Nevertheless, they persist: Cross-Country Differences in Homeownership Behavior

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Abstract

Cross-country differences in homeownership rates are large and persistent over time, with homeownership rates ranging from 44% in Switzerland to 83% in Spain. This paper investigates whether cultures—defined as behavioral attitudes passed across generations—may value homeownership differently, and could thus be a driving demand factor of the homeownership decision. To isolate the effect of cultural preferences regarding homeownership from the impact of other economic factors, we investigate second-generation immigrants' homeownership decisions in the United States between 1994 and 2017. Our findings indicate that cultural preferences for homeownership are persistent, transmitted between generations, and substantially influence the rent-versus-buy decision.

Keywords: Housing Markets, Homeownership Rates, Cross-Country Heterogeneity, Cultural Transmission, Household Housing decisions.

JEL Classifications: G11, G40, R21, Z10.

1 Introduction

Cross-country differences in homeownership rates are large and persistent over time. Especially in Europe, homeownership rates vary substantially from 44% in Switzerland to 83% in Spain. Despite the large attention housing markets have received recently, there are few empirical studies that aim to explain why homeownership rates differ so greatly across countries. The decision of whether to rent or buy is usually the most important financial choice a household takes in its lifetime. It is often assumed that households take a "user cost approach"—comparing the two options in an analytical manner with a view to optimize the expected financial outcome. In contrast, this paper investigates whether "culture" is one of the driving factors of the homeownership decision, and could thus explain part of the cross-country differences in homeownership rates.

We interpret "culture" broadly, capturing the behavioral attitudes towards homeownership transmitted from generation to generation. These behavioral attitudes could result from historical macroeconomic and institutional experiences or deeply embedded preferences and values. We interpret parental homeownership experience and parental cultural preferences towards homeownership as two sides of the same coin. For owners, the fact of owning a housing asset (homeownership experience) leads to a higher valuation being attributed to this asset by the owner (i.e., "endowment effect", "loss aversion"). At the same time, the homeownership preference of renters is likely to be stronger the higher the homeownership rate (e.g., "keeping up with the Joneses", "conformity bias", "social norms"). Whether preferences lead to institutional outcomes or vice-versa is beyond the scope of this paper.

To isolate the effect of culture on the homeownership decision from the effects of institutions and economic factors, we employ the epidemiological approach. Differences in institutions like housing market regulations (e.g., taxation, transaction costs, mortgage markets) may cause households to expect a different return from homeownership, thereby affecting the homeownership decision differentially. Therefore, we investigate the homeownership decision of second-generation immigrant household heads in the United States using data from the Current Population Survey from 1994 to 2017. A second-generation immigrant is defined as an individual who was born in the United States, but whose parents were born abroad. All second-generation immigrants have therefore grown up with the same markets and institutions. Parental cultural background, and hence behavioral attitudes, beliefs, and

perferences towards homeownership might, however, differ. If culture is persistent over time and is transmitted from generation to generation, then we would expect to find systematic differences in terms of behavioral attitudes, beliefs, and perferences across second-generation immigrant groups from different countries of origin. Thus, systematic differences in the rent-versus-buy decision of second-generation immigrant groups that correlate with their behavior in their country of ancestry would point to cultural attitudes towards homeownership being responsible for such behavioral differences.

We proxy the homeownership preferences of second-generation immigrants using aggregate homeownership rates in the country of ancestry.[1] In a second specification and using a smaller dataset, we use a differenciated homeonwership rate along the dimensions of age and income and assign the corresponding homeownership rates in the country of ancestry to the second-generation migrants in the sample.

As a first descriptive result, we show that second-generation immigrants are on average as likely to own their primary residence as native households.[2] However, we document a considerable variation in homeownership rates across second-generation immigrant groups—defined by the country of origin of their fathers. In fact, the persistent cross-country differences in homeownership rates are replicated in the United States by the descendants of migrants from those countries (Figure 1). To understand this positive relationship found at the macro-level, we investigate the homeownership decision on the micro-level, using second-generation immigrant household heads as our subjects of study.

We find that a second-generation immigrant with a father that emigrated from a high homeownership country is significantly more likely to be a homeowner in the United States than a second-generation immigrant with a father from a low homeownership country.[3] It is important to ensure that our results are not driven by a

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[1]For the analysis to be meaningful, the proxy for cultural preferences should evolve slowly over time. Otherwise, the cultural preferences transmitted by the parents to the children would not be captured by past or future values. This is not a concern, as cross-country differences in aggregate homeownership rates are persistent over time.

[2]The literature documenting a "homeownership gap" between immigrants and natives in the United States (e.g., Borjas (2002), Kauppinen and Vilkama (2016)) investigates first- and not second-generation immigrants. Consistent with our finding, Abdul-Razzak et al. (2015) show that for the homeownership probability, the immigrant status has no explanatory power for first-generation immigrants who have lived in the United States for 17 years or longer.

[3]As a baseline, we define a second-generation immigrant as someone born in the United States while having a foreign-born father. The existing literature suggests that for financial household decisions, the father's view may matter more in comparison to the mother's (see e.g., Smith et al. (2010), Fonseca et al. (2012), Ke (2021)). Defining a second-generation immigrant instead as having

Correlation of Aggregate Homeownership Rates
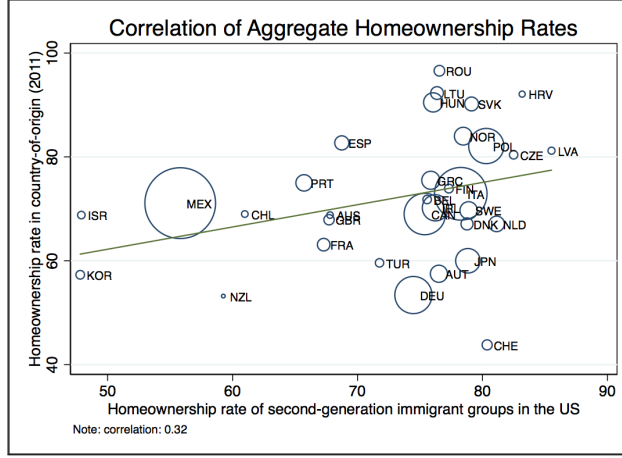
Circle size represents the number of second-generation
immigrants from a particular country of origin.

Figure 1: Aggregate Homeownership Rates

systematic difference in second-generation immigrants depending on the country of ancestry. Therefore, we control for individual characteristics that are known to be important for the decision of whether to rent or buy. Specifically, we control for age, gender, race, marital status, number of children, educational attainment, employment status, income, and savings. Housing structures or housing costs might differ from location to location and over time. We control for these differences, regardless of their source, by including a vector of metropolitan area and year dummies. Data limitations prevent us from measuring parental income directly. We propose different proxies for parental income and wealth and show that our results are robust to their inclusion.

The quantitative impact of culture on the homeownership decision is sizable for second-generation immigrant household heads. An increase in the homeownership rate in the country of origin of the immigrant's father by one standard deviation is associated with a 0.5 percentage point increase in the probability that an average second-generation immigrant is a homeowner in the United States. This accounts for 5.3% of the variation in homeownership rates across second-generation immigrant groups within the United States. The quantitative impact of the presented baseline estimate could be a lower bound for the general effect of culture on the homeownership decision. Several factors may mitigate the influence of the ancestor's cultural attitude towards homeownership: friendships[4] of the second-generation immigrants

a mother or father born abroad does not change this result.

[4]Using social-networking data from Facebook, Bailey et al. (2018) find that friendships matter

with natives and other immigrant groups, a spouse of a different cultural background, and the markets and institutions in the United States.

To unravel these effects and thereby explore the impact of culture on the home-ownership decision in a sharper way, we focus on second-generation immigrant house-hold heads that are married to a spouse of the same cultural background, and compare their homeownership decision with those that are single, and those that are married to a spouse of a different cultural background. For a second-generation immigrant, it is likely that the spouse plays an important role in preserving beliefs and preferences (spouse effect). Besides, one can expect that individuals who feel strongly attached to their country of ancestry are also more likely to marry someone from this country (selection effect). Therefore, the preferences, beliefs, and values of second-generation immigrants married to a same cultural background spouse might be the closest to those prevailing in the country of ancestry. This group might reflect the culture towards homeownership of the father's home country most accurately.

As expected, the impact of culture on the homeownership decision is largest for second-generation immigrant household heads that are married to a spouse of the same cultural background. For this subset, the impact of culture is three times larger compared to singles, and nine times larger compared to household heads that are married to a spouse of a different cultural background. The effect is also much larger compared to the baseline estimate; an increase in the homeownership rate in the country of origin of the immigrant's father by one standard deviation (across countries) is associated with a 3.7 percentage point increase in the probability that an average married second-generation immigrant with a spouse of the same cultural background is a homeowner in the United States. This accounts for 39% of the variation in the homeownership rate across second-generation immigrant groups within the United States. Finally, we present evidence for the hypothesis that the impact of the ancestor's culture vanishes over time. The effect of cultural preferences is larger for first-generation married couples with the same cultural background than for second-generation couples with the same background.

In summary, this paper highlights the role of culture for the observed large and persistent cross-country differences in homeownership rates. Our findings indicate that cultural attitudes towards homeownership are persistent, transmitted between generations, and substantially influence the rent-versus-buy decision.

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for households' real estate decisions.

The remainder of this paper is organized as follows. Section 2 reviews the related literature. Section 3 outlines our empirical strategy, describes the data and sample selection. Section 4 presents the baseline results. Section 5 shows the results for more homogeneous subgroups of second-generation immigrants and investigates cultural transmission. Section 6 discusses the robustness of our findings. Finally, Section 7 concludes. Appendix A provides summary and descriptive statistics. Appendix B offers a wide range of robustness checks.

2   Related Literature

The first strand of related literature analyses the determinants of homeownership rates within or across countries. Although there is still little consensus on why homeownership rates differ so greatly across OECD countries, surprisingly few empirical cross-country analyses of homeownership determinants have been published so far—partly reflecting data limitations (Goodman and Mayer (2018)). Interestingly, cross-country differences in the breadth of mortgage markets (Georgarakos et al. (2010); Earley (2004)), the socio-economic composition (Hilber (2007)), and the standard of living (Davis (2012); Fisher and Jafee (2003); Oxley (1984)), do not explain the large and persistent cross-country differences in homeownership rates. Instead, potenial explanations include cross-country differences in the percentage of the population living in urban areas (Fisher and Jafee (2003)), co-residence patterns (Grevenbrock (2017)), housing market regulations and taxations (Hilber (2007); Hilber and Turner (2014); Andrews and Sanchez (2011)).[5] Our paper contributes to this literature by presenting evidence that the cross-country differences in homeownership rates are replicated by descendants of migrants in the US while controlling for socioeconomic characteristics. This evidence points in the direction that cross-country differences in homeownership rates might be explained—to some extent—by differing cultural attitudes regarding homeownership.

The second strand of a growing and related empirical literature documents that experience effects matter for household financial decision making. For example, Mal-

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[5]Higher rent controls and lower security of tenure are associated with higher homeownership rates (Andrews and Sanchez (2011)). According to Hilber (2007), most of the cross-country differences can be explained by landlord efficiency and the non-taxation of imputed rents. The effect (sign and size) of mortgage deductibility on aggregate homeownership rates is debated (Hilber and Turner (2014)). These tax reliefs might be factored into real house prices (Andrews (2010)), and hence make homeownership less affordable for lower-income households (Bourassa and Yin (2008)).

mendier and Nagel (2011) show that past stock-market and bond-market experiences predict future willingness to invest in the stock market, while Kaustia and Knüpfer (2008) and Chiang et al. (2011) show that personal IPO experiences predict future IPO investments. Without differentiating between potential drivers for cultural attitudes towards homeownership (e.g., personal experiences, beliefs, preferences), we contribute to this literature by showing that differences in cultural attitudes towards homeownership matter for the homeownership decision and persistently transmit between generations.

