Original Article

Growing ethnic diversity and social trust in European societies

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Abstract The article investigates the relationship between ethnic diversity and social trust at both the national and local level. As we are particularly concerned with how the rise of new ethnic groups affects trust, the investigation takes place within a European context in which ethnic diversity today is primarily related to immigration from non-western countries. The data originate primarily from the World Value Study (WVS) and the first and second round of the European Social Survey. In contrast to some studies, but consistent with others, we find no general relationships between ethnic diversity, measured in terms of the size of non-western immigrants, and trust either at the country or local level after having checked for other possible sources of influence. There are, furthermore, no indications of trust being influenced by the rise of new ethnic groups or a multiethnic society. All told, ethnic diversity measured in terms of the size of non-western immigrants does not appear to be associated with lower levels of trust in Europe. It may be true in some areas and some countries, but it is not a general phenomenon and problem. *Comparative European Politics* (2011) **9**, 191–216. doi:10.1057/cep.2009.16

Keywords: social trust; social capital; ethnic diversity; immigration; multiethnic society

Introduction

A growing issue in recent discussions of social capital has been whether a transition to a more diverse, multiethnic society affects the generation of social capital. Several studies in recent years from primarily the United States and Canada have suggested a negative relationship between ethnic diversity and social capital. As there is widespread agreement that social capital constitutes an important resource for individuals, groups and societies alike, these studies have attracted much attention among politicians and observers

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also in Europe, who have warned about the dangers of multiculturalism and called for policies with stronger emphasis on assimilation. However, so far only few studies have been carried out in Europe. It is therefore important to examine if and how ethnic diversity is negatively related to social capital in a European context?

In the following, the overall research question is addressed by looking at how the independent variable *ethnic diversity* is constructed and next how the dependent variable, *social trust*, which is one of the main pillars of social capital, is measured. On that basis and on the basis of some previous findings the study design of the article is outlined. In the section 'Ethnic Diversity and Social Trust across European Countries', we test the hypothesis of a negative correlation between ethnic diversity and social trust at the country level. In the 'Trends in Ethnic Diversity and Social Trust' section, we highlight trends in ethnic diversity and social trust, and in the section 'Ethnic Diversity and Trust at the Local Level', we examine the relationship between ethnic diversity and social trust at the local level.

Ethnic diversity and social trust

According to the *Concise Oxford English Dictionary*, 'ethnicity' relates to a 'group of people having a common national or cultural tradition' (Soanes and Stevenson, 2008). By ethnically diverse societies or neighborhoods we therefore mean societies or neighborhoods fractionalized into two or more such groups. This definition, however, does not tell us anything about the character of the fractionalization. First, an area could be fractionalized in several ways; in Europe the pattern is that of a majority ethnic group and some minority ethnic groups of various sizes. Second, fractionalization could be accompanied by various degrees of segregation; a high degree implying little or no contacts between ethnic groups, or a low degree implying much contact between the groups. Rather than an effect of ethnic diversity less social trust could be an effect of ethnic segregation (Uslaner, 2009).

A second problem in applying the concept of ethnic diversity is that even if we agree on a formal definition of ethnic diversity, the meaning of having a common national or cultural tradition varies from one country to another. To take some examples: Since the unification of Germany in 1871, the northern and the southern part has been divided by religious affiliation, but no one would on that basis describe Germany as culturally heterogeneous. In Denmark, Jews have, for many years, had their own religious congregations, but while Danish Jews are not seen as part of what constitutes ethnic heterogeneity – because they are completely assimilated – the growing Muslim group in Denmark is.



Hence our understanding of what constitutes an ethnic minority group is very much dependent on the context. Rather than some objective characteristics of ethnicity, nation, religion and language, it is whether and how such characteristics constitute cultural differences that matters. In some countries, ethnic-based cultural differences are associated with divisions of race and tribe that go several hundred years back. In other countries such differences are of a new date, or the meaning of them has changed. This is quite clearly the case in Western Europe, where, since the 1960s, ethnic diversity has been increasingly associated with the relatively new phenomenon of immigration to Europe from non-western countries.

The context-dependency means that we should be cautious in comparing the issue of ethnicity across several different countries. No doubt it is advantageous for statistical reasons to have as many countries as possible in a model. But it is a problem if those countries are highly different with regard to the nature of the independent variable. We therefore focus in this study on ethnic diversity in Europe in terms of the size and growth of the group of non-western immigrants.

Turning to the dependent variable, social trust can be defined as trust in the 'abstract other' or 'trust in strangers', also known as 'generalized trust' as opposed to 'particularized trust', which means trust in those you know or feel connected with. The variable most often used to measure social trust is the question whether, in general, 'most people can be trusted', or, whether 'you can't be too careful in dealing with people' (see Appendix A for the exact wording). Methodologically seen, everyone would agree that it is dangerous to rely on only one item, but it has been argued rather convincingly that this standard question about trust captures the underlying theoretical concept of 'trust in strangers' (Uslaner, 2002; Bjørnskov, 2006). The question is, however, whether it applies equally to all parts of the world.

The latest wave of the World Value Survey gives us an opportunity to test the validity of the standard trust question. Besides the traditional measure of trust – whether 'most people can be trusted' – respondents are namely asked whether they trust people they meet for the first time (that is, strangers). If the standard variable on trust captures 'trust in strangers', we must expect strong correlations between the answers to these two trust questions. This is also true for 12 Western countries with Gamma coefficients between 0.54 (Cyprus) and 0.71 (Switzerland), including the United States with a Gamma coefficient of 0.70. The only (partial) exception is Spain with a Gamma coefficient of still well over 0.40. However, countries in Africa and Asia have much lower Gamma coefficients: Africa (nine countries) has an average of 0.24, ranging from 0.12 (Ghana) to 0.42 (Egypt), and Asia (10 countries) has an average of 0.35, ranging from 0.23 (China) to 0.55 (Indonesia). Also Latin America (seven countries) has a lower average, 0.48, with values ranging from 0.19 (Chile) to

0.66 (Argentina). In Eastern Europe (9 countries) the correlation is on average 0.52, ranging from 0.40 (Moldova) to 0.71 (Slovenia).

