

Culture, Context, and the Taste for Redistribution ^{*}

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Abstract

We investigate whether culture plays an important role in the determination of preferences for redistribution. We examine the preferences of immigrants to separate cultural effects from economic and institutional determinants of preferences (“context”). An individual’s preference for redistribution is strongly positively associated with the average preference for redistribution in her country of birth, and this effect of culture on preferences is as large as the effect of own household income. This result is robust to rich controls for economic factors and cannot easily be explained by selective migration. The cultural effect is stronger for non-citizens and non-voters, those with shorter tenure in the country of residence, and those who move to countries with a large number of immigrants from their own birth countries. Immigrants from countries with a higher preference for redistribution are also more likely to vote for a more pro-redistribution political party. These cultural effects persist strongly into the second generation.

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1. Introduction

Preferences for redistribution vary in systematic ways across countries. Individuals in European countries tend to have stronger redistributive preferences than people in the United States (Alesina et al. 2001, Alesina and Glaeser 2004), and individuals in former socialist countries tend to have stronger preferences than those in Western nations (Corneo and Grüner 2002). These preferences ultimately underlie the tax and transfer systems chosen by governments, so understanding their determinants is of fundamental importance. The persistence of cross-country differences suggests that redistributive preferences may have an important cultural component,¹ and this possibility has been noted in the literature (e.g., Corneo 2001; Alesina and Glaeser 2004). However, isolating the effects of culture from contemporaneous effects of the economic and institutional environment is challenging. This paper provides evidence on the effect of culture on preferences for income redistribution by examining the determinants of preferences among immigrants across 32 countries. If preferences were based solely on current context, then the preference for redistribution in an immigrant's country of origin should not matter after controlling for relevant factors in the country of residence. However, it is possible that immigrants take cultural values with them from their countries of origin and that these cultural values affect preferences for redistribution, regardless of current context.²

Voting patterns during the large waves of immigration into the United States during the nineteenth century suggest that immigrants were influenced by home country culture. Political allegiances during this time were often sharply split along ethnic lines (McCormick 1974), and

¹ We follow Guiso et al. (2006) in defining culture as “those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation.”

² Bisin and Verdier (2004) identify an alternative channel through which culture can affect the amount of redistribution: the cultural transmission of values associated with “work ethic” will affect the level of redistribution that the political equilibrium can sustain.

attitudes toward government did appear to reflect the prevailing attitudes in immigrants' countries of origin. Benson (1966, pp. 298-299), for example, argues that Dutch immigrants in New York "abided by their fathers' faith in state rights and negative government" and therefore supported the Democratic Party, which "preached the doctrines of the negative liberal state and state rights." Immigrants from Scandinavia and Germany were often supporters of early progressive movements, such as socialist political parties. Lipset and Marks (2000, pp. 139-140) note that "the leadership of Germans in the American socialist movement has been linked to the political sources of emigration from Germany ... The German Social Democratic Party was the strongest socialist movement in the world before World War I, and many newcomers brought their ideological sympathies to America." These anecdotes suggest a persistent cultural component to political preferences. Our empirical analysis formalizes this relationship by relating the preferences of contemporary immigrants to attitudes in their birth countries.

We find that the average preference for redistribution in an immigrant's country of birth has a large and significant effect on her own preference for redistribution. Our main findings can be illustrated in Figure 1, which plots individual preference for redistribution (in deviation from the mean preference of natives in the country of residence) against the mean preference of natives in the immigrant's country of birth. Preferences for redistribution are measured on a five-point scale, and each point on the graph represents the average for all immigrants born in a particular country, irrespective of the current country of residence.³ Immigrants born in a country with a high preference for redistribution tend to have higher preferences for redistribution than the natives of the countries in which they reside.

This relationship is verified in the regression analyses, where we include country of residence dummies and rich controls for economic and demographic characteristics. We find

³ Country observations are weighted by the number of immigrants born in that country.

that a one unit increase in the mean preference for redistribution in an immigrant's country of birth is associated with a 0.34 unit increase in her own preference for redistribution. Our estimates imply that the effect of culture on own preference for redistribution is approximately as large as the effect of own household income and 60% as large as the combined effect of income and education. Although income and education are imperfect proxies for economic self-interest, this indicates that the magnitude of the culture effect is comparable in size to that of other important determinants of preferences for redistribution.

This effect is robust to the choice of economic controls and to a number of sample and specification tests. Overall, the influence of birth country culture appears to be stronger for immigrants who are less politically or socially assimilated into the destination country. We also examine the intergenerational transmission of preferences by looking at individuals born in their country of residence who have an immigrant parent. A higher mean preference for redistribution in the parent's country of birth is associated with a significantly higher individual preference; the effect is two-thirds as large as the own country of birth effect.

These findings have a number of important implications. Individual preferences for income redistribution cannot be fully explained by economic self-interest or by economic, political, or social aspects of the current environment, since individual preferences continue to be influenced by country of origin even in a common environment. This also suggests that culture may be an important factor in explaining the large observed differences in systems of redistribution across countries. Finally, the inherited cultural values of immigrants can, as the anecdotes above suggest, shape the policies of the societies to which they migrate. Thus, while

our primary focus is on using immigrants as a mechanism to identify the effects of culture, the results also have implications for the political economy of immigration policy.⁴

We consider several alternative explanations for our findings. First, there may be unobserved economic factors that affect preferences for redistribution both in the birth country and the country of residence. In particular, we might be concerned about selective migration driven by economic self-interest. We demonstrate that the results are robust to rich controls for an individual's likely gain or loss from redistribution and that the results are also evident in several subsamples of countries. A second possibility is that individuals update information about the current context slowly, and our estimates are simply picking up this slow updating rather than a true effect of culture. However, we find strong cultural effects even for immigrants who have lived in their country of residence for more than 20 years and in the second generation. Finally, it is possible that cultural factors influence the way in which individuals respond to survey questions but do not affect "true" preferences. We find that a higher mean preference for redistribution in the country of birth is associated with an increased probability of voting for a more pro-redistribution party, indicating that cultural influences do affect real behavior.

Three studies that relate specifically to the current study are Alesina and Fuchs-Schündeln (2007), Guiso et al. (2006), and Alesina and Giuliano (2009). We discuss the broader literature on preferences for redistribution in Section 2 of the paper. Alesina and Fuchs-Schündeln (2007) use the separation and reunification of Germany as a natural experiment to examine how Communism affects preferences. They find that those who lived in the former East Germany more strongly prefer redistribution after reunification.⁵ The authors convincingly show

⁴ See Dancygier and Saunders (2006) for a description of differences in preferences for social spending and redistribution between immigrants and natives in Germany and the United Kingdom and a discussion of the implications for nations receiving large flows of immigrants.

⁵ Corneo (2004) also notes higher preferences for redistribution among East Germans relative to West Germans.

that living in East Germany as opposed to West Germany influences one's preferences for redistribution. By the nature of their natural experiment, however, it is hard to know whether this effect is driven by cultural differences developed under Communism, Communist indoctrination *per se*, or another aspect of living in East Germany during this time period. In addition, they focus specifically on the effects of Communism, whereas we examine the effects of culture more broadly. Guiso et al. (2006) explicitly note the potential role of culture in explaining preferences for redistribution. They find that country-of-ancestry fixed effects are significant determinants of preferences for redistribution in the United States General Social Survey. This is suggestive of a lasting effect of culture but, as the authors note, it is difficult to know what exactly is captured by the fixed effects.⁶ Finally, in independent work, Alesina and Giuliano (2009) show evidence of an effect of birth country preference for redistribution on own preference among US immigrants, consistent with our findings. Our paper demonstrates an effect of culture using data from over 30 countries, and we provide evidence against alternative explanations of this effect. In particular, we show that this effect is strongly robust to a rich set of controls for selection and to the choice of sample countries. We also show that the cultural effect is evident in actual behavior (voting), is stronger for those less assimilated into their destination country, and persists into the second generation.