The third strand of related literature investigates the transmission of cultural values, preferences, and beliefs, and examines the impact of culture on macroeconomic outcomes. A large part of this literature uses the epidemiological approach to study the link between culture and individual's behavior.[6] Giuliano (2007) 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) concludes that cultural preferences are the most relevant factor. Christelis et al. (2013) document large cross-country differences in financial asset holdings. Across European countries, households of comparable characteristics tend to have quite different probabilities of participating in a given financial asset and also quite different PPP-adjusted holdings. Using a sample of Swedish households, Haliassos et al. (2017) investigate the impact of culture on stock ownership, homeownership, and household debt, and document significant differences across cultural groups. Our work differs from theirs in two important ways. First, we examine the behavior of second-generation rather than first-generation immigrants to (i) avoid systematic selection concerns, and (ii) to be able to study cultural transmission across generations. Second, Haliassos et al. (2017) define the cultural background of migrants more broadly, grouping 39 countries of origin in six distinctive culturally similar bins (e.g., the UK and Spain are

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[6]The epidemiological approach to link the cultural background ("inherited" from the home country) to immigrants' behaviour has been applied in several domains, including the savings and investment behavior of households (Fuchs-Schündeln et al. (2019); Haliassos et al. (2017); Osili and Paulson (2008); Guiso et al. (2004); Carroll et al. (1999); Carroll et al. (1994)), mortgage choices (Rodríguez-Planas, 2018), fertility and female labor force decisions (Blau et al. (2013); Alesina and Giuliano (2010); Fernández and Fogli (2009); Fernández (2007); Antecol (2000)), educational outcomes (Huber and Paule-Paludkiewicz (2021); De Philippis and Rossi (2020); van Hoorn (2019); Figlio et al. (2019)), trust (Algan and Cahuc (2010)), and family living arrangements (Giuliano (2007)). In addition, the methodologies of natural experiments (Botticini and Eckstein (2005)) and laboratory experiments (Henrich et al. (2001)) have been used to provide evidence that culture matters. Fernández (2011) provides a detailed literature overview.

part of the same culture group). Hence, Haliassos et al. (2017) cannot reconcile the significant differences in the financial behavior of immigrants with the financial choices of households in the country of origin. We contribute to and complement this strand of literature by showing that culture matters for the rent versus buy decision, and that behavioral attitudes towards homeownership are transmitted from generation to generation.

3 Estimation Strategy and Data

3.1 Estimation Strategy

To isolate the effect of culture from those of markets and institutions, we study the homeownership decision of second-generation immigrants in the United States. This approach has an advantage over cross-country studies in that all migrants face the same markets and institutions since birth. However, they differ in terms of their country of ancestry and thus, in their cultural heritage. Hence, these migrants might also differ in terms of their attitudes towards homeownership i.e. the homeownership preference transmitted by their foreign-born parents.

Using second-generation immigrants rather than first-generation immigrants is advantageous. The potential problem of systematic differences concerning the reasons for emigration (e.g., some countries of origin might be at war), as well as potential systematic differences in the difficulty of assimilation to the United States (e.g., learning the language of the host country), are both less prominent when studying second-generation immigrants. Section 4 discusses these differential selection concerns in detail.

We use homeownership rates in the country of origin as our cultural proxy for cultural preference regarding homeownership. It is clear that aggregate homeownership rates not only capture preferences towards homeownership but are also shaped by the underlying markets and institutions. However, we argue that only the cultural component of homeownership rates prevailing in the country of origin can have explanatory power for the tenure decision of individuals born and raised in the United States. The optimal decade from which to take these numbers is not clear. One could argue that values for the cultural proxy from 1974 to 1997 would best reflect the culture of the country of origin, as this is the most likely time window in which the parents emigrated and took their cultural preferences with them. Nonetheless,

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. 1994-2017. Data limitations do not allow the use of homeownership rates from 1974 to 1997, as prior to 1990, homeownership rates exist for six countries only. Therefore, we use homeownership rates for the year 2011 as our cultural benchmark proxy.

For the analysis to be meaningful, the proxy for cultural preferences should evolve slowly over time. Otherwise, the cultural preferences transmitted by the parents to their children would not be captured by past or future values. Put differently, the homeownership rates across countries in 2011 need to be "representative" for the homeownership structure across countries for the whole observation period 1994-2017. Comparable homeownership rates over time and across countries are scarce, and not available for our full sample of countries (see Table A2 in the Online Appendix). We therefore examine the evolution of cross-country differences in homeownership rates over time for a subsample of countries.

(a) Evolution of Homeownership, 6 countries   (b) Evolution of Homeownership, 18 countries
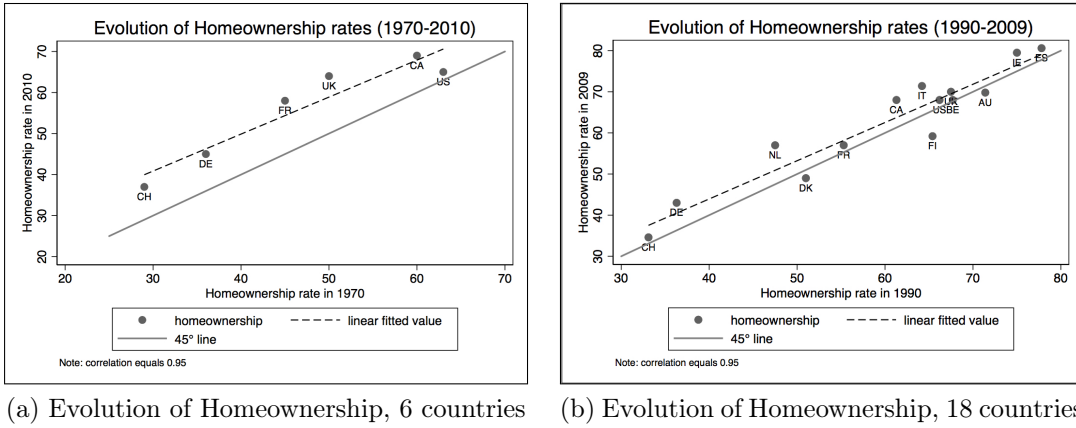
Figure 2: Evolution of Homeownership rates

For a sample of six OECD countries, Figure (2a) plots the initial observation of the homeownership rate (year 1970) against the last observation available (year 2010). The fitted line is above and nearly parallel to the 45 degree line. Hence, over the 40 years considered, homeownership rates rose proportionally in these OECD countries. Figure (2b) shows a similar picture with the difference that we reduce the time horizon to include more countries. Both figures show that the large cross-country differences in homeownership rates are constant and persistent over time.

To analyze the impact of cultural preferences on the homeownership decision of

second-generation immigrants, we use data from the Current Population Survey and estimate the following baseline model:

$$HO_{imot} = \beta_0 + \beta_1' X_{i,t} + \beta_2 \tilde{Z}_o + F_m + F_t + \varepsilon_{imot} \qquad (3.1)$$

HO_{imot} denotes the homeownership status of the second-generation immigrant i surveyed in year t, who resides in the metropolitan area m and whose father emigrated from the country of origin o. This indicator is equal to one if the individual is a homeowner and zero otherwise. $X_{i,t}$ denotes a vector of controls for individual i, which varies with the specification considered.[7] $\tilde{Z}_o$ is our variable of interest, the proxy for cultural preferences towards homeownership assigned to the parents' birthplace: the aggregate homeownership rate prevailing in 2011 in the country of origin of the immigrant's father.

In this paper, we emphasize demand-side explanations for the homeownership decision of second-generation immigrants. However, we also control for supply-side factors in the regression analysis. Housing structures and housing costs might differ not only from location to location but also over time. Sinai (2013) shows that house price cycles vary systematically across regions in the United States. We control for these differences, regardless of their source, by including a large vector of 415 metropolitan area F_m and year F_t dummies. The results are robust to several alternative specifications, e.g. including time-varying MSA fixed effects. The Eicker-Huber-White (EHW) error term is denoted by ε_{imot}.[8]

In the second specification, we further differentiate the homeownership rate for each country of origin by age and income groups and estimate the following model:

$$HO_{imot} = \beta_0 + \beta_1' X_{i,t} + \beta_2 \tilde{Z}_{o,i} + F_m + F_t + \varepsilon_{imot} \qquad (3.2)$$

The variables are identical to the baseline specification (3.1), with the only difference that we assign the immigrant's age and income *specific* country-of-origin homeownership rate; i.e. $\tilde{Z}_{o,i}$. Hence, the coefficient β_2 remains our coefficient of interest and captures the role of culture in explaining differences between second-

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[7]The individual characteristics included in the baseline specification are age, age (squared), gender, marital status, number of children, income deciles, savings, categories for race, education and employment status. These controls account for sources of heterogeneity across second-generation immigrants other than their cultural preferences.

[8]Our results are not affected by clustering at the MSA or country-of-origin level (Online Appendix B, Tables B11-B12).

generation immigrants' homeownership decisions. This method makes our measure of homeownership more precise and helps eliminate confounding variation in socio-economic characteristics across immigrant groups. However, this data set covers fewer countries and comes with the drawback of losing roughly two-thirds of our baseline observations.

3.2   Data and Sample Selection

Individual Data

The main dataset consists of the March supplement of the Current Population Surveys (CPS) from 1994 to 2017.[9] The March CPS includes questions about the birthplace of each individual and his or her parents. We define "second-generation" immigrants as individuals who were born in the United States while having fathers born abroad.[10] Our main sample includes second-generation immigrant household heads that are born in the United States and whose fathers emigrated from one of the 33 countries for which comparable homeownership rates are available. Most countries are European (24 countries).[11] We also include a few countries in Asia (Japan, South Korea), in Australasia (Australia and New Zealand), in the Americas (Mexico, Canada, Chile), and in the Middle East (Israel, Turkey). In the baseline sample, the six largest second-generation immigrant groups have their cultural origin in Mexico (29%), Italy (16%), Canada (10%), Germany (8%), Poland (7%), and Ireland (4%). Figure A1 in the Online Appendix A show the baseline sample's distribution of all observations across U.S. states. While Figure A2 illustrates the distribution of all observations across 415 different metropolitan statistical areas (MSAs) in the United States.

The sample consists of 33,290 female and 35,376 male second-generation household heads. The average second-generation immigrant does not differ significantly from the average native whose parents were born in the United States as far as

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[9]Sarah Flood, Miriam King, Steven Ruggles, and J. Robert Warren. Integrated Public Use Microdata Series, Current Population Survey: Version 5.0. [dataset]. Minneapolis: University of Minnesota, 2017. https://doi.org/10.18128/D030.V5.0.

[10]The results are robust to defining a second-generation immigrant as being born in the United States, and whose parents, either father or mother, were born abroad (Online Appendix B, Table B10). For this robustness check, if the father is foreign-born, we assign the paternal country of origin. If the father is not but the mother is foreign-born, we assign the maternal country of origin.

[11]The sample includes: Austria, Belgium, Croatia, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