Although the variable 'most people can be trusted' seems to be a fairly reliable measurement of generalized trust in Western countries, and to some extent also in Eastern Europe, the weak correlation with trust in people you meet for the first time indicates a different interpretation of the question among many respondents in these countries. The results support the use of the standard variable on trust in comparative analysis across Europe, but question the use of the variable in comparative analysis across the world.

Ethnic diversity and trust: Some previous findings

Over the past 10 years various studies have focussed on the relationship between ethnic diversity and social capital, including social trust. Several studies have been carried out at the local level and among the most discussed is undoubtedly that of Robert Putnam (2007), who finds that across local areas in the United States there is a negative relationship between ethnic diversity and a wide range of social capital indicators, including social trust. This negative relationship between neighborhood diversity and social trust is confirmed by Stolle et al (2008) not only for the United States, but also for Canada. They, however, also challenge the claims about the negative effects of diversity on trust by showing that the negative effects are mediated by the regularity with which individuals interact with their neighbors. In a recent study, Uslaner (2009) shows that it is not ethnic diversity that drives down trust, but ethnic segregation. In the United Kingdom, Letki (2008) included several neighborhood characteristics in the study and shows that it is not primarily ethnic diversity that erodes social capital, but low neighborhood status. Laurence and Heath (2008) reach a similar conclusion on more general measures of social cohesion.

At the country level several cross-country studies have shown that ethnic heterogeneity is associated with lower levels of trust (Delhey and Newton, 2005; Anderson and Paskeviciute, 2006). Sixty countries are included in the Delhey and Newton study, while Anderson and Paskeviciute include 44 countries. In both cases ethnic fractionalization appears to have some effect. But there is no uniform picture. One study with more countries gives no support to these findings (Bjørnskov, 2006). The same is the case in a recent study in which a number of European countries are included (Hooghe *et al.*, 2009).

Thus, previous studies do not provide a clear picture, either at the local or aggregate level across countries. In the following, we investigate further the relationship between ethnic diversity and social trust. Are there indications that areas and societies become less trusting as they become more ethnically



diverse? We address this question, however, in a slightly different way than has been done in previous research.

Study design

In the 'Ethnic Diversity and Social Trust across European Countries' section, we initially test the explanatory model of Delhey and Newton (2005). At the first level, this model is tested for Europe on the basis of data from the European Social Survey (ESS), 2004. At the next level, we add a newly constructed variable for ethnic minorities, which is capable of capturing the proportion of non-western immigrants. At the third level, some individual control variables are added. Unlike Delhey and Newton, and most previous studies, we introduce multilevel data analysis that allows simultaneously control for characteristics at the national and individual level, which is important when there are a limited number of cases at the national level. Finally, at the fourth level we find the best model with both individual and country-specific variables.

As will be explained later, we are not able to confirm the argument of a negative impact of ethnic diversity on trust in Europe. However, this result is by no means the final answer to the question of a relationship between ethnic diversity and trust in a European context, for the reasons given below.

First, a more complete answer should also include a dynamic analysis, where changes in the ethnic composition of society are brought into relation with the development of trust. Rather than the level of diversity at a certain point in time, it may be the growth in the presence of ethnic minority groups that matters more for trust (Hooghe, 2007). Accordingly, a negative effect on trust would be expected in those countries that within a short period of time have undergone a transition from a relatively ethnic homogeneous to a relatively ethnic heterogeneous society. In the section 'Trends in Ethnic Diversity and Social Trust', we look more closely into whether this transition appears to have left any marks on levels of trust.

Second, a more complete answer should also include the local level. As non-western immigrants are often concentrated in specific areas of a city, we may find less trust in these areas than in more ethnically homogeneous areas. Ethnic diversity may thus have a negative effect on trust that is not (yet) visible at the country level. In the section 'Ethnic Diversity and Trust at the Local Level', eight capital cities in Europe, all characterized by wide areas in which many immigrants live, are investigated as to social trust is less in areas with many residents of different ethnic groups.

In our study design, we thus take a multidimensional approach to the study of the relationship between ethnic diversity and trust, in which the effect of ethnic diversity at one point in time is supplemented by its effect over longer periods, and country studies are supplemented by studies at the community level.

Ethnic Diversity and Social Trust Across European Countries

The analysis of the relationship between ethnic diversity and social trust across Europe includes at the country level a number of independent variables taken from Delhey and Newton (2005). These are: ethnic, linguistic and religious fractionalization, Protestantism (Dominant Protestant country or mixed Protestant-Catholic country), good governance, income equality (Gini index) and national wealth (GNP per capita) (see Appendix A).

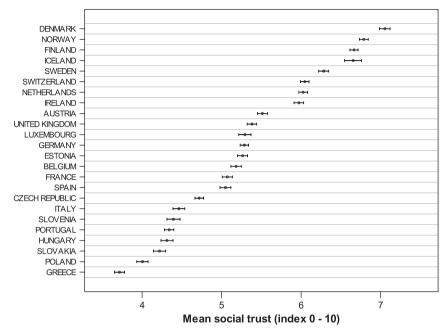
To these are added a variable for non-western immigrants. In practice, it is, however, not easy to identify such a group as statistics on immigration have been and still is incomplete. Using OECD statistics, Dumont and Lemaitre (2005) have roughly specified the country of origin of the foreign-born population. On that basis we calculate the proportion of the non-western born population for each country, defined as persons born outside EU-25, North America and Oceania, with some corrections (Dumont and Lemaitre, 2005; see Appendix B). The selection of countries is those included in ESS 2004 except Turkey and Ukraine. How western and non-western countries are defined is of course debatable. The biggest practical difficulties posed by the definition are that immigrants from Poland are not included in the variable, while those from Turkey, and the former Yugoslavia and Soviet Republics are.