The approach of examining immigrant behavior has been used in a growing literature on the economic effects of culture.⁷ Blau (1992), Carroll et al. (1994), Fairlie and Meyer (1996), and Antecol (2000, 2001) analyze the behavior of immigrant groups to determine the effects of

⁶ Giuliano (2007) and Fernández and Fogli (2007) argue that country of birth dummies cannot relate individual behavior to a specific determining factor in the country of origin. They therefore proxy for culture using the mean behavior of interest in the country of origin. We follow this approach. Abramitzky (2008) examines the effects of culture/ideology on preferences for redistribution in a different context, demonstrating that Israeli kibbutzim affiliated with socialist political parties are able to sustain higher levels of redistribution.

⁷ Fernández (2008) provides a detailed discussion of this strategy, which she terms an "epidemiological approach," as well as an overview of recent literature on culture and economics.

culture on fertility, savings, employment rates, and wage gaps. In their study of women's work behavior and fertility choices, Fernández and Fogli (2006) advance this literature by formalizing the empirical methodology and more carefully considering issues of selection and omitted variable bias. Related studies using variants of this strategy have found strong effects of culture in explaining other aspects of women's labor supply and fertility (Fernández and Fogli 2007; Fernández 2007; Alesina and Giuliano 2007; Guinnane, Moehling, and Ó Gráda 2006), household living arrangements (Giuliano 2007; Alesina and Giuliano 2007), youth labor force participation and geographic mobility (Alesina and Giuliano 2007), and trust (Algan and Cahuc 2008).⁸ While our basic identification strategy is very similar to the strategy used in these studies, we look at immigrants not only coming from multiple source countries but also going to multiple destination countries. This approach limits the scope for selection bias since we would expect the form of selection to differ across different destination countries.

The remainder of the paper proceeds as follows. In Section 2, we discuss models of preferences for redistribution and formalize our empirical strategy. Section 3 describes the data and Section 4 presents the results. Section 5 concludes.

2. Empirical Strategy

Our goal is to examine the extent to which cultural factors influence preferences for redistribution. In this section, we provide an overview of our estimation strategy. We first review economic models of preferences and outline the identifying assumptions under which we can estimate the effects of culture separately from economic incentives and the institutional

⁸ Other studies have used similar strategies to identify the effects of culture on behavior. Ichino and Maggi (2000) exploit movement of bank employees across regions in Italy to examine the effect of individual background on shirking behavior. Fisman and Miguel (2007) show that among diplomats in New York City those from more corrupt countries are more likely to commit parking violations.

environment. We then discuss other models of preferences for redistribution and explain how the factors considered in those models would affect our estimates of culture.

Under standard economic models, such as Meltzer and Richard (1981), an individual’s preference for redistribution is determined exclusively by her expected benefit or loss from redistribution, which in turn depends on the current institutional environment.⁹ It is possible that an individual’s preference for redistribution may, in addition, be determined by country-specific “cultural influences.” While this channel has been suggested in the literature (e.g., Corneo 2001; Alesina and Glaeser 2004), it is difficult to distinguish empirically the effect of cultural influences from objective country characteristics. Separating the two within a country is especially challenging because institutions at least partially reflect culture (Tabellini 2008).

Examining immigrants provides a way to identify whether cultural influences exist and are important determinants of preferences. If the standard model is correct and we can control for the relevant economic factors, we should not expect the birth country preference for redistribution to be an explanatory factor in the preferences of immigrants.

We estimate specifications of the following form for immigrant preferences:

$$pref_i = \beta_1(\overline{pref}_b) + \mathbf{X}_i\beta_2 + \theta_r + \varepsilon_i$$

where $pref_i$ denotes immigrant i ’s preference for redistribution, \overline{pref}_b is the average preference for redistribution among natives in birth country b of immigrant i , \mathbf{X}_i is a vector of individual characteristics, θ_r is a fixed effect for residence country r of immigrant i , and ε_i denotes the error term. We adjust standard errors to allow for clustering of error terms by birth country. The

⁹ Economic factors have been found to influence preferences and voting in a number of studies, e.g., Ravallion and Loshkin (2000), Corneo and Grüner (2002), Leigh (2005), Brunner et al. (2008). Individuals who have an expectation of upward mobility may also prefer less redistribution. This prospect of upward mobility (POUM) hypothesis was proposed by Bénabou and Ok (2001) and has found empirical support (Alesina and La Ferrara 2005).

vector of individual characteristics, X_i , includes demographic characteristics, such as age and gender, as well as measures such as income and education that are meant to capture how much the individual stands to gain or lose from more redistribution. The residence country fixed effect captures both the effects of objective characteristics of the residence country, such as political institutions, and the effects of cultural influences of the residence country; we cannot separate the two.

The average preference of natives in the birth country, \overline{pref}_b , reflects both objective characteristics and cultural influences in the birth country. However, there is no reason that the characteristics of and institutions in the birth country should directly affect preferences for redistribution in the residence country. For immigrants, the coefficient on \overline{pref}_b should therefore only capture the effect of cultural influences. The identifying assumption for β_1 is that there are no omitted factors that are correlated with the average preference for redistribution in the birth country and that affect the individual's preference for redistribution in the country of residence.

There may also be “behavioral” factors that affect individuals' preferences for redistribution. For example, all individuals may have some taste for fairness. If this fairness preference is common across countries, it will not affect our estimate of β_1 . We consider systematic variation in taste for fairness across countries to be an element of culture, and such variation should be captured in \overline{pref}_b . Preferences may also be affected by the characteristics of potential beneficiaries. Individuals may prefer to redistribute to members of their own racial or ethnic group (Luttmer 2001) or to those perceived to be hard-working (Fong 2007). Preferences may also vary depending on whether respondents believe income is largely determined by luck

or hard work, a possibility we discuss in more detail below. To the extent that these preferences and beliefs are driven by objective societal factors (e.g., racial heterogeneity, low-income labor force participation, economic mobility) that vary at the country level, they will be captured by the residence country fixed effects. To the extent that these preferences and beliefs are shaped by the society in which individuals are raised and then persist, such effects fall within our definition of culture and should be included in our estimate of β_1 . Remaining variation not captured by individual controls will fall in the error term but should not affect our estimate of β_1 unless it is correlated with \overline{pref}_b .

Our focus is on determining whether individual preferences for redistribution exhibit a cultural component. In our empirical analyses, we therefore take the birth country preference (shown in Figure 1) as given. We do not attempt to identify the determinants of birth country preference, although previous studies suggest that attitudes toward the recipients of redistribution may play an important role. Alesina et al. (2001) and Alesina and Glaeser (2004) show that individuals in European Union countries are more likely to report that they believe the poor are “trapped in poverty” and that “luck determines income” and less likely to report a belief that “the poor are lazy” than those in the United States. It is not clear that these differences in beliefs are supported by the empirical evidence.¹⁰ Ultimately, we would expect differences in preferences for redistribution to be reflected in the redistributive policies of countries. In practice, however,

¹⁰ Several theoretical papers have noted that differences in beliefs may arise from multiple equilibria in the interaction between beliefs and redistribution systems; see, for example, Piketty (1995), Alesina and Angeletos (2005), and Bénabou and Tirole (2006). However, we should not expect old beliefs to persist under a new system of redistribution over long periods of time and across generations unless the beliefs, once formed, become part of culture. At the individual level, Corneo and Grüner (2002) show that individuals who believe that hard work is important “for getting ahead in life” have weaker preferences for redistribution. Fong (2001) shows that individuals prefer more redistribution if they believe poverty is determined exogenously and argues that this relationship cannot be explained by imperfectly measured self-interest. In addition, macroeconomic volatility experienced during formative years can result in increases in own preference for redistribution (Giuliano and Spilimbergo 2009; Alesina and Giuliano 2009).

the political process may result in differences between preferred and actual redistribution, perhaps explaining why preferred redistribution at the country level does not perfectly correlate with aggregate measures of redistribution, such as government spending. Gaining a better understanding of why countries fall where they do in the distribution of redistributive preferences is an important question but one that lies outside the scope of this paper.

