Cross-Country Differences in Homeownership: A Cultural Phenomenon?

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Abstract

Cross-country differences in homeownership rates are large and very persistent over time, ranging between 35% in Switzerland to 80% in Spain. In this project we test the hypothesis that these cross-country differences are driven by cultural tastes. To isolate the effect of culture from the effects of institutions and economic factors, we investigate the homeownership attitudes of second generation immigrants in the United States. We find robust evidence that cross-country differences in cultural preferences are an important explanatory factor for the observed persistent differences in homeownership rates across countries.

Keywords: housing markets, homeownership rates, country heterogeneity, preferences, cultural transmission, migration

JEL Classifications: E00, R21, R23, J15, O18, Z10.

Contents

1   Introduction

Cross-country differences in homeownership rates are large and very persistent over time. Homeownership rates vary from 35% in Switzerland to 80% in Spain. Given the large attention housing markets have received recently, it is surprising that there are very few empirical studies that aim to explain why homeownership rates differ so greatly across countries. In this project we test the novel hypothesis that these cross-country differences are driven by cultural tastes. To isolate the effect of culture from the effects of institutions and economic factors, we employ the epidemiological approach - we investigate the house buying decision of international second generation immigrants in the United States.

According to Alesina and Giuliano (2016) most empirical papers define culture as "*those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation.*" And hence combine values and beliefs in the same definition. This definition was originally adopted by Guiso et al. (2006) and we follow the definition.

A second generation immigrant is defined as an individual that is born, has been raised and who lives in the United States. All second generation immigrants in our sample face therefore the same markets and institutions. However, they differ in terms of their parents' country of origin and hence in their cultural heritage.[1] Our empirical strategy is similar to Fernández and Fogli (2009), who show that the female labor force participation and fertility in the country of origin influences the fertility and labor participation of second generation immigrant women in the United States. As in Fernández and Fogli (2009), we also employ a quantitative proxy for culture - we proxy cultural preferences for homeownership by homeownership rates in the country of origin. Aggregate homeownership rates capture aggregate homeownership preferences and will depend on the distribution of these preferences. These distributions may vary across countries. It is evident that markets and institutions also shape aggregate homeownership rates. However, only the cultural component of aggregate homeownership rates in the fathers' country of origin can be relevant and have an explanatory power for the home buying decision of second generation immigrants that have been born, raised and live in the United States.

We find that higher homeownership rates in the country of origin are associ-

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[1] As common in the literature, we define a second generation immigrant by having a foreign-born father.

ated with statistically meaningful and economically larger homeownership rates of the corresponding group of second generation immigrants. This paper argues that cross-country differences in cultural preferences towards homeownership are an important explanatory factor for the observed persistent differences in homeownership rates across countries. We show that our cultural proxy, the aggregate homeownership rate in the country of origin, has a significant impact on home buying decisions by second generation immigrants. The results hold after controlling for a large set of individual characteristics and a large set of location and time dummies that account in particular for house price effects in a specific year and metropolitan area of the second generation immigrants residence.[2] These results provide an interesting new perspective on the causes of differences in homeownership rates across countries.

The quantitative impact of culture on homeownership decisions is sizeable, but is likely to be underestimated for the following reasons. First, parents are not the only transmitter of culture - as the friendships of the second generation immigrant, and the institutions in their country of residence shape preferences and beliefs as well. Second, the impact of the culture of one's ancestors may diminish over time. Third, the cultural preferences of the parents of second generation immigrants might differ from the average value of those preferences in the country of origin and hence our cultural proxy might not represent accurately the preferences of those parents. These factors may lead to a substantial underestimation of the effect of culture on home buying decisions.

To address the presumption that the effect of culture on the homeownership decision is underestimated in our baseline regression, we study the transmission of culture. The first hypothesis is that married couples that share the same cultural background conserve their cultural preferences more in comparison to couples where each partner is from a different cultural background. The second hypothesis is that ethnic density matters for the persistence and transmission of culture - where ethnic density is defined as the density of population from a particular ethnic background in a specific geographic area.

We find that culture matters significantly more for couples of second generation immigrants who share the same cultural background. Second generation immigrant

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[2]Metropolitan areas are specific counties or groups of counties centering on a substantial urban area. House price cycles vary systematically across regions in the United States, see Sinai (2016). Therefore it is particularly important to include this large set of location dummies, as well as time dummies to account for house price effects in a specific year and location of residence.

couples that both have a Spanish father are approximately 6 percentage points more likely to be homeowners compared to a second generation immigrant couple of Swiss origin. When studying first generation immigrant couples, this differences amounts to 11 percentage points. Further, we find that ethnic density matters for the persistence and transmission of culture. Therefore, we conclude that the quantitative impact of culture on homeownership decisions is substantial and likely to be underestimated in our baseline regression.[3]

The results of this paper not only provide a novel explanation for the observed large and persistent cross-country differences in homeownership rates, it also contributes to the literature that studies the impact of culture on economic outcomes. Further, our results are relevant for policy. Nowadays, researchers and policy markers have understood that housing markets need serious attention to ensure financial stability. To develop effective macro-prudential policy for the control of housing markets, country heterogeneity needs to be taken into account. It is important to understand where the large and persistent cross-country differences in homeownership rates originate from. The impact and the effectiveness of the transmission of macro-prudential tools into the economy is influenced both by homeownership rates, and by the underlying reasons that drive these cross-country differences.[4]

The reminder of this paper is organized as follows. Section 2 provides a brief review of two strands of literature this paper relates to. The first related literature analyzes the transmission of cultural values, preferences or beliefs and the impact of culture on economic outcomes. The second strand of related literature analyzes the determinants of homeownership rates across countries. Section 3 outlines our empirical strategy, describes the data and sample selection. Section 4 presents our baseline results and discusses the robustness of our findings. Section 5 provides additional evidence for the hypothesis that culture matters for the homeownership decision by analyzing the transmission of culture. Section 6 analyses the implied aggregate homeownership rates of ethnic groups in the United States and relates them to the homeownership rates in the country of origin. Section 7 concludes. Appendix A gives a detailed overview on the data of our cultural proxy, and provides summary

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[3]In our baseline regression, we find a sizable and significant impact of culture on the home buying decision of second generation immigrants. Having a Spanish father makes a second generation immigrant 1.6 percentage points more likely to be a homeowner compared to a second generation immigrant of Swiss origin.

[4]According to Huber (2016)'s empirical study countries with larger homeownership rates are more vulnerable to housing bubbles, and generally characterized by more volatile housing markets.

and descriptive statistics. Appendix B provides a wide range of robustness checks.

2   Related Literature

Although our paper combines ideas about homeownership and culture in a novel way, it follows a large literature on related topics.

The first strand of related literature investigates the transmission of cultural values, preferences or beliefs and studies the impact of culture on economic outcomes. This literature is relatively new in economics, and the applied empirical methodology is often referred to as the epidemiological approach.[5] This empirical methodology isolates the effects of culture from those of markets and institutions by studying the individual behavior of immigrants from different cultural backgrounds in one host country - hence holding constant the institutional and economic environment. This approach mainly involves capturing cultural preferences of immigrants by an average value of a continuous variable assigned to the country of origin. The seminal paper in this area is Carroll et al. (1994) that studies the impact of culture on saving rates.[6] This methodology has been used to study a variety of topics.

Algan and Cahuc (2010) and Guiso et al. (2006) show that the level of trust of U.S. immigrants depends on and is highly correlated with the average trust level in their country of origin. Our empirical strategy is similar to that of Fernández and Fogli (2009), Alesina and Giuliano (2010), and Fernández et al. (2004) who show that the labor force participation and fertility rates of U.S. immigrant women is influenced by the female labor participation and fertility rates of the country of origin of their mothers. In a similar vein, Algan and Cahuc (2005) use inherited family values of U.S. immigrants as an instrument for family values in the source country to explain cross-country employment heterogeneity. Osili and Paulson (2008) study the investment behavior of first generation U.S. immigrants and find that immigrants from countries with institutions that more effectively protect private property are more likely to own stock in the United States. They conclude that the effect of home institutions is absorbed early in live and is persistent after emigrating. Osili

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[5]In addition, the methodologies of natural experiments (e.g. Botticini and Eckstein (2005)) and laboratory experiments (e.g. Henrich et al. (2001)) have been used to provide evidence that culture matters. Fernández (2010) provides a detailed literature overview.

[6]Carroll et al. (1994) investigate the saving behavior of first generation immigrants in Canada and find that cross-country differences in saving rates cannot be explained by culture. However, their results need to be taken with care, as the analysis is subject to large data restrictions.

and Paulson (2008) show that the cultural background matters more when the immigrants live in areas with many other immigrants from the same country of origin. One important difference between their work and ours is that we study the behavior of second not first generation immigrants. Ichino and Maggi (2000) find that the place of birth explains the largest part of the south-north shirking on the job differential in Italy, the place of birth is seen as proxy for the cultural background. Kosse and Jansen (2013) study first and second generation immigrants in the Netherlands and find that culture affects the choice between payment instruments.[7] In a recent study, Atkin (2015) shows that substantial and persistent differences in food preferences exist across social groups in India. He shows that migrants bring and keep their origin-state food preferences and that these differences in food preferences can explain the differences in the intake of calories per Rupee of food expenditure across social groups. Luttmer and Singhal (2011) shows that culture is an important determinant of preferences for redistribution.

Our paper is most related to Giuliano (2007). Her study evaluates why Southern Europeans choose to stay longer at their parents' homes compared to young adults in the North of Europe by studying the behavior of second generation immigrants in the United States. Giuliano (2007) finds that these behavioral differences between Southern and Northern Europeans are also visible for second generation immigrants in the United States and cannot be explained by income differences or the like. Giuliano (2007) concludes that cultural preferences are the most relevant factor.