A third set of independent variables are those at the individual level taken from ESS 2004, namely age, gender and two variables for education, namely level of education and persons in education (see Appendix A for the construction of these and the following variables). From ESS 2004, furthermore, we add the variable of belonging to an ethnic minority group. The purpose of this is to take into account that the size of ethnic minorities varies from country to country, which might in itself influence the result at the country level, if immigrants are less trusting than the majority population.

The dependent variable is measured on a two-item scale including (1) the standard variable that 'Most people can be trusted, or you can't be too careful', and (2) 'Do you think most people would try to take advantage of you if they got the chance, or would they try to be fair?'. A test on European data shows that this two-item scale gives a more satisfactory result than one of only one variable (Reeskens and Hooghe, 2008).

Figure 1 shows tremendous variations in the level of trust in the 24 countries in the ESS 2004 data set.⁴ Also, the countries tend to group into major clusters.





Cases weighted by Design weight

Figure 1: Social trust in 24 European countries.

Note: Respondents 18+ years. A *design weight* constructed by the team behind the European Social Survey adjusts for differences in selection probability among different groups in the countries. This gives a somewhat better representativeness, although the practical effect of the weight is rather small. See also European Social Survey (2004): 'Weighting European Social Survey Data'.

Source: European Social Survey 2004.

With few exceptions, the general picture shows the Nordic countries at the top, the South and East European countries at the bottom, and the Central European countries in the middle. As indicated by the intervals, some of the minor differences between the countries could be coincidental, while the major differences are more systematic.

In the first round, we test the Delhey/Newton model for all 24 European countries and for the 18 West European countries. East and Western Europe are different not only in terms of social trust, but also with regard to the character of immigration. We furthermore add the variable 'non-western immigrants' and we show the results for the two-item scale on trust. It makes, however, no difference whether we use the standard variable of 'most people can be trusted' or the two-item scale.

Table 1: Correlations between social trust and a series of country-specific characteristics. Country-level analyses

	24 countries (East and West)	18 countries (West)	13 countries (West without Nordic countries)
Country-specific variables:			
Per cent non-Western immigrants	-0.06	-0.27	0.13
(OECD measure)			
Ethnic fractionalization	-0.14	-0.17	0.23
Linguistic fractionalization	0.09	0.02	0.45
Religious fractionalization	-0.07	0.02	0.51*
Good governance	0.90***	0.88***	0.84***
National wealth (GDP per capita)	0.70***	0.57**	0.58**
Gini index	-0.44**	-0.78***	-0.44
Protestant or mixed Protestant and Catholic	0.75***	0.73***	0.51*

^{*}*P*<0.1: ***P*<0.05: ****P*<0.01.

Note: Respondents 18+ years. All variables are fully described in Appendix A. Weighted by a design weight (see note to Figure 1).

Source: European Social Survey 2004; Dumont and Lemaitre (2005); Alesina et al (2003); World Bank (2007); World Bank Governance Indicator Database; and IMF, World Economic Outlook Database.

As shown in Table 1, there are neither significant bivariate effects of the Delhey/Newton measures of *ethnic, linguistic and religious fractionalization*, nor of the new variable of *non-western immigrants*, while the effects of *good governance, national wealth, income equality (the Gini coefficient)* and of a dummy for *Protestantism* are rather strong for both the 24 European and 18 West European countries. Although it is not significant we observe a moderate effect of non-western immigrants on trust (0.27). A comparison between West European countries with and without the Nordic countries, however, shows that the negative relation between non-western immigrants and social trust is caused by the combination of the relatively high ethnic homogeneity and high level of social trust in the Nordic countries. No effect remains if the Nordic countries are taken out of the analysis (column 3; see also Figure 2).

The moderate correlation between non-western immigrants and social trust in Western Europe leads us to make a further test of this relationship, in which the percentage of non-western immigrants is seen in combination with the variables of the Delhey–Newton model, and where we at the same time are able to control for individual-level variables. This is done with multilevel analysis. With only 18 cases at the macro-level available though, it is not advisable to



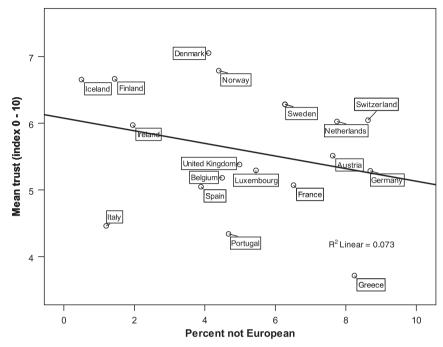


Figure 2: Correlation between social trust and percentage belonging to ethnic minority groups in 18 West European countries. Country aggregates.

Note: Respondents 18 + years. Analysis is weighted by a design weight (see note to Figure 1). *Source*: European Social Survey 2004; Dumont and Lemaitre (2005).

include more than one or two independent variables at the country level in each model at a time. By running different combinations, we aim for the best possible model in terms of explained variance including one or two variables that are statistically significant at the 0.05 level.⁵ However, with only 18 countries even this analysis can be questioned, not least because of problems with multicollinearity, that is correlated independent variables at the country level. The results of Model 4 in Table 2 must therefore be seen as tentative.

As appears from Table 2, there are still no significant effects of non-western immigrants. The final Model 4 shows the 'best' two-level model. It explains more than 80 percent of the variance at the country level and is found after running a number of models with different combinations of variables, including one or two independent variables at the country level. Among the country-level variables, only 'good governance' is included. All together, 'good governance' seems to be by far the most important variable behind the variations in social trust found in the countries of Western Europe.