3. Data

We use data from three rounds of the European Social Survey (ESS), a biennial cross-sectional survey administered in a large sample of (mostly) European nations. The survey was initiated by the European Science Foundation with the goal of measuring and comparing attitudes and behaviors across countries and over time in a methodologically rigorous way. The three rounds of the survey were conducted in 2002/2003, 2004/2005, and 2006/2007. Thirty-two countries participated in at least one round of the survey, and seventeen countries participated in all three rounds. The countries participating in each round are given in the first column of Table 1.

Respondents are given the statement “the government should take measures to reduce differences in income levels” and asked if they agree strongly, agree, neither agree nor disagree, disagree, or disagree strongly. We code this question on a five-point scale, with 1 being “disagree strongly” and 5 being “agree strongly.” Although the question does not specify a particular country when it refers to “government,” the question immediately preceding this question asks about policies specifically in the country of residence.¹¹ We define the preference

¹¹ In Round 1, the immediately preceding question asks respondents their level of agreement with the following statement: “The less that government intervenes in the economy, the better it is for [country].” In Rounds 2 and 3, the immediately preceding question asks respondents to “please say what you think overall about the state of health

for redistribution in an immigrant's birth country as follows: we calculate the mean preference among natives in the birth country in each ESS round, weighted by individual weights, and then average across rounds.¹²

Our primary sample consists of individuals who are immigrants; that is, individuals whose country of birth differs from the country of residence. We restrict this immigrant sample to individuals who are 18 years of age or older and whose birth country is an ESS survey country.¹³ We drop observations for which the preference for redistribution is missing (3.7% of observations in the immigrant sample). We also drop observations for which gender is missing (less than 0.1% of observations). Demographic characteristics of this sample (N=6249) are given in Appendix Table A1.

Table 1 summarizes immigrant flows across countries in our immigrant subsample of the ESS. The first set of columns tabulates patterns of emigration from countries of birth; the second set of columns tabulates patterns of immigration into countries of residence. For example, 100 individuals in the sample were born in Austria but reside in a different sample country, and 335 individuals resided in Austria at the time of the survey but were born in a different sample country. These numbers are unweighted. The table is meant to illustrate the variation in our sample but is not representative of aggregate immigration flows across the sampled countries.

services in [country] nowadays" on a scale from extremely bad to extremely good. In both cases, [country] is replaced with the name of the country in which the survey is conducted.

¹² If a country did not participate in all rounds of the survey, the birth country preference for that country is defined by the average across the available rounds. In practice, the mean preference for a given country across rounds is almost perfectly correlated. This means that we will retain immigrants *from* a given birth country in all rounds as long as we observe the birth country in any round. However, we have observations for immigrants *to* a given destination country in a given round only if the destination country participated in that round.

¹³ We drop observations for which age is missing (less than 1% of observations). We also drop 12 observations for which individuals reported being born outside the country of residence but country of birth is missing or the birth country and indicator for native-born are inconsistent.

We observe substantial diversity in the sample: each birth country has at least four distinct destination countries. Among the 930 possible country pair cells, we observe individuals in 43% of them.

4. Results

4.1. Determinants of Preferences for Redistribution

In Table 2, we test for the effects of culture on individual preferences for redistribution and explore the effects of traditional economic determinants of preferences. A one unit increase in the mean preference for redistribution in the individual's country of birth, calculated on a 1 to 5 scale, is associated with a 0.36 unit increase in the individual's own preference for redistribution (column 1). This effect is highly statistically significant ($t=4.08$). The specification in column 1 includes country of residence fixed effects as well as demographic and socioeconomic status controls.¹⁴ We also control for income in the country of birth, measured by the log of purchasing power parity adjusted GDP in 2004. Standard errors are clustered by birth country, since the preference variable of interest varies at the birth country level.

The economic variables affect preferences for redistribution in the direction that is consistent with economic self-interest. Higher-income households stand to lose more from income redistribution and, consistent with that, household income has a negative effect on preferences for redistribution.¹⁵ Similarly, individuals with less than secondary education have a

¹⁴ We control for age, gender, education, spouse's education, marital status, log of household income, log of household size, whether the individual is currently working, whether the individual has ever been unemployed for more than 12 months, the primary income source, whether the individual has a child in the home, an indicator for residence in an urban area, and an indicator for ESS round. We include dummy variables to indicate missing information.

¹⁵ Household income refers to total net income from all sources. Income is coded in a series of income ranges. We define income as the midpoint of the relevant range for each household. If a household's income fell in the category $\text{income} < X$, where X is the lowest income level given, we define income as $0.5X$. If a household's income fell in the category $\text{income} > Y$, where Y is the highest income level given, we define income as $2Y$. If income distributions are

higher preference for redistribution, and individuals with more than secondary education have a lower preference; the same pattern is observed for spousal education. Individuals who have ever been unemployed for a twelve month period have a higher preference. We also examine the effects of primary source of income, with the omitted category being wage and salary income. Relative to this group, individuals whose primary source of income is self-employment and those whose primary source is investment income have lower preferences for redistribution. Those whose primary source of income is pension, unemployment benefits, or social benefits have a higher preference for redistribution, though the effect of pension income is not statistically significant. Age has a positive effect on preferences, as does being female.

The log of purchasing power parity adjusted GDP in the birth country is included as a control to capture economic differences across countries. To the extent that these differences in economic environment affect the cultural preference for redistribution, we are perhaps overcontrolling. However, we wanted to capture differences in birth country culture over and beyond simple differences in the level of economic development of the birth country. The GDP coefficient is positive and significant in our base specification, but its magnitude and significance level are sensitive to the choice of sample. Hence, we mainly regard it as a control variable and do not attach an economic interpretation to it.

In order to compare the magnitude of the culture effect directly to the magnitude of economic determinants of preferences, we standardize the preference variable and the explanatory variables and re-run the specification in column 1. The estimates imply that a one standard deviation increase in the birth country preference for redistribution is associated with a 0.11 standard deviation increase in the immigrant's own preference for redistribution. In

Pareto distributions, then for parameter α , $E(\text{income} \mid \text{income} > Y) = \alpha Y$. Empirically, income does appear to follow a Pareto distribution, and we take $\alpha = 2$ following Saez (2001).

comparison, a one standard deviation increase in the log of household income is associated with a 0.07 standard deviation decrease in own preference. The coefficient on income is somewhat difficult to interpret, since this specification also controls for education and other proxies for income. If we remove the controls for own education, spousal education, source of income, and the indicator for whether the individual had paid work in the last week, then the coefficient on culture is 0.13, whereas the coefficient on log household income is -0.12. Finally, if we re-introduce own education as a linear variable to the previous specification, the estimates imply that a one standard deviation increase in culture is associated with a 0.11 standard deviation in own preference. Summing the relevant coefficients, the combined effect of a one standard deviation increase in log household income and own education is a 0.18 standard deviation decrease in own preference. It is important to note that income and education are imperfect proxies for true economic self-interest. Nevertheless, the results do suggest that culture is an economically significant determinant of redistributive preferences.

We next compare the effects of our control variables on preferences in the immigrant sample and the native sample. This comparison allows us to test whether demographic and economic factors affect the preferences of immigrants differently than the preferences of natives. Column 2 regresses the individual preference for redistribution on the same set of control variables as in column 1, but excludes the birth country preference and GDP measures since these variables cannot be identified separately from the residence country fixed effects in the native sample. Column 3 presents the same regression for the sample of natives. Overall, the coefficients appear quite similar, indicating that the economic determinants of preferences for redistribution are similar for natives and immigrants.¹⁶ These results alleviate the possible

¹⁶ We cannot reject the hypothesis that the individual characteristics predicting preferences for redistribution have the same effects for natives and immigrants (p-value: 0.36).

concern that individual characteristics do not capture the expected benefit or loss from redistribution as well among immigrants as among natives and that, as a result, the coefficient on birth country preferences could reflect economic self-interest rather than a cultural effect.

