It's Where You're From, It's Where You're At: Culture, Individualism and Preferences for Redistribution*

Olle Hammar†

February 14, 2019

Abstract:
In this study, I analyze the relationship between individualism and preferences for income redistribution and equality, using variation in immigrants' countries of origin to capture the impact of cultural beliefs on individual preferences. Using global survey data for a large number of individuals and countries around the world, I find strong support for the hypothesis that coming from a more individualistic culture is negatively and significantly associated with an individual's preferences for redistribution. The results are confirmed using a variety of robustness checks, including matching estimators and the grammatical rule of a pronoun drop as an instrumental variable. Cultural assimilation analysis, however, indicates that the impact of the cultural origin weakens off with time spent in the new country, and that the culture of origin has no statistically significant effect on an individual's current preferences for redistribution if migration took place before the age of 10.

JEL: D63, O10, Z13
Keywords: Individualism, Collectivism, Preferences for redistribution, Cultural assimilation.

* I am grateful to Ingvild Almås, Niklas Bengtsson, Niclas Berggren, Andreas Bergh, Michael Best, Christian Bjørnskov, Jeremiah Dittmar, Lena Edlund, Mikael Elinder, Vicky Fouka, Jonas Hjort, Markus Jäntti, Wojciech Kopczuk, Ilyana Kuziemko, Eliana La Ferrara, Martin Ljunge, Erzo Luttmer, Suresh Naidu, Therese Nilsson, Kiki Pop-Eleches, Anja Prummer, Rodrigo Soares, David Stasavage, Daniel Waldenström and seminar participants at Columbia University, IFN, IIES, LISER, Lund University, Paris School of Economics, Stockholm School of Economics, Uppsala University, the ASWEDE Conference on Development Economics and the National Conference in Economics for valuable comments and discussions.
† Department of Economics, Uppsala University; Research Institute of Industrial Economics (IFN), Uppsala Center for Fiscal Studies (UCFS) and Uppsala Center for Labor Studies (UCLS). olle.hammar@nek.uu.se

"It ain't where you're from, it's where you're at" – Eric B. & Rakim

1. Introduction

Do individualistic societies foster preferences for income inequality? The question of what determines an individual's *preferences for redistribution*, or *equality*,[1] is an important issue that has received increased attention over the last years. Previous research on this topic has identified large variations in the preferences for redistribution, both among individuals as well as across countries. In particular, *culture*,[2] which can be defined as "the set of values and beliefs people have about how the world (both nature and society) works as well as the norms of behavior derived from that set of values" (Gorodnichenko and Roland, 2017), has been found to be robustly associated with differences in these preferences (Alesina and Giuliano, 2015; Luttmer and Singhal, 2011). Yet, the question of which cultural dimensions that affect preferences for income redistribution and equality has been largely absent in these studies. Thus, what I will do in this study is to explicitly test the impact of one particular aspect of cultural beliefs, namely that of *individualism versus collectivism*, on preferences for income redistribution in a large set of countries around the world using individual survey data from the integrated *World Values Survey* (WVS) and *European Values Study* (EVS) and the *European Social Survey* (ESS).

While individualism versus collectivism has been considered a main dimension of cross-country cultural variation in the psychology literature since long (see, e.g., Heine, 2011; Hofstede, Hofstede and Minkov, 2010), and although Greif (1994) argued for its economic importance already more than 20 years ago, it is only more recently that this cultural dimension has gained recognition in empirical economics (e.g., Berggren and Burzynska, 2015; Gorodnichenko and Roland, 2011, 2015, 2017). Also, most previous studies on individualism highlight its (positive) correlation with, for instance, economic growth (e.g., Gorodnichenko and Roland, 2011). At the same time, however, whether a society is more individualistic or collectivistic, i.e., whether people's self-image is defined in terms of "*I*" or

[1] While there is a difference between preferences for redistribution and preferences for equality, both conceptually and empirically, in my main analysis I will use these concepts interchangeably as the survey data that I use include measures of both. In the sensitivity analysis, however, I will make a distinction between these two questions.

[2] In this paper, I will follow Fernández' (2011) and Alesina and Giuliano's (2015) use of the term *culture* when referring to, e.g., social values and beliefs. This concept, however, is also closely related to what, e.g., North (1991) and Williamson (2000) refer to as *informal institutions*.

"*we*", is also likely to affect how individuals value equality. This potential link, I believe, is something that has not been investigated before, and studying this relationship is thus important for our understanding of the cultural roots of preference differences. Moreover, these preferences will eventually also have implications for actual redistribution and welfare around the world. To my knowledge, this is the first time that the potential effect of cultural individualism on preferences for redistribution, as well as its speed of cultural assimilation, has been tested.

In order to test whether individuals from more individualistic cultures prefer less income redistribution, I will use variation in immigrants' country of origin to capture the impact of culture on individual preferences (i.e., using the so-called "*epidemiological"* approach). As robustness checks, I will also apply *matching* estimators as well as an *instrumental variables* (IV) approach where I use the pronoun drop dummy from Davis and Abdurazokzoda's (2016) new linguistic dataset as an instrument for collectivism. Doing so, I find a robust and statistically significant negative relationship between individualism and preferences for redistribution. Heterogeneity analyses confirm this association for both individuals born in another country and with another nationality, while there seems to be assimilation into the new cultural environment over time as the impact is not persistent for second-generation immigrants. When individuals have spent approximately half their life in the new country, the impact of the country-of-residence culture starts to dominate that of their country of origin. Moreover, I find no statistically significant impact of the culture of origin if migration took place before the age of 10.

The rest of the paper is organized as follows. In the next section I will give a brief overview of some previous empirical research that has been conducted on this topic. Thereafter, I will present the empirical approach and data used in this paper, followed by its main results. Finally, I will also present some robustness and heterogeneity analyses, including a short analysis of cultural assimilation, before I conclude.

2. Previous Research on Culture, Individualism and Preferences for Redistribution

Quite a few earlier studies have tried to use cross-country data to analyze the determinants of preferences for redistribution or equality. However, a problem with many of these studies is that they use too aggregated data and thereby risk averaging away potentially important

individual determinants of preferences. Also, the relationships could be different on the cross-country and individual levels. As a response to this, more recent studies have instead used individual-level survey data and, as such, been able to also take individual characteristics into account. Yet, when trying to establish causal relationships a number of problems, including endogeneity issues such as reverse causality, simultaneity and omitted variables, remain. As a potential solution to some of these problems, the so-called epidemiological approach has become popular over the last years. In such a study, Luttmer and Singhal (2011) find that immigrants' redistributive preferences are positively related to the average preference in their birth countries, and that cultural determinants of preferences for redistribution are persistent across generations. This means that redistributive preferences cannot be fully explained by economic self-interest or by the current economic, political or social environment. In other words, culture seems to matter. But which aspects of culture are important in shaping preferences for redistribution and equality? This is an important question that remains yet to be answered.

The individualism-collectivism cleavage is one such particular aspect of culture, which has been claimed to be the most important cross-country dimension in cultural psychology (Heine, 2011), as well as the primary cultural dimension affecting long-run economic growth (Gorodnichenko and Roland, 2011, 2012, 2017). While individualism emphasizes personal freedom and achievement, collectivism emphasizes embeddedness of individuals in larger groups. Because an individualistic culture implies stronger preferences for personal freedom, it seems plausible that individuals in such a culture should prefer less income redistribution, and possibly also less income equality. A collectivistic culture, on the other hand, is associated with considerations beyond the individual self, i.e., for the group, and is thus likely to imply more egalitarian preferences. My hypothesis is thus that more individualistic societies should foster preferences for more income inequality, and vice versa.

Other potential determinants of redistributive and equality preferences that have been found significantly (and negatively) associated with preferences for redistribution in previous studies include the individual characteristics of age, being male, income, right-wing ideology, education and employment (Alesina and Giuliano, 2009). Moreover, preferences for redistribution have also been found to be affected by country-level and time-specific determinants such as political regimes (Alesina and Fuchs-Schündeln, 2007), macroeconomic shocks (Giuliano and Spilimbergo, 2014) and changes in income inequality (Olivera, 2015;

Schmidt-Catran, 2016). Finally, social trust has been found to affect income equality in previous studies (e.g., Bergh and Bjørnskov, 2014), and a potential mechanism for this relationship could be via redistributive preferences.

3. Empirical Approach

The idea behind the *epidemiological approach* is that culture affects prior beliefs, which in turn affect economic outcomes (Guiso, Sapienza and Zingales, 2006). As such, it analyzes the variation in outcomes across different (first- or second-generation) immigrant groups residing in the same country, thus making it possible to separate the impact of culture from the, otherwise endogenously determined, economic and institutional environment. The assumptions underlying this approach is that cultural beliefs vary across immigrant groups in a systematic fashion reflecting culture in the country of origin, and that individuals who live in the same country face similar economic and formal institutional environments (Fernández, 2011). As an example of the epidemiological approach, Alesina and Giuliano (2009) and Luttmer and Singhal (2011) have found that culture, as measured by the mean preferences for redistribution in the immigrants' country of origin, appears to be an important determinant of preferences for redistribution.