Fable 2: Ethnic heterogeneity and social trust in Western European countries. Multilevel analysis (random intercept). Unstandardized regression coefficients and random effects

	Model 0 Model I Empty model Bivariate effec (with only a constant from per cent term included) non-western	Model I Bivariate effect from per cent non-western	Model 2 Individual level characteristic	Model 3 Variables from Model 1 and 2	Model 4 Best model with both individual- and country-specific variables ^b
Fixed effects Individual level variables: Gender (female) Age (in tens) Ethnic minority Education (0-6) Student			0.01(NS) 0.07*** -0.21*** 0.21***	0.01(NS) 0.07*** -0.21*** 0.21***	0.01(NS) 0.07*** -0.21*** 0.21***
Country-level variables (minimum to maximum effects): Per cent non-western immigrants (OECD) ^a Good governance ^a	ffects): —	-0.77(NS)		-0.72(NS)	2.34***
Random effects Variance at individual level Variance at country level Intra-class correlation (country)	3.56*** 0.83***	3.56*** 0.82***	3.47*** 0.67*** 0.16	3.47*** 0.66*** 0.16	3.47*** 0.15**
Explained variance at individual level Explained variance at country level		%0	3% 19%	3% 20%	3% 82%

'The variable is rescaled to a range of 1, which means that the regression coefficient displays the effect on trust when changing the independent The 'best' model is found by analyzing every combination of one and two country-level variables together with the individual-level variables. variable from the minimum to the maximum value in the sample.

Note: Respondents 18+ years. All variables are fully described in Appendix A. Analysis is weighted by a design weight (see note to Figure 1). Source: European Social Survey 2004; Dumont and Lemaitre (2005); World Bank Governance Indicator Database.

*P < 0.05; **P < 0.01; ***P < 0.005



Trends in Ethnic Diversity and Social Trust

There are not only large differences between the European countries in terms of the stock of non-western immigrants, but also in terms of the time and pace of ethnic diversification. In some European countries ethnic diversity developed gradually from the 1960s in response to a growing need for immigrant workers. Other European countries saw a rapid change from the 1980s as a result of the growth in the number of refugees from primarily the Balkan area and the Middle East. A study from 2001 indicates that sentiments are more positive toward immigrants in countries where immigration has been seen as a planned response to a growing demand for foreign labor, than in countries in which growing diversity is a result of an unplanned influx of refugees (Bauer *et al*, 2001; Goul Andersen, 2002). If we translate this result to the area of trust, it may support the hypothesis that it is the rise in the presence of ethnic minority groups that matters more for trust than the size of the permanent stock of immigrants.

The major increase in immigration to Western Europe took place in the 1990s and continued after 2000, whereby family reunification was the single most important factor (Castles and Miller, 2009). The question is whether there are signs that the growth in immigration in these years has affected the level of trust in Western Europe. In other words, are there any indications that the development of social trust varies with the influx of immigrants across Western European countries?

Unfortunately, there is no available information to identify the groups of non-western immigrants in European countries in the 1980s and 1990s. We therefore use the influx of all foreigners as a proxy. This is permissible as we know non-western immigrants constitute a major and increasing portion of the total influx of foreigners into many West European countries in the 1990s (OECD, 2006). The independent variable is thus constructed as the change in the growth of the average influx of foreigners from one period to another, namely from 1980–1990 to 1991–2004 (see Appendix C). Unfortunately Austria, Portugal and the United Kingdom are absent in terms of the influx of foreigners, as we have insufficient information about the influx of immigrants in the 1980s into these countries.

The database for social trust is the second wave of WVS around 1990 and the second round of the Eurobarometer in 2004. In both cases we use the standard measure, whether 'most people can be trusted'. There is, however, a slight difference between the two measures, as Eurobarometer permits respondents a spontaneous 'it depends' answer. In most countries only a small minority of respondents chose that option. Nevertheless, to make the comparison as accurate as possible, these answers are distributed proportionally into the two main categories. For obvious reasons Norway and

Switzerland are not present in the Eurobarometer data. For these two countries we use the parallel question on trust from the International Social Survey Programme 2004. Also in this case the response categories are slightly different as they are extended from two to four. Hence the two positive response categories ('always can be trusted' and 'usually can be trusted') are merged. Greece and Luxembourg are not present in the second round of WVS. For these two countries results from the third wave are used (around 1999).

Figure 3 relates the change in the influx of foreigners to the change in social trust from 1990 to 2004. As appears, there is no support to the hypothesis of a relationship between the growth in immigration across countries in Western Europe and social trust.⁷

There is also no difference between 'old' and 'new' immigrant countries. In some European countries ethnic diversity has developed gradually since 1945, partly related to a growing demand for foreign labor, partly related to the status of those countries as colonial or former colonial powers. Examples of

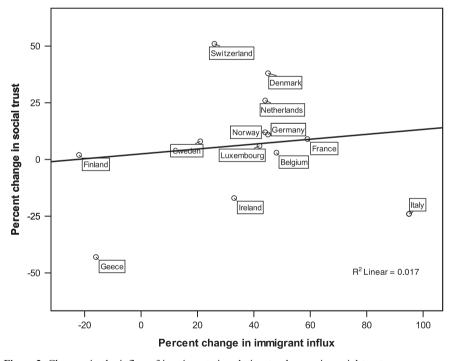


Figure 3: Changes in the influx of immigrants in relation to changes in social trust. *Note*: Weighted by a design weight (see note to Figure 1). *Source*: Hooghe *et al* (2008); World Value Studies 1981, 1990, 1999; Eurobarometer (no. 62) 2004; International Social Survey Programme (Citizenship) 2004.

these 'old' immigrant countries are Belgium, Switzerland, France, the United Kingdom and West Germany, where more than 5 per cent of the population in 1975 is estimated to be foreign residents or foreign born (Castles and Miller, 1998, Chapter 4). In other European countries growing ethnic diversity has been a result of an unplanned influx of refugees since the 1980s. Examples of these are Austria, Sweden, Norway and Denmark, countries that in the 1980s and 1990s, through the so-called humanitarian channel, received growing numbers of refugees. Also Greece and Ireland received many foreigners during that period, mainly through the so-called work channel. Since the late 1990s, Spain, Portugal and Italy have been added to the list of new European immigration destinations (OECD, 2008).