4.2. Robustness Analysis

A concern when examining the preferences of immigrants is selection. Although cross-country migration decisions are clearly non-random, our primary concern here is whether selective migration could spuriously generate an effect of birth country preference for redistribution on own preference. We explore the possibility of economically motivated selective migration by testing the sensitivity of our results to the choice of economic controls (Table 3). In row 1, we regress individual preference for redistribution on the birth country preference, controlling only for residence country fixed effects. This specification corresponds to the graph shown in Figure 1. The estimated preference coefficient is 0.26 ($p < 0.01$). This estimate is quite close to the slope of the line in Figure 1 (0.30). Row 2 presents the results with a basic set of controls; this specification is the same as column 1 in Table 2, and the estimated preference coefficient is 0.36.

We next include richer control variables (row 3). We define the own education indicators more narrowly, resulting in seven possible educational attainment categories. We include 3rd order polynomials in the log of household income and household size, a quadratic term for age, more detailed controls for employment status and history, indicators for religious affiliation, indicators for the length of residence in the residence country, and a dummy variable for linguistic minority that is equal to one if the language most commonly spoken at home is not one of the primary residence country languages.¹⁷ The estimated preference coefficient in this

¹⁷ We include whether your spouse is currently working and whether you have ever had a paid job. We define a language as a “primary” language of a given country if it is a language most commonly spoken at home by at least

specification is 0.34 ($p < 0.01$). We define the set of control variables used in row 3 as our baseline set of controls. These controls are included in all further analyses, unless otherwise indicated.

In row 4, we add controls for citizenship, whether the individual voted in the last national election, and frequency of religious attendance. We do not include these variables in the baseline set of controls because they may be partially determined by preferences for redistribution, but their inclusion does not affect the estimate. The specifications in rows 3 and 4 include 3rd order polynomials in income, but the effects of these income variables on an individual's gain or loss from redistribution may depend on the tax and transfer systems of the country of residence. We therefore include interactions of income, income-squared, and income cubed and residence country dummies, allowing the effects of income to vary flexibly by country (row 5). The estimated coefficient is 0.32 ($p < 0.01$). Finally, we add an even more extensive set of economic controls (row 6), resulting in an estimated coefficient of 0.29 ($p < 0.01$).¹⁸

The estimates in Table 3 demonstrate that the preference effect is robust to the choice of controls for economic factors. Although the point estimates generally decrease slightly as we add more controls, including even the richest set of economic controls results in a large and significant estimate that is similar to the baseline. Selection on unobservables could still be a potential concern if the birth country preference is capturing economic characteristics of immigrants that remain unobserved by us but *are* relevant for taxes and transfers. This may seem unlikely, given that we found little selection on a rich set of observable characteristics (for

30% of natives in that country. These results and the results in Section 4.3 are very similar if we instead use a 10% or 50% cutoff for linguistic minority.

¹⁸ We include all the controls in rows 4 and 5 and add controls for main economic activity over the last week, union membership, mother's and father's education, occupation and industry indicators, and dummies for within-host country region. There are 96 controls included in the baseline and 458 controls included in the regression with comprehensive controls (row 6).

education, income, and labor market experiences). However, we cannot completely rule out the possibility of selection on unobservables. Immigrants may, for example, have private information about expected economic mobility.

Another possible type of selection is preference-based (Tiebout) selection. Migrants with high preferences for redistribution (from whichever country they come) may choose to move to high-preference countries, and similarly, those with low preferences may move to low-preference countries. In the extreme, if all individuals moved to countries exactly aligned with their own preferences, we would not estimate any effect of culture even if cultural effects were in fact strong. More generally, such selective migration would attenuate our coefficients, biasing our estimates of culture downward.

We next test the robustness of our results to the choice of sample and specification (Table 4). Row 2 presents the results excluding the two birth countries with the lowest mean preference for redistribution (Denmark and the Netherlands) and the two countries with the highest mean preference (Bulgaria and Greece). The estimated coefficient is slightly higher than the baseline (0.38) and remains highly significant. Our results are also robust to dropping individuals for whom the birth country is a former Communist country (row 3).¹⁹ This indicates that cultural influences are important within Western Europe; we are not capturing only the effects of Communism or other factors that might drive differences in preferences between Eastern and Western Europe.

Our baseline specification included an indicator variable for the ESS round. We now examine the three rounds separately (rows 4-6). While the effect is strongest in the Round 2 sample, the coefficient of interest is significant at the 10% level or better in all three rounds. The

¹⁹ Former Communist countries in the sample are: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Poland, Romania, Russia, Slovakia, Slovenia, and Ukraine.

effect is also robust to restricting the sample to the 17 countries surveyed in all rounds (row 7) and to restricting the sample to the EU-15 countries, the 15 member countries of the European Union prior to the 2004 expansions (row 8). These results indicate that cultural influences appear to be important determinants of preferences even among countries that are relatively homogeneous.²⁰ The fact that we observe significant effects of birth country preference across many different subsamples of countries also provides further suggestive evidence against the selection hypotheses, since we would expect the form of selection to differ in these subsamples.

4.3. Heterogeneity

We next explore whether the birth country effect differs for different types of immigrants. We examine heterogeneity in the birth country effect by regressing an immigrant's preference for redistribution on her birth country mean preference interacted with the relevant indicator variable (Table 5). The direct effect of birth country preference is excluded, so each regression has two coefficients of interest: one measures the average effect of birth country among immigrants for whom the indicator equals one and the other measures the average effect for those for whom the indicator equals zero. The table also reports the p-value on a test of whether the two coefficients in each regression are equal.

Rows 1, 2, and 3 test whether the effect varies based on the length of time the immigrant has lived in the residence country, citizenship, and voting. We construct three indicator variables. Tenure is equal to one if the immigrant has lived in the residence country for more than 20 years (which is about the median tenure). Citizenship is equal to one if the individual is a citizen of the residence country, and Voting is equal to one if she voted in the last national

²⁰ We perform three additional robustness checks: we omit individuals with any missing income or demographic information (row 9), we run an ordered probit rather than an OLS specification (row 10), and we weight the data using individual weights (row 11). Since the root mean squared error in the OLS specification happens to be 1.00, the probit coefficient can be meaningfully compared to the OLS coefficient. In all three robustness checks, the coefficients are very close to the baseline coefficient and statistically significant at the 1% level.

election. Individuals with longer tenure, citizens, and voters have smaller effects of birth country preference,²¹ but the preference effect is still highly significant for each of these groups. The tenure effect suggests that the result is unlikely to be driven solely by slow updating of economic information, since birth country preference is a significant determinant of own preference even among immigrants who have lived in their country of residence for more than twenty years.

The effect of birth country preference also varies with social measures of assimilation. Row 4 shows that individuals in a residence country with a large population of other immigrants from the individual's own birth country have a significantly stronger effect of birth country culture. Borjas (1992) notes the potential importance of an individual's ethnic group in determining intergenerational earnings mobility; a similar mechanism may act to slow assimilation in this case. Row 5 shows that immigrants who are members of linguistic minorities in their residence countries have stronger preference effects, perhaps because they are less easily able to assimilate into the residence country, although this difference is not statistically significant.

These economic and social measures are correlated with each other, so we are not able to separately estimate the partial effect of each measure. Taken together, however, these results do suggest that individuals are less influenced by birth country culture when they are more assimilated into the residence country. This may be because immigrants' preferences begin to converge to cultural norms in the country of residence or because those who choose to assimilate have preferences that are more divergent from their birth country preferences to begin with.

Individuals with children in the household have significantly stronger birth country preference effects (row 6). This result may be somewhat surprising, since we might expect children to hasten the assimilation process. A possible explanation of this finding is that parents

²¹ The differences are significant at the 5% level for tenure and voting and just above the 10% level for citizenship.

want to pass on their birth country culture to their children and that this strengthens the effect on their own preferences.