Father's birthplace	Age	Male	Marital status	# of children	Household income	High school (or less)	College w/o degree	College degree	Nobs	HO_{im}	HO_{org}
Pared-down Summary Statistics: Second-Generation Immigrants											
Natives	48.8	0.53	0.53	0.87	64601	0.42	0.18	0.38	1,271,469	70.19	66.2
Australia	57.2	0.5	0.44	0.48	80924	0.26	0.25	0.48	118	67.8	68.8
Austria	69.7	0.47	0.41	0.26	53030	0.5	0.15	0.35	1043	76.51	57.5
Belgium	62.2	0.53	0.57	0.52	64631	0.48	0.18	0.34	221	75.57	71.8
Canada	58.7	0.54	0.53	0.59	61037	0.45	0.18	0.37	6630	75.38	69.0
Chile	39.1	0.6	0.41	0.7	71505	0.21	0.24	0.55	123	60.98	69.0
Croatia	58.3	0.55	0.53	0.64	99819	0.28	0.13	0.59	101	83.17	92.1
Czech Republic	69.2	0.46	0.45	0.24	49406	0.53	0.13	0.35	217	82.49	80.4
Denmark	69.1	0.53	0.47	0.26	55805	0.45	0.21	0.34	485	78.76	67.1
England	60.1	0.53	0.5	0.5	61680	0.39	0.19	0.42	2234	74.75	67.9
Finland	70.8	0.47	0.42	0.24	45199	0.52	0.17	0.31	238	77.31	73.9
France	54.0	0.5	0.45	0.53	59767	0.35	0.19	0.46	535	67.29	63.1
Germany	59.5	0.53	0.5	0.58	62760	0.44	0.17	0.39	5307	74.47	53.4
Greece	55.4	0.52	0.48	0.62	75456	0.33	0.2	0.47	1168	75.86	75.5
Hungary	63.8	0.49	0.47	0.46	63780	0.48	0.16	0.36	1328	76.05	90.5
Ireland	62.0	0.53	0.49	0.56	66714	0.37	0.18	0.46	2562	76.23	70.2
Isreal/Palestine	39.3	0.49	0.52	1.3	85815	0.3	0.14	0.56	167	47.9	68.8
Italy	65.5	0.52	0.49	0.43	52741	0.58	0.14	0.28	10835	78.26	72.9
Japan	69.4	0.54	0.48	0.36	59068	0.5	0.14	0.36	2234	78.83	60.0
Latvia	55.8	0.48	0.57	0.66	84477	0.12	0.17	0.71	145	85.52	81.2
Lithuania	68.4	0.43	0.41	0.35	55076	0.46	0.17	0.38	550	76.36	92.3
Mexico	42.2	0.51	0.48	1.09	52474	0.58	0.21	0.21	19836	55.81	71.1
Netherlands	58.4	0.58	0.6	0.73	71048	0.46	0.13	0.41	848	81.13	67.1
New Zealand	38.6	0.37	0.33	0.96	88651	0.37	0.26	0.37	27	59.26	53.2
Norway	68.6	0.49	0.49	0.29	51324	0.51	0.17	0.32	1128	78.46	84.0
Poland	68.1	0.49	0.44	0.35	53367	0.53	0.14	0.32	4746	80.3	82.1
Portugal	53.1	0.47	0.48	0.66	56319	0.54	0.16	0.3	948	65.72	75.0
Romania	65.3	0.5	0.51	0.4	69445	0.36	0.2	0.44	371	76.55	96.6
Scotland	61.4	0.51	0.55	0.49	65973	0.36	0.2	0.44	954	80.08	67.9
Slovakia	69.2	0.48	0.42	0.34	41448	0.65	0.13	0.23	661	79.12	90.2
South Korea	35.5	0.58	0.32	0.42	77182	0.2	0.19	0.61	228	47.81	57.3
Spain	55.5	0.55	0.48	0.55	67202	0.38	0.19	0.44	691	68.74	82.7
Sweden	69.5	0.49	0.43	0.3	48603	0.46	0.21	0.33	1080	78.89	69.7
Switzerland	64.3	0.47	0.45	0.31	58640	0.4	0.23	0.37	326	80.37	43.8
Turkey	58.0	0.49	0.43	0.35	61919	0.35	0.16	0.5	216	71.76	59.6
United Kingdom	52.6	0.51	0.49	0.61	71150	0.29	0.16	0.55	347	67.72	67.9
Wales	70.6	0.44	0.33	0.17	66704	0.39	0.56	0.06	18	55.56	67.9
Average	56.9	0.52	0.48	0.65	57046.80	0.51	0.18	0.32	1907.39	70.49	70.83
Std. deviation	20.2	0.50	0.50	1.06	67680.23	0.50	0.38	0.47	3736.86	9.47	11.90
Correlation w/ HO_{origin}	0.29	-0.03	0.24	-0.09	-0.05	0.16	-0.21	-0.02	-0.04	0.31	1.00

HO_{im} denotes the aggregate homeownership rate of the corresponding second-generation immigrant (or native) group. HO_{org} denotes the aggregate homeownership rate in the country of origin in 2011. Appendix Table A3 provides the complete summary statistics for the second-generation immigrants and Appendix Table A4 for the first-generation immigrants in our baseline sample. These tables include additional socio-economic characteristics.

Table 1: Characteristics of second-generation migrants (baseline sample)

socioeconomic characteristics are concerned (Table 1). The average homeownership rate of second-generation immigrants is 70.5%. This compares to a homeownership rate of 70.2% for the household heads whose fathers were born in the United States. Despite these very similar average homeownership rates, there is considerable variation in aggregate homeownership rates across second-generation immigrants grouped by country of ancestry.

Aggregate Homeownership Rates and Country Level Data

Comparable homeownership rates across countries and over time are scarce. We collect two different datasets for aggregate homeownership rates, namely the homeown-

ership rates provided by the PEW research center, and the OECD homeownership rate. For the main estimations, we use the comparable aggregate homeownership rates for 33 countries provided by the PEW research center, because it provides the larger country coverage. Homeownership rates in both sources are defined by the fraction of the households living in an owner-occupied dwelling. Despite some variations in the homeownership rates across these two different sources, the Spearman's rank correlation coefficient equals 0.96 (Online Appendix A, Table A2). We also collect aggregate data on GDP, schooling, and wages at the country-of-origin level from the Penn World Tables.

Socio-economic specific Homeownership Rates

The ECB's European Household Finance and Consumption Survey (HFCN) allows us to collect homeownership rates for different socio-economic groups that we match with the corresponding profile of the second-generation migrants in our sample. We collect homeownership rates for the years 2010 and 2017 and for five different age groups: 1 "16-34"; 2 "35-44"; 3 "45-54"; 4 "55-64"; and 5 "65+" and for seven different income groups: 1 "<1000"; 2 "1000-1499"; 3 "1500-1999"; 4 "2000-2499"; 5 "2500-3499"; 6 "3500-5499"; and 7 "5500+". For the year 2010, data is available for the following 14 countries: Austria, Belgium, Cyprus, Germany, Spain, Finland, France, Greece, Italy, Luxemburg, Malta, Netherlands, Portugal, and Slovakia. For the year 2017, data is available for eight more countries: Croatia, Estonia, Hungary, Ireland, Lithuania, Latvia, Poland, and Slovenia.

4   Estimation and Results

4.1   Regression Results

This section presents the results of the probit estimation of the models (3.1) and (3.2).[12] Table 2 shows the marginal effects for the estimation of model (3.1). In the first column, the homeownership status of second-generation immigrant i is regressed on the proxy for the cultural preference towards homeownership without any control variables. In the second column we add a full set of year and metropolitan area dummies corresponding to individuals' location of residence. In both cases,

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[12]As a robustness check, we repeat all regressions using a linear probability model and find very similar results.

the coefficient of interest is strongly significant and positive, indicating that second-generation immigrants with fathers that emigrated from a high homeownership country are more likely to be a homeowner themselves. Using the alternative definition for second-generation immigrants, someone who was born in the United States and whose parents, either father or mother, were born abroad, does not alter the results.

There may be many reasons for finding the aforementioned positive correlation that might have little to do with cultural preferences. For example, second-generation immigrants may vary in a systematic fashion by country of origin that affects their propensity to become a homeowner. There could be systematic differences regarding, e.g., income, savings, and education or other socioeconomic characteristics that are known to affect the propensity to become a homeowner. In particular, if second-generation immigrants from high homeownership countries were to have systematically higher incomes, omitting income would bias the coefficient of the proxy for cultural preferences upwards. Therefore, we include in our full baseline specification (column 3) a series of individual characteristics that we expect to be essential drivers for homeownership. As expected, and consistent with the literature studying tenure choice, individuals are more likely to be homeowners if they have more income, are employed, are married, are better educated, and if they are older.

The marginal effect of culture is larger in column 3 compared to column 2. Table 3 shows that aside from cultural preferences, the second-generation immigrant's income and marital status are the main drivers of homeownership. Table 3 shows in columns 4 and 9 that omitting these characteristics biases the impact of cultural preferences on homeownership downwards.

	Dependent Variable: Homeownership status of 2nd generation immigrant i		
	(1)	(2)	(3)
HO_{origin}	0.080***	0.0591***	0.0647***
	(0.020)	(0.022)	(0.023)
age			0.0219***
			(0.001)
age squared			-0.0001***
			(0.000)
male (dummy)			-0.0049
			(0.004)
marital status			0.172***
			(0.004)
number of children			0.0024
			(0.002)
savings			-0.0000
			(0.000)
employment status			✓
income categories			✓
education categories			✓
race categories			✓
metropolitan area		✓	✓
year (dummy)		✓	✓
N	68666	68666	68666
pseudo R^2	0.0002	0.044	0.228
mean	0.705	0.705	0.705

Marginal effects (at the mean). * p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses. Dependent variable: Equal to one if the 2nd generation immigrant is a homeowner, 0 otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Number of income categories (income deciles) is 10. The first decile is the reference category. The education categories are: High School or less, college without degree, college +. The first category 'High School or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which paid interest. Number of metropolitan area categories: 415. HO_{origin} denotes the aggregate homeownership rate in the parents' country of origin in 2011 and is $\in (0,1)$.

Table 2: Baseline Specification

	Dependent Variable: Homeownership status of second-generation immigrant i									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
HO_{org}	0.059**	0.069***	0.06***	0.067***	0.079***	0.084****	0.048**	0.053**	0.117***	0.065***
	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.023)
race categories										✓
number of children		✓								✓
male				✓						✓
marital status					✓					✓
education categories						✓				✓
employment status							✓			✓
savings								✓		✓
income categories									✓	✓
metropolitan area	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
year (dummy)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
N	68666	68666	68666	68666	68666	68666	68666	68666	68666	68666
pseudo R^2	0.044	0.047	0.044	0.052	0.107	0.054	0.048	0.054	0.109	0.228
mean	0.705	0.705	0.705	0.705	0.705	0.705	0.705	0.705	0.705	0.705

Marginal effects (at the mean). * p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Number of metropolitan area categories: 415. HO_{origin} denotes the aggregate homeownership rate in the country of origin in 2011 and is $\in (0,1)$.

Table 3: Further Insights: adding individual controls

The second specification, estimation model (3.2), further eliminates confounding systematic variation in socio-economic characteristics of second-generation migrants by using HCFN homeownership data disaggreagted by age and income groups. We assign each second-generation immigrant i the corresponding age/income specific homeownership rate prevailing in the country of origin. Table 4 shows the regression results. In columns 1 and 4, we use the aggregate HFCN homeownership rate in the country of origin for the years 2010 and 2017, respectively. Columns 2 and 5 present the results when matching the age-specific homeownership rate with the corresponding profile of the second-generation migrants, while columns 3 and 6 show the results when assigning the homeownership rate along the income dimension.

Both specifications include MSA and year dummies controlling for time-invariant and location-invariant effects, respectively. To account for potential changes over time and across locations (e.g. in the housing stock, house prices, population composition), we perform a robustness check and include MSA time trends (Table 5, Panel a). While the matching in specification (3.2) has clear advantages, the disadvantage is the much smaller sample size. The data set includes 14 countries in the euro area for the year 2010 and 22 countries for the year 2017. Hence the number of observations drops from 68,666 observations in the baseline specification to 22,196 for the year 2010 and to 28,339 for the year 2017. Still, the results are very much in line using the two different specifications. In the remainder of the paper, we focus on the baseline model specified in Equation (3.1) as the larger number of observations gives us some leeway to execute robustness checks, where we split or alter the specification of the sample.

Ideally, we would like to also control for parental income and wealth. Unfortunately, we cannot link the second-generation immigrant household heads to their parents (i.e., we cannot control for parental characteristics directly).[13] Our estimate of culture 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 the positive coefficient of the culture proxy were driven by omitted parental income and wealth, then parents from high homeownership countries would need to be systematically richer compared to parents from low homeown-

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[13]The CPS dataset available to researchers allows linking parents and children as long as they live in the same household. By definition, our subjects of study (second-generation immigrant household heads) do not live with their parents anymore.

ership countries.[14] To address the omitted parental income variable concern, we first show that first-generation immigrants' income is not significantly nor positively correlated with homeownership rates prevailing in the country of origin.[15] Second, we construct three different proxies to measure parental income and include these proxies in the baseline specification separately (Table 5, Panel B). The first parental income proxy measures the "average personal income in survey year t of the first-generation immigrant group that the parents of the second-generation immigrant i belong to". The second proxy is similar, instead of the average personal income we use the average household income. Each parental income proxy has a positive and statistically significant impact on the second-generation immigrant's probability of becoming a homeowner. The inclusion of parental income does not affect the results on the cultural preference measure qualitatively. The proxy for cultural preferences towards homeownership remains highly significant, although larger in magnitude, suggesting that homeownership rates in the countries of origin and income of the corresponding first-generation immigrant groups in the United States (the parents) are negatively correlated. The third parental income proxy is given by real GDP per capita (PPP adjusted) prevailing in the country of origin. GDP per capita has no statistically or economically significant impact on the probability of becoming a homeowner for second-generation immigrants. The proxy for cultural preferences towards homeownership remains highly significant, although slightly larger in magnitude, suggesting that homeownership rates in the countries of origin and GDP per capita are negatively correlated.