If we take a look at these groups of countries in relation to the development of trust, we get no clear picture. Although we see a decrease in trust in some of the new immigration countries, namely Greece, Italy and Ireland, at the same time we see an increase in countries like Austria, Denmark and Spain. The same mixed picture is true for the old immigration countries.

Nor do we observe any effect on trust from immigration's being a hot issue on the political agenda. We could well expect social trust to be affected in countries where changes in the ethnic composition has been accompanied by a rise in anti-immigrant movements and parties, namely in Austria, France, Norway and Denmark, where such parties have been represented in national parliaments since the 1990s. However, in three of the four countries, social trust increases to a level above the average for all the included countries.

Up to now, nothing indicates that the rise in the presence of ethnic minority groups in itself causes lower trust. We can, however, not exclude the possibility of long-term effects, just as we must assume that effects on trust will depend on how European governments in the future will handle issues around immigration and integration.

Ethnic Diversity and Trust at the Local Level

Even if it is not possible to show effects of ethnic diversity on trust at the national level, such effects may appear at the local level, most likely in areas of major European cities where non-western immigrants are concentrated. With the groups of non-western immigrants still rather small in most European countries, the possible effects of their presence are still so limited as to not be seen at the national level. This could, however, change in parallel with the continuous growth of the foreign-born population (Castles and Miller, 2009). There are thus good reasons to supplement studies of the relationship between ethnic diversity and trust at the national level with studies at the local level. If

we find a negative relationship at the local level, this might be an indication of what later on could appear at the national level. However, rather than an effect of diversity, less trust might be an effect of segregation (Uslaner, 2009), and thus an indication of the failure of policies directed at integrating ethnic minorities into society.

We include eight European capital cities in the investigation: Paris, London, Vienna, Copenhagen, Oslo, Stockholm, Amsterdam/Rotterdam and Berlin. Amsterdam and Rotterdam are merged. All of these cities have a large contingent of non-western immigrants who tend to concentrate in certain neighborhoods.

The database is the European Social Survey: 2002. Besides a regional variable including these cities, the ESS 2002 also includes a variable, where the respondents are asked to describe the area they currently live in – whether it is an area where almost nobody, where some or where many people are of a different race or ethnic group (see Appendix A). We use this variable as a proxymeasure, as we have no objective information about the neighborhood the respondents live in. As it is a subjective assessment, one may of course fear that two persons living in the same area may give a different response to the question. By choosing capital cities we hope, however, to reduce that uncertainty, as we expect inhabitants of these cities to have some common understanding of what is meant by an area in which live 'many people of a different race or ethnic group', compared to areas where almost nobody or only some of a different race or ethnic group live. We cannot, however, eliminate this uncertainty and therefore have to take the individual city-results 'with a grain of salt'.

We exclude ethnic minority groups from the data set here, because we want to examine the possible effects on trust of the ethnic majority living in the same area as ethnic minority groups, and in the analysis therefore the variable 'ethnic minority' (see Appendix A) is not included.

The presence of ethnic minority groups is, however, not the only factor that may influence trust. We know that education is a powerful predictor of trust, and as we also may assume that ethnic majority members living in ethnically mixed areas are less educated than ethnic majority members living in other areas, we should control for this factor together with the other background variables of age and gender (see Appendix A).

Furthermore, several studies in the United Kingdom have shown that it is important to include and control for neighborhood characteristics as well (Letki, 2008; Laurence and Heath, 2008). The areas non-western immigrants concentrate in are often described as 'deprived areas'. Rather than ethnic diversity, it might thus be the specific characteristics of the neighborhood that drive down social trust. Among the characteristics of a deprived area are higher crime rates, more unemployment, poorer health and economy, less social network, more widespread political powerlessness and greater insecurity. As we



have no exact information on these neighborhood characteristics, we include some variables in the analysis, which we believe are able to 'capture' effects of such context parameters. These variables are: (1) whether the respondent or a household member has fallen victim to a burglary or assault in the past 5 years; (2) whether the respondent is unemployed (divided into two categories 'looking for work' and 'not looking for work'); (3) whether the respondent is disabled or sick; (4) how the respondent estimates his/her own health and financial situation; (5) the respondent's income; (6) three social network variables: (a) how often the respondent meets with friends, relatives and work colleagues; (b) whether the respondent is able to borrow money to make ends meet; (c) participation in organizations; (7) political efficacy, both internal and external; and (8) how safe the respondent feels walking alone in the neighborhood (see Appendix A).

The hypothesis is thus that some of the effects can be explained partly by individual characteristics and partly by the fact that non-western immigrants tend to establish themselves in poorer parts of town, where the crime rate is higher, where both individual and collective resources are fewer, and where more people fear crime.

Unfortunately Vienna and Paris cannot be brought into the aggregate analysis, as the French data have no comparable variables for income, and the Austrian data set no comparable variable for education.⁸ The results of the aggregate analysis are shown in Table 3.

In Model 1, controlled only for different levels of trust, we observe that respondents living in neighborhoods with many people of different race/ethnic groups typically score 0.40 points lower on the social trust scale than respondents who reportedly live in neighborhoods with almost no immigrants. However, step by step this effect is reduced to 0.14 and ends up being insignificant, which shows that the initial effect is mainly to be explained by a combination of individual and neighborhood characteristics.