The main conclusion from this second strand of literature is that values and preferences, summarized as culture, differ across countries and that culture influences economic outcomes.

The second related literature analyses the determinants of homeownership rates within or across countries. Although there is still little consensus on why homeownership rates differ so much across OECD countries, surprisingly few empirical cross-country analyses of homeownership determinants have been published so far. Chiuri and Jappelli (2003)'s dataset consists of 14 OECD countries over a 30 year period. They find that down-payment requirements on mortgage loans only have a negative impact on homeownership for young households.[8] Georgarakos et al. (2010)

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[7]Kosse and Jansen (2013) show that first generation immigrants are affected by their cultural background, while second generation immigrants behave as their Dutch counterparts. Payment behavior is not passed from one generation to the next.

[8]This result corresponds to Andrews and Sanchez (2011)'s finding that a decrease in the down-payment has a positive impact on homeownership for young households that are in the second

find that homeownership rates in Europe do not correlate with the breadth of mortgage markets. This result matches that of Earley (2004), who finds in a sample of 15 European countries that the highest homeownership countries are among those with the lowest levels of mortgage-to-GDP ratios. Hilber (2007) analyzes homeownership rates in 15 European countries and finds that demographic factors are highly significant determinants for individual tenure choice. Homeownership is larger for married couples, increases with age and the number of children.[9] However, Hilber (2007) finds that country differences in the socio-economic composition cannot explain cross-country differences in homeownership rates. This is in line with Davis (2012), who finds that homeownership rates are not correlated with cross-country standards of living. This finding is consistent with earlier cross-country studies, e.g. Oxley (1984) and the recent study Fisher and Jafee (2003), who find that income-differences across countries have no explanatory power regarding homeownership rates. Fisher and Jafee (2003) discover that the percentage of a country's population living in urban areas has a significant and negative impact on aggregate homeownership rates. According to Hilber (2007) most of the cross-country differences can be explained by landlord efficiency and certain specific tax policies. The non-taxation of imputed rents has a strong positive effect on homeownership. Notably, the deductibility of mortgage interest (tax relief on mortgage-debt-financing) plays only a minor role.[10] Hilber (2007)'s result that non-taxation of imputed rents is an explanation for cross-country differences in homeownership rates should be handled with care. Only 2 out of the 15 countries in his sample have a taxation of imputed rents in place. Andrews and Sanchez (2011) estimate a Probit Model and find that rental market regulations influence tenure choice. Higher rent controls and lower security of tenure are associated with a higher probability of homeownership.

The main conclusions from this strand of the literature is that there is a consensus on factors that cannot explain cross-country difference in homeownership rates - namely cross-country differences in income or the breath of the mortgage market.

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income quartile.

[9]For the United States, Bourassa et al. (2014) finds a negative relationship between homeownership and the number of children living in the household.

[10]This is in line with the results of Andrews and Sanchez (2011), who suggest that tax relief on mortgage-debt-financing has only a very small effect on aggregate homeownership rates and that the effect might even be negative if these tax reliefs are factored into real housing prices, see Andrews (2010), and therefore make homeownership less affordable for lower income households, see Bourassa and Yin (2007). In a recent paper Hilber and Turner (2010) finds that tax relief on mortgage-debt-financing is an inefficient policy in promoting homeownership rates.

On the other hand, the fundamental causes for the large differences remain an open question.

3 Estimation Strategy and Data

3.1 Data and Sample Selection

Individual Data

The main dataset is the March supplement of the Current Population Surveys (CPS) from 1994 to 2014, provided by the IPUMS database.[11] The March CPS includes questions about the birthplace of each individual and his or her parents. In the literature, "second generation" immigrants are generally defined as individuals with immigrant fathers.[12] We use this definition.

Our main sample includes second generation immigrant household heads that are at least twenty years old, whose fathers immigrated from one of the 38 countries for which homeownership rates are available. Most countries are European (28 countries).[13] We also include a few countries in Asia (Japan, South Korea, Singapore), in Australasia (Australia and New Zealand), in America (Mexico, Canada, Chile) and the Middle East (Israel, Turkey).[14]

The sample consists of 30,748 women and 33,238 men who are household heads, born, raised, and live in the United States and who's father immigrated from one of the countries in our sample.[15] The average second generation immigrant in our sample is 58 years old, and the homeownership rate of second generation immigrants is 71.41%. This compares to a homeownership rate of 70.57% for the household-heads whose fathers were born in the United States. Table (7) in Appendix A provides summary statistics for the sample of second generation immigrants at the level of fathers' of country of origin, while Table (9) provides a detailed characteristics of first generation immigrants at the level of country of origin.

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[11]IPUMS-CPS, University of Minnesota, www.ipums.org.

[12]See Card et al. (1998), Giuliano (2007), Fernández and Fogli (2009).

[13]The sample includes: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland, the United Kingdom.

[14]This set of countries has been chosen as this sample corresponds to the largest collection of aggregate homeownership rates from a single source.

[15]This compares to of 513,575 women and 594,399 men who are household heads, born and live in the United States and whose father was born in the United States.

For the baseline sample, we impose the restriction that the number of observations must be larger than fifteen for each country of origin. Relaxing this restriction does not alter the results.[16]

Country Level Data

The individual data is augmented with country homeownership rates, that are taken from PEW Research Center. Table (6) in Appendix A gives a detailed overview on the data, followed by descriptive statistics.

3.2   Estimation Strategy

As discussed previously, this paper uses the epidemiological approach. Our strategy is to isolate the effects of culture from those of markets and institutions by studying the homeownership decision of individuals who were born in, raised and reside in the United States, but whose parents were born in a foreign country. Using second generation immigrants rather than first generation immigrants is advantageous. The potential problem of a systematic selection of immigrants depending on the country of origin is less prominent when studying second generation immigrants. For first generation immigrants the reasons for emigration might vary in a systematic fashion depending on the country of origin (e.g. some countries might be in war). There might also exist systematic differences in the difficulty of assimilation in the United States, e.g. learning the language of the host country.

The epidemiological approach mainly involves capturing cultural preferences of immigrants by an average value of a continuous variable assigned to the country of origin. The outcome of the immigrants choices is regressed on the same outcome variable (average) prevailing in the country of origin.

We use homeownership rates in the country of origin as our cultural proxy for cultural preference regarding homeownership. The optimal decade from which to take these numbers is not clear. We study second generation immigrants from 1994 to 2014, who are older than 20 years, and were born in the United States. Hence, their parents must have come to the United States by 1974-1994 at the latest. Hence, one can argue that values for the cultural proxy from 1974-1994 would best reflect the culture of the country of origin, as this is the most likely time window when the parents emigrated and took their cultural preferences with them. On the other hand,

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[16]Refer to the robustness check in the Appendix B, Table (12).

as argued by Fernández and Fogli (2009), cultural values transmitted by parents are best reflected by what the counterparts of the individuals in the country of origin are doing during the same period, i.e. 1994-2014. Data limitations, do not allow us to use homeownership rates from 1974-1994 - as we have homeownership rates prior to 1990 only for six countries. Therefore, we use homeownership rates for the year 2011 as our cultural benchmark proxy.[17]

For the analysis to be meaningful, the proxy for culture should evolve slowly over time. Otherwise, the cultural values/ preferences transmitted by the parents to children would not be captured by past or future values. This is not a concern, as aggregate homeownership rates and especially cross-country differences are very persistent over time. Please refer to Section 8.2. in Appendix A for more detail.

4 Estimation and Results

4.1 Baseline Findings

We estimate the following model:

$$HO_{imo} = \beta_0 + \beta_1' X_i + \beta_2 \tilde{Z}_o + F_m + F_t + \varepsilon_{imo} \tag{4.1}$$

HO_{imo} denotes the homeownership status of the second generation immigrant i, who resides in the metropolitan area m and who's father immigrated from country of origin o. This indicator is equal to one if the individual is a homeowner and zero otherwise. $\tilde{Z}_o$ is our variable of interest, a proxy for culture assigned to the parents' birthplace. X_i denotes a vector of controls for individual i, which varies with the specification considered.[18] F_m and F_t stand for a large set of metropolitan area and time dummies, respectively. capturing house price effects within the metropolitan

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[17]The critical reader might question whether immigrants' preferences can be proxied by an average value in their country of origin. Here, it should be noted that this factor will bias the test of the hypothesis towards not finding any effect of culture on the homeownership decision of the second generation immigrant. More generally, the reader may suspect that aggregate homeownership rates might not only capture preferences but may also capture institutions, differences in taxation etc. This is definitely true. The beauty of this approach is that only the cultural component (of homeownership rates in the country of father's origin) can have an explanatory power for the tenure decision of individuals born and raised in the United States.

[18]The individual characteristics include: age, age (squared), gender, race, education, income, and marital status. These controls should be sufficient to account for sources of heterogeneity across second generation immigrant other than their cultural preferences.

area of residence in a particular year.[19] The error term is denoted by ε_{imo}.

Table (1) shows the main OLS regression results for the model in (4.1). In the first column, the homeownership status of second generation immigrant i is regressed on the cultural proxy for the preference for homeownership (aggregate homeownership rate in the country of origin in 2011) and on a full set of metropolitan area and time dummies corresponding to individuals' residence. The coefficient is strongly significant and positive, indicating that second generation immigrants with fathers that immigrated from a country of high homeownership rates, are more likely to be a homeowner themselves.

In the second column, we include individual characteristics - in particular age and age squared, as well as race, sex, marital status, and income deciles. As expected, individuals that have more income, are married and live together and those that are older, are more likely to be homeowners. The direct effect of culture remains positive and significant, although smaller in magnitude.