Following this approach, my baseline estimation equation is given by:

$$Preferences_{ijct} = \beta_0 + \beta_1 IDV_c + \beta_2 Z_c + \beta_3 X_i + \gamma_j + \mu_t + \varepsilon_{ijct}$$

where $Preferences_{ijct}$ is the preferences for redistribution of individual i, living in country j and coming from country c ($c \neq j$); in year t; IDV_c is the individualism index in the individual's country of origin; Z_c is a vector of country-of-origin-level controls; X_i is a vector of individual controls; γ_j and μ_t are country of residence and year fixed effects, respectively; and ε_{ijct} is an error term. The country of residence fixed effect captures the institutional environment and all other unobserved characteristics that apply to all individuals living in that country. It also implies that the cultural variable captures the difference between the social beliefs in the individual's country of origin relative to the country of residence (i.e., the cultural component; see, e.g., Dinesen 2012). The regressions are run using *ordinary least squares* (OLS), but using ordered *logistic* or *probit* regressions yields qualitatively the same

results. The results are shown with robust standard errors clustered on country of origin, but the results also hold with country-of-residence clustering.

In a robustness analysis, I will also use *propensity score matching* to compare individuals with an individualistic culture to similar individuals with the main difference being that they have a collectivistic culture instead. This approach has previously been used in a similar context by, e.g., Dinesen (2012) comparing the level of trust of migrants and comparable non-migrants. Moreover, I will also use an *IV approach* as an alternative identification strategy trying to disentangle the effect of individualism from other cultural components. As instrument for individualism-collectivism I will then use a linguistic measure of the grammatical rule on *pronoun drop*, which was first collected by Kashima and Kashima (1998) and recently expanded by Davis and Abdurazokzoda (2016). As an example of such a pronoun drop you can, e.g., in Spanish say both "*yo hablo"* ("*I speak"*) or only "*hablo"* (dropping the subject pronoun "*yo"*), while such a pronoun drop is not permitted in, e.g., English. The intuition behind this instrument is that more individualistic societies tend to emphasize the importance of the individual in the context of speech and thus have kept the pronoun, while more collectivistic societies more often have dropped it. Previous studies using the pronoun drop as similar instrument are Alesina and Giuliano (2007), Licht, Goldschmidt and Schwartz (2007) and Tabellini (2008). This linguistic feature is then assumed to affect preferences for redistribution only through its relationship with individualism.

4. Data

Most previous studies analyzing the determinants of preferences for redistribution or equality only use data from one specific survey, country or region. I broaden this approach by using a combined dataset of the integrated *World Values Survey* (WVS, 2016) and *European Values Study* (EVS, 2016) and the *European Social Survey* (ESS, 2016), thus obtaining a wide set of countries and individuals from all around the world. The coverage of this dataset is shown in Table 1. In the full sample, the WVS includes 341,271 individuals in 98 countries over the years 1981-2014, the EVS includes 164,997 individuals in 46 countries for 1981-2009, and the ESS includes 336,964 individuals in 36 countries for 2002-2014.

[Table 1 about here]

Most of my analysis will focus on the sample of all individuals with another cultural origin than their country of residence, in which I will include both first-generation immigrants (i.e., individuals with another nationality or country of birth) and second-generation immigrants (i.e., individuals whose mother and/or father has another country of origin). In some heterogeneity analyses, however, I will also compare and analyze these different samples and datasets separately.

As dependent variable, I will use individuals' responses to the survey question on income equality values, i.e., self-selection on a 10-point scale ranging from "*We need larger income differences as incentives*" to "*Incomes should be made more equal*" (EVS, 2016; WVS, 2016). In the ESS (2016), this question is phrased slightly differently, namely as "*The government should take measures to reduce differences in income levels*", with selection on a 5-point scale ranging from "*Agree strongly*" to "*Disagree strongly*". Conceptually, the EVS/WVS question is thus closer to the concept of income equality preferences, while the ESS question is closer to that of preferences for income redistribution. In my baseline analysis, I will use both sources and thus recode this variable into an index ranging from 0 to 100, where a higher value indicates stronger preferences for income equality or redistribution, and vice versa. Sensitivity analyses, however, show that the results do not depend on the wording of this question and hold for each survey separately. Country coverage and the average preferences for redistribution are illustrated in Figure A1 in the Appendix.

The individualism-collectivism explanatory variable is collected from Hofstede, Hofstede and Minkov (2010) and their later extensions,[3] whose individualism index is the most commonly used empirical measure of this cultural dimension (Alesina and Giuliano, 2015; Gorodnichenko and Roland, 2017). This dimension has also been included in recent research using the epidemiological approach, albeit looking at other outcomes (Berggren, Ljunge and Nilsson, 2017; Ljunge, 2017). The individualism index is given at the country level for 102 countries (see Figure 1 for country coverage and individualism values) and assumed to be constant over the analyzed time period, which should be reasonable given that cultures usually change only slowly over time (Williamson, 2000). The index is based on factor analysis using survey questions (initially for IBM employees, but later expanded) and has

[3] Available at https://geert-hofstede.com (2016-09-12).

been validated in a number of studies (see, e.g., Gorodnichenko and Roland, 2017; Hofstede, Hofstede and Minkov, 2010).[4] It ranges from 0 to 100, with 0 representing maximum collectivism, i.e., "a society in which people from birth onwards are integrated into strong, cohesive in-groups, which continue to protect them throughout their lifetime in exchange for unquestioning loyalty", and 100 maximum individualism, i.e., "a society in which the ties between individuals are loose: a person is expected to look after himself or herself and his or her immediate family only" (Hofstede and Minkov, 2013). In the main analysis, immigrants are assigned the individualism index value of their country of origin (i.e., country of nationality, country of birth, mother's or father's country of origin, if different than country of residence).[5] In the heterogeneity analysis, however, I analyze these different samples separately.

[Figure 1 about here]

The individual-level control variables taken from the WVS, the EVS and the ESS include the (recoded) survey measures of trust (1 meaning that the individual answered "*Most people can be trusted*", in contrast to 0 "*Can't be too careful*"), satisfaction with life (ranging from 0 "*Dissatisfied*" to 100 "*Satisfied*"), self positioning in political scale (ranging from 0 "*Left*" to 100 "*Right*"), highest educational level attained (ranging from 0 "*Inadequately completed elementary education*" to 100 "*University with degree*"), employment status (where 0 means "*Unemployed*", 1 "*Other*" and 2 "*Employed*"), monthly household income (in constant euros), a sex dummy (where 0 indicates male and 1 indicates female), age, and number of years lived in country (grouped into less than 1 year, 1-5 years, 6-10 years, 11-20 years, and more than 20 years).

[4] The index formula used by Hofstede *et al*. (2010) to calculate the *individualism index* (IDV) is given by:

$$IDV = 35(MeanQ4 - MeanQ1) + 35(MeanQ9 - MeanQ6) + Constant,$$

where $MeanQX$ is the mean score of question X in the following:

"*In choosing an ideal job, how important would it be for you to:*
1) have sufficient time for your personal or home life;
4) have security of employment;
6) do work that is interesting;
9) have a job respected by your family and friends",

ranked on a 5-point scale, ranging from 1 "*of utmost importance*" to 5 "*of very little or no importance*".

[5] If an individual has both another nationality and country of birth, I simply use their average. Similarly, for second-generation immigrants, I use the average value of both parents. If an individual is both a first- and second-generation immigrant, I use the value of his or her own country of origin.

In the baseline specification, I will control for the level of inequality and income in the country of origin and use fixed-effects for the country of residence. In alternative specifications, however, I will control for a broader set of variables in the country of origin, including the mean level of social trust and equality preferences, ethnolinguistic fractionalization and democratic rights. The sources for these country-level control variables are the following: the actual level of income inequality is measured by the Gini coefficient as collected by Milanovic' (2016) *All the Ginis* (ALG) dataset; the country-level income is measured by the log of GDP per capita (in PPP-adjusted constant 2011 international dollars) taken from the World Bank's (2016) *World Development Indicators* (WDI); the average ethnic, linguistic and religious fractionalization is measured by Alesina, Devleeschauwer, Easterly, Kurlat and Wacziarg (2003); and, as an indicator of democracy and autocracy, I use the revised combined polity score (rescaled into a 0-100 index) from the *Polity IV Project* (Marshall, Gurr and Jaggers, 2016). Moreover, as further controls, the survey values for social trust and equality preferences above are averaged at the country level. The pronoun drop instrument is taken from Davis and Abdurazokzada's (2016) new linguistic dataset (where 1 indicates that the language allows pronoun drop and 0 that it does not), covering 56 languages in 94 countries (the country-level averages of this dummy is illustrated in Figure A2 in the Appendix). Some summary statistics for the different variables and samples are presented in Table 2.

[Table 2 about here]

From Table 2, the immigrant sample seems fairly representative for the full sample, even though it covers a smaller sample of residence countries and years. Pairwise correlations for the individual and country-of-origin-level characteristics are presented in Table A1 in the Appendix. These correlations indicate that, on the individual level, preferences for more equal income distributions seem to be correlated with higher trust, lower life satisfaction, more left-wing political preferences, lower educational, employment and income levels, time spent in the new country, and being female and older. On the country level, focusing on the cultural component, individual preferences for redistribution and equality seem to be negatively related to individualism, social trust, actual income equality, GDP per capita, fractionalization and democratic rights in the immigrants' country of origin. The correlation between individualism index in country of origin and individual preferences for redistribution is

illustrated in the binned scatterplot in Figure 2 (corresponding correlations separated into the different immigrant samples are shown in Figure A3 in the Appendix). However, these are only simple correlations and, hence, I turn now to the regression results.

[Figure 2 about here]

5. Results

I first run a standard OLS regression estimating individuals' preferences for redistribution by the level of individualism in their country of residence (including the full sample of both immigrants and non-immigrants) and a set of individual and country-level controls. These results are presented in Table A2 in the Appendix (together with the same estimation using ordered logistic and ordered probit regressions, respectively, instead of OLS), and show a negative and statistically significant relationship between individualism and preferences for redistribution also when controlling for a large number of individual and country-of-residence-level characteristics. Most of the individual variables also remain statistically significant and in the same direction as the pairwise correlations, except for trust, which is now found to have a negative conditional correlation with redistributive preferences. When controlling for the other variables, income inequality in the country of residence is positively related to preferences for redistribution and equality, while country-of-residence-level income has a positive, but not statistically significant, association with preferences for income redistribution.