We also observe that the included variable in Model 4 – do you feel safe walking alone in the local area after dark – explains a large part of the remaining effect of living in a neighborhood with many people of a minority race/ethnic group. In our model it is an indication of a relationship between living in the respective area and social trust. Another interpretation would be, however, that it is the presence of many of a different ethnic group in these areas, which induces negative answers to the question if 'you feel safe ...'. If that was the case we would expect that a variable measuring whether respondent think that immigrants make the country's crime problem worse would have a similar effect in the model as the variable 'do you feel safe'. We have tested this, but it appears that the variable measuring the feelings of crime among immigrants explains nothing (not shown). All things considered, it supports the assumption of 'do you feel safe' as a control variable and thus an interpretation that it is

Table 3: Effect on social trust of living in an area with many or some members of a different ethnic group. Unstandardized regression coefficients and explained variance. N = 1296

	Model 1 Dummy variables for urban areas	Model 2 + background variables	Model 3 +more explanatory variables	Model 4 + Feel insecure in local area after dark
City dummies:				
London	-1.91***	-1.90***	-1.55***	-1.41***
Berlin	-1.99***	-2.04***	-1.45***	-1.37***
Amsterdam	-1.62***	-1.57***	-1.17***	-1.08***
Stockholm	-0.61***	-0.66***	-0.48***	-0.45***
Oslo	-0.57***	-0.61***	-0.52***	-0.50***
Copenhagen (ref.)	_	_	_	_
Respondent's estimate of how many n	nembers of a differ	ent ethnic group live	in the area:	
Many	-0.40**	-0.33*	-0.26*	-0.16(NS)
Some	-0.18(NS)	-0.14(NS)	-0.13(NS)	-0.10(NS)
Very few (ref.)	_	_	_	_
Gender (female)	_	0.30***	0.32***	0.45***
Age (in tens)	_	0.07*	0.15***	0.15***
Education (0–6)	_	0.12***	0.04*	0.03(NS)
Student	_	0.20(NS)	0.12(NS)	-0.08(NS)
Unemployed, looking for work	_	_	0.15(NS)	0.15(NS)
Unemployed, not looking for work	_	_	-0.64*	-0.61*
Disabled	_	_	-0.15(NS)	-0.20(NS)
Retired	_	_	-0.08(NS)	-0.04(NS)
Low income	_	_	0.03(NS)	0.05(NS)
Health (1–5)	_	_	-0.10(NS)	-0.08(NS)
Difficult to live on present income (1–4)	_	_	-0.05 (NS)	-0.05 (NS)
Borrow money to make ends meet (1–5)	_	_	0.05(NS)	0.04(NS)
Assault or burglary in last 5 years	_	_	-0.09(NS)	-0.08(NS)
Social network (1–7)	_	_	0.18***	0.17***
Organizational network (1–3)	_	_	0.10(NS)	0.08(NS)
Internal political efficacy (1–5)	_	_	0.02(NS)	-0.00(NS)
External political efficacy (1–5)	_	_	0.36***	0.34***
Feel unsafe walking alone after dark	_	_	_	-0.29***
R^2	0.17	0.19	0.25	0.26
Adjusted R^2	0.17	0.19	0.24	0.25

^{***}*P*<0.005; ***P*<0.01; **P*<0.05.

Note: Respondents 18+ years. Weighted analysis (see note to Figure 1). All variables are fully described in Appendix A.

Source: European Social Survey 2002.



Table 4: The effect on trust of living in areas with *many* of different ethnic groups for each of six big cities. Linear regression (OLS). Unstandardized regression coefficients

	Model 1 Ethnic minority in local area	Model 2 + background variables	Model 3 + more explanatory variables	Model 4 + Feel unsecure walking after dark
Respondent's own estimate of nu London: (N=121)	mber of people bel -0.13(NS)	onging to ethnic -0.15(NS)	minorities in le 0.05(NS)	ocal area: 0.21(NS)
Berlin: (<i>N</i> = 145)	0.56(NS)	0.56(NS)	0.42(NS)	0.20(NS)
Amsterdam and Rotterdam: $(N=179)$	-0.19(NS)	-0.20(NS)	-0.18(NS)	-0.05(NS)
Stockholm: (N = 287)	-0.96**	-1.00***	-0.82*	-0.66*
Oslo: (N=351)	-0.42^{\dagger}	-0.46*	-0.33(NS)	-0.33(NS)
Copenhagen: $(N=213)$	-0.60*	-0.56(NS)	-0.23(NS)	-0.12(NS)
Wien: (N = 407)	-0.36(NS)	-0.41^{\dagger}	-0.27(NS)	-0.12(NS)
Paris: (N = 410)	-0.54*	-0.59**	-0.45*	-0.18(NS)

^{***}P < 0.005; **P < 0.01; *P < 0.05; †<0.10.

Note: Respondents 18 + years. Weighted analysis (see note to Figure 1).

Source: European Social Survey 2002.

the character of the neighborhood that matters most in this context, not the persons living in it.

With the reservation that these results are survey-based, nothing therefore really indicates that it plays a significant role for trust whether one lives in an area with few or many people of a different ethnic group.

Are there variations between the cities concerning the effect of living with many people of a different ethnic group? A preliminary analysis shows that there is a statistically significant difference at the 0.10 level, and we therefore make a separate analysis for each capital city. As the number of respondents is rather small in these separate analyses, we recode the independent variable to a dummy, where the categories of living in an area with some and almost nobody of a different ethnic group are collapsed (Table 4).

As it appears, there are effects in both directions, but only in Stockholm is there a statistically significant effect. Because of the relatively small number of respondents, we should not overestimate the differences between the cities. What we, however, can conclude is that even if there might be in some cities an effect on trust of living in ethnically mixed neighborhoods, it is not to be seen as a general phenomenon at the local level in Europe.

Conclusion

Generally, the conclusion of Delhey and Newton (2005) and others of a negative relationship between ethnic diversity and social trust cannot be confirmed for Europe as a whole. For Western Europe, however, we observe a bivariate though not statistically significant effect. This effect can be explained by the combination of high-level trust and relatively low-level ethnic heterogeneity in the Nordic countries, for if the Nordic countries are taken out of the analysis, no effect remains. Further analysis, however, indicates that it is 'good governance' that is by far the most important variable behind the variation in social trust in the countries of Western Europe.

As ethnic diversification is a relatively new phenomenon in many European countries, it might be expected that, rather than the stock of immigrants from non-western countries, it is the growth in the presence of ethnic minority groups in society that matters most for trust. This hypothesis is, however, not confirmed if we compare the growth of the immigrant population in West European countries with the development of trust. Nor do we observe differences between 'new' and 'old' immigrant countries, just as it does not seem to affect trust whether the issue of immigration has become a major source of political conflict or not.