The full specification is shown in the last column, where we add three categories of education.[20] As expected, education has a positive and significant impact on homeownership. The direct effect of culture remains positive and significant, although slightly larger in magnitude than in specification (2), indicating that education and homeownership rates in the country of origin are negatively correlated. The coefficients of income remain significant, although slightly smaller in magnitude compared to specification (2), suggesting that income and education are positively correlated.

We conclude that cultural preferences concerning homeownership play a significant role in home buying decisions. The results are robust to changes in the estimation technique, to changes in the sample criteria (changes in the sample of countries of origin)[21], to alternative variables as cultural proxy, to clustered standard errors, and to different specifications to control for house price effects in a particular year and location.

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[19]We include 415 different metropolitan area dummies. For robustness check purpose, appendix B shows three alternative regression specifications to account for price effects within a given location and year. One specification includes the interaction term metropolitan area x year. For the sake of having a larger dataset, we do not choose the interaction specification for the baseline.

[20]The education categories are: High School or less, college without degree, college +.

[21]We show seven sample size variations in Appendix B. We exclude e.g. countries of origin for which we have less than 100, or the country of origin that has most observations, i.e. Mexico. In additional tests, we exclude countries of origin that might have been systematically different and therefore induced systematically different types of emigrants (i.e. the parents of our subjects of study).

The economic impact of our variable of interest is sizeable in the context of second generation immigrants.[22] The effect is of similar magnitude as the effect of reaching a higher income decile. Having a Spanish father makes a second generation immigrant 1.6% points more likely to be a homeowner in comparison to a second generation immigrant of Swiss origin. The quantitative impact of culture on the homeownership decisions is likely to be underestimated for the following reasons. First, parents are not the only transmitter of culture - as the friendships of the second generation immigrant, and the institutions in the country of residence shape preferences and beliefs as well. Second, the impact of the culture of one's ancestors may diminish over time. Third, the cultural preferences of the parents of second generation immigrants might differ from the average value of those preferences in the country of origin and hence our cultural proxy might not represent accurately the preferences of those parents. These factors would lead to a substantial underestimation of the effect of culture on home buying decisions. We test this theory in section 5.

4.2   Robustness of our Findings

This section is dedicated to exploring the robustness of our findings. For robustness purposes, we also run a Probit estimation of (4.1). Our cultural variable of interest remains highly significant and the marginal effects correspond to the OLS estimates. We propose seven sample size variations and three alternative regression specifications to account for house price effects in a particular year and location. We also show one robustness check where we use an alternative proxy for cultural preferences towards homeownership, and one robustness check where we use clustered standard errors instead of the robust (Huber-White-sandwich) standard errors. All robustness checks are presented in Appendix B.

Next, we discuss potential problems as the systematic selection of immigrants, omitted variables, as well as our measurement of culture.

Systematic Selection of Immigrants: This is an important empirical issue when studying the behavior of immigrants. Immigrants may not be representatives of their home country and might be systematically different depending on the country of origin. The reasons for emigration might be different depending on the country

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[22]An increase in the homeownership rate in the country of father's origin by one standard deviation (across countries) is associated with a probability increase of the corresponding second generation immigrants to be a homeowner in the United States, which accounts around 4.1% of the variation in the homeownership rate across immigrant groups within the US.

of origin. Further, one might be concerned that the difficulty of assimilation in the United States (e.g. learning the language of the host country) might vary in a systematic fashion depending on the country of origin.

We address this concern by studying second generation immigrants instead of first generation immigrants. A second generation immigrant has been born, raised and lives in the United States, and possesses the U.S. nationality. The potential problem of a systematic selection is less prominent when studying second generation immigrants.

In addition, we show in the Appendix B seven sample size variations, where we exclude countries of origin that might have been systematically different and therefore induced systematically different types of emigrants (i.e. the parents of our subjects of study). We exclude countries-of-origin that have experienced a war during 1945-1994.[23] In other robustness checks we exclude countries that have been post-soviet states, or countries that have experienced dictatorships during 1945-1994. Our baseline results stay very robust.

Further, we study the characteristics of first generation immigrants - the generation the parents of our subjects of study belong to. Table (9) in Appendix A shows that first generation immigrant's characteristics (income, education levels, age, etc.) are not correlated with homeowenrship rates prevailing in the country of origin.

Omitted variables: Omitted variables are always a serious concern when employing the epidemiological approach. In our specific case, the most likely candidate for an omitted variable is unobserved parental income of the second generation immigrant. Our estimate could be biased if the parental income varies in a systematic fashion across countries of origin and if parents are a source of financial help to become a homeowner. If our positive coefficient of our cultural proxy is driven by this omitted variable, then parents from high homeownership countries would need to be systematically richer compared to parents from low homeownership countries. It is highly unlikely that parents from higher homeownership countries were systematically richer before emigrating as it is widely known that homeownership rates and income[24] are negatively correlated across countries. On average, countries with

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[23]This time window corresponds to the time when the parents immigrated to the United States.

[24]Measured by (1) real GDP per capita or (2) real GDP per capita, adjusted for purchasing power parity. Cross-country studies have shown that countries with lower homeownership rates, are typically the richer countries; see e.g. Oxley (1984), Fisher and Jafee (2003) or Davis (2012).

larger homeownership rates, are characterized with a lower GDP per capita.[25] We do not have the data on parental income nor wealth, but we study the characteristics of first generation immigrants - the generation the parents of our subjects of study belong to. Table (9) in Appendix A shows that first generation immigrant's characteristics (income, education levels, age, etc.) are not correlated with homeowenrship rates prevailing in the country of origin. Therefore, there is no reason to believe that immigrants to the United States are systematically richer if they emigrate from poorer countries (i.e. high homeownership countries) compared to immigrants emigrating from richer countries (i.e. low homeownership countries).

Measurement of culture: The critical reader might raise the concern that parents of second generation immigrants are not a random sample of the distribution of beliefs and preferences in the country of origin. Hence, the cultural values transmitted to the second generation immigrant may not reflect the culture of the country of origin. This is not a major concern as this factor would bias the test of the hypothesis against finding any effect of culture on the homeownership decision of the second generation immigrant. More generally, the reader may suspect that aggregate homeownership rates might not only capture preferences but may also capture institutions, differences in taxation etc. This is definitely true, however only the cultural component of homeownership rates prevailing in the country of origin can have an explanatory power for the tenure decision of individuals born and raised in the United States - who are exposed to the taxation system and institutions of the United States since they are born.

Our baseline results are robust to an alternative proxy for cultural preferences towards homeownership. Instead of using the quantitative continuous variable *homeownership rates in the country of origin*, we construct a dummy variable that is equal to one if the homeownership rate in the country of origin is larger than 70 % (median value) and zero otherwise. The estimation results are shown in appendix B.

We conclude from a large set of different robustness checks, that our baseline results are very robust. Additional evidence for our hypothesis that culture plays an important role for the decision of becoming a homeowner is provided in section 5.

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[25]Assuming for now that this cross-country pattern persists after emigrating, then omitting parental income would lead to an underestimation of the cultural effect. As immigrants from richer countries (on average richer), are those emigrating from countries with lower homeownership rates. The coefficient of HO_o would pickup the effect of this omitted variable and be biased downwards.

Dependent Variable: Homeownership status of 2nd generation immigrant i			
	(1)	(2)	(3)
HO_{origin}	0.0583***	0.0432**	0.0450**
	(2.68)	(2.26)	(2.36)
sex (dummy)		0.0189***	0.0193***
	(2.68)	(2.26)	(5.44)
marital status (dummy)		0.156***	0.158***
		(40.64)	(41.02)
age		0.0231***	0.0227***
		(37.43)	(36.74)
age squared		-0.000143***	-0.000140***
		(-25.57)	(-24.78)
race categories		✓	✓
income categories		✓	✓
education categories			✓
metropolitan area (dummy)	✓	✓	✓
year (dummy)	✓	✓	✓
constant	0.672***	-0.381***	-0.381***
	(43.16)	(-17.21)	(-17.21)
N	61319	61319	61319
R^2	0.112	0.253	0.254
adj. R^2	0.044	0.247	0.248

* p<0.1, ** p<0.05, *** p<0.01. t statistics in parentheses. With robust standard errors. Dependent variable: Equal to one if 2nd generation immigrant is a homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. Number of metropolitan area categories: 415. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0, 1)$.

Table 1: OLS Regression - Culture and Homeownership

5 Cultural Transmission

This section provides additional evidence for our hypothesis that culture matters for the homeownership decision. We investigate cultural transmission and show that when individuals are more exposed to their cultural inheritance in the United States, the effect of culture on the home buying decision is significantly stronger.

5.1 Married Couples

In this section, we study the effect of the composition of married couples in cultural transmission. The spouse might play an important role in preserving the beliefs and preferences. Our hypothesis is that if both spouses have the same cultural background, the effect of our cultural proxy on behavior will be larger. Further, we expect that the effect of culture for a single non-married household head is significantly larger than for a household head that is married to a spouse of a different cultural background.

We run the baseline regression in (4.1) for second generation immigrant single and married household heads, who's spouse is from a different background, separately. The regression results are shown in Table (2), in columns (2) and (3), respectively. We find that the effect of culture is significantly and approximately 60% larger for single household heads compared to our baseline regression, where we include married and single second generation immigrants. For second generation married household heads that have a spouse from a different cultural background, their own cultural background has no significant impact on his homeownership decision. Next, we test our hypothesis that if both spouses have the same cultural background, the effect of our cultural proxy on behavior will be larger than in our baseline regression. Table (2) shows the estimation results in column (24). Married household heads that are older, better educated and who have a higher income are more likely to be a homeowner.