Next, we discuss the concern of a differential selection into emigration and how we address it. It is clear that first-generation emigrants are a selective sample and might therefore not be representative of their home country. As long as the degree of selection into emigration is the "same" across countries of origin, our coefficient of interest would be unbiased. However, there are reasons why one could suspect a differential selection at the country-of-origin level. The difficulty of assimilation to the United States (e.g., learning the host country's language) and the reasons for

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[14]On a general note, it is unlikely that parents from higher homeownership countries were systematically richer before emigrating. On average, countries with larger homeownership rates are characterized by a lower GDP per capita; see e.g. Oxley (1984), Fisher and Jafee (2003) or Davis (2012). These negative cross-country correlations between homeownership rates and income hold irrespective of measuring income by (1) real GDP per capita or (2) real GDP PPP per capita.

[15]The correlation between the country-of-origin homeownership rate and average income of the corresponding first-generation immigrant group is equal to -0.16. First-generation immigrants (the parents) from high homeownership countries are on average poorer (Online Appendix, Table A4).

emigration might vary systematically depending on the country of origin.

First, we address this differential selection concern by focusing on second-generation immigrant household heads instead of first-generation immigrants. Studying second-generation immigrant household heads, born, raised and educated in the United States, mitigates biases of differential selection into emigration by country of origin (Fernández, 2008). Second, the differential selection would lead to an upward bias of the coefficient of cultural preferences only if second-generation immigrants with the same country of ancestry have an unobserved characteristic in common that affects their homeownership decision in the United States, and if this unobserved attribute positively correlates with the homeownership rate in the country of origin. To investigate this possibility, we follow the literature and add several aggregate variables at the country-of-origin level (GDP per capita, average years of schooling, labor income in GDP) to our baseline specification. Our proxy for cultural preferences for homeownership remains highly significant, while the additional aggregate country-of-origin variables are not statistically significant (Table 5, Panel C, Cols 1–4). Third, we propose three sample size variations, where we exclude countries of origin that may have encouraged systematically different types of emigrants (the parents of our subjects of study). We exclude countries of origin that experienced war in the period 1945–1994, post-Soviet states, and countries that experienced dictatorships during the 1945–1994 period, respectively (Table 5, Panel C, Cols 5–7).[16] Fourth, we show that correlations of observed average first-generation immigrant's characteristics (income, education levels, age, etc.) with home country homeownership rates are low (Table A4). We find that first-generation immigrants from high homeownership countries are on average less educated and have less income and savings (and hence making them less likely to be homeowners in the United States).

We conclude that cultural preferences concerning homeownership play a significant role in home buying decisions. The results are robust to a large number of additional robustness checks that we discuss briefly in Section 6.

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[16]The time window 1945–1994 corresponds to the most likely period when the parents emigrated to the United States.

Dependent Variable: Homeownership status of immigrant i						
	(1)	(2)	(3)	(4)	(5)	(6)
$HO_{HFCN,2010}$	0.070*** (0.024)					
$HO^{age}_{HFCN,2010}$		0.070*** (0.023)				
$HO^{income}_{HFCN,2010}$			0.039** (0.019)			
$HO_{HFCN,2017}$				0.072*** (0.019)		
$HO^{age}_{HFCN,2017}$					0.066*** (0.018)	
$HO^{income}_{HFCN,2017}$						0.055*** (0.014)
age	✓	✓	✓	✓	✓	✓
age squared	✓	✓	✓	✓	✓	✓
male	✓	✓	✓	✓	✓	✓
marital status	✓	✓	✓	✓	✓	✓
number of children	✓	✓	✓	✓	✓	✓
savings	✓	✓	✓	✓	✓	✓
employment status	✓	✓	✓	✓	✓	✓
income categories	✓	✓	✓	✓	✓	✓
education categories	✓	✓	✓	✓	✓	✓
race categories	✓	✓	✓	✓	✓	✓
metropolitan area	✓	✓	✓	✓	✓	✓
year (dummy)	✓	✓	✓	✓	✓	✓
N	22196	22191	16080	30912	28339	21922
pseudo R^2	0.210	0.210	0.216	0.202	0.203	0.207
mean	0.760	0.760	0.761	0.769	0.770	0.773

Marginal effects (at the mean). * p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Number of metropolitan area categories: 415. In columns 1 and 4, the dependent variable equals the aggreagte homeownership rate in the country of origin in year 2010 and 2017, respectively (source: HFCN survey). In columns 2 and 5, $HO^{age}_{HFCN,year}$ denotes the homeownership rate in the country of origin matched to the age profile of the second generation immigrant i; five different age groups: 1 "16-34"; 2 "35-44"; 3 "45-54"; 4 "55-64"; and 5 "65+". In columns 3 and 6, $HO^{income}_{HFCN,year}$ denotes the homeownership rate in the country of origin matched to the income profile of the second generation immigrant i; seven different income groups: 1 "<1000"; 2 "1000-1499"; 3 "1500-1999"; 4 "2000-2499"; 5 "2500-3499"; 6 "3500-5499"; and 7 "5500+".

Table 4: Second specification

Dependent Variable: Homeownership status of immigrant i

A: Time-varying MSA FE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
HO_{org}	0.064**						
$HO_{HFCN,2010}$		0.071**					
$HO^{age}_{HFCN,2010}$			0.072**				
$HO^{income}_{HFCN,2010}$				0.037			
$HO_{HFCN,2017}$					0.066***		
$HO^{age}_{HFCN,2017}$						0.053**	
$HO^{income}_{HFCN,2017}$							0.047***
N	64524	16249	16245	11755	23498	21347	16625

B: Parental income

	Proxy 1 (1)	Proxy 2 (2)	Proxy 3 (3)
HO_{org}	0.079***	0.081***	0.065**
N	68410	68422	60586

C: Systematic Selection

	GDP (1)	Education (2)	Wage (3)	All (4)	no war countries (5)	no dictator countries (6)	no post-Soviet states (7)
HO_{org}	0.065**	0.074***	0.055**	0.069**	0.057**	0.063***	0.067***
N	60586	60586	60227	60227	68386	65777	68013

Marginal effects (at the mean). * $p<0.1$, ** $p<0.05$, *** $p<0.01$. Appendix B reports for each estimation the complete regression table. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Each estimation includes the following standard controls: gender, age, age squared, marital status, number of children, race categories, employment status, savings, income, educational attainment. In Panel A, time-varying MSA fixed effects are added. In Panel B and C, MSA and year dummies are included.

Table 5: Key Robustness Checks

4.2 Quantitative Impact of Cultural Preferences

The quantitative impact of culture on the homeownership decision is sizable for second-generation immigrants in the United States. An increase in the aggregate homeownership rate in the country of origin of the immigrant's father by one standard deviation (across countries) is associated with a 0.5 percentage point increase in the probability that an average second-generation immigrant is a homeowner in the United States. This accounts for 5.3% of the variation in the homeownership rate across second-generation immigrant groups within the United States.

Given that our subjects of study are second-generation immigrants, we suspect the quantitative impact of the presented baseline estimate to be a lower bound for the general effect of culture on the homeownership decision. Second-generation immigrants were born in the United States. The impact of the ancestral culture may diminish over time, as parents are not the only transmitter of cultural preferences. The friendships of the second-generation immigrant and the institutions in the country of residence (i.e., the United States) may also shape their preferences and beliefs. The next section explores cultural transmission and shows that the effect of cultural preferences on the homeownership decision is stronger for migrants that are more exposed to their cultural heritage.

5 Married Couples and Cultural Transmission

In the baseline sample of second-generation immigrant household heads, there might be heterogeneity in the ability to preserve their ancestral culture. To unravel these effects and thereby explore the impact of cultural preferences on the homeownership decision in a sharper way, we split the group of second-generation immigrants further into more homogeneous subgroups. Repeating the analysis for more homogeneous subgroups allows us to capture more accurately the different cultural homeownership preferences across countries.

In particular, we study the effect of the composition of married couples on cultural transmission. For a second-generation immigrant, the spouse may play an important role in preserving the beliefs and preferences transmitted by the parents. We study three subsamples. The first consists of second-generation household heads that are single, and the second (third) sample consist of second-generation household heads that are married to a spouse of a different (same) cultural background.

It is clear that marital status and the choice of the spouse are both endogenous variables. It is very likely that individuals who feel strongly attached to their country of ancestry also marry someone from this country (selection effect). It is also likely that individuals who are married to a spouse of the same cultural background will be more exposed to their cultural inheritance compared to singles and those who are married to spouses of different cultural backgrounds (spouse effect).

So, if we would find a stronger effect of culture for this subgroup, then we could not disentangle whether the results are due to selection (more culturally attached individuals marrying within the same culture) or due to an influence of being with a spouse from the same culture. Although it would be interesting to know whether the effect is due to selection or to the spouse effect, we are interested in finding a more homogenous subsample of second-generation immigrants (in comparison to the baseline sample) with preferences that are closest to those prevailing in their country of ancestry. Given the arguments above, we suspect that this subsample consists of household heads that are married to a spouse of the same cultural background.

Table 6 shows the estimation results. For comparison, column 1 illustrates the baseline regression. In column 2, we run the regression for second-generation immigrant single household heads only. The third column presents the estimation results for the subset of married household heads whose spouse is from a different background. In column 4, we only include married household heads that share the same cultural background as their spouse.

Consistent with the theories of the spouse effect and selection, we find that the impact of culture is the largest for married household heads with the same cultural background as their spouse (col.4). The marginal effect is more than three times as large compared to singles (col.2), and nine times larger compared to household heads that are married to a spouse of a different cultural background (col.3). In addition, we find that the effect of culture is statistically significant and three times larger for single household heads compared to married couples that do not share the same cultural background.

We find that the impact of cultural preferences is quantitatively substantial for married household heads with the same cultural background as their spouse. An increase in the homeownership rate in the country of origin of the immigrant's father by one standard deviation (across countries) is associated with a 3.7 percentage point increase in the probability that an average married second-generation immigrant

	Dependent Variable: Homeownership status of immigrant i				
	second-generation				first-generation
	all (baseline) (1)	single (2)	married $\neq$ background (3)	married same background (4)	married same background (5)
HO_{origin}	0.065*** (0.023)	0.092*** (0.035)	0.032 (0.023)	0.314** (0.130)	0.430*** (0.073)
male	-0.005 (0.004)	-0.032*** (0.006)	0.004 (0.004)	0.001 (0.011)	0.003 (0.007)
marital status	0.172*** (0.004)				
age	0.022*** (0.001)	0.022*** (0.001)	0.018*** (0.001)	0.023*** (0.002)	0.029*** (0.001)
age squared	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)
number of children	0.002 (0.002)	-0.007* (0.004)	0.009*** (0.002)	0.014*** (0.004)	0.021*** (0.002)
savings	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)
employment status	✓	✓	✓	✓	✓
education categories	✓	✓	✓	✓	✓
income categories	✓	✓	✓	✓	✓
race categories	✓	✓	✓	✓	✓
metropolitan area	✓	✓	✓	✓	✓
year (dummy)	✓	✓	✓	✓	✓
N	68666	35252	22958	8673	38843
pseudo R^2	0.228	0.152	0.219	0.262	0.201
mean	0.705	0.585	0.862	0.736	0.545

Marginal effects (at the mean). * p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses. Dependent variable: Equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Number of metropolitan area categories: 415. HO_{origin} denotes the aggregate homeownership rate in the parents' country of origin in 2011 and is $\in (0, 1)$.

Table 6: Married – Does the Partners Background matter?

(with a spouse of the same cultural background) is a homeowner in the United States. This accounts for 39% of the total variation in the homeownership rate across second-generation immigrant groups within the United States (which equals 9.47 percentage points).

Next, we explore cultural transmission. As mentioned before, the impact of culture might diminish over time in our sample. The longer you are exposed to the culture of your host country, the more difficult it might be to preserve the culture of the home country. Therefore, we expect the effect of cultural preferences towards homeownership to be larger for first- compared to second-generation married immigrants. Column 5 in Table 6 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 culture proxy is highly significant, and the marginal effect is 37% larger for first-generation married couples with the same cultural background compared to second-generation couples with the same background. These effects are statistically significant and quantitatively large.

We draw three main conclusions from this section. First, we find that cultural preferences towards homeownership are transmitted from generation to generation. Second, the results of this section indicate that the quantitative impact of cultural preferences on the homeownership decision is substantial. Third, this section provides evidence that the quantitative impact found in the baseline specification is indeed a lower bound for the general effect of culture on the actual homeownership decision. We find a much larger effect of culture for second-generation immigrant household heads married to a spouse with the same cultural background. This subsample might have the closest preferences to the one in the country of ancestry, either because of the spouse or/and selection effect discussed in this Section.