However, since all individuals living in a country are assumed to have the same individualism-collectivism cultural beliefs in the regression above, I cannot control for country fixed effects, and this specification could potentially suffer from a number of endogeneity issues. Thus, I now turn to the epidemiological approach, exploiting variation in immigrants' country of origin to better capture variation in the cultural dimension of individualism versus collectivism within the country of residence, i.e., applying country-of-residence fixed effects to control for the economic and institutional environment in which these individuals live. In particular, this should solve for any unobservable characteristics at the country-of-residence level, as well as for potential reverse causality since the individual preferences of a person living in a new country are not very likely to affect the individualism-

collectivism ranking of his or her country of origin. These OLS regression results are presented in Table 3.[6]

[Table 3 about here]

The results in Table 3 show a negative and statistically significant relationship between individualistic cultural beliefs in the country of origin and immigrants' preferences for income redistribution, even after controlling for their country of residence. That is, more individualistic cultures seem to be associated with less egalitarian values, where an increase of 10 percentage points on the individualism index is associated with a decrease of approximately 0.6-0.8 percentage points on the preferences for redistribution scale. Also, preferences for redistribution are found to be statistically significantly related to having lower life satisfaction, political preferences more to the left, lower levels of education, employment and income, more years spent in the new country, and being female and old. It could also be noted that none of the other country-of-origin-level variables are statistically significant (except for fractionalization, which is marginally significant), when controlling for the cultural individualism impact. The last column of Table 3 shows the same results but where the values of all variables have been standardized to having mean 0 and standard deviation 1. In other words, a one standard deviation increase of the individualism index (which corresponds, e.g., to the difference between Sweden with an individualism index value of 71 and the United States with a value of 91) is associated with a 0.05 standard deviation decrease of the preferences for redistribution measure (corresponding roughly to, e.g., the difference between the average redistributive preferences value in Sweden, which is 62.3, and in Poland, which is 60.6). This standardized coefficient magnitude is similar to that of household income and the life satisfaction measure, and the only variables with larger standardized coefficients are political preferences and the education level.

6. Robustness Checks

6.1 Matching Estimators

[6] Running ordered logit or probit regressions instead of OLS yields qualitatively the same results (results available upon request).

As a first sensitivity analysis, I will check if the results are robust to using matching as an alternative estimation strategy. I hence use the propensity-score matching method, where I compare individuals that are similar in a number of observable characteristics but differ in their individualism versus collectivism cultural belonging. I thus create a dummy variable in which I define individuals that have a country-of-origin individualism index value above 50 as individualists and those with a value below 50 as collectivists. For a comparison of the mean values in the two samples, see Table A3 in the Appendix. The estimation results when matching and comparing immigrant individualists to collectivists are shown in Table 4.

[Table 4 about here]

As seen in Table 4, using this matching method I also find a negative and statistically significant relationship between individualism and preferences for redistribution. More specifically, the average treatment effect of having an individualistic, as opposed to collectivistic, culture is a reduction of approximately 1.3 percentage points on the preferences for redistribution scale.

6.2 The Pronoun-Drop IV Approach

Although none of the included country-of-origin controls are significant in the OLS regressions above, it could still be the case that there are some other omitted or unobserved variables driving the results. As an alternative strategy, I will thus use the pronoun-drop dummy as an instrument for individualism versus collectivism, i.e., to check whether it is actually individualism, rather than some other cultural variable in the country of origin, that drives the results. The assumption here is that the grammatical rule on pronoun drop affects preferences for redistribution only through its language-culture relationship, i.e., through its association with individualistic-collectivistic cultural beliefs. The results from these *two-stage least squares* (2SLS) regressions are shown in Table 5, where I have used the individual responses to the "*language at home*" question in the WVS, the EVS and the ESS, combined with pronoun-drop information from Davis and Abdurazokzoda's (2016) new linguistic dataset.

[Table 5 about here]

The 2SLS regression results in Table 5 show that i) the pronoun drop seems to be a valid instrument for individualism-collectivism in the respect that it is negatively and statistically significantly related to the individualism index, and ii) using this instrument confirms the baseline results of a statistically significant negative association between individualism and an individual's preferences for redistribution. Here, the estimated impact is even stronger than for the OLS results, indicating that an increase of 10 percentage points on the individualism index is associated with a decrease of approximately 3 percentage points on the preferences for redistribution scale. Moreover, since the baseline results are confirmed also when using this alternative individualism-collectivism measure, potential measurement error in the main survey-based individualism index does not seem to be driving the results.

6.3 Heterogeneity Analyses

Using the epidemiological approach, another robustness check includes analyzing the different surveys separately (see Table A4 in the Appendix). The results hold for both surveys separately, but the individualism coefficient size is somewhat larger for the integrated EVS and WVS sample than for the ESS. Since the wording of the survey question differs between these two samples, this indicates that the association between individualism and preferences for equality is slightly stronger than the association with preferences for redistribution.

Furthermore, I can also analyze the impact within different immigrant subsamples. These results are presented in Table 6.

[Table 6 about here]

The results in Table 6 show that the negative relation between individualism and preferences for income redistribution is robust to looking separately on immigrants who have emigrated from a more individualistic culture relative to their country of destination, as well as from a relatively more collectivistic culture, respectively; from another country within the same geographical region, and those who have emigrated from another geographical region, respectively.[7] The relationship, however, is strongest among those who have migrated from one region to another, and to a relatively more collectivist region. The association is also robust to looking only on the sample of first-generation immigrants (i.e., those with another

[7] Using the United Nations' classification of regions.

nationality and/or country of birth than their country of residence). Analyzing the sample of second-generation immigrants separately, however, there seems to be no statistically significant impact of individualism in the parents' country of origin on their children's preferences for redistribution. The corresponding results for an even finer division of the immigrant subsamples are shown in Table A5 in the Appendix, and the standardized estimated coefficients of these regressions are illustrated in Figure 3. These results indicate the existence of an assimilation or integration process such that the cultural impact of individualism on redistributive preferences is not persistent across generations and possibly weakens off with time spent in the new institutional and cultural environment. Notably, this insignificant relationship among the second-generation immigrants is in contrast to what has been found by, e.g., Luttmer and Singhal (2011).

[Figure 3 about here]

7. Cultural Assimilation Analysis

As indicated by the results above, the association between country-of-origin individualism and individual preferences for income inequality is not found statistically significant among second-generation immigrants. A potential explanation for this is that, with time spent in the new cultural environment, immigrants might also adapt the culture of their new country of residence (i.e., direct *horizontal* socialization, as opposed to *vertical* parental socialization; see, e.g., Bisin and Verdier, 2011). In order to check whether or not this seems to be the case, I will, instead of the country-of-residence fixed effects, include the country-of-residence individualism index as well as income and inequality controls in my baseline regression. Because such cultural assimilation is also likely to depend on the relative time that the individual has lived in the new environment, I will calculate the country-of-residence life-share as the total number of years lived in the country-of-residence divided by the individual's age. Since the number of observations for each year lived in the country is quite limited, I will group this variable into three categories: those immigrants that have lived i) less than one third, ii) between one and two thirds, and iii) more than two thirds of the life in the new country of residence. The results for these three groups are presented in Table 7 and illustrated by their standardized coefficient estimates in Figure 4.

[Table 7 about here]

While these cultural assimilation results are admittedly very crude, I believe that they do give some support to the idea that immigrants are assimilated or adapted to their new cultural environment quite "rapidly", i.e., after spending approximately the same amount of time in the new country as spent in the origin country. Moreover, the country of residence impact seems to be relatively stronger, with a coefficient size that is almost the double, compared to the culture of origin impact.

[Figure 4 about here]

Finally, I will also perform the same cultural assimilation analysis as above, but instead separating the sample by the individuals' age when they migrated. These results are presented in Figure 5, and indicate that there seems to be no statistically significant impact of the culture of origin on current preferences for redistribution if migration took place approximately before the age of 10. Culture in the current country of residence, however, seems to have a statistically significant impact regardless of the age at migration.

[Figure 5 about here]

8. Conclusion

In this study, I have analyzed the association between individualism versus collectivism and individuals' preferences for income redistribution and equality, using variation in immigrants' country of origin to separate the effect of culture from the otherwise endogenously determined institutional environment. Doing so, I have found strong support for a negative relationship between individualistic cultural beliefs and redistributive preferences, i.e., individualistic societies seem to foster preferences for income inequality. These results were confirmed using matching estimators as well as the grammatical rule on pronoun drop as a linguistic instrument for individualism-collectivism. Heterogeneity analyses also showed that the cultural impact of individualism on redistributive preferences is not significantly persistent over generations. Moreover, the impact of cultural origin only seems to be statistically significant if migration took place after the age of 10. More research would be needed in order to better understand the workings of such cultural adaption and its relation to institutional and cultural change. It would also be interesting to analyze the association between other cultural

dimensions and egalitarian preferences, as well as the impact of individualism on actual redistribution and income equality.

References

Alesina, A., A. Devleeschauwer, W. Easterly, S. Kurlat and R. Wacziarg (2003). "Fractionalization", *Journal of Economic Growth* 8: 155-194. http://www.anderson.ucla.edu/faculty_pages/romain.wacziarg/papersum.html (2017-05-31).