4.4. Cultural Effects and Voting Behavior

A question when interpreting these findings is whether culture affects true preferences or only reporting behavior. We therefore examine the effects of birth country preferences on individual voting decisions. This exercise is limited by the fact that only 46% of the immigrant sample was eligible and chose to vote in the last national election. As discussed in the last section, the subsample of immigrants who vote are less influenced by their birth country culture.

Party ideologies are classified in two ways. First, we construct a measure of each party's preference for redistribution by using the voting behavior of the native sample. This party preference variable is defined for each immigrant as the mean preference for redistribution among natives who voted for the immigrant's party. A higher value of this variable implies that the party for which the immigrant voted is likely to be more in favor of redistribution. Second, we categorize political parties as right, center, or left using the Database of Political Institutions constructed by Beck et al. (2001).²²

Before looking at voting behavior, we examine the effect of birth country preference on own self-reported preference for the subsample of immigrants for whom party voting data are available. Row 1 of Table 6 presents our baseline specification for the sample of immigrants for whom our measure of party preference can be constructed. Row 3 presents the specification for the subsample for which the Beck political party classification can be made. The preference effects for these samples are 0.184 ($p < 0.05$) and 0.181 ($p < 0.10$), respectively. These estimates

²² The Beck data were supplemented with data from the Huber-Inglehart (1995) classification of party politics. Please see the notes to Table 6 for more detail. We also added cases where we were able to discern the party match from other sources with confidence; these were generally parties where the left-right classification was clear but the party was not a main government or opposition party and therefore not included in the Beck database. All party classifications were made prior to running the empirical analyses.

differ slightly from the effect for all voters estimated in Table 5 because even among immigrants who voted, the political party for which they voted is unavailable in 18% of cases. We are unable to match the political party to a Beck database classification in a further 30% of cases.

In row 2, we replace the dependent variable with our constructed measure of the redistributive preference of the party for which the immigrant voted. Note that this measure is scaled in a way that makes it directly comparable to the individual preference measure. We find that immigrants from birth countries with a high preference for redistribution are significantly more likely to vote for a more pro-redistribution political party in their countries of residence. The estimated effect is 0.11, and it is significant at the 1% level. The effect is somewhat smaller than the effect on preferences for redistribution for this sample (row 1) but is estimated with greater precision. This finding is not surprising; we would expect a voting-based measure of preferences to be less noisy than the self-reported categorical measure. This difference is also reflected in the R-squared: we can explain over half of the variation in the voting measure, as compared to 10-15% of the variation in the preference measure.

We also find that birth country culture increases the immigrant's preference for redistribution when we measure this preference by the Beck classification of the party for which she voted. An increase of one unit in the birth country mean preference is associated with a 0.25 unit movement to the left on the three-unit Beck scale (row 4), and the effect is significant at the 5% level. We conclude that Table 6 provides strong evidence against the concern that the estimated effects of culture only capture reporting behavior rather than true preferences.

4.5. Intergenerational Transmission of Preferences

In Rounds 2 and 3 of the ESS, individuals are asked not only their own country of birth but also the country of birth of their mother and father. We construct the sample of individuals

who are residing in their own country of birth but who have at least one parent who was born in a different ESS survey country. This sample consists of 4649 individuals. Of these, 2920 have a mother and 2958 have a father who was born in a different ESS survey country.²³

We first examine the effect of the mean preference for redistribution in the parent birth country, where parent could be the mother or father. We define the parent birth country mean preference as the average of the mean preferences in each parent's country of birth. A slight majority of individuals in this sample has one parent who is a native in the country of residence and another parent who emigrated from an ESS survey country. We include the birth country preference of the native parent in the average to correctly scale the cultural effect of the immigrant parent, but this does not drive the estimates because we capture the direct effect of the native parent's birth country preference by the residence country fixed effects.

A one unit increase in the parent birth country preference is associated with an increase of 0.23 in the individual preference, and the effect is statistically significant at the 5% level (Table 7, row 1). This effect is approximately two-thirds as large as the own country of birth effect. In row 2, we include an interaction of the mean preference in the parent birth country with a dummy variable that equals one if both parents come from the same birth country.²⁴ The base effect (for those whose parents do not come from the same birth country) is 0.18 ($p < 0.10$). The marginal effect of having a common parental birth country is 0.14. This suggests that having two parents from the same birth country amplifies the cultural effect, although the interaction is not estimated with precision. It is also possible that individuals with a strong desire to transmit their cultural values to their children select partners who share these values. In this case, the

²³ Of those with an ESS immigrant mother, 55% have a native father and 42% have an immigrant father from an ESS survey country. Of those with an ESS immigrant father, 56% have a native mother and 42% have an immigrant mother from an ESS survey country.

²⁴ This indicator is equal to one for 1077 individuals in the sample.

common birth country effect could partially reflect preference intensity by a single parent rather than a true amplification effect. The country of origin effect appears to be stronger for immigrant mothers: the effect of mother's birth country preference is 0.17 ($p < 0.05$) and the effect of father's birth country preference is 0.11 (not significant).²⁵ However, we cannot reject the hypothesis that the mother's and father's effect are equally strong.

These results suggest that cultural effects persist strongly at least into the second generation, a finding that is consistent with previous work on the intergenerational transmission of preferences and with research documenting cultural effects of country of ancestry among second generation immigrants in the United States.²⁶ These results also provide evidence against the selective migration and slow updating hypotheses, since the samples consist of individuals born in their country of residence.

5. Conclusion

By studying immigrants, we are able to credibly disentangle cultural determinants of preferences for redistribution from economic and institutional determinants. We find that individuals' preferences for redistribution are strongly affected by preferences in their countries of birth: the average preference for income redistribution in the culture where an immigrant is raised continues to have an effect once they emigrate. This effect is highly statistically significant, economically important, and robust to rich controls for economic factors and to the

²⁵ The sample in row 3 consists of natives with an immigrant mother from an ESS survey country; the sample in row 4 consists of natives with an immigrant father from an ESS survey country. These samples overlap slightly, since some individuals have parents from the same source country and some individuals have parents from two different survey countries. The preference variables in these specifications are the source country mean preference of the mother and father respectively. Note that the stronger effect for mothers could arise because women may choose partners with stronger preference intensity than men, effectively transmitting their cultural values through spousal selection.

²⁶ See, e.g., Bisin and Verdier (2008) for a brief and lucid overview of models and evidence of cultural transmission. Guiso et al. (2008) present evidence of cultural effects persisting over a period of well over 500 years.

choice of sample and specification. Our results show that these cultural influences also affect real behaviors, such as voting. Cultural determinants of preferences for redistribution appear to be strongly persistent across generations.

At a fundamental level, this paper provides evidence on the nature of preferences for redistribution. We find that these preferences cannot be fully explained by economic self-interest or by economic, political, or social aspects of the current environment, since individual preferences continue to be influenced by country of origin even in a common environment. We take this as evidence that culture is an important determinant of preferences for redistribution. At a more applied level, this finding has three important implications. First, it suggests that culture may be an important factor in explaining the large observed differences in systems of redistribution across countries. Second, it implies persistence in preferences for redistribution. This persistence means that in settings with multiple equilibria for the amount of redistribution (e.g., as in Piketty 1995), we are unlikely to observe a sudden shift from one equilibrium to another, which underscores the importance of those factors that determine the selection of the initial equilibrium. Third, while our primary focus is on using immigrants as a mechanism to identify the effects of culture, our findings shed light on the political economy of immigration policy because the cultural values that immigrants bring along can shape the social policies of their destination countries well into the future. Even if the immigrants themselves have little effect on current policy (e.g., because they are not allowed to vote), the transmission of their cultural values to their children can affect future policy and have a lasting impact.