6   Robustness of our Findings

We found a significant effect of cultural homeownership preferences on the homeownership decision of second-generation immigrants. Our results are robust to variations in the vector of individual controls (Table 3), to alternative estimation techniques and standard error specifications (Appendix B, Tables B11–B13), to concerns of a differential selection of immigrants (Appendix B, Tables B4 and B9), to the inclusion

of parental income proxies (Appendix B, Table B8), and to an alternative definition of the immigrant status (Appendix B, Table B10). Additionally, we explore in this Section the robustness of our findings with respect to alternative measurements of cultural preferences towards homeownership, sample selection, as well as alternative specifications for the location of residence.

Alternative measures for culture (Appendix B, Table B1): Our results are robust to alternative proxies for cultural preferences towards homeownership. Instead of using the continuous variable *aggregate homeownership rates in the country of origin*, we construct dummy variable that are equal to one if the homeownership rate in the country of origin is larger than the mean, median and 75 percentile respectively, and zero otherwise. Our results are furthermore robust to using the OECD homeownership rate as our proxy for cultural preferences towards homeownership instead of our benchmark.[17]

Sample Selection (Appendix B, Tables B2 and B3): The number of observations varies a lot across countries of origin. To make sure that specific countries of origin do not drive our results we perform the following robustness checks: First, we drop those second- generation immigrants that come from a country of origin for which we have less than 100 (200) observations. In addition, we run robustness checks where we drop second-generation immigrants with Mexican origin (the largest group with 29% of the baseline's observations) and Mexican and Italian origin (these two largest groups account for 45% of the baseline's observations) respectively. Lastly, we exclude those countries of origin (Israel, Palestine, Mexico, South Korea, New Zealand) that represent outliers with respect to the homeownership rate of second-generation immigrants (Figure 1).

Specifications for the location of residence (Appendix B, Tables B5–B7): As shown in the main text (Table 5), our results are robust to controlling for MSA time-trends instead of including the time, and MSA fixed effects separately. We present three alternative regression specifications to account for potential systematic differences across locations of residence. First, we test the robustness of our findings by excluding the MSA and year fixed effects. Second, we use a different definition of location. Instead of using MSA time-varying fixed effects as in Table 5, we use time-varying metropolitan central city status fixed effects. Third, we explicitly address the concern that housing affordability might differ across locations of residence. We

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[17]The OECD measure covers five fewer countries of origin (Singapore, Israel, Japan, Turkey, New Zealand), consequently, we lose 15 percent of our baseline observations.

proxy local housing affordability by homeownership rates at the MSA level and include these MSA homeownership rates in the baseline regression. The proxy for culture $\tilde{Z}_o$ remains positive and highly significant, while the MSA homeownership rate is not statistically significant. Our results are robust to these variations.

7   Conclusion

This paper argues that cross-country differences in cultural preferences regarding homeownership are an important explanatory factor for the large and persistent cross-country differences in homeownership rates that we observe in the data.

By studying second-generation immigrant household heads, we credibly disentangle the effect of cultural preferences from the impact of markets and institutions. In our baseline sample, we find no homeownership gap between the average second-generation immigrant household and the average native household. However, we identify considerable variation in aggregate homeownership rates across second-generation immigrant groups from different cultural backgrounds. In fact, the persistent cross-country differences in homeownership rates are replicated in the United States by the descendants of immigrants from these countries.

We find that cultural preferences for homeownership are persistent, transmitted between generations, and influence the rent-versus-buy decision. We robustly show that the aggregate homeownership rate in the father's country of origin, our cultural proxy, has a significant and sizable impact on the homeownership decisions of second-generation immigrants living in the United States. This result is confirmed when using a smaller sample of countries that allows to use socio-economic specific homeownership rates in the country of origin. We collect homeownership rates for different age and income groups to assign the age-specific and income-specific homeownership rate with the corresponding profile of second-generation migrant in the sample. Further, the results hold after controlling for a large set of individual characteristics that are known to affect the tenure choice. We also account for systematic differences over time and across metropolitan areas of residence.

Second-generation immigrant household heads that are married to a spouse of the same cultural background might have preferences, beliefs, and values that are closest to those prevailing in their country of ancestry. For this subset, we find a quantitatively large impact of culture. An increase in the homeownership rate in

the country of origin of the immigrant's father by one standard deviation (across countries) is associated with a 3.7 percentage point increase in the probability that an average married second-generation immigrant (with a spouse of the same cultural background) is a homeowner in the United States. This accounts for 39% of the variation in the homeownership rate across second-generation immigrant groups within the United States. The effect of culture is still quantitatively sizable for singles, but not for those second-generation immigrants that are married to a spouse of a different cultural background.

Our results are policy relevant. Huber (2019) shows for a sample of OECD countries that countries characterized by larger homeownership rates are those countries that are more vulnerable to housing bubbles and generally characterized by more volatile housing markets. To develop an effective macro-prudential policy tool for the control of European housing markets, country heterogeneity in homeownership rates needs to be taken into account. Hence it is helpful to understand where the large and persistent cross-country differences in homeownership rates originate from. This paper shows that aside from purely economic and institutional factors, cultural attitudes towards homeownership are a persistent element in households' decision making.

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Online Appendix
Nevertheless, they persist: Cross-country differences in homeownership behavior

Stefanie J. Huber and Tobias Schmidt

Appendix A provides descriptive statistics of the data and Appendix B a large battery of robustness checks.

Appendix A: Summary and Descriptive Statistics

Individual Data

The main dataset consists of the March supplement of the Current Population Surveys (CPS) from 1994 to 2017. Our main sample includes second-generation immigrant household heads that are born in the United States and whose fathers emigrated from one of the 38 countries for which comparable homeownership rates are available. Most countries are European (28 countries). The European countries include: Austria, Belgium, Bulgaria, Croatia Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom. We also include a few countries in Asia (Japan, South Korea, Singapore), in Australasia (Australia and New Zealand), in the Americas (Mexico, Canada, Chile), and in the Middle East (Israel, Turkey). We impose the restriction that the number of observations must be larger than twenty for each country of origin, we drop five countries (Bulgaria, Cyprus, Estonia, Iceland and Singapore). This restriction ensures that there are sufficient observations for each of the cultural groups to reliably estimate the cultural homeownership differentials. Relaxing this restriction does not alter the results.

In the baseline sample, the six largest second-generation immigrant groups have their cultural origin in Mexico (29%), Italy (16%), Canada (10%), Germany (8%), Poland (7%), and Ireland (4%). The results are robust to excluding Mexico or excluding Mexico and Italy (45% of the observations).

Figure A1 (A2) shows the baseline sample's distribution of all observations across states (415 different metropolitan statistical areas MSAs) in the United States. The sample consists of 33,290 female and 35,376 male second-generation house-

hold heads.[18] The average second-generation immigrant does not differ significantly from the average native whose parents were born in the United States as far as socioeconomic characteristics are concerned (Tables A3 and A4).
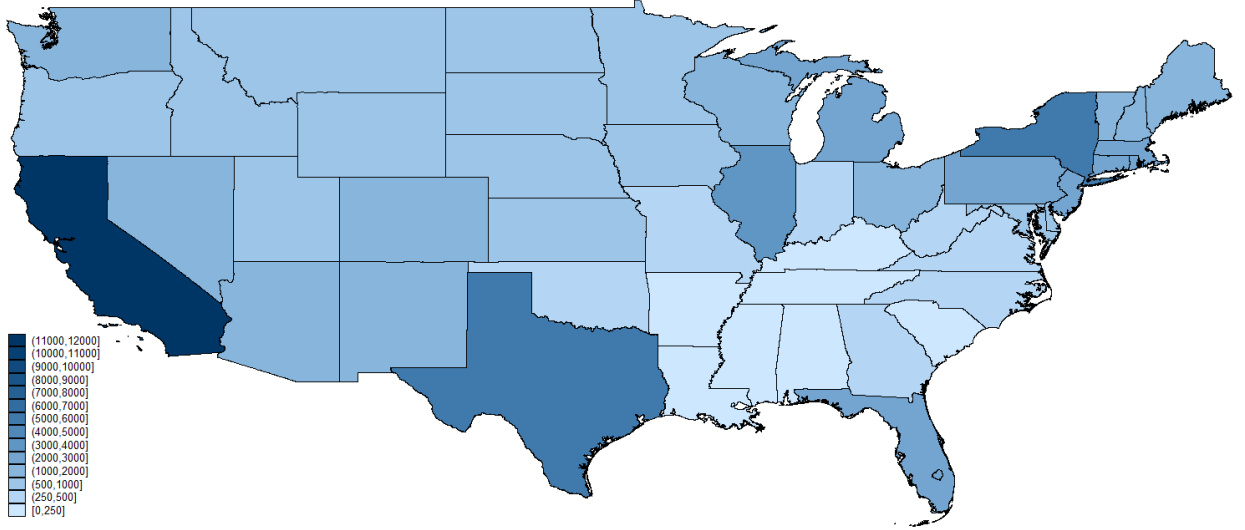
Figure A1: Distribution of second-generation immigrants across U.S. states
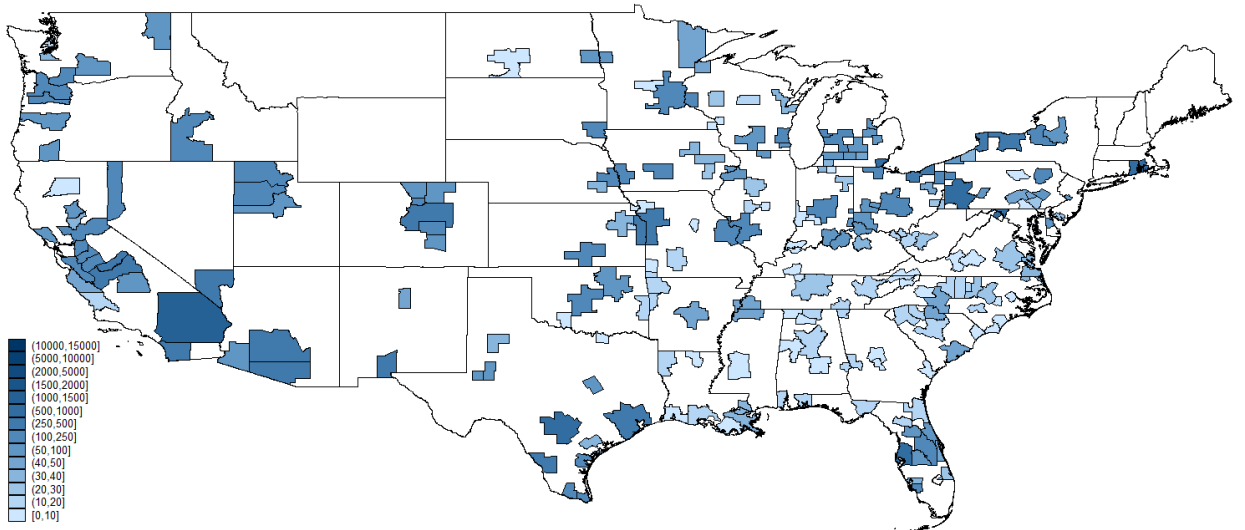
Figure A2: Distribution of second-generation immigrants across MSAs