Alesina A. and N. Fuchs-Schündeln (2007). "Good-Bye Lenin (or Not?): The Effect of Communism on People's Preferences", *American Economic Review* 97(4): 1507-1528.

Alesina, A. and P. Giuliano (2007). "The Power of the Family", *NBER Working Paper* 13051.

Alesina, A. F. and P. Giuliano (2009). "Preferences for Redistribution", *NBER Working Paper* 14825.

Alesina, A. and P. Giuliano (2015). "Culture and Institutions", *Journal of Economic Literature* 53(4): 898-944.

Berggren, N., M. Ljunge and T. Nilsson (2017). "Roots of Tolerance: What Explains Western Values among Children of Immigrants?", mimeo.

Berggren, O. and K. Burzynska (2015). "The Impact of Social Beliefs on Microfinance Performance", *Journal of International Development* 27: 1074-1097.

Bergh, A. and C. Bjørnskov (2014). "Trust, Welfare States and Income Equality: Sorting out the Causality", *European Journal of Political Economy* 35: 183-199.

Bisin, A. and T. Verdier (2011). "The Economics of Cultural Transmission and Socialization", *Handbook of Social Economics* 1A: 339-416.

Davis, L. S. and F. Abdurazokzoda (2016). "Language, Culture and Institutions: Evidence from a New Linguistic Dataset", *Journal of Comparative Economics* 44: 541-561.

Dinesen, P. T. (2012). "Does Generalized (Dis)trust Travel? Examining the Impact of Cultural Heritage and Destination-Country Environment on Trust of Immigrants", *Political Psychology* 33(4): 495-511.

European Social Survey (2016). *European Social Survey*. http://www.europeansocialsurvey.org (2017-01-04).

European Values Study (2016). *European Values Study*. http://www.europeanvaluesstudy.eu (2016-09-12).

Fernández, R. (2011). "Does Culture Matter?". In Benhabib, J., M. O. Jackson and A. Bisin (eds.), *Social Economics* 1A: 481-510. North-Holland: Elsevier.

Giuliano P. and A. Spilimbergo (2014). "Growing up in a Recession", *Review of Economic Studies* 81: 787-817.

Gorodnichenko, Y. and G. Roland (2011). "Which Dimensions of Culture Matter for Long-Run Growth?", *American Economic Review: Paper & Proceedings* 101(3): 492-498.

Gorodnichenko, Y. and G. Roland (2012). "Understanding the Individualism-Collectivism Cleavage and Its Effects: Lessons from Cultural Psychology". In Aoki, M., T. Kuran and G. Roland (eds.), *Institutions and Comparative Economic Development* 213-236. New York: Palgrave Macmillan.

Gorodnichenko, Y. and G. Roland (2015). "Culture, Institutions and Democratization", *NBER Working Paper* 21117.

Gorodnichenko, Y. and G. Roland (2017). "Culture, Institutions and the Wealth of Nations". *Review of Economics and Statistics*, forthcoming.

Greif, A. (1994). "Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on Collectivist and Individualist Societies", *Journal of Political Economy* 102(5): 912-950.

Guiso, L., P. Sapienza and L. Zingales (2006). "Does Culture Affect Economic Outcomes", *Journal of Economic Perspectives* 20(2): 23-48.

Heine, S. J. (2011). *Cultural Psychology*. 2nd ed. New York: W. W. Norton & Company.

Hofstede, G., G. J. Hofstede and M. Minkov (2010). *Cultures and Organizations: Software of the Mind*. 3rd ed. New York: McGraw-Hill. https://geert-hofstede.com/countries.html (2016-09-12).

Hofstede, G. and M. Minkov (2013). *Values Survey Module 2013 Manual*.

Ljunge, M. (2017). "Cultural Determinants of Gender Roles: Pragmatism as an Underpinning Attitude toward Gender Equality among Children of Immigrants". In Costa-Font, Joan and Mario Macis (eds.), *Social Economics: Current and Emerging Avenues* 197-232. Cambridge: MIT Press.

Kashima, E. S. and Y. Kashima (1998). "Culture and Language: The Case of Cultural Dimensions and Personal Pronoun Use", *Journal of Cross-Cultural Psychology* 29(3): 461-486.

Licht, A. N., C. Goldschmidt and S. H. Schwartz (2007). "Culture Rules: The Foundations of the Rule of Law and Other Norms of Governance", *Journal of Comparative Economics* 35: 659-688.

Luttmer, E. F. P. and M. Singhal (2011). "Culture, Context, and the Taste for Redistribution", *American Economic Journal: Economic Policy* 3(1): 157-179.

Marshall, M. G., T. R. Gurr and K. Jaggers (2016). *Polity IV Project: Political Regime Characteristics and Transitions, 1800-2015*. Center for Systemic Peace. http://www.systemicpeace.org/inscrdata.html (2017-05-30).

Milanovic, B. (2016). *All the Ginis Dataset*. October 2016. https://www.gc.cuny.edu/Page-Elements/Academics-Research-Centers-Initiatives/Centers-and-Institutes/Stone-Center-on-Socio-Economic-Inequality/Core-Faculty,-Team,-and-Affiliated-LIS-Scholars/Branko-Milanovic/Datasets (2017-01-05).

North, D. C. (1991). "Institutions", *Journal of Economic Perspectives* 5(1): 97-112.

Olivera, J. (2015). “Preferences for Redistribution in Europe”, *IZA Journal of European Labor Studies* 4(14): 1-18.

Schmidt-Catran, A. W. (2016). “Economic Inequality and Public Demand for Redistribution: Combining Cross-Sectional and Longitudinal Evidence”, *Socio-Economic Review* 14(1): 119-140.

Tabellini, G. (2008). “Institutions and Culture”, *Journal of the European Economic Association* 6(2-3): 255-294.

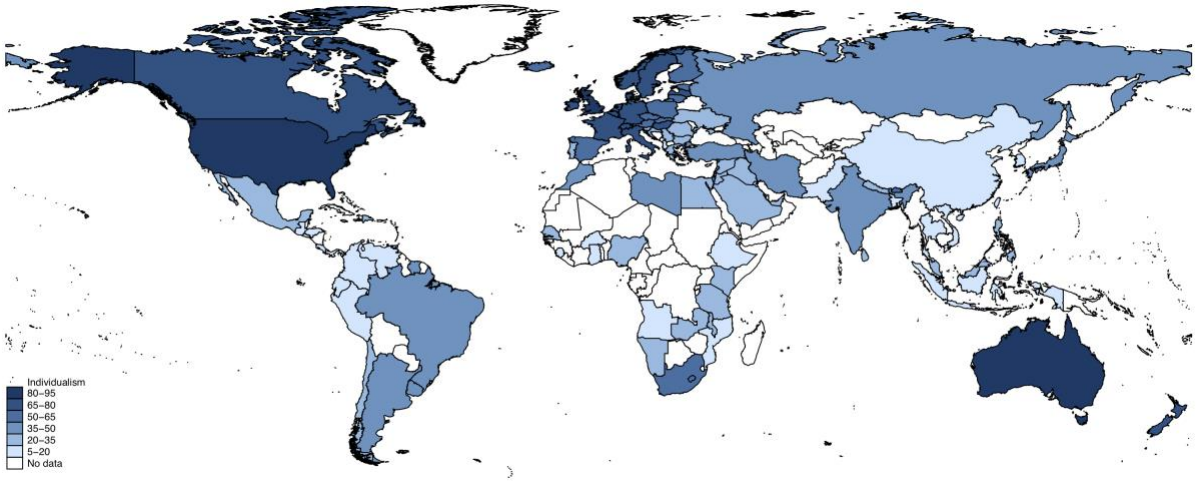
Williamson, O. E. (2000). “The New Institutional Economics: Taking Stock, Looking Ahead”, *Journal of Economic Literature* 38(3): 595-613.

World Bank (2016). *World Development Indicators*. http://databank.worldbank.org (2017-01-05).

World Values Survey (2016). *World Values Survey*. http://www.worldvaluessurvey.org/wvs.jsp (2016-09-12).