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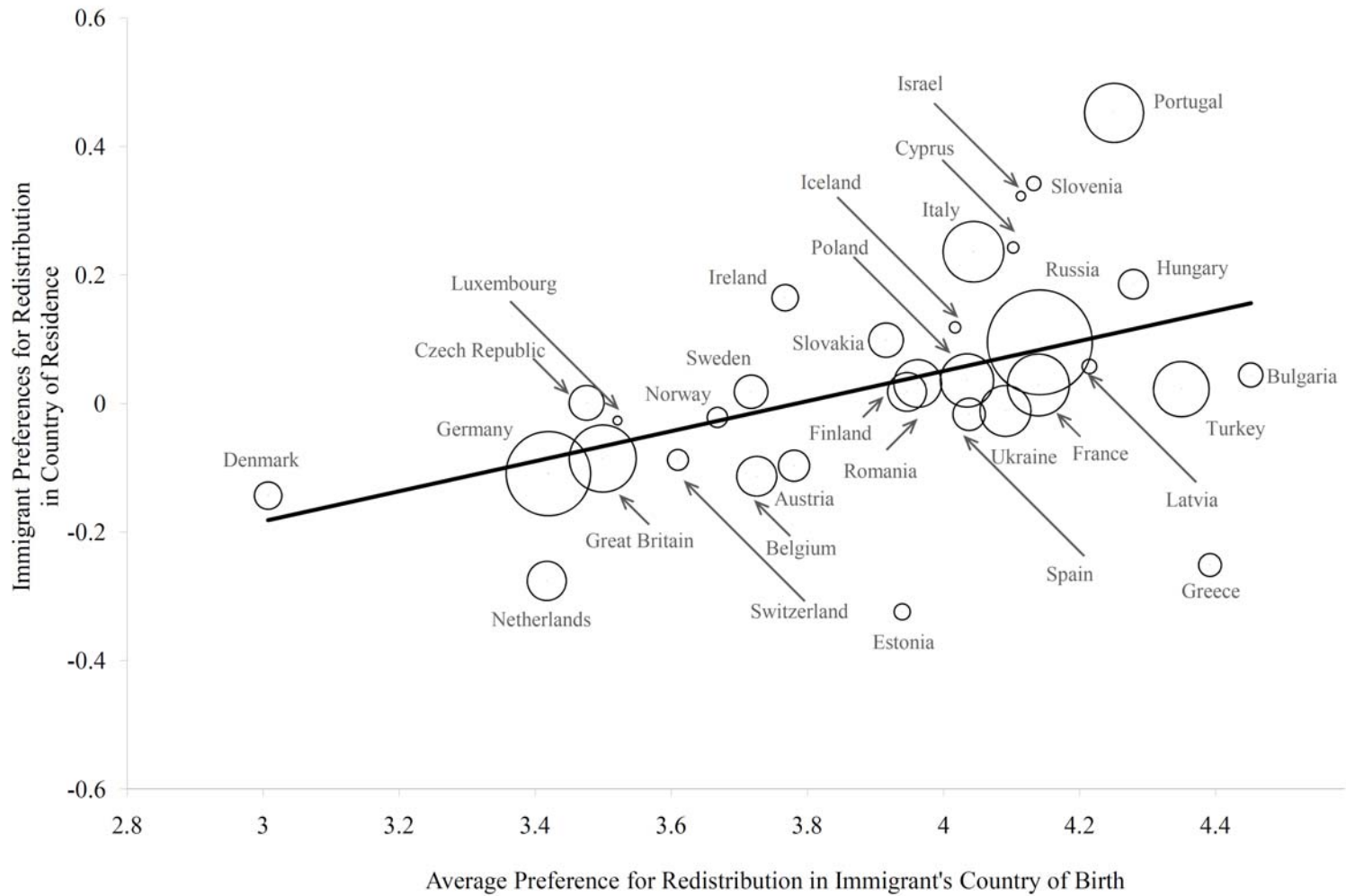
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Figure 1: Immigrant Preferences for Redistribution by Preferences in Country of Birth



Note: Immigrant preference for redistribution in country of residence is measured in deviation from the mean preference of natives in the country of residence. It is then averaged over all countries in which immigrants from a given birth country currently reside. Thus, the country labels indicate countries of birth. The size of each circle is proportional to the number of immigrants from the indicated country in the ESS dataset. The regression line has a slope of 0.30 with a standard error of 0.08. The adjusted R² equals 0.40.

Table 1: Immigration Flows within ESS Sample Countries

Country:	Immigration Flows by Birth Country				Immigration Flows by Country of Destination			
	Number of Immigrants from Birth Country	Distinct Destination Countries	Most Prevalent Destination Country	Number Immigrating to Most Prevalent Country	Number of Immigrants in Destination Country	Distinct Birth Countries	Most Prevalent Birth Country	Number Immigrating from Most Prevalent Country
Austria	100	13	Switzerland	54	335	23	Germany	115
Belgium	165	18	Luxembourg	93	274	19	France	66
Bulgaria ⁺ *	60	15	Greece	18	10	4	Romania	4
Cyprus ⁺ *	13	4	Greece	6	27	9	Greece	14
Czech Rep. [#]	126	14	Slovakia	56	124	8	Slovakia	92
Denmark	78	11	Norway	33	88	21	Germany	15
Estonia ⁺	27	6	Finland	13	576	6	Russia	487
Finland	158	9	Sweden	131	93	12	Sweden	49
France	404	20	Luxembourg	126	169	19	Portugal	46
Germany	740	28	Switzerland	213	433	27	Poland	99
Great Britain	471	19	Ireland	315	163	23	Ireland	60
Greece [#]	54	16	Cyprus	14	171	19	Germany	50
Hungary	91	17	Austria	26	67	6	Romania	49
Iceland ^{##}	13	5	Denmark	5	9	3	Denmark	5
Ireland	72	8	Great Britain	60	384	15	Great Britain	315
Israel ^{##}	9	8	Netherlands	2	282	17	Romania	69
Italy [#]	387	16	Switzerland	140	35	13	Switzerland	7
Latvia ⁺ *	22	8	Estonia	6	141	5	Russia	117
Luxembourg [#]	8	4	Belgium	4	701	21	Portugal	252
Netherlands	160	15	Belgium	53	177	22	Turkey	42
Norway	43	10	Sweden	27	169	20	Sweden	34
Poland	296	22	Germany	99	43	8	Germany	27
Portugal	367	9	Luxembourg	252	69	11	France	37
Romania ⁺ *	238	22	Israel	69	1	1	Ukraine	1
Russia ⁺ *	1142	24	Estonia	487	55	5	Ukraine	47
Spain	108	16	Switzerland	27	102	18	Romania	20
Slovakia ⁺	123	11	Czech Rep.	92	76	6	Czech Rep.	56
Slovenia	21	7	Austria	9	47	8	Germany	19
Sweden	117	12	Finland	49	321	24	Finland	131
Switzerland	45	12	Italy	7	719	25	Germany	213
Turkey ^{##}	321	14	Germany	88	14	5	Bulgaria	8
Ukraine ⁺	270	19	Estonia	76	374	9	Russia	348

Note: + indicates that the survey was not fielded in the first round of the ESS in that country. * indicates that the survey was not fielded in the second round of the ESS in that country. # indicated that the survey was not fielded in the third round of the ESS in that country.