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[18]This compares to 564,257 female and 636,458 male household heads, who were born in the United States, and whose fathers were also born in the United States.
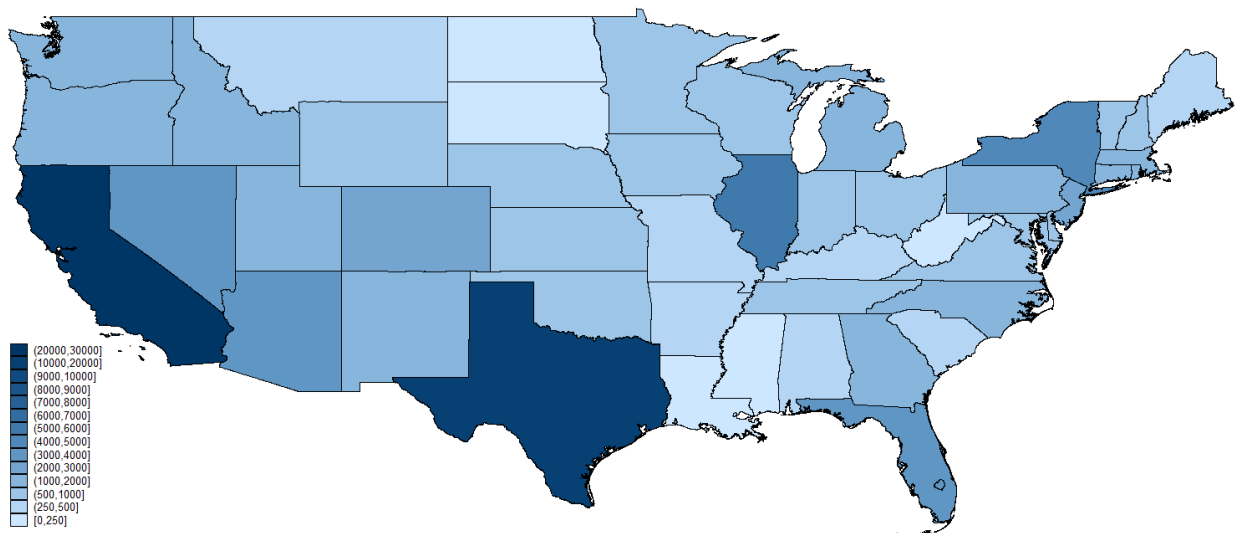
Figure A3: Distribution of first-generation immigrants across U.S. states
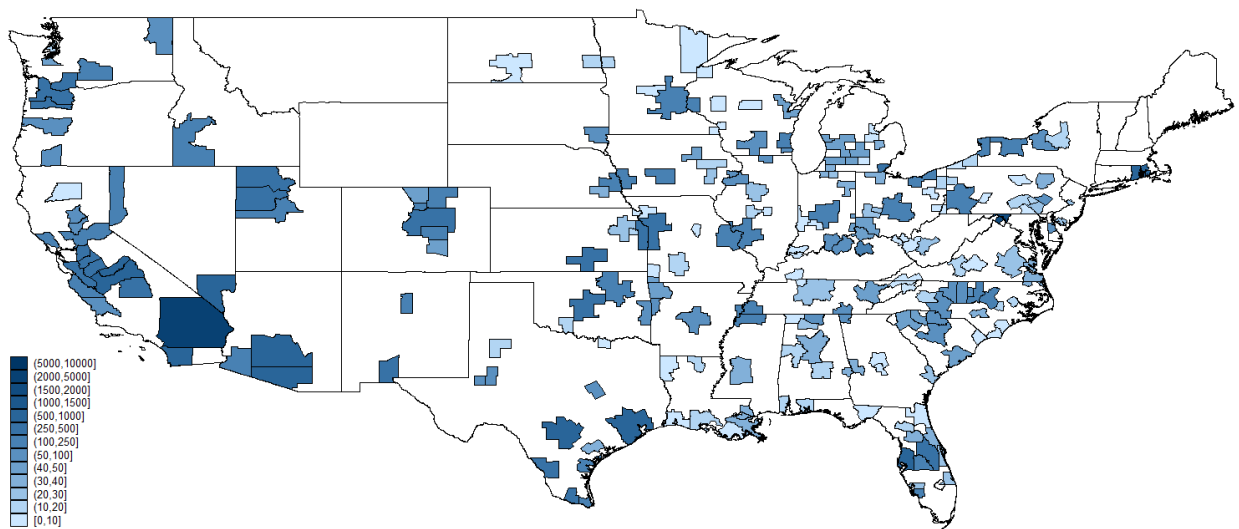
Figure A4: Distribution of first-generation immigrants across MSAs

Country Level Data: Aggregate Homeownership Rates

Comparable homeownership rates across countries and over time are scarce. We collect two different datasets for aggregate homeownership rates, namely the homeownership rates provided by the PEW research center, and the OECD homeownership rate (Table A2). For the main estimations, we use the comparable aggregate homeownership rates for 38 countries provided by the PEW research center, because it provides the larger country coverage. This set of countries has been chosen as it corresponds to the most extensive collection of comparable aggregate homeownership rates. For example, we would have liked to include China (the second-generation immigrants from China constitute the 12th largest group in the initial CPS sam-

ple). However, there are many concerns that the official Chinese homeownership rate is not internationally comparable. The official statistics from the National Chinese Statistics Bureau reports a homeownership rate of 89.3% as of 2010. However, the official figure uses the concept of privately owned land (in proportion to total land for residential purpose), while we define aggregate homeownership rates by the fraction of the households living in an owner-occupied dwelling. We also had to exclude the fourth-largest group, Puerto Rico (6.61%), the seventh-largest group, Russia (3.36%), and the ninth-largest group, the Philippines (2.38%). Note that the baseline sample includes eight out of the eleven largest second-generation immigrant groups of the initial CPS sample.

The OECD provides the second measure for homeownership. The OECD calculations are mainly based on the European Survey on Income and Living Conditions (EU SILC). In comparison to the first measure, the OECD measure covers five fewer countries of origin (Singapore, Israel, Japan, Turkey, New Zealand), and therefore, we lose 15 percent of our baseline observations. Despite some variations in the homeownership rates across these two different sources, the correlation coefficient equals 0.959, while the Spearman's rank correlation coefficient equals 0.96. We also collect aggregate data on GDP, schooling, and wages at the country-of-origin level from the Penn World Tables.

	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 A1: Cross-country correlations for selected year pairs

Country Level Data: Socio-economic specific Homeownership Rates
The ECB's European Household Finance and Consumption Survey (HFCN) allows us to collect homeownership rates for different socio-economic groups that we match with the corresponding profile of the second-generation migrants in our sample. We collect homeownership rates for the years 2010 and 2017 and for five different age groups: 1 "16-34"; 2 "35-44"; 3 "45-54"; 4 "55-64"; and 5 "65+" and for seven different income groups: 1 "<1000"; 2 "1000-1499"; 3 "1500-1999"; 4 "2000-2499"; 5 "2500-3499"; 6 "3500-5499"; and 7 "5500+". For the year 2010, data is available

for the following 14 countries: Austria, Belgium, Cyprus, Germany, Spain, Finland, France, Greece, Italy, Luxemburg, Malta, Netherlands, Portugal, and Slovakia. For the year 2017, data is available for eight more countries: Croatia, Estonia, Hungary, Ireland, Lithuania, Latvia, Poland, and Slovenia.

	Source: PEW Research Center		Source: OECD			Source: HFCN	
Country	year	Homeownership	Homeownership	year	Source	Homeownership	year
Romania	2011	96.6	96.2	2014	EU SILC	n.a.	n.a
Lithuania	2011	92.3	89.9	2014	EU SILC	93.2	2017
Croatia	2011	92.1	89.2	2014	EU SILC	85.3	2017
Hungary	2012	90.5	88.2	2014	EU SILC	84.0	2017
Slovakia	2011	90.2	90.2	2014	EU SILC	88.8	2017
Singapore	2012	90.1	n.a.	n.a	n.a	n.a.	n.a
Bulgaria	2011	87.2	83.6	2014	EU SILC	n.a.	n.a
Norway	2011	84.0	76.4	2014	EU SILC	n.a.	n.a
Estonia	2011	83.5	77.2	2014	EU SILC	75.3	2017
Spain	2011	82.7	78.0	2014	EU SILC	83.1	2010
Poland	2011	82.1	81.1	2014	EU SILC	79.3	2017
Latvia	2012	81.2	89.9	2014	EU SILC	72.7	2017
Malta	2011	80.8	76.2	2014	EU SILC	81.4	2017
Czech Republic	2012	80.4	76.5	2014	EU SILC	n.a.	n.a
Iceland	2011	77.9	74.0	2014	EU SILC	n.a.	n.a
Slovenia	2011	77.5	75.6	2014	EU SILC	76.3	2017
Greece	2011	75.9	72.1	2014	EU SILC	72.0	2017
Portugal	2011	75.0	73.9	2014	EU SILC	74.5	2017
Finland	2012	73.9	66.4	2014	EU SILC	66.3	2017
Cyprus	2011	73.8	65.4	2014	EU SILC	68.2	2017
Italy	2011	72.9	71.8	2014	EU SILC	68.5	2017
Belgium	2011	71.8	66.1	2014	EU SILC	69.3	2017
Mexico	2011	71.1	71.7	2014	ENIGH	n.a.	n.a
Ireland	2011	70.2	69.4	2014	EU SILC	69.5	2017
Sweden	2011	69.7	62.1	2014	EU SILC	n.a.	n.a
Canada	2006	69.0	69.3	2011	SLID	n.a.	n.a
Chile	2006	69.0	64.6	2013	CASEN	n.a.	n.a
Australia	2010	68.8	62.9	2014	HILDA	n.a.	n.a
Israel	2008	68.8	n.a.	n.a	n.a	n.a.	n.a
Luxembourg	2011	68.2	69.0	2014	EU SILC	69.0	2017
United Kingdom	2011	67.9	63.4	2014	EU SILC	n.a.	n.a
Denmark	2011	67.1	53.9	2014	EU SILC	n.a.	n.a
Netherlands	2011	67.1	56.5	2014	EU SILC	57.5	2017
France	2011	63.1	61.4	2014	EU SILC	57.9	2017
Japan	2010	60.0	n.a.	n.a	n.a	n.a.	n.a
Turkey	2011	59.6	n.a.	n.a	n.a	n.a.	n.a
Austria	2011	57.5	49.7	2014	EU SILC	45.9	2017
South Korea	2005	57.3	53.6	2014	Korean Housing Survey	n.a.	n.a
Germany	2011	53.4	45.0	2014	GSOEP	44.0	2017
New Zealand	2006	53.2	n.a.	n.a	n.a	n.a.	n.a
Switzerland	2011	43.8	39.8	2014	EU SILC	n.a.	n.a

The homeownership data from the PEW Research Center is 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. The homeownership data from the OECD is mainly based on European Survey on Income and Living Conditions (EU SILC). ENIGH stands for Encuesta Nacional de Ingresos y Gastos de los Hogares, SLID stands for the Survey of Labour and Income Dynamics, GSOEP stands for the German Socioeconomic Panel, CASEN stands for Encuesta de Caracterizacion Socioeconomica Nacional, and HILDA stands for he Household, Income and Labour Dynamics Survey. Despite some variations in the homeownership rates across these two different sources, the correlation coefficient equals 0.959, while the Spearman's rank correlation coefficient equals 0.960. HFCN stands for the ECB's European Household Finance and Consumption Survey.