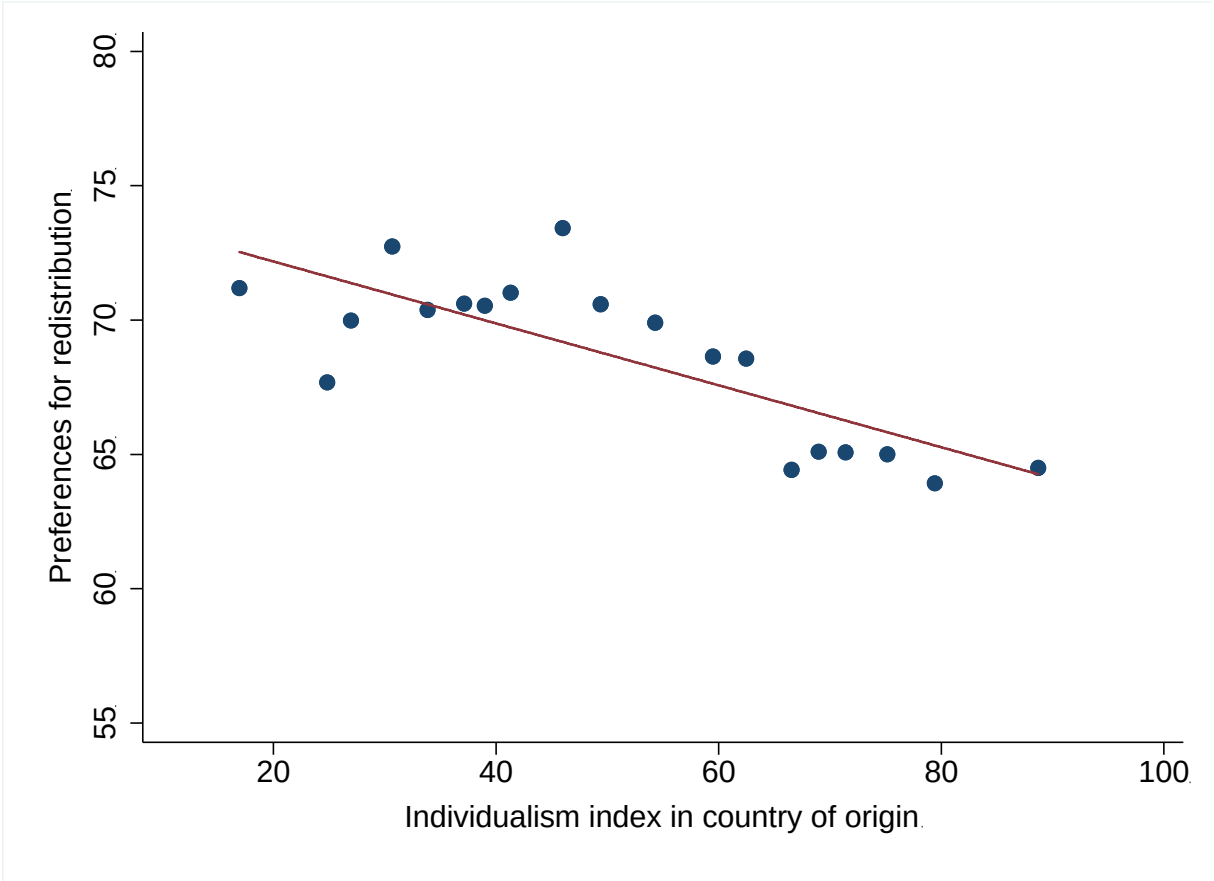
Figures

Figure 1: Individualism versus collectivism around the world.



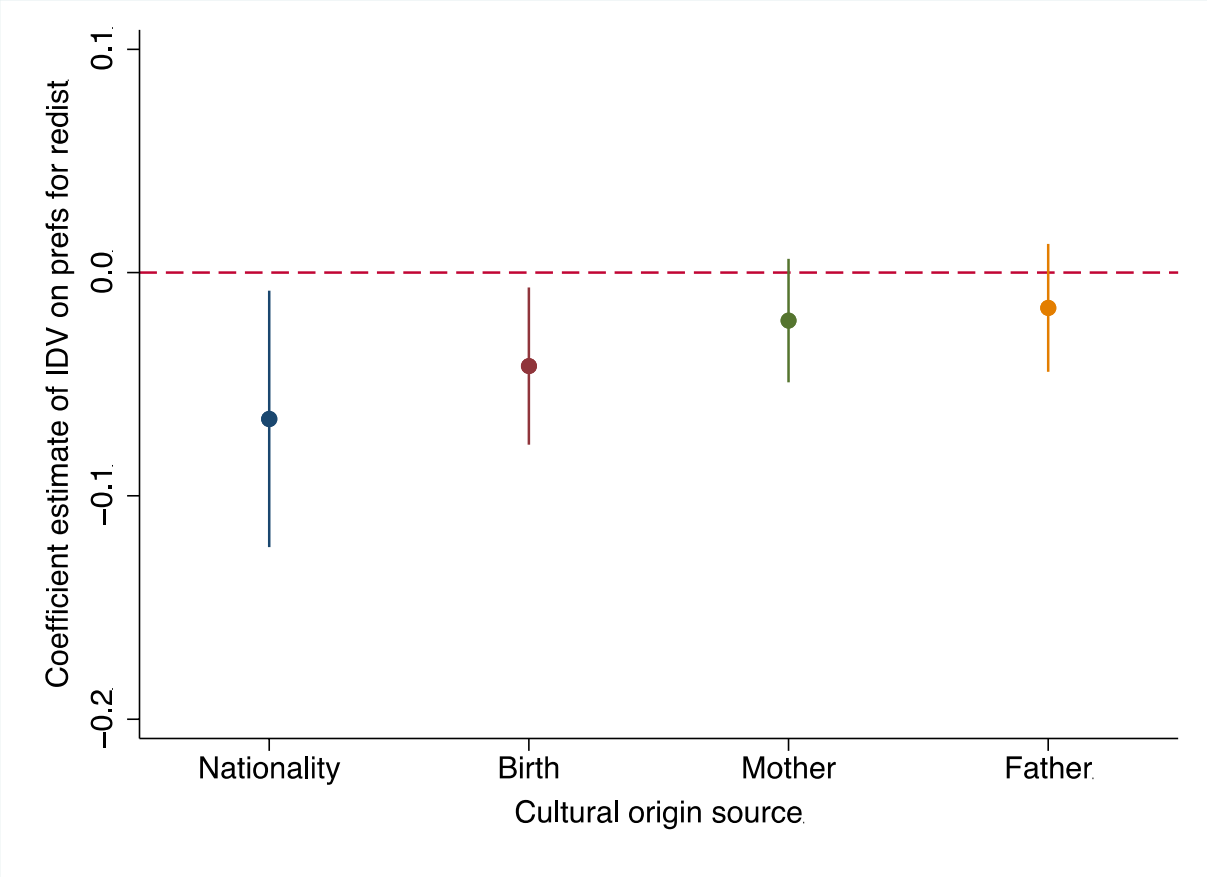
Source: Hofstede *et al*. (2010).

Figure 2: Correlation between cultural individualism and individual preferences for redistribution: binned scatterplot.



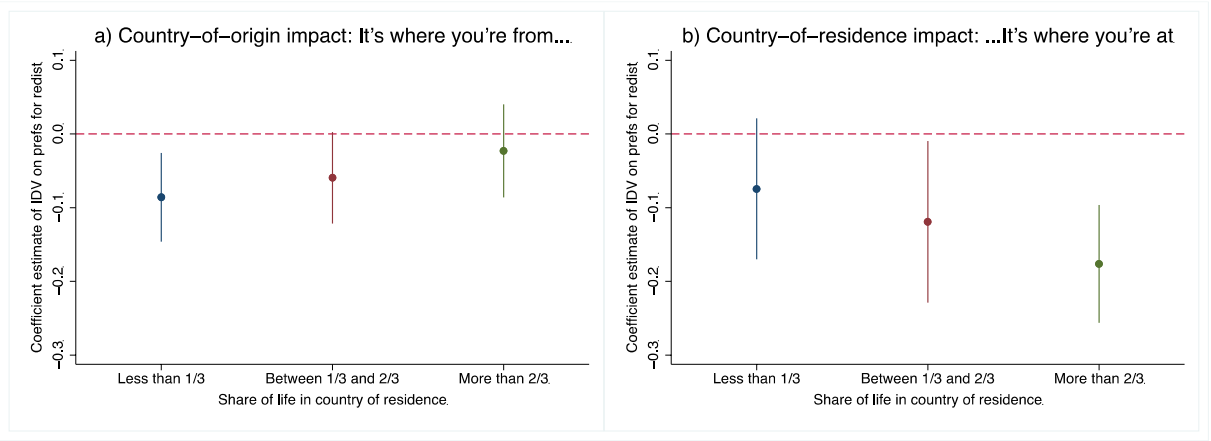
Note: Bins based on 55,334 observations in total.
Sources: ESS (2016); EVS (2016); Hofstede *et al.* (2010); WVS (2016).

Figure 3: Estimated impact of individualism on preferences for redistribution by immigrant sample.



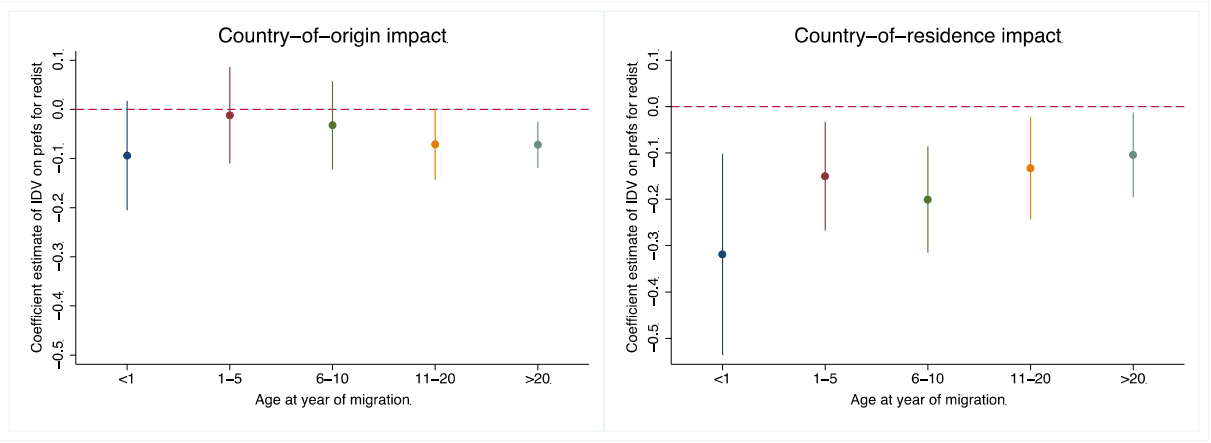
Note: Estimated standardized coefficients for individualism on preferences for redistribution, with 95 percent confidence intervals, controlling for origin country characteristics, individual characteristics, residence country and year fixed effects.
Source: Table A5 in the Appendix.

Figure 4: Comparing country-of-origin versus country-of-residence impact of individualism on preferences for redistribution: it's where you're from, it's where you're at



Note: Estimated standardized coefficients for individualism on preferences for redistribution, with 95 percent confidence intervals, controlling for origin country characteristics, residence country characteristics, individual characteristics and year fixed effects.
Source: Table 7.