The coefficient of our cultural proxy is significant and approximately 300% larger than in the baseline scenario (compare to column 1). An increase in the homeownership rate in the country of father's origin by one percentage point is associated with a 14.9 percentage point increase in the probability of the corresponding second generation immigrants to be a homeowner in the United States.

Next, we explore whether the effect of culture is larger for first generation married immigrants. As mentioned before, the impact of culture might diminish over time. We expect that the effect of culture is larger for first generation married couples with the same background than for second generation couples with the same background. Column (3) in Table (3) shows the estimation results. Married first generation household heads that are older, better educated and who have a higher income are more likely to be a homeowner. The cultural proxy is highly significant and large. An increase in the homeownership rate in the country of father's origin by one percentage point is associated with a 29.1 percentage point increase in the probability of the corresponding second generation immigrants to be a homeowner in the United States. These effects are not only significant, but quantitatively large.

Therefore, we conclude that the spouse's cultural background matters for preserving culture as well as for it's transmission. The results of this section indicate that the quantitative impact of culture on homeownership decisions is substantial and likely to be underestimated in our baseline regression.

	Dependent Variable: Homeownership status of immigrant i			
	2nd generation			
	all (baseline) (1)	single (2)	married $\neq$ background (3)	married same background (4)
HO_{origin}	0.0450** (2.39)	0.0760** (2.44)	0.0230 (1.02)	0.145* (1.73)
age	0.0227*** (36.74)	0.0198*** (23.84)	0.0273*** (24.64)	0.0279*** (16.56)
age squared	-0.000140*** (-24.78)	-0.000109*** (-14.27)	-0.000195*** (-24.37)	-0.000182*** (-11.60)
marital status (dummy)	0.158*** (41.02)			
sex (dummy)	0.0193*** (5.44)	0.0286*** (5.16)	0.00533 (1.06)	0.0141 (1.45)
race categories	✓	✓	✓	✓
income categories	✓	✓	✓	✓
education categories	✓	✓	✓	✓
metropolitan area	✓	✓	✓	✓
year (dummy)	✓	✓	✓	✓
constant	-0.368**** (-16.70)	-0.363**** (-11.27)	-0.160**** (-4.13)	-0.391**** (-5.03)
N	61319	31405	21624	7969
R^2	0.254	0.193	0.194	0.305
adj. R^2	0.248	0.181	0.1771	0.272

* $p<0.1$, ** $p<0.05$, *** $p<0.01$. t statistics in parentheses. With robust standard errors. Dependent variable: Equal to one if immigrant is a homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. Number of metropolitan area categories: 415. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0,1)$.

Table 2: OLS Regression - Married - Does the Partners' Background matter?

	Dependent Variable: Homeownership status of immigrant i			
	2nd generation			1st generation
	all (baseline) (1)	married same background (2)		married same background (3)
HO_{origin}	0.0450** (2.39)	0.145* (1.78)		0.291*** (5.43)
age	0.0227*** (36.74)	0.0280*** (16.56)	0.0276*** (26.24)	
age squared	-0.000140*** (-24.78)	-0.000182*** (-11.60)	-0.000165*** (-15.66)	
marital status (dummy)	0.158*** (41.02)			
sex (dummy)	0.0193*** (5.44)	0.0141 (1.45)	0.00287 (0.54)	
race categories	✓	✓		✓
income categories	✓	✓		✓
education categories	✓	✓		✓
year (dummy)	✓	✓		✓
metropolitan area (dummy)	✓	✓		✓
constant	-0.368*** (-16.70)	-0.391*** (-5.03)		-0.649*** (-13.56)
N	61319	7969		34011
R^2	0.254	0.305		0.256
adj. R^2	0.248	0.272		0.246

* $p<0.1$, ** $p<0.05$, *** $p<0.01$. t statistics in parentheses. With robust standard errors. Dependent variable: Equal to one if immigrant is a homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. Number of metropolitan area categories: 414. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0,1)$.

Table 3: OLS Regression - Married - Does the Partners Background matter? (2)

5.2   Ethinc Density

In this section, we study the effect of neighborhood composition in cultural transmission. The cultural makeup of individuals living in a particular neighborhood may be influential in the preservation of cultural beliefs and preferences. A neighborhood with a high density of individuals of the same country of origin may help to preserve that country's culture. Our hypothesis is that the higher the ethnic density of a group in a neighborhood, the larger the effect of our cultural proxy on individual behavior (i.e. home buying decision). Ethnic density is given by

$$ED_{1,m} = \frac{\text{\# of immigrants from country of origin } o \text{ living in metropolitan area } m}{\text{total population of immigrants in metropolitan area } m}$$

first and second generation immigrants with country of origin o and living in metropolitan area m as a fraction of the total population of first and second generation immigrants in metropolitan area m.

We run three regressions. First, we include in the baseline regression the density measure but exclude the cultural proxy. Second, we include in our baseline regression the density measure. And third, we include in our baseline regression the density measure and an interaction term of culture with the density measure. A significant and positive coefficient on the interaction term means that ethnic density helps to preserve culture, and more importantly, that the impact of culture on the home buying decision is larger, the larger the ethnic density. Table (4) reports the results. Across all specifications the density measure is significant and has a negative impact on the individual homeownership decision. In column (2) we include our cultural proxy and the density measure. We find that the cultural proxy remains positive and significant. The interaction term of culture with density is included in column (3) and is highly significant and positive.

We conclude that a higher ethnic group density is associated with larger impacts of our cultural proxy on our dependent variable (individual homeownership decision). Ethnic density matters for preserving culture as well as for it's transmission. The results of this section indicate that the quantitative impact of culture on homeownership decisions is likely to be underestimated in our baseline regression.

	Dependent Variable: Homeownership status of immigrant i		
	(1)	(2)	(3)
density	-0.0273**	-0.0280**	-1.103***
	(-2.23)	(-2.28)	(-2.71)
HO_{origin}		0.0449**	0.00370
		(2.34)	(0.15)
density $\times$ HO_{origin}			1.511***
			(2.64)
age	0.0226***	0.0226***	0.0227***
	(36.23)	(36.24)	(36.26)
age squared	-0.000140***	-0.000140***	-0.000140***
	(-24.65)	(-24.67)	(-24.69)
marital status (dummy)	0.159***	0.159***	0.159***
	(41.15)	(41.14)	(41.14)
sex (dummy)	0.0194***	0.0193***	0.0194***
	(5.45)	(5.43)	(5.44)
race categories	✓	✓	✓
income categories	✓	✓	✓
education categories	✓	✓	✓
year (dummy)	✓	✓	✓
metropolitan area (dummy)	✓	✓	✓
constant	-0.339***	-0.370***	-0.340***
	(-18.30)	(-16.28)	(-13.33)
N	60784	60784	60784
R^2	0.252	0.252	0.252
adj. R^2	0.246	0.246	0.246

* p<0.1, ** p<0.05, *** p<0.01. t statistics in parentheses. With robust standard errors. Dependent variable: Equal to one if immigrant is a homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. Number of metropolitan area categories: 415. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0, 1)$.

Table 4: OLS Regression - Culture and Homeownership - Ethnic Density

6   Aggregates

We compute aggregate homeownership rates H_{i_o} for all second generation immigrants i with a father born in country of origin o. Figure (1) plots the aggregate homeownership rates HO_{i_o} against our cultural proxy, i.e. the aggregate homeownership rates of the country of father's origin. The correlation is positive and equal to 0.33. Higher homeownership countries are associated with higher homeownership rates of their descendants living in the United States.

We run a corresponding (and basic) OLS regression:

$$H_{i_o} = \beta_0 + \beta_1 HO_{origin} + \varepsilon_{io}$$

The results can be found in Table (5). Our cultural proxy is significant, positive and large. An increase in the homeownership rate in the country of the fathers origin o by one standard deviation (across countries) is associated with an increase of in the homeownership rate of the corresponding second generation immigrant group in the United States by 3.35 percentage points, which is about 27.22% of the variation in the homeownership rate across immigrant groups within the United States. We take these results as additional evidence that cultural preferences matter when it comes to living arragements.
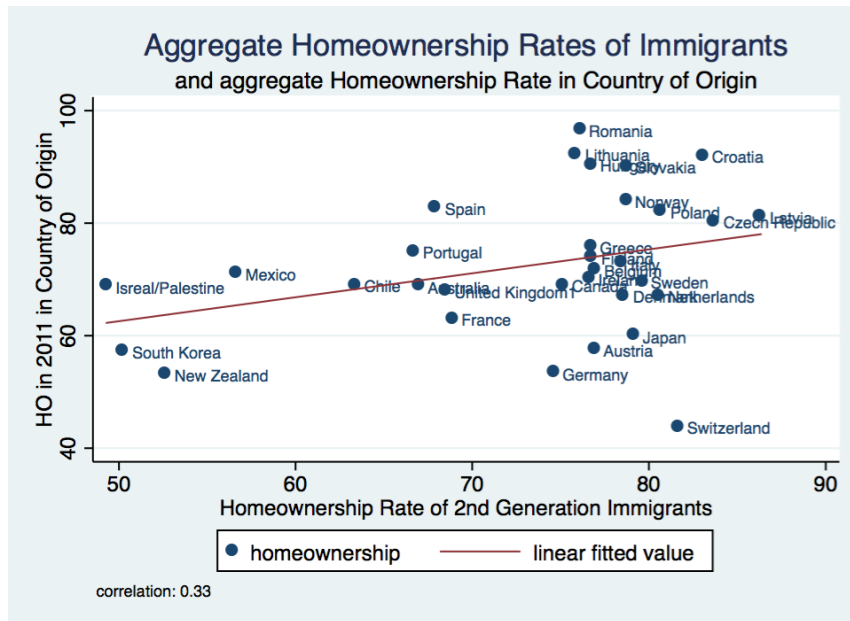
Second Generation Immigrants have been born and live in the US, while their father has immigrated from one of the countries in our sample.