At the local level, the question of ethnic heterogeneity and social trust is examined in eight capital cities on the basis of survey data. Even if we have to accept the results tentatively, it seems safe to say that it is not generally the case in Europe that trust is less among the ethnic majority population living in ethnically mixed areas. These results are found after a control for relevant individual background variables and the application of some proxies for neighborhood characteristics. The findings of Putnam and others for the United States is thus not supported for the local level in Europe.

All told, ethnic diversity measured in terms of the size of non-western immigrants does not appear to be associated with lower levels of trust in Europe. In some areas and some countries it may be the case, but it cannot be seen as a general phenomenon and therefore not as a general problem. That said, we should add that of course we cannot exclude long-time effects on trust, just as the development of trust is likely to depend on how the EU and European governments in future handle problems about assimilation and integration.



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Notes

- 1 It was not until the mid-1990s that steps were taken to improve the comparability of the statistics on migration (Lemaitre and Thoreau, 2006). Since 2000, it has been possible to identify foreign and foreign-born residents for virtually all OECD countries. The growing number of illegal immigrants is, however, not covered in the statistics.
- 2 Statistics on the foreign-born population includes both citizens and non-citizens, which, owing to different naturalization practices in the countries, gives the most accurate picture of the immigrant population. Unfortunately descendants of immigrants are not included because only in a few countries are descendants registered officially. The variable for non-western immigrants therefore underestimates the actual proportion of ethnic minorities. This has, however, little effect on the distribution of non-western immigrants between the countries.
- 3 Of course Norway, Switzerland, Iceland and some other small European states (Andorra, Liechtenstein and so on) outside EU25 belong to the category of western countries. This has, however, little practical significance, mostly in terms of Norwegian immigrants to Denmark and in particular to Sweden, and we have been able to correct for that.
- 4 The intervals are constructed by multiplying the standard error by 1.4. This method assures that if two countries do not have overlapping intervals, they will have different mean trust in the population at a 0.05 significance level (Goldstein 1995, pp. 36–37).
- 5 In the different regression models we also study scatter plots of partial regression coefficients to look for influential cases, outliers, non-linear effects and so on. In a few cases at the country level this check becomes very important.
- 6 Some of the tested country-level variables will, in a model together with the variable for good governance, obtain a significance level of around 0.05. This applies both to the variable for percentage of non-western immigrants and to the variable for a Protestant country, but a thorough investigation of these effects shows that it is really a Nordic-country effect, which is behind just as was seen in the bivariate analysis. Thus, for instance, the inclusion of a dummy

- variable for Nordic countries in the statistical model will explain a large part of these effects and leave them clearly insignificant.
- 7 For technical reasons, Spain cannot be shown in the figure, because the influx of foreign-born persons into Spain has increased sevenfold. However, this does not influence the result.
- 8 This appears in the country-specific reports that can be downloaded from the ESS homepage: http://www.europeansocialsurvey.org/.

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Appendix A

List of variables

Dependent variables

Social trust (one item). 'Most people can be trusted' or 'You can't be too careful' (scale from 0-10).

0 =You can't be too careful; 1 =Most people can be trusted.

Social trust (index measured as a mean of two items; the one above and the following) 'Do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?'

0 = Most people would try to take advantage of me. 10 = Most people would try to be fair.

Independent variables at the country level

Non-western immigrants. See Appendix B.

Frac. ethnic. Ethnic fractionalization (from Alesina et al, 2003).

Frac. lang. Linguistic fractionalization (from Alesina et al, 2003).

Frac. rel. Religious fractionalization (from Alesina et al, 2003).

Good governance. Sum index based on five variables from the World Bank Governance Database concerning voice and accountability, political stability/ no violence, government effectiveness, rule of law and control of corruption (World Bank, 2004) (http://info.worldbank.org/governance/wgi/index.asp). See also Kaufmann *et al* (2006).

National Wealth (GDP per capita, US Dollars). International Monetary Fund, World Economic Outlook Database, April 2008 (http://www.imf.org/external/pubs/ft/weo/2008/01/weodata/index.aspx).

Income equality (Gini index). World Bank. *World Development Indicators* 2007 (except for Iceland: Statistics Iceland, Weekly Web Release, 3 February 2005).

Protestantism defined as dominant Protestant country or mixed Protestant-Catholic country (Finland, Norway, Sweden, Denmark, Iceland, the United Kingdom, Germany, the Netherlands, Switzerland and Estonia).

Independent variables at the individual level

Variables with no explanation of coding are dummy variables where '1' is indicating the category mentioned and '0' is the reference category.

Gender. 1 = Male; 2 = Female.

Age. In years or tens of years.

Education level. 'What is the highest level of education you have received?' Ordinary scale from 0 to 6.

0 = No completed primary education; 1 = Primary or first stage of secondary; 2 = Lower secondary or second stage of secondary; 3 = Upper secondary; 4 = Post-secondary, non-tertiary; 5 = First stage of tertiary; 6 = Second stage of tertiary.

In education. 'Which of these descriptions applies to what you have been doing the last 7 days?' In education.

Ethnic minority

The identification is based on five questions: (1) 'Were you born in (country)?' (2) 'In which country were you born?' (3) 'Was your father born in (country)?' (4) 'Was your mother born in (country)?' (5) 'In which country was your mother born?' Belonging to an ethnic minority are: (1) those born outside EU 25, the Nordic countries, Canada, Australia, New Zealand, Andorra,



Liechtenstein, Monaco, San Marino, Switzerland and the Vatican State and whose parents were not born in these countries; and (2) the descendants whose mother was born outside the above-mentioned countries.

Respondent's own estimate of number of people belonging to ethnic minority groups in local area

'How would you describe the area where you currently live?' 1 = An area where almost nobody is of a different race or ethnic group from most (country) people; 2 = Some people are of a different race or ethnic group from most (country) people; 3 = Many people are of a different race or ethnic group.

Victim of assault or burglary

'Have you or a member of your household been the victim of a burglary or assault in the last five years?'