Figure 5: Comparing country-of-origin versus country-of-residence impact of individualism on preferences for redistribution by age at migration



Note: Estimated standardized coefficients for individualism on preferences for redistribution, with 95 percent confidence intervals, controlling for origin country characteristics, residence country characteristics, individual characteristics and year fixed effects.

Tables

Table 1: Coverage of the dataset.

	Individuals	**Residence countries**	**Origin countries**	**Years**
Immigrant sample: other cultural origin	63,511	46	214	2002-2014
First-generation immigrants				
Other nationality	15,310	45	174	2002-2014
Other country of birth	35,383	45	204	2002-2014
Second-generation immigrants				
Other origin mother	44,654	46	204	2004-2014
Other origin father	45,790	46	198	2004-2014
Full sample: both migrants and non-migrants	843,232	108	214	1981-2014

Note: Origin countries also include regions.
Sources: ESS (2016); EVS (2016); WVS (2016).

Table 2: Summary statistics.

	Obs.	Mean	Std. Dev.	Min	Max
Full sample					
Preferences for redistribution	773,092	58.08	32.74	0	100
Individualism index (residence country)	772,505	52.41	21.62	6	91
Gini coefficient (residence country)	722,150	34.73	8.43	18	67
GDP per capita (residence country)	799,042	25,952	16,391	858	126,145
Fractionalization (residence country)	837,520	34.09	17.49	1	83
Polity score (residence country)	818,655	86.78	23.13	0	100
Trust value	750,745	0.37	0.48	0	1
Life satisfaction value	834,459	65.38	25.58	0	100
Political left-right scale	654,227	51.34	24.13	0	100
Education level	664,594	50.37	30.98	0	100
Employment status	827,513	1.44	0.63	0	2
Household income	330,466	2,213	2,335	0	14,728
Sex	838,071	0.53	0.50	0	1
Age	836,838	44.38	17.70	13	123
Pronoun drop dummy	513,796	0.51	0.50	0	1
Immigrant sample					
Preferences for redistribution	61,729	68.91	28.46	0	100
Individualism index (origin country)	56,891	50.00	19.76	6	91
Gini coefficient (origin country)	62,777	34.65	6.13	23	66
GDP per capita (origin country)	63,078	20,745	12,395	636	90,302
Fractionalization (origin country)	63,276	34.45	15.53	1	84
Polity score (origin country)	63,155	65.24	26.10	0	100
Trust value	51,086	0.49	0.50	0	1
Life satisfaction value	63,070	67.52	24.24	0	100
Political left-right scale	52,137	49.88	23.05	0	100
Education level	53,033	51.43	30.54	0	100
Employment status	63,071	1.43	0.63	0	2
Household income	46,826	2,326	2,409	10	14,000
Sex	63,469	0.55	0.50	0	1
Age	63,202	46.20	17.88	13	114
Time in new country	34,862	3.18	1.08	0	4
Years in new country	18,812	27.96	19.45	0	95
Life share in new country	18,677	54.52	28.36	0	100
Pronoun drop dummy	51,482	0.30	0.46	0	1

Sources: Alesina *et al*. (2003); ESS (2016); EVS (2016); Hofstede *et al*. (2010); Marshall *et al*. (2016); Milanovic (2016); World Bank (2016); WVS (2016).

Table 3: Baseline OLS regression results, immigrant sample.

	Preferences for redistribution			
	(1)	*(2)*	*(3)*	*Std. Coef.*
Origin country characteristics				
Individualism index	-0.057***	-0.068***	-0.081***	-0.049***
	(0.018)	(0.025)	(0.027)	(0.017)
Gini coefficient		-0.074	-0.015	-0.003
		(0.057)	(0.079)	(0.015)
Log GDP per capita		0.672	-0.597	-0.014
		(0.568)	(0.879)	(0.020)
Mean social trust			0.052	0.023
			(0.035)	(0.015)
Mean preferences for redistribution			0.015	0.004
			(0.049)	(0.014)
Fractionalization			-0.064*	-0.030*
			(0.038)	(0.018)
Polity score			0.030	0.024
			(0.023)	(0.019)
Individual characteristics				
Trust value		1.219	1.133	0.017
		(0.838)	(0.862)	(0.013)
Life satisfaction value		-0.054***	-0.060***	-0.047***
		(0.014)	(0.014)	(0.011)
Political left-right scale		-0.175***	-0.174***	-0.128***
		(0.019)	(0.019)	(0.014)
Education level		-0.080***	-0.078***	-0.074***
		(0.013)	(0.013)	(0.012)
Employment status		-0.674*	-0.809**	-0.016**
		(0.384)	(0.388)	(0.007)
Household income		-0.001***	-0.001***	-0.052***
		(0.000)	(0.000)	(0.014)
Time in new country		1.243***	1.184***	0.039***
		(0.331)	(0.337)	(0.011)
Sex	2.584***	1.847***	1.929***	0.029***
	(0.207)	(0.472)	(0.480)	(0.007)
Age	0.107***	0.050***	0.048***	0.029***
	(0.014)	(0.018)	(0.018)	(0.010)
Residence country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Number of obs.	55,085	12,143	11,805	11,805
R-squared	0.117	0.153	0.158	0.158

Notes: Robust standard errors clustered on origin country in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Sources: Alesina *et al*. (2003); ESS (2016); EVS (2016); Hofstede *et al*. (2010); Marshall *et al*. (2016); Milanovic (2016); World Bank (2016); WVS (2016).

Table 4: Propensity-score matching results, immigrant sample.

	Preferences for redistribution
	ATE
Individualist dummy	-1.267**
	(0.569)
Number of obs.	26,743

Notes: Average treatment effects (ATE). Robust standard errors in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Matching variables are individual-level trust value, life satisfaction value, political left-right scale, education level, employment status, household income, sex, age, and residence country FE.
Sources: ESS (2016); EVS (2016); Hofstede *et al*. (2010); Milanovic (2016); World Bank (2016); WVS (2016).

Table 5: IV regression results, immigrant sample.

	Individualism index (origin country)	**Preferences for redistribution**	**Individualism index (origin country)**	**Preferences for redistribution**
	(1) *First stage*	*(1)* *Second stage*	*(2)* *First stage*	*(2)* *Second stage*
Individualism index (origin country)		-0.355*** (0.065)		-0.279*** (0.098)
Pronoun drop dummy (home language)	-12.168*** (4.085)		-9.483*** (3.100)	
Residence country characteristics				
Gini coefficient			-0.593*** (0.214)	0.656*** (0.146)
Log GDP per capita			12.188*** (2.943)	-6.457*** (2.134)
Individual characteristics				
Trust value			0.515 (0.664)	-0.889 (0.545)
Life satisfaction value			0.030* (0.016)	-0.036*** (0.011)
Political left-right scale			-0.002 (0.011)	-0.179*** (0.023)
Education level			0.014 (0.024)	-0.044*** (0.010)
Employment status			-0.483 (0.482)	-0.450 (0.443)
Household income			0.000*** (0.000)	-0.001*** (0.000)
Sex			-0.210 (0.438)	1.618*** (0.569)
Age			0.106*** (0.034)	0.129*** (0.022)
Number of obs.	45,129	45,129	13,130	13,130
R-squared	0.079		0.195	

Notes: Robust standard errors clustered on origin country in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Sources: Davis and Abdurazokzoda (2016); ESS (2016); EVS (2016); Hofstede *et al.* (2010); Milanovic (2016); World Bank (2016); WVS (2016).

Table 6: Heterogeneity analysis, different immigrant samples.

	Preferences for redistribution					
	More individualist origin	*More collectivist origin*	*Between-region migration*	*Within-region migration*	*First-generation immigrant*	*Second-generation immigrant*
Origin country characteristics						
Individualism index	-0.180***	-0.069**	-0.078***	-0.065*	-0.065**	-0.035
	(0.046)	(0.034)	(0.029)	(0.038)	(0.026)	(0.032)
Gini coefficient	-0.139	-0.047	0.009	-0.042	-0.067	0.016
	(0.148)	(0.058)	(0.067)	(0.116)	(0.054)	(0.084)
Log GDP per capita	6.255***	0.395	-0.803	1.451	0.510	0.321
	(1.551)	(0.547)	(0.737)	(1.663)	(0.572)	(0.698)
Individual characteristics						
Trust value	0.360	1.453	2.179**	0.727	1.085	-0.092
	(0.837)	(0.995)	(0.973)	(1.083)	(0.786)	(0.588)
Life satisfaction value	-0.077**	-0.047***	0.008	-0.085***	-0.058***	-0.084***
	(0.031)	(0.014)	(0.023)	(0.020)	(0.013)	(0.014)
Political left-right scale	-0.206***	-0.165***	-0.146***	-0.196***	-0.179***	-0.187***
	(0.026)	(0.025)	(0.023)	(0.022)	(0.019)	(0.025)
Education level	-0.086***	-0.075***	-0.045***	-0.092***	-0.086***	-0.085***
	(0.021)	(0.015)	(0.014)	(0.016)	(0.011)	(0.012)
Employment status	-0.320	-0.783	-1.011	-0.512	-0.787*	-0.570
	(0.625)	(0.483)	(0.674)	(0.399)	(0.439)	(0.477)
Household income	-0.001**	-0.001***	-0.001***	-0.001*	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Time in new country	0.629	1.362***	2.166***	0.898**		
	(0.492)	(0.445)	(0.511)	(0.407)		
Sex	2.771***	1.717***	1.405	2.004***	1.930***	2.730***
	(0.951)	(0.549)	(0.881)	(0.557)	(0.411)	(0.526)
Age	0.073*	0.054**	0.010	0.065**	0.097***	0.100***
	(0.038)	(0.023)	(0.027)	(0.024)	(0.015)	(0.018)
Residence country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	3,349	8,736	3,919	8,224	13,161	10,705
R-squared	0.206	0.139	0.156	0.157	0.160	0.182

Notes: Robust standard errors clustered on origin country in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Sources: ESS (2016); EVS (2016); Hofstede *et al.* (2010); Milanovic (2016); World Bank (2016); WVS (2016).

