarity* locally, one ethnic, the other economic, which render the development of community trust more demanding and difficult. In both cases, the introduction of an element of the sense of *unfairness* appears to further undermine community trust. As community trust is connected to the capacity of the local community to act collectively then community trust may become also a collective asset (cf. Morenoff *et al.*, 2001).

Given that mass immigration to Sweden from countries that are considered to be culturally distant is quite recent it is possible that the negative relationship will dissipate over time. Few of today's adults have been socialized into living in diverse communities. Therefore, the lack of community trust may be due to negative prejudices and stereotypes about immigrants that still linger among the adult population. However, a necessary condition for this more optimistic interpretation to hold true is a substantial increase in social interaction within ethnically diverse areas. Above, we documented a strong and negative relationship between lack of neighbourhood contact and community trust which was mainly visible in immigrant-dense areas. We have to consider the endogeneity of these findings, as those who distrust their neighbours may also be more likely to withdraw from interacting with them. However our findings may imply that negative perceptions of immigrants will persist because of few social connections and asymmetric feedback, by which only those who actually take a leap of faith will receive any information about whether they were right or wrong in doing so. Conversely, if no social interaction exists the negative preconceptions about the others can more easily be maintained. Thus, the difficult task of halting developments towards ethnically based parallel societies is a core priority if deterioration of trust is to be avoided. Social contacts may facilitate the creation of trust but we have also shown that perceptions of other groups being better treated by public authorities, correlates negatively with community trust in diverse communities, which indicates that contact alone may not solve the trust puzzle.

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Appendix

Table A 1 HLM 3 analyses of community trust with the interaction variables entered separately (robust standard errors)

	Community trust			
	Each interaction separately: Neighborhood contact	Each interaction separately: Too much diversity	Each interaction separately: Pos. discrimination foreign background	Each interaction separately: Neg. discrimination
Intercept	61.79*** (.95)	61.81*** (.96)	61.68*** (.97)	61.74*** (.94)
<i>Municipality-level variables</i>				
Herfindahl index	8.41 (5.77)	9.68 (6.47)	10.88 (6.59)	10.34 (6.37)
Median income (1000 SEK)	-.028* (.013)	-.031* (.013)	-.029* (.014)	-.027* (.013)
Education (low)	.044 (.088)	.048 (.093)	.054 (.093)	.053 (.090)
Population size	-.010 (.010)	-.007 (.010)	-.006 (.011)	-.008 (.011)
Unemployment				
<i>Neighbourhood-level variables (group-mean centred)</i>				
Herfindahl index	9.31* (3.73)	9.06* (3.80)	9.43* (3.80)	9.45* (3.37)
Median income (1000 SEK)	.033* (.010)	.033** (.010)	.034** (.010)	.033** (.010)
<i>Individual-level variables</i>				
Minority background (=1)	-6.96*** (1.17)	-6.91*** (1.17)	-7.04 *** (1.19)	-6.94*** (1.19)
Contact with neighbours (1-3)				
Intercept	5.34*** (.40)	5.36*** (.41)	5.36*** (.41)	5.37*** (.41)
Herfindahl	-7.31* (3.55)			
Too little/much cultural diversity (1-4)				
Intercept	-1.75*** (.30)	-1.80*** (.31)	-1.77*** (.30)	-1.77*** (.30)
Interaction with Herfindahl		5.63 (2.81)		
Pos. discrimination ppl with foreign background (0-2)				
Intercept	-1.96*** (.74)	-1.93*** (.73)	-2.00*** (.70)	-1.96*** (.73)
Interaction with Herfindahl			11.56* (4.85)	

Neg. discrimination ppl with foreign background (0-2)				
Intercept	.72 (.49)	.71 (.49)	.71 (.49)	.69 (.48)
Interaction with Herfindahl				2.82 (3.66)
Too little equality (0-2)	-3.55*** (.62)	-3.57*** (.62)	-3.58*** (.61)	-3.52*** (.62)
Negative discrimination ppl with low economic resources (0-2)	-2.53*** (.55)	-2.55*** (.55)	-2.53*** (.55)	-2.54*** (.56)
Positive discrimination ppl with low economic resources (0-2)	-4.31* (1.79)	-4.38* (1.78)	-4.34* (1.74)	-4.32* (1.78)
Individual variance	278.97	279.35	278.88	279.95
Neighbourhood variance	.47	.93	.77	.067
Estimation of level-3 variance components				
Intercept1/Intercept2	.014	.024	.14	.013
Contact ngb/Intercept2	1.19			
Too much div/Intercept2		.044		
Pos discr.for./Intercept2			1.75	
Neg.discr.for./Intercept2				.64
N Individuals	4472	4472	4472	4472
N Neighborhoods	786	786	786	786
N Municipalities	33	33	33	33
LR-test of deviance, χ^2	754.30***	751.54***	739.93***	746.11***