Figure 1: Homeownership Rates

| | Aggregate Homeownership Rate 2nd Generation Immigrants | |
	(1)	(2)
HO_{origin}	0.270*	0.266*
	(1.96)	(1.88)
Average aggregate income		-0.000176
		(-1.06)
constant	53.12***	63.97***
	(4.93)	(4.13)
N	38	38
R^2	0.102	0.140
adj. R^2	0.077	0.091

t statistics in parentheses. * $p<0.1$, ** $p<0.05$, *** $p<0.01$.

Table 5: OLS Regression - Culture and Homeownership - Aggregates

7 Conclusion

This paper argues that cross-country differences in cultural preferences are an important explanatory factor for the observed persistent differences in homeownership rates across countries. By studying second generation immigrants we distangle credibly the effect of culture from markets and institutions. We robustly show that the aggregate homeownership rates in the fathers country of origin has a significant impact on the home buying decisions of second generation immigrants. The results hold after controlling for a large set of individual characteristics and a large set of location and time dummies that account in particular for house price effects in a specific year and metropolitan area of the second generation immigrant's residence. These results provide an interesting new perspective on the drivers of differing homeownership rates across countries.

The results are also relevant for policy. In recent times, researchers and policy markers have understood that housing markets need serious attention to ensure financial stability. To develop effective monetary and macro-prudential policy for the control of housing markets, country heterogeneity needs to be taken into account. Hence, one needs to understand where the large and persistent cross-country differences in homeownership rates originate from. The impact and the effectiveness of the transmission of macro-prudential tools into the economy is influenced both by homeownership rates, and by the underlying reasons that drive these cross-country differences.

8 Appendix A

8.1 Data on Homeownership Rates and Summary Statistics

Country	year	Homeownership
Romania	2011	96.6
Lithuania	2011	92.3
Croatia	2011	92.1
Hungary	2012	90.5
Slovakia	2011	90.2
Norway	2011	84
Spain	2011	82.7
Poland	2011	82.1
Latvia	2012	81.2
Malta	2011	80.8
Czech Republic	2012	80.4
Greece	2011	75.9
Portugal	2011	75
Finland	2012	73.9
Italy	2011	72.9
Belgium	2011	71.8
Mexico	2011	71.1
Ireland	2011	70.2
Sweden	2011	69.7
Canada	2006	69
Chile	2006	69
Australia	2010	68.8
Israel	2008	68.8
United Kingdom	2011	67.9
Denmark	2011	67.1
Netherlands	2011	67.1
France	2011	63.1
Japan	2010	60
Turkey	2011	59.6
Austria	2011	57.5
South Korea	2005	57.3
Germany	2011	53.4
New Zealand	2006	53.2
Switzerland	2011	43.8

Source: PEW Research Center. Based on: Eurostat; US Census
Bureau; Turkish Statistical Institute; Statistics Canada; Singapore
Department of Statistics; Australien Bureau of Statistics; Statistics
New Zealand; Housing Finance Information Network.

Table 6: Aggregate Homeownership Rates in %

Second Generation Immigrants: Summary Statistics			
Country of Origin	Observations (Number)	Cultural Proxy HO_{origin}	Homeownership $HO_{immigrant}$
Romania	343	96.6	76.1
Lithuania	539	92.3	75.9
Croatia	65	92.1	83.1
Hungary	1303	90.5	76.7
Slovakia	696	90.2	78.7
Singapore	8	90.1	25
Bulgaria	9	87.2	77.8
Norway	1174	84	78.7
Estonia	3	83.5	66.7
Spain	624	82.7	67.9
Poland	4616	82.1	80.7
Latvia	139	81.2	86.3
Czech Republic	215	80.4	83.7
Iceland	3	77.9	66.7
Greece	1087	75.9	76.7
Portugal	952	75	66.7
Finland	237	73.9	76.8
Cyprus	8	73.8	100
Italy	10395	72.9	78.4
Belgium	204	71.8	76.9
Mexico	16472	71.1	56.6
Ireland	2421	70.2	76.6
Sweden	1079	69.7	79.6
Canada	6568	69	75.1
Chile	112	69	63.4
Australia	106	68.8	67
Israel/Palestine	140	68.8	49.3
United Kingdom	3433	67.9	69.2
Denmark	472	67.1	78.6
Netherlands	814	67.1	80.6
France	511	63.1	68.9
Japan	2014	60	79.1
Turkey	188	59.6	77.6
Austria	1005	57.5	76.9
South Korea	207	57.3	50.2
Germany	5109	53.4	74.6
New Zealand	19	53.2	52.6
Switzerland	311	43.8	81.7
Average	1757.6	73.8	72.9
Std deviation	3340.3	12.4	12.3

Avg. ethnic density: measured by number of second generation immigrants from origion o as fraction of all second generation immigrants.

Table 7: Summary Statistics of Second Generation Immigrants

8.2 Descriptive Statistics of Homeownership Rates

For the large sample of countries that we use for the analysis, refer to Table (6), neither timeseries nor data points for year-pairs are available. We reduce the sample to study the evolution of cross-country differences in homeownership rates over time. We conclude that homeownership rates rose in many OECD countries over time, but important country differences remained.[26] Table (8) shows the correlations of homeownership rates for selected year pairs. The correlations are large and positive. Figure (2a) plots for a sample of six OECD countries the inital observation of homeownership (year 1970) against the last observation of homeownership available (year 2010). The fitted line is close to parallel to the 45°line. Hence, homeownership rates rose proportionally in these OECD countries. Figure (2b) plots for 18 OECD countries the inital observation of homeownership (year 1990) against the last observation of homeownership available (year 2009). The fitted line is nearly parallel to the 45°line. Hence, homeownership rates rose proportionally in the OECD countries. Cross-country differences in homeownership are very persistent over time.
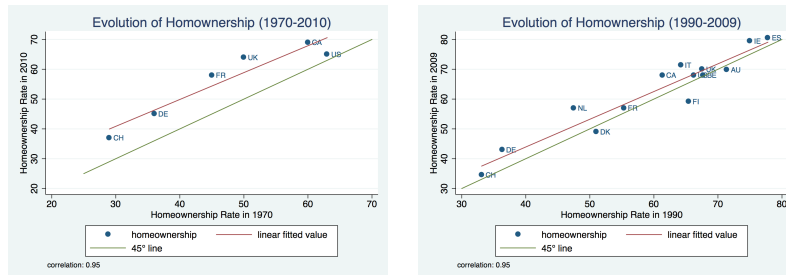
(a) Evolution of Homeownership for 6 countries

(b) Evolution of Homeownership for 18 countries

Figure 2: Evolution of Homeownership rates

	Homeownership Rates				
	1970	1990	2004	2009	2010
1970	1.00				
1990	0.90	1.00			
2004	0.92	0.98	1.00		
2009	0.93	0.95	0.98	1.00	
2010	0.95	0.95	0.97	0.98	1.00

Table 8: Correlations of aggregate Homeownership rates for selected year pairs

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[26]For 1970, homeownership rates are available for six countries. In this sample homeownership rates rose by 9.2% points from 1970 to 2010. For the year pairs 1990 and 2009, the sample consists of 18 countries. On average, homeownership rates rose by 2.53 % points from 1990 to 2009.

Birthplace	Number	Age avg.	Income (household)	High School (or less)	College w/o degree	College degree	HO
Australia	319	44.9	106754.82	31.97	23.35	44.68	68.8
Austria	295	62.29	64966.52	50.13	15.30	34.57	57.5
Belgium	178	52.21	93579.08	45.03	18.57	36.41	71.8
Bulgaria	76	39.93	73250	12.80	43.03	44.16	87.2
Canada	4311	53.05	76942.26	45.69	17.82	36.49	69
Chile	491	46.96	64851.18	25.17	22.51	52.32	69
Croatia	77	51.1	103213.1	28.58	12.18	59.25	92.1
Cyprus	14	49.14	138317	16.47	11.75	71.77	73.90
Czech Republic	150	49.58	65288.6	52.32	14.07	33.61	80.40
Denmark	135	58.39	80098.73	47.48	19.94	32.58	67.10
England	2683	52.67	81477.07	39.37	19.07	41.56	67.90
Estonia	6	63.33	43527.83	52.32	24.56	23.12	83.5
Finland	93	56.58	61039	54.20	15.70	30.11	73.90
France	733	50.32	81667.85	38.05	18.07	43.88	63.1
Germany	3147	58.21	60543.25	46.39	16.68	36.93	53.4
Greece	800	56.38	58984.57	34.85	19.29	45.86	75.5
Hungary	454	58.85	57681.31	49.36	16.50	34.14	90.5
Ireland	828	56.77	67686.03	38.08	18.03	43.89	70.2
Italy	2326	60.58	58480.66	59.02	14.37	26.61	72.90
Japan	1936	48.66	62322.79	50.65	14.25	35.10	60
Latvia	98	61.76	61263.07	18.17	17.82	64.01	81.2
Lithuania	167	55.89	54728.73	46.18	17.14	36.68	92.3
Mexico	54120	40.74	39406.1	59.49	20.42	20.10	71.10
Netherlands	476	55.69	89270.99	46.44	13.48	40.082	67.10
New Zealand	115	45.36	119537.87	34.18	31.81	34.00	53.2
Norway	197	64.05	65466.01	50.90	16.93	32.16	84
Poland	2227	52.33	56820.37	54.34	14.22	31.44	82.1
Portugal	1211	50.76	58667.17	57.55	16.36	26.10	75
Romania	549	47.08	79069.91	37.21	20.15	42.64	96.6
Scotland	480	58.27	70743.38	37.48	18.66	43.86	67.90
Singapore	110	42.54	87950.66	15.22	27.90	56.89	90.1
Slovakia	98	47.64	58974.01	58.58	13.10	28.32	90.2
South Korea	2362	45.26	60264.40	21.89	18.83	59.28	57.3
Spain	562	51.78	67404.52	38.99	19.17	41.85	82.7
Sweden	209	53.09	76242.21	47.65	20.52	31.83	69.7
Switzerland	208	54.61	78873.46	43.05	23.28	33.67	43.8
Turkey	401	43.58	74887.06	34.70	17.76	47.54	59.6
U.S. Virgin Islands	109	44.28	62150.77	38.06	29.64	32.30	65
outlying areas	868	44.21	52664.63	49.00	22.93	28.07	65
United Kingdom	486	51.01	114991.84	33.01	15.43	51.57	67.90
Wales	11	70	104471.55	40.85	36.39	22.76	67.9
Average	2051.61	52.43	74012.69	41.00	19.68	39.32	72.62
Standard deviation	8393.86	6.94	20975.15	12.41	6.41	11.58	12.11
Correlation w/ HO		0.01	-0.15	-0.05	-0.07	0.09	1