Table 2: Predictors of Preferences for Redistribution

<i>Dependent Variable:</i> Subjective Preference for Income Redistribution	<u>Immigrants</u>		<u>Immigrants – Controls Only</u>		<u>Natives – Controls Only</u>	
	Coefficient	(S.E.)	Coefficient	(S.E.)	Coefficient	(S.E.)
Birth country redistribution preferences	0.364 ^{***}	(0.089)				
Birth country log GDP per capita	0.190 ^{***}	(0.064)				
Age	0.004 ^{**}	(0.002)	0.004 ^{**}	(0.002)	0.003 ^{***}	(0.001)
Female	0.091 ^{***}	(0.030)	0.087 ^{**}	(0.032)	0.126 ^{***}	(0.017)
Own Low education	0.050	(0.056)	0.067	(0.059)	0.058 ^{***}	(0.016)
Own High education	-0.088 ^{***}	(0.026)	-0.096 ^{***}	(0.027)	-0.161 ^{***}	(0.019)
Spouse Low Education	0.059 ^{**}	(0.028)	0.073 ^{**}	(0.030)	0.056 ^{***}	(0.012)
Spouse High Education	-0.163 ^{***}	(0.040)	-0.160 ^{***}	(0.037)	-0.107 ^{***}	(0.019)
Divorced or separated	0.084	(0.100)	0.090	(0.100)	0.090 ^{***}	(0.013)
Widowed	0.017	(0.071)	0.020	(0.072)	-0.003	(0.019)
Never married	0.082	(0.064)	0.092	(0.064)	0.052 ^{***}	(0.014)
Log household income	-0.059 [*]	(0.030)	-0.062 [*]	(0.031)	-0.089 ^{***}	(0.012)
<i>Primary Income Source:</i>						
Self-Employed	-0.206 ^{***}	(0.051)	-0.206 ^{***}	(0.054)	-0.179 ^{***}	(0.025)
Pension	0.051	(0.037)	0.046	(0.036)	-0.007	(0.019)
Unemployment benefits	0.164 [*]	(0.088)	0.161 [*]	(0.084)	0.107 ^{***}	(0.038)
Social benefits	0.249 ^{***}	(0.090)	0.234 ^{**}	(0.094)	0.113 ^{**}	(0.040)
Investment	-0.360 ^{**}	(0.164)	-0.340 [*]	(0.169)	-0.389 ^{***}	(0.059)
Other	-0.213	(0.141)	-0.224	(0.146)	-0.116 ^{***}	(0.033)
Log household size	0.017	(0.026)	0.012	(0.024)	0.038 ^{***}	(0.009)
Paid work last week	0.000	(0.033)	0.004	(0.033)	0.006	(0.011)
Has a child in the household	0.066 [*]	(0.038)	0.075 [*]	(0.038)	0.008	(0.010)
Ever unemployed for more than 12 months	0.142 ^{***}	(0.038)	0.138 ^{***}	(0.035)	0.135 ^{***}	(0.024)
Lives in metropolitan area	0.014	(0.041)	0.019	(0.043)	-0.037 ^{**}	(0.018)
ESS Round 2	-0.003	(0.039)	-0.002	(0.038)	0.030	(0.023)
ESS Round 3	0.111 ^{**}	(0.051)	0.109 ^{**}	(0.049)	0.085 ^{***}	(0.026)
Residence country dummies (32)		Yes		Yes		Yes
N		6249		6249		118323
Adjusted R ²		0.1061		0.1000		0.1324

Note: Robust standard errors adjusted for clustering by birth country are in parentheses. Significance levels: * 10 percent; ** 5 percent; *** 1 percent. The dependent variable is subjective support for income redistribution. Birth country redistribution preferences are measured as the mean subjective preference for redistribution among natives in the immigrant's country of birth. Log GDP per capita is measured in purchasing power parity US dollars. Low education includes the two categories "Not completed primary education" and "Primary or first stage of basic." Secondary education is the omitted category and corresponds to the category "Lower secondary or second stage of basic." High education includes the following four categories: "Upper secondary," "Post-secondary, non-tertiary," "First stage of tertiary," and "Second stage of tertiary." The omitted marital category is "Married." The omitted income source is "Salary and wages." (Unreported) dummies are included for missing regressors.

Table 3: Effect of Birth Country Culture on Immigrants' Preferences for Redistribution in Residence Country

<i>Dependent Variable:</i> Subjective Preference for Income Redistribution	Coefficient on Birth Country Redistribution Preferences	(S.E.)	Adjusted R ²	N
<i>Specification:</i>				
1. Country dummies as only controls	0.264***	(0.092)	0.0701	6249
2. Baseline, but fewer controls	0.364***	(0.089)	0.1061	6249
3. Baseline	0.341***	(0.084)	0.1101	6249
4. Baseline, but more controls	0.339***	(0.082)	0.1101	6249
5. Baseline, but interacting a cubic in log household income with country dummies	0.321***	(0.079)	0.1151	6249
6. Comprehensive controls	0.290***	(0.072)	0.1325	6249

Note: Robust standard errors adjusted for clustering by birth country are in parentheses. Significance levels: * 10 percent; ** 5 percent; *** 1 percent. (Unreported) dummies are included for missing regressors. The baseline regression with fewer controls corresponds to Column 1 of Table 2. The baseline regression adds several controls: We include more detailed controls for own education (“not completed primary education,” “primary or first stage of basic,” “lower secondary or second stage of basic,” “upper secondary,” “post-secondary, non-tertiary,” “first stage of tertiary,” and “second stage of tertiary”); 3rd order polynomials in the log of household income and household size; a quadratic term for age; indicators for whether the spouse is currently working and whether the respondent has ever had a paid job; a dummy for linguistic minority coded as 1 if the respondent’s primary language spoken at home is spoken at home by less than 30% of the native population; a set of five 0/1 dummies to express the length of time a respondent has lived in the residence country; and a set of eight 0/1 dummies to express religious affiliation. The regression with more controls (row 4) adds a dummy equal to 1 if the respondent attends religious services once a month or more, a dummy equal to 1 if the respondent voted in the last national election, and a dummy equal to 1 if the respondent is a citizen of the residence country. Row 6 includes all of the controls in rows 4 and 5 and adds the following additional controls: a set of eight 0/1 dummies for main activity over the last week, three 0/1 dummies to indicate union membership, ten occupational categories, sixteen industry categories, mother’s and father’s education (defined as in Table 3), and a full set of dummies for within-residence country region.

Table 4: Robustness to Sample Selection and Specification

<i>Dependent Variable:</i> Subjective Preference for Income Redistribution				
<i>Specification:</i>	Coefficient on Birth Country Redistribution Preferences	(S.E.)	Adjusted R ²	N
1. Baseline	0.341 ^{***}	(0.084)	0.1101	6249
2. Omitting Denmark, the Netherlands, Bulgaria and Greece	0.383 ^{***}	(0.101)	0.1068	5897
3. Omitting former Eastern Bloc birth countries	0.334 ^{***}	(0.080)	0.1049	3833
4. ESS Round 1	0.316 ^{**}	(0.118)	0.1026	2005
5. ESS Round 2	0.442 ^{***}	(0.056)	0.1152	2306
6. ESS Round 3	0.252 [*]	(0.134)	0.1204	1938
7. Only countries represented in all ESS rounds	0.270 ^{**}	(0.097)	0.0930	2521
8. Only EU-15 countries	0.225 ^{**}	(0.085)	0.1108	2416
9. Omitting observations with missing income or demographic information	0.308 ^{***}	(0.078)	0.1179	4774
10. Ordered probit	0.361 ^{***}	(0.087)	0.0491	6248
11. Weighted by design weights	0.361 ^{***}	(0.097)	0.1135	6249

Note: Robust standard errors adjusted for clustering by birth country are in parentheses. Significance levels: * 10 percent; ** 5 percent; *** 1 percent. All regressions include the same control variables as the baseline regression reported in row 3 of Table 3. Denmark and the Netherlands are the two birth countries with the lowest mean preference for redistribution; Bulgaria and Greece are the countries with the highest mean preference. Former Eastern Bloc countries included in the ESS are Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Poland, Romania, Russia, Slovakia, Slovenia, and Ukraine. Countries in each of the three rounds and those represented in all rounds are shown in Table 1. Design weights correct for the probability of sampling within a country but do not adjust for differences in population across countries.

Table 5: Which Immigrants Are Most Influenced by Their Birth Country?