Table 7: Comparing country-of-origin versus country-of-residence cultural impact.

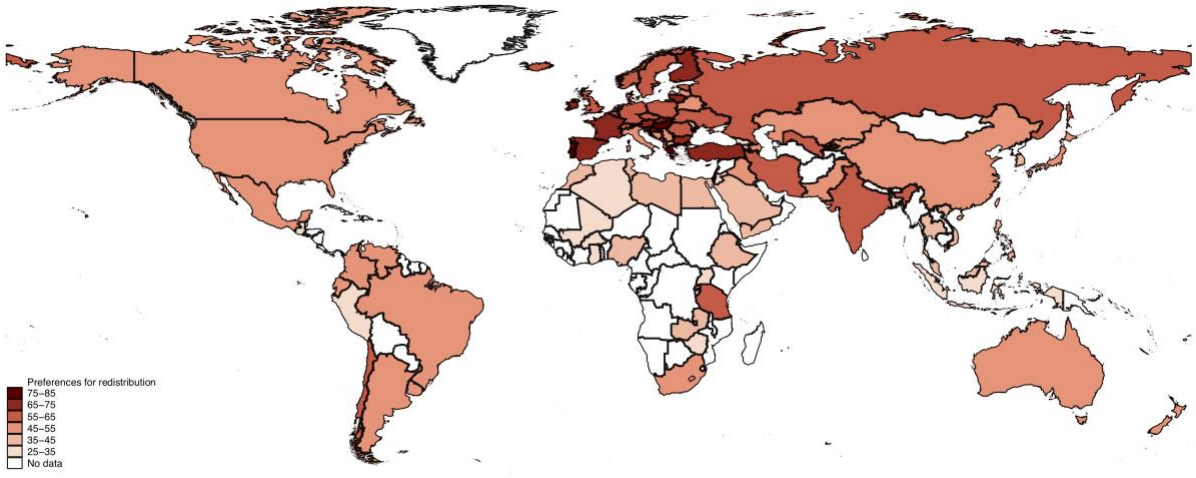
	Preferences for redistribution					
				Share of life in country of residence		
	(1)	*(2)*	*(3)*	*<1/3*	*1/3<2/3*	*>2/3*
Origin country characteristics						
Individualism index	-0.083***	-0.070**	-0.070*	-0.142***	-0.098*	-0.038
	(0.017)	(0.029)	(0.036)	(0.050)	(0.052)	(0.053)
Gini coefficient		-0.092	-0.092	-0.345***	-0.228*	-0.130
		(0.061)	(0.075)	(0.112)	(0.130)	(0.126)
Log GDP per capita		0.619	-0.275	0.929	2.039	-0.385
		(0.818)	(0.976)	(1.459)	(1.586)	(1.519)
Mean social trust			-0.010			
			(0.047)			
Fractionalization			-0.079*			
			(0.044)			
Polity score			0.027			
			(0.028)			
Residence country characteristics						
Individualism index	-0.203***	-0.138***	-0.123***	-0.113	-0.180**	-0.267***
	(0.031)	(0.037)	(0.043)	(0.073)	(0.083)	(0.061)
Gini coefficient		0.696***	0.627***	0.589*	0.694***	0.318**
		(0.121)	(0.119)	(0.328)	(0.224)	(0.156)
Log GDP per capita		-2.746	-3.070	-6.501*	1.278	3.347
		(1.962)	(2.134)	(3.611)	(4.492)	(3.648)
Mean social trust			-0.001			
			(0.039)			
Fractionalization			0.020			
			(0.030)			
Polity score			-0.054			
			(0.099)			
Individual characteristics						
Trust value		1.664**	1.775**	2.477	-1.485	-0.400
		(0.753)	(0.782)	(1.696)	(1.091)	(1.119)
Life satisfaction value		-0.064***	-0.069***	-0.010	-0.049**	-0.043
		(0.015)	(0.016)	(0.039)	(0.024)	(0.038)
Political left-right scale		-0.175***	-0.171***	-0.209***	-0.176***	-0.137***
		(0.019)	(0.020)	(0.036)	(0.032)	(0.026)
Education level		-0.085***	-0.082***	-0.010	-0.081***	0.002
		(0.015)	(0.015)	(0.027)	(0.023)	(0.024)
Employment status		-1.353***	-1.533***	-1.366	0.594	-2.800**
		(0.446)	(0.443)	(1.057)	(1.160)	(1.077)
Household income		-0.001**	-0.001**	-0.001***	-0.001***	-0.001*
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)

Time in new country		0.872**	0.864**			
		(0.336)	(0.327)			
Sex	2.669***	1.637***	1.727***	2.623	1.877	1.986*
	(0.218)	(0.612)	(0.630)	(1.582)	(1.254)	(1.024)
Age	0.125***	0.061**	0.054**	0.008	0.079	0.071*
	(0.013)	(0.025)	(0.025)	(0.071)	(0.052)	(0.039)
Residence country FE	No	No	No	No	No	No
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	52,767	8,759	8,470	1,211	1,503	1,960
R-squared	0.068	0.136	0.139	0.188	0.196	0.281

Notes: Robust standard errors clustered on origin country in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Sources: Alesina *et al*. (2003); ESS (2016); EVS (2016); Hofstede *et al*. (2010); Marshall *et al*. (2016); Milanovic (2016); World Bank (2016); WVS (2016).

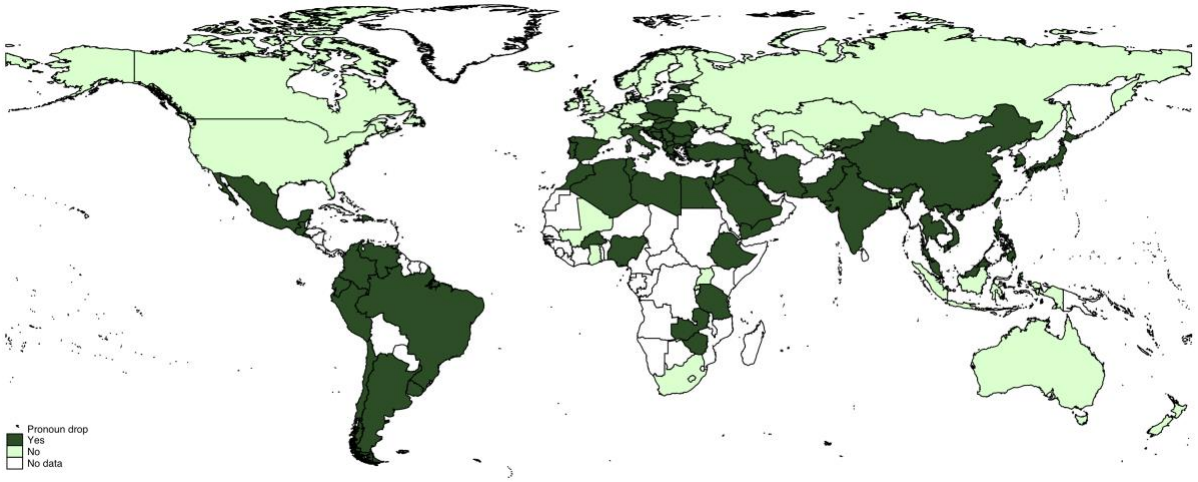
Appendix

Figure A1: Mean preferences for redistribution around the world.