Table 9: Characteristics of 1st generation immigrants across countries of origin

9 Appendix B: Robustness Checks

Robustness Check 1: Alternative Estimation Methods

Robustness Check 1: Probit Regression

We estimate the model in (4.1) with a Probit regression. The estimation results are shown in Table (10). Our cultural variable of interest remains highly significant and the marginal effects correspond to the OLS estimates.

Robustness Check 2: Alternative Proxy for Cultural Preferences

Robustness Check 2: Dummy High Homeownership country

We estimate the model in (4.1) with an alternative proxy for cultural preferences. The alternative proxy is a dummy variable and equal to one if the homeownership rate in the country of origin is larger than 70 % (median value) and zero otherwise. The estimation results are shown in Table (11). Our new cultural variable of interest remains highly significant.

Robustness Checks 3-9: Varying Sample Sizes

Robustness Check 3: Larger Sample

We estimate (4.1) for all available countries in the sample. The sample includes 5 more countries-of origin in comparison to our baseline sample.[27] The estimation results are very similar. The cultural proxy stays significant and the quantitative impact of the cultural proxy is basically identical. Table (12) shows the regression results.

Robustness Check 4: Excluding countries < 100 observations

We estimate (4.1) for a smaller sample of countries. We exclude all countries of origin listed in Table (6) that have less than 100 observations. The estimation results are very similar. The cultural proxy stays significant and the quantitative impact of the cultural proxy is basically identical. Table (13) shows the regression results.

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[27]The included countries are Bulgaria, Cyprus, Estonia, Iceland and Singapore. In the baseline, we exclude these countries as the number of observations is below ten for these countries of origin.

Robustness Check 5: Excluding Mexico (country of origin with most observations)
We estimate (4.1) for a smaller sample of countries. We exclude Mexico. We lose 26% of the baseline observations. The estimation results are very similar. The cultural proxy stays significant and the quantitative impact of the cultural proxy is basically identical. Table (14) shows the regression results.

Robustness Check 6: Excluding "war countries"
We estimate (4.1) for a smaller sample of countries. We exclude all countries of origin listed in Table (6) that might have been affected by wars between 1945-1994. We exclude Isreael/Palestine, Croatia and South Korea. The estimation results are very similar. The cultural proxy stays significant and the quantitative impact of the cultural proxy is basically identical. Table (15) shows the regression results.

Robustness Check 7: Excluding "dictatorship countries"
We estimate (4.1) for a smaller sample of countries. We exclude all countries of origin from the baseline sample that had a dictatorship at some point between 1945-1994. We exclude Portugal, Spain and Greece. The estimation results are very similar. The cultural proxy stays significant and the quantitative impact of the cultural proxy is basically identical. Table (16) shows the regression results.

Robustness Check 8: Excluding Post-Soviet States
We estimate (4.1) for a smaller sample of countries. We exclude all Post-Soviet States as countries of origin from the baseline sample. Hence we exclude Lithuania, Estonia, and Latvia. The estimation results are very similar. The cultural proxy stays significant and the quantitative impact of the cultural proxy is basically identical. Table (17) shows the regression results.

Robustness Check 9: Excluding Outliers
We estimate (4.1) for a smaller sample of countries. We exclude all countries of origin from the baseline sample that are outliers in Figure (1), hence we exclude South Korea, Israel, New Zealand and Mexico. The estimation results are very similar. The cultural proxy stays significant and the quantitative impact of the cultural proxy is basically identical. Table (18) shows the regression results.

Robustness Check 10-13: Varying Location-Time Dummies

Robustness Check 10: Without metropolitan area and year dummies
We estimate (4.1) without F_{m_t}, the large set of metropolitan area-time dummies. The estimation results are very similar. The cultural proxy stays significant and the quantitative impact of the cultural proxy is basically identical. Table (19) shows the regression results.

Robustness Check 11: With year-metropolitan area dummies
(instead of seperate metropolitan area and year dummies)
We estimate (4.1) without F_t and F_m, the set of year and metropolitan area dummies. Instead we include F_{m_t}, a large set of 4339 year-metropolitan area dummies, that account for houseprice effects in a specific time at a specific location. This reduces our sample size. The estimation results are very similar. The cultural proxy stays significant and the quantitative impact of the cultural proxy is basically identical. Table (20) shows the regression results.

Robustness Check 12: With metropolitan central city status-year dummies
(instead of metropolitan area-year)
We estimate (4.1) without F_{m_t}, the large set of metropolitan area-time dummies. Instead we include F_{s_t}, a set of metropolitan central city status-year dummies. Metropolitan central city status indicates whether a household was located in a metropolitan area. For households within metropolitan areas, metropolitan central city status specifies whether the housing unit was inside or outside the central city of the metropolitan area.The estimation results are very similar. The cultural proxy stays significant and the quantitative impact of the cultural proxy is basically identical. Table (21) shows the regression results.

Robustness Check 13: With clustered standard errors (at metropolitan area level)
We estimate (4.1) with clustered standard errors at metropolitan area level. The estimation results are very similar. The cultural proxy stays significant and the quantitative impact of the cultural proxy is basically identical. Table (22) shows the regression results.

Dependent Variable: Homeownership status of immigrant i			
	(1)	(2)	(3)
HO_{origin}	0.211****	0.216***	0.227***
	(3.17)	(2.82)	(2.95)
sex (dummy)		0.0439****	0.0445****
		(3.35)	(3.39)
marital status (dummy)		0.579****	0.587****
		(41.41)	(41.84)
age		0.0718****	0.0705****
		(33.65)	(32.79)
age squared		-0.000431****	-0.000417****
		(-22.10)	(-21.16)
race categories		✓	✓
income categories		✓	✓
education categories			✓
year (dummy)	✓	✓	✓
metropolitan area (dummy)	✓	✓	✓
constant	0.836***	-2.948***	-2.503***
	(5.75)	(-14.10)	(-14.25)
N	61123	61117	61117
pseudo R^2	0.0433	0.228	0.229

t statistics in parentheses. * p<0.1, ** p<0.05, *** p<0.01, **** p<0.001. With robust standard errors. Dependent variable: Equal to one if second generation immigrant homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0,1)$.

Table 10: Robustness Check (1): Probit Regression

	Dependent Variable: Homeownership status of immigrant i
$HO_{high-low}$	0.0101***
	(2.77)
sex (dummy)	0.0193***
	(5.46)
marrital status (dummy)	0.158***
	(41.00)
age	0.0228***
	(36.80)
age squared	-0.000140***
	(-24.82)
race categories	✓
income categories	✓
education categories	✓
year (dummy)	✓
metropolitan area (dummy)	✓
constant	-0.359***
	(-19.86)
N	61319
R^2	0.254
adj. R^2	0.248

t statistics in parentheses. * p<0.1, ** p<0.05, *** p<0.01. With robust standard errors. Deependent variable: Equal to one if second generation immigrant homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. The dummy $HO_{high-low}$ is equal to one if the homeownership rate in the country of origin in 2011 is larger than the median and zero otherwise.

Table 11: Robustness Check (2): Alternative Proxy for Cultural Preferences

Dependent Variable: Homeownership status of immigrant i			
	(1)	(2)	(3)
HO_{origin}	0.0626***	0.0426**	0.0444**
	(3.01)	(2.23)	(2.33)
sex (dummy)		0.0189****	0.0193****
		(5.33)	(5.44)
marital status (dummy)		0.156****	0.157****
		(38.80)	(39.18)
age		0.0231****	0.0227****
		(37.44)	(36.75)
age squared		-0.000143****	-0.000140****
		(-25.57)	(-24.78)
race categories		✓	✓
income categories		✓	✓
education categories			✓
year (dummy)	✓	✓	✓
metropolitan area (dummy)	✓	✓	✓
constant	0.673****	-0.380****	-0.381****
	(39.95)	(-17.19)	(-17.19)
N	61349	61349	61349
R^2	0.053	0.253	0.254
adj. R^2	0.046	0.247	0.248

t statistics in parentheses. * p<0.1, ** p<0.05, *** p<0.01. With robust standard errors. Dependent variable: Equal to one if second generation immigrant homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0,1)$. Includes all countries of origin listed in Table (6) without any restrictions.