<i>Dependent Variable:</i> Subjective Preference for Income Redistribution	Coefficient on birth country preference for income redistribution		(S.E.) p-value	Adjusted R ²	N
<i>Specification:</i>					
1. By tenure					
<i>Has lived in the country for ≤20 years</i>	0.482 ^{***}	(0.132)	0.1108	6249	
<i>Has lived in the country for >20 years</i>	0.261 ^{***}	(0.073)			
P-value on test of equal coefficients		0.033			
2. By citizenship					
<i>Non-citizen in residence country</i>	0.416 ^{***}	(0.114)	0.1107	6249	
<i>Citizen in residence country</i>	0.271 ^{***}	(0.071)			
P-value on test of equal coefficients		0.112			
3. By voting					
<i>Non-voter in previous national election</i>	0.419 ^{***}	(0.097)	0.1107	6249	
<i>Voted in previous national election</i>	0.244 ^{***}	(0.083)			
P-value on test of equal coefficients		0.026			
4. By immigrant density					
<i>Immigrant density below median</i>	0.192 ^{**}	(0.087)	0.1131	6249	
<i>Immigrant density above median</i>	0.683 ^{***}	(0.105)			
P-value on test of equal coefficients		0.000			
5. By linguistic minority					
<i>Speaks dominant language at home</i>	0.282 ^{***}	(0.075)	0.1106	6249	
<i>Speaks minority language at home</i>	0.482 ^{***}	(0.148)			
P-value on test of equal coefficients		0.130			
6. By children in the household					
<i>Does not have children in the household</i>	0.278 ^{***}	(0.080)	0.1104	6249	
<i>Has children in the household</i>	0.434 ^{***}	(0.096)			
P-value on test of equal coefficients		0.006			

Note: Robust standard errors are adjusted for clustering by birth country. Significance levels: * 10 percent; ** 5 percent; *** 1 percent. All regressions include the same control variables as the baseline regression reported in row 3 of Table 3. Immigrant density is measured as the ratio of immigrants from a particular birth country to the total population in the country of residence. The median of immigrant density is the median taken over all immigrants from ESS countries in the ESS data set. A language is defined as dominant if more than 30% of the native population speaks it as a primary language in the home.

Table 6: Effect of Birth Country Culture on Immigrants' Voting Behavior

<i>Dependent Variable:</i>	Coefficient on Birth Country Redistribution Preferences	(S.E.)	Adjusted R ²	N
1. Subjective preference for income redistribution using sample for voting data is available	0.184**	(0.090)	0.1123	2328
2. Redistribution preferences of the party for which the person voted	0.105***	(0.033)	0.5233	2328
3. Subjective preference for income redistribution using sample for which Beck data is available	0.181*	(0.106)	0.1103	1622
4. Left-right party scale using Beck database	0.253**	(0.116)	0.1638	1622

Note: Robust standard errors adjusted for clustering by birth country are in parentheses. Significance levels: * 10 percent; ** 5 percent; *** 1 percent. All regressions include the same control variables as the baseline regression reported in row 3 of Table 3. In the first two regressions, the sample is restricted to immigrant respondents who voted in the previous national election and reported the party for which they voted. Political party redistribution preferences is the mean preference for income redistribution among natives voting for the political party for which the respondent voted. In the second two regressions, the sample is restricted to immigrant respondents who voted for a political party that is coded as left, right, or center in the Beck database. The Beck database from the World Bank codes the three largest government political parties and the largest opposition party as left, right, center, or NA. The left-right party scale codes "Right" parties as 1, "Center" parties as 2, and "Left" parties as 3. The Beck data were supplemented with data from the Huber-Inglehart (1995) classification of party politics. These data were the basis of many of the Beck classifications but include parties not coded in the Beck database. Huber-Inglehart classifies parties on a 1-10 left-right scale. Based on the Beck cutoffs, we define parties scored less than 5 as left, those from 5-6 as center, and those above 6 as right. We also added cases where we were able to discern the party match from other sources with confidence; these were generally parties where the left-right classification was clear, but the party was not a main government or opposition party and therefore not included in the Beck database. All party classifications were made prior to running the empirical analyses.

Table 7: The Effect of Parental Birth Country Culture on Second Generation Immigrants

<i>Dependent Variable:</i> Subjective Preference for Income Redistribution	Coefficient on Birth Country Redistribution Preferences	(S.E.)	Adjusted R ²	N
1. Parental birth country preferences for income redistribution	0.227**	(0.086)	0.1217	4649
2. Parental birth country preferences for income redistribution	0.176*	(0.098)	0.1215	4649
Interaction on parental birth country preference and both parents emigrating from the same country	0.141	(0.138)		
3. Mother's birth country preferences for income redistribution	0.165**	(0.068)	0.1357	2920
4. Father's birth country preferences for income redistribution	0.109	(0.091)	0.1202	2958

Note: Robust standard errors adjusted for clustering by birth country are in parentheses. Significance levels: * 10 percent; ** 5 percent; *** 1 percent. All regressions include the same control variables as the baseline regression reported in row 3 of Table 3.

Appendix Table A1: Summary Statistics

Variable	Mean	S.D.	Min.	Max	N
<i>Preferences for Income Redistribution</i>					
Individual preference for income redistribution	3.82	1.06	1	5	6249
Mean preference for income redistribution in birth country	3.92	0.325	3.01	4.45	6249
Political party redistribution preferences	3.83	0.431	1	5	2328
Beck Score of Party	2.06	0.953	1	3	1622
<i>Demographics and Other Characteristics</i>					
Age	50.01	16.98	18	96	6241
Female	0.567	0.496	0	1	6245
Own Low education	0.312	0.464	0	1	6184
Own Secondary education	0.312	0.463	0	1	6184
Own High education	0.376	0.484	0	1	6184
Spouse Low education	0.316	0.465	0	1	3937
Spouse Secondary education	0.319	0.466	0	1	3937
Spouse High education	0.365	0.482	0	1	3937
Married	0.587	0.492	0	1	6219
Divorced or separated	0.121	0.326	0	1	6219
Widowed	0.113	0.317	0	1	6219
Never married	0.180	0.384	0	1	6219
Log household income	9.704	1.256	6.80	12.39	4906
<i>Primary Income Source:</i>					
Wages and salary	0.589	0.492	0	1	6145
Self-employed	0.062	0.240	0	1	6145
Pensions	0.275	0.447	0	1	6145
Unemployment	0.025	0.156	0	1	6145
Social benefits	0.030	0.170	0	1	6145
Investments	0.007	0.082	0	1	6145
Other	0.013	0.112	0	1	6145
Log household size	0.834	0.548	0	2.48	6246
Paid work last week	0.545	0.498	0	1	6202
Has a child in the household	0.430	0.495	0	1	6226
Ever been unemployed for more than 12 months	0.123	0.329	0	1	6201
Citizen of residence country	0.559	0.497	0	1	6239
Has lived in residence country for more than 20 years	0.629	0.483	0	1	6183
Lives in metropolitan area	0.403	0.491	0	1	6223
Linguistic minority	0.432	0.495	0	1	6232
Voted in last national election	0.463	0.499	0	1	6166
Immigrant birth country density above median	0.499	0.500	0	1	6249
Born in an Eastern Bloc country	0.387	0.487	0	1	6249
Log GDP per capita in birth country	9.69	0.583	8.58	10.99	6249
ESS Wave 2	0.369	0.483	0	1	6249
ESS Wave 3	0.310	0.463	0	1	6249

Note: Subjective support for income redistribution is the level of agreement with the statement “the government should take measures to reduce differences in income levels.” Their responses are coded on a five point scale with 1 being “disagree strongly” and 5 being “agree strongly.” Political party redistribution preferences is the mean preference for income redistribution among natives voting for the political party for which the respondent voted. The Beck database from the World Bank codes the three largest government political parties and the largest opposition party as left, right, center, or NA. Low education includes the two categories “Not completed primary education” and “Primary of first stage of basic.” Secondary education is the omitted category and corresponds to the category “Lower secondary or second stage of basic.” High education includes the following four categories: “Upper secondary,” “Post-secondary, non-tertiary,” “First stage of tertiary,” and “Second stage of tertiary.” A language is defined as minority if less than 30% of the native population speaks it as a primary language in the home. Immigrant population is the density of immigrants from a particular birth country. Former Eastern Bloc countries included in the ESS are Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Poland, Romania, Russia, Slovakia, Slovenia, and Ukraine. Log GDP per capita is measured in purchasing power parity US dollars.