Table A2: Aggregate Homeownership Rates in %

Second-Generation Immigrants: Summary Statistics I

Father's birthplace	Age	Male	Marital status	# of children	Employed	Un-employed	Not in labor force	Household income	Interest income	High school (or less)	College w/o degree	College degree	Nobs	HO_{im}	HO_{org}
Natives	48.8	0.53	0.53	0.87	0.66	0.03	0.31	64601	1586	0.42	0.18	0.38	1,271,469	70.19	66.2
Australia	57.2	0.5	0.44	0.48	0.49	0.03	0.47	80924	1839	0.26	0.25	0.48	118	67.8	68.8
Austria	69.7	0.47	0.41	0.26	0.3	0.01	0.69	53030	3401	0.5	0.15	0.35	1043	76.51	57.5
Belgium	62.2	0.53	0.57	0.52	0.42	0.03	0.56	64631	4064	0.48	0.18	0.34	221	75.57	71.8
Canada	58.7	0.54	0.53	0.59	0.51	0.03	0.47	61037	2185	0.45	0.18	0.37	6630	75.38	69.0
Chile	39.1	0.6	0.41	0.7	0.8	0.02	0.17	71505	1106	0.21	0.24	0.55	123	60.98	69.0
Croatia	58.3	0.55	0.53	0.64	0.61	0.01	0.38	99819	3508	0.28	0.13	0.59	101	83.17	92.1
Czech Republic	69.2	0.46	0.45	0.24	0.3	0.02	0.67	49406	3264	0.53	0.13	0.35	217	82.49	80.4
Denmark	69.1	0.53	0.47	0.26	0.33	0.02	0.65	55805	3350	0.45	0.21	0.34	485	78.76	67.1
England	60.1	0.53	0.5	0.5	0.46	0.02	0.51	61680	3000	0.39	0.19	0.42	2234	74.75	67.9
Finland	70.8	0.47	0.42	0.24	0.24	0.01	0.75	45199	2665	0.52	0.17	0.31	238	77.31	73.9
France	54.0	0.5	0.45	0.53	0.56	0.04	0.41	59767	2041	0.35	0.19	0.46	535	67.29	63.1
Germany	59.5	0.53	0.5	0.58	0.49	0.02	0.49	62760	2788	0.44	0.17	0.39	5307	74.47	53.4
Greece	55.4	0.52	0.48	0.62	0.54	0.02	0.44	75456	2460	0.33	0.2	0.47	1168	75.86	75.5
Hungary	63.8	0.49	0.47	0.46	0.39	0.02	0.59	63780	3511	0.48	0.16	0.36	1328	76.05	90.5
Ireland	62.0	0.53	0.49	0.56	0.45	0.02	0.53	66714	2833	0.37	0.18	0.46	2562	76.23	70.2
Isreal/Palestine	39.3	0.49	0.52	1.3	0.67	0.02	0.31	85815	1145	0.3	0.14	0.56	167	47.9	68.8
Italy	65.5	0.52	0.49	0.43	0.35	0.02	0.63	52741	2694	0.58	0.14	0.28	10835	78.26	72.9
Japan	69.4	0.54	0.48	0.36	0.26	0.01	0.73	59068	3647	0.5	0.14	0.36	2234	78.83	60.0
Latvia	55.8	0.48	0.57	0.66	0.59	0.01	0.4	84477	4267	0.12	0.17	0.71	145	85.52	81.2
Lithuania	68.4	0.43	0.41	0.35	0.3	0.01	0.69	55076	4344	0.46	0.17	0.38	550	76.36	92.3
Mexico	42.2	0.51	0.48	1.09	0.65	0.05	0.3	52474	610	0.58	0.21	0.21	19836	55.81	71.1
Netherlands	58.4	0.58	0.6	0.73	0.56	0.02	0.42	71048	1999	0.46	0.13	0.41	848	81.13	67.1
New Zealand	38.6	0.37	0.33	0.96	0.81	0.04	0.15	88651	5028	0.37	0.26	0.37	27	59.26	53.2
Norway	68.6	0.49	0.49	0.29	0.31	0.02	0.67	51324	3505	0.51	0.17	0.32	1128	78.46	84.0
Poland	68.1	0.49	0.44	0.35	0.32	0.01	0.67	53367	3246	0.53	0.14	0.32	4746	80.3	82.1
Portugal	53.1	0.47	0.48	0.66	0.52	0.04	0.44	56319	1680	0.54	0.16	0.3	948	65.72	75.0
Romania	65.3	0.5	0.51	0.4	0.39	0.01	0.59	69445	5207	0.36	0.2	0.44	371	76.55	96.6
Scotland	61.4	0.51	0.55	0.5	0.5	0.01	0.49	65973	2733	0.36	0.2	0.44	954	80.08	67.9
Slovakia	69.2	0.48	0.42	0.34	0.31	0.02	0.67	41448	2519	0.65	0.13	0.23	661	79.12	90.2
South Korea	35.5	0.58	0.32	0.42	0.63	0.04	0.32	77182	1917	0.2	0.19	0.61	228	47.81	57.3
Spain	55.5	0.55	0.48	0.55	0.53	0.03	0.45	67202	2122	0.38	0.19	0.44	691	68.74	82.7
Sweden	69.5	0.49	0.43	0.3	0.31	0.01	0.68	48603	3134	0.46	0.21	0.33	1080	78.89	69.7
Switzerland	64.3	0.47	0.45	0.31	0.4	0.03	0.58	58640	3137	0.4	0.23	0.37	326	80.37	43.8
Turkey	58.0	0.49	0.43	0.35	0.5	0.01	0.48	61919	3388	0.35	0.16	0.5	216	71.76	59.6
United Kingdom	52.6	0.51	0.49	0.61	0.54	0.05	0.4	71150	2148	0.29	0.16	0.55	347	67.72	67.9
Wales	70.6	0.44	0.33	0.17	0.28	0.00	0.72	66704	3684	0.39	0.56	0.06	18	55.56	67.9
Average	56.9	0.52	0.48	0.65	0.48	0.03	0.49	57046.80	2176.84	0.51	0.18	0.32	1907.39	70.49	70.83
Std. deviation	20.2	0.50	0.50	1.06	0.50	0.16	0.50	67680.23	8723.57	0.50	0.38	0.47	3736.86	9.47	11.90
Correlation w/ HO_{origin}	0.29	-0.03	0.24	-0.09	-0.23	-0.29	0.24	-0.05	0.21	0.16	-0.21	-0.02	-0.04	0.31	1.00

Number of observations: 68666. Male dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Household income: total annual household income. Interest income (saving proxy 1): pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Rental income (saving proxy 2): pre-tax income received from rent (after expenses), from charges to roomers or boarders, and from money paid by estates, trusts, and royalties. HO_{im} denotes the aggregate homeownership rate of the corresponding second-generation immigrant group. HO_{origin} denotes the aggregate homeownership rate in the country of origin in 2011.

Table A3: Characteristics of second-generation immigrants in the baseline sample

First-Generation Immigrants: Summary Statistics II

Birthplace	Age	Male	Marital status	# of children	Employed	Un-employed	Not in labor force	Household income	Interest income	High school (or less)	College w/o degree	College degree	Nobs	HO_{im}	HO_{org}
Natives	48.8	0.53	0.53	0.87	0.66	0.03	0.31	64601	1586	0.42	0.18	0.38	1,271,469	70.19	66.2
Australia	45.9	0.54	0.61	0.92	0.73	0.04	0.24	114284	2776	0.21	0.15	0.64	346	62.14	68.8
Austria	62.7	0.5	0.48	0.41	0.45	0.02	0.53	66527	2469	0.35	0.15	0.5	345	76.52	57.5
Belgium	52.7	0.47	0.56	0.85	0.59	0.03	0.38	96346	2253	0.22	0.14	0.64	179	75.98	71.8
Canada	53.2	0.5	0.57	0.75	0.6	0.02	0.37	78324	2198	0.36	0.17	0.47	4063	73.2	69
Chile	46.7	0.6	0.62	0.9	0.71	0.04	0.26	62471	1369	0.33	0.14	0.54	762	48.03	69
Croatia	51.4	0.66	0.63	0.73	0.73	0.01	0.26	102836	2243	0.4	0.09	0.5	107	70.09	92.1
Czech Republic	50.8	0.62	0.55	0.86	0.65	0.01	0.35	71206	1139	0.37	0.08	0.55	178	65.17	80.40
Denmark	56.8	0.45	0.49	0.56	0.57	0.01	0.43	89123	2478	0.21	0.15	0.64	176	69.32	67.10
England	54.2	0.5	0.56	0.73	0.61	0.02	0.37	81638	2780	0.32	0.17	0.51	2907	74.48	67.90
Finland	54.4	0.37	0.45	0.59	0.55	0.03	0.43	82938	1405	0.29	0.12	0.59	119	67.23	73.90
France	51.4	0.47	0.5	0.68	0.66	0.01	0.33	82005	2374	0.25	0.13	0.62	886	62.64	63.1
Germany	58.5	0.43	0.51	0.49	0.5	0.02	0.48	63900	2694	0.36	0.16	0.48	3451	75.59	53.4
Greece	55.4	0.63	0.6	0.86	0.6	0.03	0.37	64078	2191	0.56	0.12	0.32	969	75.54	75.5
Hungary	57.9	0.57	0.62	0.64	0.49	0.04	0.47	65118	3073	0.36	0.14	0.51	618	71.68	90.5
Ireland	56.1	0.52	0.51	0.71	0.56	0.02	0.42	73413	2131	0.44	0.15	0.42	1134	68.08	70.2
Isreal/Palestine	41.1	0.68	0.65	1.49	0.76	0.03	0.21	87836	1259	0.33	0.1	0.57	389	55.27	68.8
Italy	59.2	0.58	0.6	0.75	0.5	0.02	0.48	63544	1987	0.61	0.1	0.29	3025	76.79	72.90
Japan	49.5	0.44	0.45	0.53	0.59	0.01	0.4	64114	1658	0.28	0.12	0.59	2194	47.54	60
Latvia	62.1	0.43	0.53	0.49	0.45	0.03	0.52	57293	1904	0.14	0.22	0.65	102	78.43	81.2
Lithuania	56.2	0.45	0.52	0.66	0.52	0.05	0.43	65211	1809	0.24	0.17	0.59	245	63.27	92.3
Mexico	41.4	0.59	0.63	1.66	0.69	0.06	0.25	41833	220	0.84	0.08	0.08	64461	45.27	71.10
Netherlands	55.5	0.61	0.64	0.69	0.65	0.01	0.34	94315	3304	0.26	0.18	0.56	586	78.84	67.10
New Zealand	44.9	0.47	0.67	1.09	0.78	0.02	0.21	108631	2276	0.2	0.14	0.66	116	59.48	53.2
Norway	62.7	0.49	0.47	0.53	0.38	0.02	0.6	66881	3855	0.33	0.19	0.48	235	74.89	84
Poland	52.9	0.52	0.59	0.75	0.61	0.03	0.35	64418	1926	0.42	0.16	0.41	2896	67.37	82.1
Portugal	51.1	0.58	0.67	1	0.63	0.04	0.33	61401	1340	0.74	0.09	0.16	1407	71.07	75
Romania	48.1	0.57	0.66	0.89	0.69	0.03	0.28	86672	2127	0.32	0.12	0.56	662	66.31	96.6
Scotland	57.6	0.47	0.53	0.64	0.52	0.03	0.46	72334	2367	0.38	0.21	0.41	659	69.95	67.90
Slovakia	56.5	0.45	0.52	0.63	0.51	0.01	0.47	56357	2068	0.43	0.11	0.46	237	71.73	90.2
South Korea	45.3	0.54	0.6	0.83	0.65	0.03	0.32	61138	856	0.31	0.12	0.56	2606	43.75	57.3
Spain	56.4	0.53	0.5	0.59	0.54	0.02	0.44	63826	1989	0.38	0.14	0.47	1261	62.49	82.7
Sweden	56	0.42	0.57	0.82	0.52	0.02	0.47	87999	2153	0.23	0.12	0.64	250	72	69.7
Switzerland	56.3	0.52	0.53	0.65	0.61	0.02	0.37	87788	5140	0.21	0.11	0.68	246	75.2	43.8
Turkey	47.4	0.66	0.6	0.87	0.64	0.04	0.33	74375	1261	0.34	0.1	0.55	615	49.11	59.6
United Kingdom	51.4	0.58	0.66	0.75	0.71	0.03	0.26	120317	2640	0.17	0.13	0.7	636	75.31	67.90
Wales	73.8	0.33	0.25	0.25	0.33	0	0.67	46196	4430	0.25	0.17	0.58	12	66.67	67.90
Average	53.71	0.52	0.56	0.76	0.59	0.03	0.39	75741.28	2226.17	0.35	0.14	0.52	271.23	66.84	71.71
Std. Deviation	6.48	0.08	0.08	0.26	0.10	0.01	0.11	18143.41	941.83	0.15	0.03	0.14	286.35	9.9	12.06
Correlation w/ HO_{origin}	0.11	0.14	0.11	-0.01	-0.14	0.16	0.11	-0.16	-0.18	0.19	0.01	-0.21	0.06	0.17	1

We restricted this sample to those first-generation immigrants that emigrated from countries of origin that are included in our baseline sample. Male dummy: equal to one if male. Marital status dummy: equal to one if married and living with partner. Household income: total annual household income. Interest income (saving proxy 1): pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Rental income (saving proxy 2): pre-tax income received from rent (after expenses), from charges to roomers or boarders, and from money paid by estates, trusts, and royalties. HO_{im} denotes the aggregate homeownership rate of the corresponding first-generation immigrant group. HO_{origin} denotes the aggregate homeownership rate in the country of origin in 2011.

Table A4: Characteristics of first-generation immigrants

Additional Results

Aggregates

We compute aggregate homeownership rates H_{i_o} for all second-generation immigrants i with a father born in the country of origin o. Figure 1 (in the paper) plots the aggregate homeownership rates HO_{i_o} against our cultural proxy, i.e. the aggregate homeownership rates of the country of origin of the immigrant's father. The correlation is positive and equal to 0.32. 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 (A5). Our proxy for cultural preferences towards homeownership is significant, positive and large. An increase in the homeownership rate in the country of origin of the immigrant's father 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 for homeownership matter when it comes to the actual homeownership decision.