1 = No; 2 = Yes (transposed in comparison with original variable).

Unemployed, looking for a work. 'Which of these descriptions applies to what you have been doing the last 7 days?' 'Unemployed looking for a job'.

Unemployed, not looking for work. 'Which of these descriptions applies to what you have been doing the last 7 days?' 'Unemployed not looking for a job'.

Permanently disabled or sick

'Which of these descriptions applies to what you have been doing the last 7 days?' 'Permanently sick or disabled'.

Respondent's health. 'How is your health in general? Would you say it is ...' 1 = Very bad; 2 = Bad; 3 = Fair; 4 = Good; 5 = Very good.

Respondent's financial situation

'Which of the descriptions on this card comes closest to how you feel about your current household income?'

1 = Living comfortably on present income; 2 = Coping on present income; 3 = Difficult on present income; 4 = Very difficult on present income.

Respondent's income

Low income defined as below half the median income of country.

How often meet with friends etc

'How often do you meet socially with friends, relatives or colleagues?'

1 =Never; 2 =Less than once a month; 3 =Once a month; 4 =Several times monthly; 5 =Once a week; 6 =Several times weekly.

Respondent is able to borrow money

'If for some reason you were in serious financial difficulties and had to borrow money to make ends meet, how difficult or easy would that be?'

1 = Very difficult; 2 = Quite difficult; 3 = Neither easy nor difficult; 4 = Quite easy; 5 = Very easy.

Participation in organizations

Index constructed from a series of variables concerning participation and voluntary work in different organizations – sport clubs, cultural organization, trade union and so on.

0 = No participation and no voluntary work; 1 = Participation, but no voluntary work; 2 = Voluntary work.

Internal political efficacy

Index based on three variables concerning: 'How often does politics seem so complicated that you can't really understand what is going on?'; 'Do you think that you could take an active role in a group involved with political issues?'; 'How difficult or easy do you find it to make your mind up about political issues?' (values from 1 to 5).

External political efficacy

Index based on two variables concerning: 'Do you think that politicians in general care what people like you think?'; 'Would you say that politicians are just interested in getting people's votes rather than in people's opinions?' (values from 1 to 5).



Appendix B

See Table B1.

Table B1: Foreign-born citizens 2002–2003. Percentage of total population

	Total population	Citizens born outside EU25, North America and Oceania ^a	Percentage citizens born outside EU25, North America and Oceania
Austria	8 000 000	610 231	7.6
Belgium	10 200 000	458 159	4.5
Switzerland	7 200 000	621 252	8.6
Czech Republic	10 200 000	101 193	1.0
Germany	82 200 000	7 145 983	8.7
Denmark	5 300 000	217 677	4.1
Estonia ^b	1 400 000	210 000	14.0
Spain	39 700 000	1 544 627	4.0
[taly ^c	57 000 000	700 000	1.2
Finland	5 200 000	74 930	1.4
France	58 700 000	3 824 705	6.5
United Kingdom	58 600 000	2 921 466	5.0
Greece	10 600 000	873 926	8.2
Hungary	10 200 000	224 372	2.1
Ireland	3 800 000	74 307	2.0
Ísland ^d	279 000	1500	0.5
Luxembourg	436 000	23 765	5.4
Netherlands	15 900 000	1 232 104	7.7
Norway	4 500 000	197 821	4.4
Poland	38 660 000	496 786	1.3
Portugal	10 200 000	476 581	4.7
Sweden	8 900 000	558 331	6.3
Slovenia ^e	1 900 000	170 000	8.9
Slovakia ^f	5 400 000	270 000	0.5

^aIt is not always possible to state the origin. In these cases foreign-born are listed as 'unspecified'. It has only a significant impact for Germany and Switzerland. In these cases 'unspecified' are distributed proportionally in the categories of born outside EU25, North America and Oceania and born inside these areas. Furthermore, immigrants from Norway to Denmark and Sweden are excluded.

Source: Dumont and Lemaitre (2005); Dumont and Lemaitre (2006); OECD (2008).

^bAlmost all 'foreign born' are from Russia.

^cDumont and Lemaitre (2005)do not include Italy. The number of non-western immigrants is estimated on the basis of Dumont and Lemaitre (2006).

^dDumont and Lemaitre do not include Iceland. The number is estimated on the basis of: Statistics Iceland (2009).

^eIn Slovenia live approximately 207000 foreign-born persons. Around 80 per cent of these come from former Yugoslavia and a few per cent from other countries outside EU25 (Statistical Office of the Republic of Slovenia, http://www.stat.si/eng/novica_prikazi.aspx?ID=652).

^fEstimated on the basis of OECD (2008).



Appendix C

See Table C1.

Table C1: Change in the growth of influx of foreigners 1980-2004 and change in social trust 1990-2004 (per cent)

	Influx 1980–1990 Avg/year	Influx 1991–2004 Avg/year	Change (percentage)	Social trust 1990 (most can be trusted, percentage)	Social trust 2004 (most can be trusted, percentage)	Change (percentage)
Austria				32	48	50
Belgium	40 447	59830	48	33	34	3
Denmark	14 457	20 906	45	58	80	38
Finland	12618	9857	-22	63	64	2
France	64 248	102 378	59	23	25	6
Germany	515 455	748 312	45	36	40	11
Greece	36167	30 538	-16	35	20	-43
Ireland	21 000	27 979	33	47	39	-17
Italy	90 364	175899	95	34	26	-24
Luxembourg	7261	10 343	42	33	35	9
Netherlands	55 434	79 681	44	53	29	26
Norway	16158	23 334	44	65	73	12
Portugal				21	28	33
Spain	21 782	185847	753	34	43	26
Sweden	36 082	43 710	21	99	71	8
Switzerland	72 543	91085	26	43	65	51
UK				4	38	-14

Sources: Hooghe et al (2008); World Value Studies, 1981, 1990 and 1999. Eurobarometer 62 (2004) and ISSP (2004) (Citizenship).