Table 12: Robustness Check (3): Varying Sample Size 1

Dependent Variable: Homeownership status of immigrant i			
	(1)	(2)	(3)
HO_{origin}	0.0609***	0.0407**	0.0427**
	(2.92)	(2.12)	(2.23)
sex (dummy)		0.0189****	0.0193****
		(5.34)	(5.44)
marital status (dummy)		0.157****	0.158****
		(40.64)	(41.01)
age		0.0231****	0.0227****
		(37.42)	(36.72)
age squared		-0.000143****	-0.000140****
		(-25.55)	(-24.76)
race categories		✓	✓
income categories		✓	✓
education categories			✓
year (dummy)	✓	✓	✓
metropolitan area (dummy)	✓	✓	✓
constant	0.674****	-0.380****	-0.380****
	(39.88)	(-17.12)	(-17.13)
N	61254	61254	61254
R^2	0.053	0.253	0.254
adj. R^2	0.046	0.247	0.248

t statistics in parentheses. * $p<0.1$, ** $p<0.05$, *** $p<0.01$. With robust standard errors. Dependent variable: Equal to one if second generation immigrant homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0,1)$. Includes all countries of origin listed in Table (6) that have more than 100 observations.

Table 13: Robustness Check (4): Varying Sample Size 2

Dependent Variable: Homeownership status of immigrant i			
	(1)	(2)	(3)
HO_{origin}	0.103****	0.0484**	0.0484**
	(5.00)	(2.53)	(2.53)
sex (dummy)		0.0236****	0.0241****
		(5.82)	(5.95)
marital status (dummy)		0.167****	0.169****
		(38.01)	(38.27)
age		0.0250****	0.0249****
		(30.87)	(30.78)
age squared		-0.000168****	-0.000166****
		(-23.84)	(-23.62)
race categories		✓	✓
income categories		✓	✓
education categories			✓
year (dummy)	✓	✓	✓
metropolitan area (dummy)	✓	✓	✓
constant	0.682****	-0.401****	-0.408****
	(40.13)	(-14.94)	(-15.17)
N	45334	45334	45334
R^2	0.045	0.215	0.216
adj. R^2	0.036	0.207	0.208

textitt statistics in parentheses. * p<0.1, ** p<0.05, *** p<0.01. With robust standard errors. Dependent variable: Equal to one if second generation immigrant homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0,1)$. We exclude Mexico from the baseline sample.

Table 14: Robustness Check (5): Varying Sample Size 3

Dependent Variable: Homeownership status of immigrant i			
	(1)	(2)	(3)
HO_{origin}	0.0451**	0.0397**	0.0416**
	(2.16)	(2.07)	(2.17)
sex (dummy)		0.0187****	0.0191****
		(5.28)	(5.38)
marital status (dummy)		0.157****	0.158****
		(40.58)	(40.96)
age		0.0230****	0.0226****
		(37.21)	(36.51)
age squared		-0.000143****	-0.000139****
		(-25.40)	(-24.60)
race categories		✓	✓
income categories		✓	✓
education categories			✓
year (dummy)	✓	✓	✓
metropolitan area (dummy)	✓	✓	✓
constant	0.685****	-0.378****	-0.378****
	(40.50)	(-17.00)	(-17.00)
N	61081	61081	61081
R^2	0.053	0.252	0.253
adj. R^2	0.046	0.246	0.247

t statistics in parentheses. * p<0.1, ** p<0.05, *** p<0.01. With robust standard errors. Dependent variable: Equal to one if second generation immigrant homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0,1)$. War countries excluded from baseline sample.

Table 15: Robustness Check (6): Varying Sample Size 4

Dependent Variable: Homeownership status of immigrant i			
	(1)	(2)	(3)
HO_{origin}	0.0652***	0.0418**	0.0442**
	(3.09)	(2.16)	(2.28)
sex (dummy)		0.0188****	0.0191****
		(5.18)	(5.28)
marital status (dummy)		0.156****	0.158****
		(39.74)	(40.09)
age		0.0233****	0.0230****
		(37.10)	(36.42)
age squared		-0.000145****	-0.000142****
		(-25.42)	(-24.64)
race categories		✓	✓
income categories		✓	✓
education categories			✓
year (dummy)	✓	✓	✓
metropolitan area (dummy)	✓	✓	✓
constant	0.671****	-0.387****	-0.387****
	(39.31)	(-17.20)	(-17.20)
N	58743	58743	58743
R^2	0.055	0.255	0.255
adj. R^2	0.047	0.249	0.249

t statistics in parentheses. * $p<0.1$, ** $p<0.05$, *** $p<0.01$. With robust standard errors. Dependent variable: Equal to one if second generation immigrant homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0,1)$. Excluding countries of origin from baseline sample that experienced dictatorship.

Table 16: Robustness Check (7): Varying Sample Size 5

Dependent Variable: Homeownership status of immigrant i			
	(1)	(2)	(3)
HO_{origin}	0.0541**	0.0453**	0.0482**
	(2.53)	(2.30)	(2.45)
sex (dummy)		0.0188****	0.0192****
		(5.27)	(5.38)
marital status (dummy)		0.157****	0.158****
		(40.46)	(40.84)
age		0.0229****	0.0226****
		(37.10)	(36.41)
age squared		-0.000142****	-0.000138****
		(-25.23)	(-24.43)
race categories		✓	✓
income categories		✓	✓
education categories			✓
year (dummy)	✓	✓	✓
metropolitan area (dummy)	✓	✓	✓
constant	0.679****	-0.381****	-0.382****
	(39.43)	(-16.98)	(-17.02)
N	60691	60691	60691
R^2	0.053	0.254	0.254
adj. R^2	0.046	0.248	0.249

t statistics in parentheses. * p<0.1, ** p<0.05, *** p<0.01. With robust standard errors. Dependent variable: Equal to one if second generation immigrant homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0,1)$. Excluding countries of origin from baseline sample that are Post-Soviet States.

Table 17: Robustness Check (8): Varying Sample Size 6

Dependent Variable: Homeownership status of immigrant i			
	(1)	(2)	(3)
HO_{origin}	0.0848****	0.0479**	0.0479**
	(4.09)	(2.50)	(2.50)
sex (dummy)		0.0231****	0.0237****
		(5.69)	(5.82)
marital status (dummy)		0.167****	0.169****
		(37.93)	(38.20)
age		0.0248****	0.0247****
		(30.39)	(30.31)
age squared		-0.000166****	-0.000165****
		(-23.50)	(-23.27)
race categories		✓	✓
income categories		✓	✓
education categories			✓
year (dummy)	✓	✓	✓
metropolitan area (dummy)	✓	✓	✓
constant	0.696****	-0.396****	-0.403****
	(40.88)	(-14.63)	(-14.87)
N	45112	45112	45112
R^2	0.045	0.213	0.214
adj. R^2	0.036	0.205	0.206

t statistics in parentheses. * p<0.1, ** p<0.05, *** p<0.01. With robust standard errors. Dependent variable: Equal to one if second generation immigrant homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0, 1)$. Excluding countries of origin from baseline sample that are outliers in Figure (1).

Table 18: Robustness Check (9): Varying Sample Size 7

Dependent Variable: Homeownership status of immigrant i			
	(1)	(2)	(3)
HO_{origin}	0.0896****	0.0370**	0.0385**
	(4.53)	(2.00)	(2.08)
sex (dummy)		0.0134****	0.0136****
		(3.87)	(3.91)
marital status (dummy)		0.166****	0.167****
		(43.73)	(44.05)
age		0.0247****	0.0244****
		(41.19)	(40.68)
age squared		-0.000156****	-0.000153****
		(-28.43)	(-27.86)
race categories		✓	✓
income categories		✓	✓
education categories			✓
constant	0.651****	-0.436****	-0.437****
	(45.91)	(-21.78)	(-21.77)
N	63986	63986	63986
R^2	0.000	0.224	0.224
adj. R^2	0.000	0.223	0.224

t statistics in parentheses. * p<0.1, ** p<0.05, *** p<0.01. With robust standard errors. Dependent variable: Equal to one if second generation immigrant homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. Number of year-metropolitan area categories: 4339. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0, 1)$. Difference to baseline: No metropolitan area-year dummies.

Table 19: Robustness Check (10): Varying Location-Time Dummies 1

Dependent Variable: Homeownership status of immigrant i			
	(1)	(2)	(3)
HO_{origin}	0.0583***	0.0391*	0.0408**
	(2.68)	(1.95)	(2.04)
sex (dummy)		0.0164****	0.0167****
		(4.43)	(4.53)
marital status (dummy)		0.156****	0.157****
		(38.79)	(39.18)
age		0.0231****	0.0227****
		(35.91)	(35.26)
age squared		-0.000144****	-0.000140****
		(-24.59)	(-23.84)
race categories		✓	✓
income categories		✓	✓
education categories			✓
year-metropolitan area (dummy) dummies	✓	✓	✓
constant	0.672****	-0.394****	-0.396****
	(43.16)	(-18.16)	(-18.23)
N	61319	61319	61319
R^2	0.112	0.299	0.299
adj. R^2	0.044	0.245	0.245

t statistics in parentheses. * p<0.1, ** p<0.05, *** p<0.01. With robust standard errors. Dependent variable: Equal to one if second generation immigrant homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0,1)$. Difference to baseline: No seperate year and metropolitan area dummies. We include a large set of 4339 year-metropolitan area dummies.