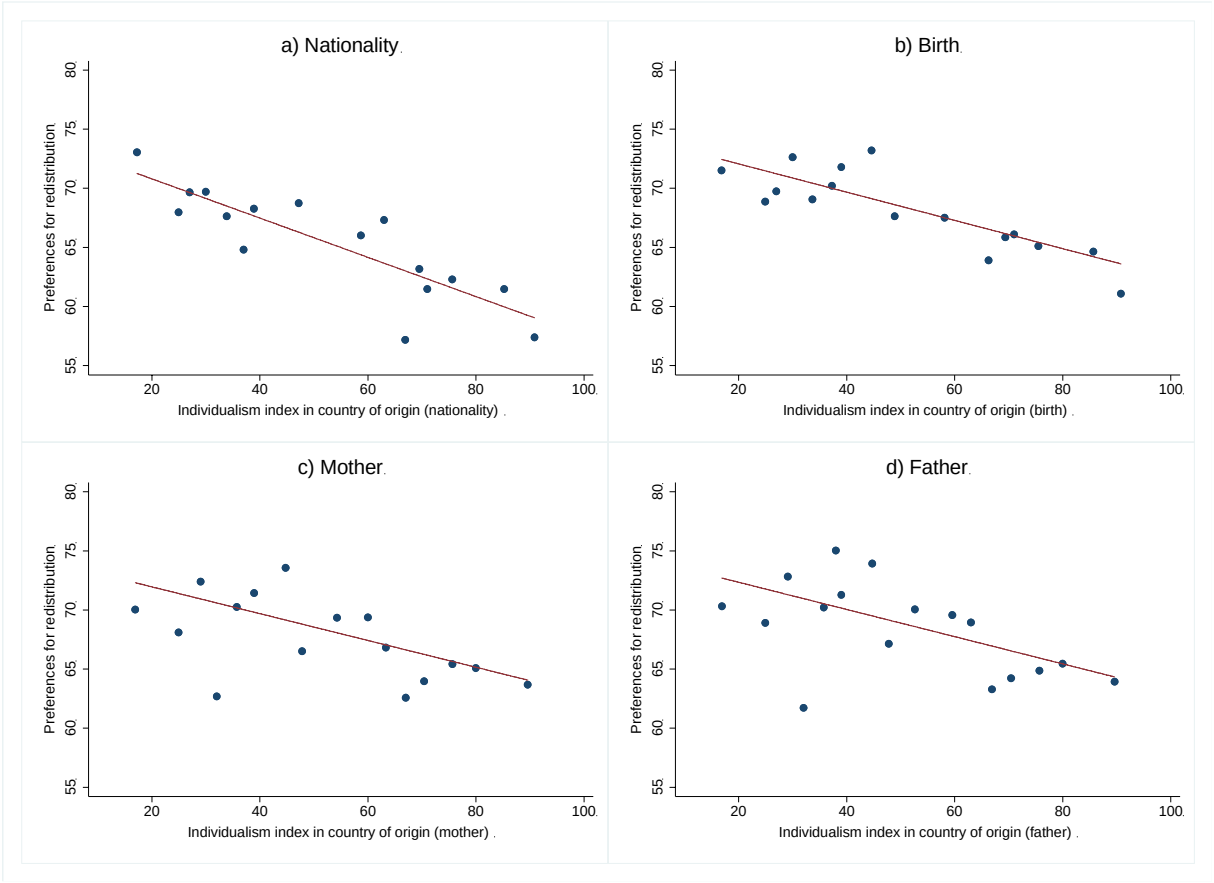
Sources: ESS (2016); EVS (2016); WVS (2016).

Figure A2: Mean pronoun drop around the world.



Source: Davis and Abdurazokzoda (2016).

Figure A3: Correlation between individualism and preferences for redistribution by cultural origin source: binned scatterplots.



Note: Bins based on a) 13,374, b) 28,806, c) 37,119 and d) 37,963 observations in total.
Sources: ESS (2016); EVS (2016); Hofstede *et al.* (2010); WVS (2016).

Table A1: Correlation matrix.

	Pref's for redist.	**Individualism index (origin country)**	**Mean social trust (origin country)**	**Mean pref's for redist. (origin country)**
Origin country characteristics				
Individualism index	-0.080***			
Mean social trust	-0.081***	0.608***		
Mean pref's for redist.	0.002	0.119***	0.225***	
Gini coefficient	0.015***	-0.237***	-0.353***	-0.227***
Log GDP per capita	-0.068***	0.706***	0.600***	0.475***
Fractionalization	-0.018**	-0.234***	-0.112***	-0.347***
Polity score	-0.091***	0.612***	0.496***	0.414***
Individual characteristics				
Trust value	0.054***	0.134***	0.196***	-0.020***
Life satisfaction value	-0.051***	0.148***	0.138***	0.004
Political left-right scale	-0.131***	-0.016***	0.007	-0.037***
Education level	-0.143***	0.057***	0.106***	-0.018***
Employment status	-0.069***	0.029***	0.055***	0.026***
Household income	-0.089***	0.168***	0.188***	0.041***
Time in new country	0.077***	0.031***	0.068***	0.017***
Sex	0.050***	-0.011***	0.003	-0.005
Age	0.122***	0.055***	0.035***	0.019***

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Sources: Alesina *et al*. (2003); ESS (2016); EVS (2016); Hofstede *et al*. (2010); Marshall *et al*. (2016); Milanovic (2016); World Bank (2016); WVS (2016).

Table A2: OLS, ordered logistic and ordered probit regression results, full sample.

	Preferences for redistribution		
	OLS	*Ordered logit*	*Ordered probit*
Residence country characteristics			
Individualism index	-0.144***	-0.010***	-0.006***
	(0.006)	(0.000)	(0.000)
Gini coefficient	0.262***	0.017***	0.010***
	(0.018)	(0.001)	(0.001)
Log GDP per capita	0.362	-0.006	0.006
	(0.229)	(0.015)	(0.009)
Individual characteristics			
Trust value	-0.395**	-0.045***	-0.024***
	(0.156)	(0.010)	(0.006)
Life satisfaction value	-0.089***	-0.007***	-0.004***
	(0.004)	(0.000)	(0.000)
Political left-right scale	-0.181***	-0.012***	-0.007***
	(0.003)	(0.000)	(0.000)
Education level	-0.111***	-0.007***	-0.004***
	(0.003)	(0.000)	(0.000)
Employment status	-1.148***	-0.075***	-0.044***
	(0.130)	(0.009)	(0.005)
Household income	-0.001***	0.000***	0.000***
	(0.000)	(0.000)	(0.000)
Sex	2.656***	0.154***	0.092***
	(0.144)	(0.009)	(0.006)
Age	0.055***	0.004***	0.002***
	(0.004)	(0.000)	(0.000)
Residence country FE	No	No	No
Year FE	Yes	Yes	Yes
Number of obs.	147,110	147,110	147,110
R-squared	0.146	0.037	0.036

Notes: Robust standard errors in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Sources: ESS (2016); EVS (2016); Hofstede *et al*. (2010); Milanovic (2016); World Bank (2016); WVS (2016).

Table A3: Means comparison, immigrant sample.

	Individualists (IDV>50)			**Collectivists (IDV<50)**		
	Obs.	*Mean*	*Std. Dev.*	*Obs.*	*Mean*	*Std. Dev.*
Preferences for redistribution	29,645	66.64	28.47	31,841	70.99	28.32
Individualism index (origin country)	25,714	68.98	10.23	30,925	34.23	9.10
Trust value	24,589	0.54	0.50	26,303	0.43	0.50
Life satisfaction value	30,202	71.16	22.62	32,617	64.10	25.19
Political left-right scale	26,645	49.31	22.44	25,264	50.35	23.61
Education level	25,071	52.19	30.63	27,762	50.73	30.48
Employment status	30,131	1.44	0.62	32,690	1.42	0.64
Household income	23,348	2,660	2,562	23,320	1,988	2,193
Sex	30,332	0.55	0.50	32,885	0.56	0.50
Age	30,211	46.78	17.89	32,739	45.76	17.85

Sources: ESS (2016); EVS (2016); Hofstede *et al*. (2010); WVS (2016).

Table A4: Robustness analysis, different surveys.

	Preferences for redistribution	
	EVS & WVS	*ESS*
Origin country characteristics		
Individualism index	-0.110**	-0.059**
	(0.046)	(0.029)
Gini coefficient	-0.305***	-0.038
	(0.094)	(0.065)
Log GDP per capita	0.165	0.669
	(1.441)	(0.677)
Individual characteristics		
Trust value	1.350	-0.434
	(1.148)	(0.673)
Life satisfaction value	-0.023	-0.033***
	(0.031)	(0.011)
Political left-right scale	-0.136***	-0.191***
	(0.034)	(0.020)
Education level	-0.094***	-0.049***
	(0.028)	(0.010)
Employment status	-0.573	-0.388
	(0.991)	(0.395)
Household income	-0.001	-0.001***
	(0.001)	(0.000)
Time in new country	0.351	1.566***
	(1.267)	(0.320)
Sex	3.131**	1.736***
	(1.189)	(0.545)
Age	0.057	0.045**
	(0.035)	(0.020)
Residence country FE	Yes	Yes
Year FE	Yes	Yes
Number of obs.	2,355	9,788
R-squared	0.145	0.139

Notes: Robust standard errors clustered on origin country in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Sources: ESS (2016); EVS (2016); Hofstede *et al.* (2010); Milanovic (2016); World Bank (2016); WVS (2016).

Table A5: Sensitivity analysis, different immigrant samples.

	Preferences for redistribution			
	Other nationality	*Other country of birth*	*Other origin mother*	*Other origin father*
Origin country characteristics				
Individualism index	-0.098**	-0.065**	-0.035	-0.026
	(0.043)	(0.027)	(0.023)	(0.024)
Gini coefficient	-0.165**	-0.062	-0.040	-0.048
	(0.082)	(0.060)	(0.056)	(0.058)
Log GDP per capita	0.597	0.574	0.535	0.229
	(1.232)	(0.639)	(0.573)	(0.583)
Individual characteristics				
Trust value	0.499	1.142	0.476	0.163
	(1.016)	(0.752)	(0.615)	(0.750)
Life satisfaction value	-0.062***	-0.055***	-0.066***	-0.070***
	(0.022)	(0.012)	(0.016)	(0.014)
Political left-right scale	-0.201***	-0.176***	-0.168***	-0.170***
	(0.025)	(0.019)	(0.020)	(0.021)
Education level	-0.091***	-0.084***	-0.085***	-0.081***
	(0.013)	(0.012)	(0.012)	(0.013)
Employment status	-0.096	-0.699*	-0.466	-0.597
	(0.516)	(0.396)	(0.372)	(0.420)
Household income	-0.001***	-0.001***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)
Sex	1.512**	1.976***	2.117***	2.568***
	(0.719)	(0.482)	(0.383)	(0.408)
Age	0.107***	0.087***	0.080***	0.081***
	(0.019)	(0.018)	(0.015)	(0.014)
Residence country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Number of obs.	5,662	12,110	15,976	16,360
R-squared	0.173	0.153	0.168	0.163

Notes: Robust standard errors clustered on origin country in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Sources: ESS (2016); EVS (2016); Hofstede *et al.* (2010); Milanovic (2016); World Bank (2016); WVS (2016).