Table 20: Robustness Check (11): Varying Location-Time Dummies 2

Dependent Variable: Homeownership status of immigrant i			
	(1)	(2)	(3)
HO_{origin}	0.0758****	0.0477***	0.0499***
	(3.84)	(2.58)	(2.69)
sex (dummy)		0.0139****	0.0141****
		(3.99)	(4.06)
marital status (dummy)		0.156****	0.157****
		(41.19)	(41.54)
age		0.0233****	0.0230****
		(38.55)	(37.95)
age squared		-0.000146****	-0.000143****
		(-26.47)	(-25.80)
race categories		✓	✓
income categories		✓	✓
education categories			✓
year-metro (dummy)	✓	✓	✓
constant	0.660****	-0.403****	-0.404****
	(46.76)	(-20.00)	(-20.01)
N	63579	63579	63579
R^2	0.028	0.235	0.235
adj. R^2	0.027	0.233	0.234

t statistics in parentheses. * p<0.1, ** p<0.05, *** p<0.01. With robust standard errors. Dependent variable: Equal to one if second generation immigrant homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0,1)$. Difference to baseline: No metropolitan area and nor year dummies. We include instead a set of metropolitan central city-year dummies. For households within metropolitan areas, metropolitan central city status specifies whether the housing unit is inside or ouside the central city of the metropolitan area.

Table 21: Robustness Check (12): Varying Location-Time Dummies 3

Dependent Variable: Homeownership status of immigrant i			
	(1)	(2)	(3)
HO_{origin}	0.0583*	0.0432*	0.0450**
	(1.83)	(1.89)	(1.97)
sex (dummy)		0.0189****	0.0193***
		(3.34)	(3.28)
marital status (dummy)		0.156****	0.158****
		(27.77)	(28.00)
age		0.0231****	0.0227****
		(23.66)	(22.82)
agesquare		-0.000143****	-0.000140****
		(-15.44)	(-14.59)
race categories		✓	✓
income categories		✓	✓
education categories			✓
year (dummy)	✓	✓	✓
metropolitan area (dummy)	✓	✓	✓
constant	0.672****	-0.394****	-0.396****
	(29.70)	(-12.17)	(-12.32)
N	61319	61319	61319
R^2	0.112	0.299	0.299
adj. R^2	0.044	0.245	0.245

t statistics in parentheses. * p<0.1, ** p<0.05, *** p<0.01. With robust standard errors. Dependent variable: Equal to one if second generation immigrant homeowner, 0 otherwise. Sex dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories: 10. Number of education categories: 3. HO_{origin} denotes the homeownership rate in the country of origin in 2011 and is $\in (0,1)$. Difference to baseline: Clustered standard errors at metropolitan area level.

Table 22: Robustness Check (13): Clustered Standard Errors

Bibliography

Alberto Alesina and Paola Giuliano. Culture and institutions. *Journal of Economic Literature (Forthcoming)*, 2016.

Luigi Guiso, Paola Sapienza, and Luigi Zingales. Does culture affect economic outcomes? *Journal of Economic Perspectives*, 20(2):23–48, 2006. doi: 10.1257/jep. 20.2.23. URL `http://www.aeaweb.org/articles.php?doi=10.1257/jep.20.2.23`.

Raquel Fernández and Alessandra Fogli. Culture: An empirical investigation of beliefs, work, and fertility. *American Economic Journal: Macroeconomics*, 1(1):146–77, 2009. doi: 10.1257/mac.1.1.146. URL `http://www.aeaweb.org/articles.php?doi=10.1257/mac.1.1.146`.

Todd Sinai. House price moments in boom-bust cycles. *forthcoming*, 2016.

Stefanie J. Huber. Preference for housing services and rational housing bubbles. *Working Paper*, 2016.

Maristella Botticini and Zvi Eckstein. Jewish occupational selection: Education, restrictions, or minorities? *The Journal of Economic History*, 65:922–948, 12 2005. ISSN 1471-6372. doi: 10.1017/S0022050705000355. URL `http://journals.cambridge.org/article_S0022050705000355`.

Joseph Henrich, Robert Boyd, Samuel Bowles, Colin Camerer, Ernst Fehr, Herbert Gintis, and Richard McElreath. In search of homo economicus: Behavioral experiments in 15 small-scale societies. *American Economic Review*, 91(2):73–78, 2001. doi: 10.1257/aer.91.2.73. URL `http://www.aeaweb.org/articles.php?doi=10.1257/aer.91.2.73`.

Raquel Fernández. Does culture matter? Technical report, National Bureau of Economic Research, 2010.

Christopher D Carroll, Byung-Kun Rhee, and Changyong Rhee. Are There Cultural Effects on Saving? Some Cross-Sectional Evidence. *The Quarterly Journal of Economics*, 109(3):685–99, August 1994. URL `http://ideas.repec.org/a/tpr/qjecon/v109y1994i3p685-99.html`.

Yann Algan and Pierre Cahuc. Inherited trust and growth. *American Economic Review*, 100(5):2060–92, 2010. doi: 10.1257/aer.100.5.2060. URL `http://www.aeaweb.org/articles.php?doi=10.1257/aer.100.5.2060`.

Alberto Alesina and Paola Giuliano. The power of the family. *Journal of Economic Growth*, 15(2):93–125, 2010. ISSN 1381-4338.

Raquel Fernández, Alessandra Fogli, and Claudia Olivetti. Mothers and sons: Preference formation and female labor force dynamics. *The Quarterly Journal of Economics*, 119(4):1249–1299, 2004. doi: 10.1162/0033553042476224. URL `http://qje.oxfordjournals.org/content/119/4/1249.abstract`.

Yann Algan and Pierre Cahuc. The Roots of Low European Employment: Family Culture? In *NBER International Seminar on Macroeconomics 2005*, NBER Chapters, pages 65–109. National Bureau of Economic Research, Inc, 2005. URL `http://ideas.repec.org/h/nbr/nberch/0342.html`.

Una Okonkwo Osili and Anna L Paulson. Institutions and financial development: Evidence from international migrants in the united states. *The Review of Economics and Statistics*, 90(3):498–517, 2008.

Andrea Ichino and Giovanni Maggi. Work environment and individual background: Explaining regional shirking differentials in a large italian firm. *The Quarterly Journal of Economics*, 115(3):1057–1090, 2000. doi: 10.1162/003355300554890. URL `http://qje.oxfordjournals.org/content/115/3/1057.abstract`.

Anneke Kosse and David-Jan Jansen. Choosing how to pay: The influence of foreign backgrounds. *Journal of Banking & Finance*, 37(3):989–998, 2013. URL `http://EconPapers.repec.org/RePEc:eee:jbfina:v:37:y:2013:i:3:p:989-998`.

David Atkin. The caloric costs of culture: Evidence from indian migrants. *American Economic Review (revise and resubmit)*, 2015.

Erzo F. P. Luttmer and Monica Singhal. Culture, context, and the taste for redistribution. *American Economic Journal: Economic Policy*, 3(1):157–79, 2011. doi: 10.1257/pol.3.1.157. URL `http://www.aeaweb.org/articles.php?doi=10.1257/pol.3.1.157`.

Paola Giuliano. Living Arrangements in Western Europe: Does Cultural Origin Matter? *Journal of the European Economic Association*, 5(5):927–952, 09 2007. URL `http://ideas.repec.org/a/tpr/jeurec/v5y2007i5p927-952.html`.

Maria Concetta Chiuri and Tullio Jappelli. Financial market imperfections and home ownership: A comparative study. *European Economic Review*, 47(5):857 – 875, 2003. ISSN 0014-2921. doi: http://dx.doi.org/10.1016/S0014-2921(02)00273-8. URL `http://www.sciencedirect.com/science/article/pii/S0014292102002738`.

Dan Andrews and Aida Caldera Sanchez. The evolution of homeownership rates in selected oecd countries: Demographic and public policy influences. *OECD Journal: Economic Studies*, 1(836), 2011.

Dimitris Georgarakos, Adriana Lojschova, and Melanie Ward-Warmedinger. Mortgage indebtedness and household financial distress. *ECB Working Paper Series*, (1156), February 2010.

F. Earley. What explains the differences in homeownership rates in europe? *Housing Finance International*, 19(1):25–30, 2004.

Christian Hilber. Why are homeownership rates so different across countries? *In the 14th Annual European Real Estate Society Conference. ERES: Conference. London, UK*, 2007.

Steven C. Bourassa, Donald Haurin, Patric Hendershott, and Martint Hoesli. Determinants of the homeownership rate: An international perspective. *Swiss Finance Institute: Research Paper Series*, (11-49), 2014.

Morris A. Davis. Questioning homeownership as a public policy goal. *Policy Analysis, CATO Institute*, (696), May 2012.

Michael Oxley. Owner occupation in various european countries. *Land Managment: New Directions*, 1984.

Lynn M. Fisher and Austin J. Jafee. Determinants of international home ownership rates. *Housing Finance International*, 2003.

Dan Andrews. Real house prices in oecd countries: The role of demand shocks and structural and policy factors. *OECD Economics Department Working Papers*, (831), 2010.

S.C. Bourassa and M. Yin. Tax deductions, tax credits and the homeownership rate of young urban adults in the united states. *Urban Studies*, (45):1141–61, 2007.

Christian A. L. Hilber and Tracy M. Turner. The mortgage interest deduction and its impact on homeownership decisions. Number SERCDP0055. Economics Research Centre (SERC), London School of Economics and Political Science, London, UK, 2010.

David Card, John DiNardo, and Eugena Estes. The More Things Change: Immigrants and the Children of Immigrants in the 1940s, the 1970s, and the 1990s. NBER Working Papers 6519, National Bureau of Economic Research, Inc, April 1998. URL `http://ideas.repec.org/p/nbr/nberwo/6519.html`.

George J. Borjas. Ethnicity, neighborhoods, and human-capital externalities. *The American Economic Review*, 85(3):pp. 365–390, 1995. ISSN 00028282. URL `http://www.jstor.org/stable/2118179`.