Dependent variable: Aggregate Homeownership Rate of second-generation immigrant groups H_{im}	
HO_{origin}	0.244*
	(0.126)
N	33
R^2	0.105
adj. R^2	0.076

Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A5: OLS – Culture and Homeownership – Aggregates

Online Appendix B: Robustness Checks

As discussed in the paper, our results are robust to alternative estimation techniques; a LPM and a Logit model yield very similar results (available on request). Our results are robust to variations in the vector of individual controls, we refer to Table 3 in the main text. This Online Appendix B provides a large range of additional checks to test the robustness of our results with respect to: alternative proxies for cultural preferences towards homeownership, varying sample sizes, concerns of a systematic selection of immigrants, alternative specifications of the location of residence, concerns of omitted parental income, inclusion of additional covariates at the country-of-origin level, alternative definition of the immigrant status, and to alternative standard error specifications.

The regression results using four alternative proxies to measure cultural preferences are shown in Table B1. The number of observations varies a lot across countries of origin. To make sure that specific countries of origin do not drive our results we perform several sample size variations (Tables B2 and B3). To address the concern of a systematic selection of immigrants, we refer to regression tables B4. For alternative specifications of the location of residence, we refer to Tables B5-B7. For robustness checks addressing the parental financial situation, refer to Table B8. For inclusion of additional covariates at the country-of-origin level, see B9. For the alternative definition of the immigrant status, we refer to Table B10. For checking robustness with respect to clustered standard errors, we refer to Tables B11-B13.

Robustness Check 1: Alternative Proxies for Cultural Preferences
Robustness Check 1a: OECD Homeownership measure
We estimate the model in (3.1) using the aggreagte homeownership rates provided by the OECD. The OECD calculations are mainly based on the European Survey on Income and Living Conditions (EU SILC). In comparison to the baseline measure, the OECD measure cover fewers countries of origin (Singapore, Israel, Japan, Turkey, New Zealand), and we, therefore, lose 15 percent of our baseline observations. The estimation results are shown in Table (B1) in column 1.

Robustness Check 1b: Dummy High Homeownership country (> mean)
We estimate the model in (3.1) with an alternative proxy for cultural preferences for homeownership. The alternative proxy is a dummy variable and equal to one if

the homeownership rate in the country of origin is larger than 70.81% (mean value) and zero otherwise. The estimation results are shown in Table (B1) in column 2.

Robustness Check 1c: Dummy High Homeownership country (> median)
We estimate the model in (3.1) with an alternative proxy for cultural preferences for homeownership. The alternative proxy is a dummy variable and equal to one if the homeownership rate in the country of origin is larger than 71.10% (median value) and zero otherwise. The estimation results are shown in Table (B1) in column 3.

Robustness Check 1d: Dummy High Homeownership country (> 75th percentile)
We estimate the model in (3.1) with an alternative proxy for cultural preferences for homeownership. The alternative proxy is a dummy variable and equal to one if the homeownership rate in the country of origin is larger than 73% (75th percentile value) and zero otherwise. The results are shown in Table (B1) in column 4.

Robustness Checks 2-7: Varying Sample Sizes
Table (A3) shows that the number of observations varies a lot across countries of origin. To make sure that specific countries of origin do not drive our results we perform the following robustness checks:

Robustness Check 2: Larger Sample
We estimate (3.1) for all available countries in the sample. The sample includes five more countries of origin in comparison to our baseline sample (Bulgaria, Cyprus, Estonia, Iceland, and Singapore). In the baseline, we exclude these countries of origin, as each country has less than twenty observations. The estimation results are very similar. Table (B2) shows the regression results in column 1.

Robustness Check 3: Excluding countries < 100 observations
We estimate (3.1) for a smaller sample of countries. We exclude all countries of origin listed in Table (A2) that have less than 100 observations (Croatia). Table (B2) shows the results in column 2.

Robustness Check 4: Excluding countries < 200 observations

We estimate (3.1) for a smaller sample of countries, all countries of origin listed in Table (A2) that have less than 200 observations (Australia, Croatia, Chile, Israel, Palestine, New Zealand, and Latvia) are excluded. Table (B2), column 3.

Robustness Check 5: Excluding Mexico (country of origin with most observations)

We estimate (3.1) for a smaller sample of countries. We exclude the country of origin that has the largest number of observations, i.e., Mexico. We lose 29% of the baseline observations. Table (B3) shows the regression results in column 1.

Robustness Check 6: Excluding Mexico and Italy

We estimate (3.1) for a smaller sample of countries. We exclude the two countries of origin that have the largest number of observations, i.e., Mexico and Italy. We lose 45% of the baseline observations. Table (B3) shows the results in column 2.

Robustness Check 7: Excluding Outliers

We estimate (3.1) for a smaller sample of countries. We exclude all countries of origin from the baseline sample that cluster in the left bottom corner in Figure (1), we exclude Israel, Palestine, Mexico, South Korea, New Zealand. Table (B3) shows the regression results in column 3.

Robustness Checks 8-10: Systematic Selection of Immigrants

Robustness Check 8: Excluding "war countries"

We estimate (3.1) for a smaller sample of countries. We exclude all countries of origin listed in Table (A2) that have been affected by wars between 1945-1994 and which therefore might have encouraged systematically different types of emigrants (i.e., the parents of our subjects of study). We exclude Israel/Palestine, Croatia, and South Korea. Table (B4) shows the regression results in column 1.

Robustness Check 9: Excluding "dictatorship countries"

We estimate (3.1) 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 and which therefore might have encouraged systematically different types of emigrants (i.e., the parents of our subjects of study). We exclude Portugal, Spain,

and Greece. Refer to Table (B4) in column 2.

Robustness Check 10: Excluding Post-Soviet States

We estimate (3.1) for a smaller sample of countries. We exclude all countries of origin from the baseline sample that are post-Soviet states (Lithuania, Estonia, and Latvia), and which therefore might have encouraged systematically different types of emigrants (i.e., the parents of our subjects of study). Table (B4) shows the regression results in column 3.

Robustness Check 11-15: Varying Controls of Location of Residence

Sinai (2013) shows that house price cycles vary systematically across regions in the United States. We control for these differences in the baseline, regardless of their source, by including a large vector of 415 metropolitan area F_m and year F_t dummies. Metropolitan areas are defined as specific counties or groups of counties centering on a substantial urban area.

We present four alternative regression specifications to account for potential systematic differences across locations of residence. As a first robustness check, we control for MSA time-trends instead of including the time, and MSA fixed effects separately. Second, we test the robustness of our findings by excluding the MSA and year fixed effects. Third, we use a different definition of location. Instead of using MSA time-varying fixed effects, we use time-varying metropolitan central city status fixed effects. Forth, we explicitly address the concern that housing affordability might differ across locations of residence. We proxy local housing affordability by homeownership rates at the MSA level and include these MSA homeownership rates in the baseline regression. The proxy for culture $\tilde{Z}_o$ remains positive and highly significant, while the MSA homeownership rate is not statistically significant. Our results are robust to these variations.

Robustness Check 11: Time-varying Metropolitan area fixed effects
(Specification 3.2)

Instead of including the time F_t and MSA F_m fixed effects separately, we control for MSA time trends $MSA \times Year$ in all specifications. We performed this robustness check for the second specification (equation 3.2), where we use different versions of migrant's age and income specific country-of-origin homeownership rate as our

cultural proxy (HFCN data). All six columns of Table 2 (in the main text) are replicated using MSA time trends in Table (B5).

Robustness Check 12: Time-varying Metropolitan area fixed effects (Specification 3.1)

We estimate the baseline specification (3.1) without F_m and F_t, the large sets of metropolitan area and time dummies. Instead, we include $MSA \times Year$, a set of metropolitan area per year dummies. Table (B6) shows the results when accounting for these MSA time trends, replicating all five columns of Table 3 in the main text.

Robustness Check 13: Without metropolitan area and time fixed effects

We estimate (3.1) without F_m and F_t, the large sets of metropolitan area and time dummies. Table (B7) shows the regression results in column 1.

Robustness Check 14: Time-varying Metropolitan central city status

We estimate (3.1) without F_m and F_t, the large sets of metropolitan area and time dummies. Instead, we include $MCC \times Year$, a set of metropolitan central city status per year dummies. For households within metropolitan areas, the metropolitan central city status specifies whether the household is located inside or outside the central city of the metropolitan area. Table (B7) shows the results in column 2.

Robustness Check 15: Housing Affordability across MSAs

We add to baseline specification a proxy for housing affordability. Including home-ownership rates at the MSA level will capture differences in housing affordability across MSAs. Table (B7) shows the results in column 3.

Robustness Checks 16-18: Omitted Parental Income

Robustness Check 16: Parental Income Proxy 1

We add to the baseline the first parental income proxy, the "yearly average personal income of the group of first-generation immigrants that the parents of the second-generation immigrant i belong to". Table (B8), column 1.

Robustness Check 17: Parental Income Proxy 2

We add to the baseline the second parental income proxy, the "yearly average house-

hold income of the group of first-generation immigrants that the parents of the second-generation immigrant i belong to". Table (B8), column 2.

Robustness Check 18: Parental Income Proxy 3
We add to the baseline the third parental income proxy: real GDP per capita (PPP adjusted) prevailing in the country of origin. Data source: Penn World Tables. Table (B8), column 3.

Robustness Checks 19-22: Additional covariates at country-of-origin level
Robustness Check 19: GDP per capita (PPP)
We add to the baseline real GDP per capita (PPPs, in mil. 2011US$) prevailing in the country of origin. Data source: Penn World Tables. Table (B9), column 1.

Robustness Check 20: Years of education
We add to the baseline average years of schooling at the country-of-origin level. Data source: Penn World Tables. Table (B9), column 2.

Robustness Check 21: Average wage
We add to the baseline the average wage of employees prevailing in the country of origin. Data source: Penn World Tables. Table (B9), column 3.

Robustness Check 22: GDP, Education, Average wage
We add to the baseline real GDP per capita (PPP adjusted), average years of schooling, and the average wage of employees. Data source: Penn World Tables. Table (B9), column 4.

RC 23: Different Definition of second-generation immigrants
As common in the related literature, we define a second-generation immigrant as someone who was born in the United States and whose father was born abroad (see, e.g., Alesina and Giuliano (2010), Fernández and Fogli (2009),Fernández (2007), Feliciano (2005), and Antecol (2000)). In this specification, however, we define a second-generation immigrant as someone who was born in the United States and whose parents, either father or mother, were born abroad. If the father is foreign-born, we assign the paternal country of origin. If the father is not but the mother

is foreign-born, we assign the maternal country of origin. Table (B10) shows the regression results.

Robustness Check 24-26: Varying Standard Errors

Given heteroskedasticity, there are two possible approaches to model the standard errors: one can either choose robust Eicker-Huber-White (EHW) standard errors or clustered standard errors at the country of origin level. A typical argument for clustered standard errors is that unobserved components of outcomes for units within clusters are correlated. Key assumptions for using clustered standard errors are that observations can be grouped into clusters where the model errors are uncorrelated across and correlated only within clusters. Second, the number of clusters (rather than the number of observations) needs to be large, especially if the cluster sizes are not balanced (Cameron et al. (2008), Imbens and Kolesár (2016), Carter et al. (2017)). According to Mackinnon and Webb (2016), inference using clustered standard errors can be unreliable even with 100 unbalanced clusters. Hence, given that we have 33 very unbalanced clusters, we use the robust EWH standard errors for our baseline estimations.[19] However, we test the robustness of our findings with respect to clustered standard errors extensively. We repeat all regressions in the main text using three alternative clustered standard error specifications.

Robustness Check 24: Clustered Standard Errors at country of origin (COO) level
Instead of using robust Eicker-Huber-White sandwich standard errors, we estimate all main regressions with clustered standard errors at the country-of-origin level. Table (B11) shows the regression results for all columns of Table 4 in the main text. For the entire sample of second-generation immigrant household heads (col. 1) and the subset of singles (col. 2), the clustered standard errors are larger than the EHW standard errors. Hence, the statistical significance of the cultural proxy decreases slightly. In contrast, for the most homogeneous subset of second-generation immigrant household heads married to a spouse with the same cultural background (col. 4), the statistical significance of the cultural proxy increases because the clustered standard errors are smaller than the EHW standard errors.

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[19]We have 33 countries of origin with an average of 1,907 observations; the clusters are very unbalanced with a minimum of 27 to a maximum of 19,836 observations. The two largest country-of-origin clusters (Mexico and Italy) account for 45 percent of the observations, while the five largest country-of-origin clusters (Mexico, Italy, Canada, Germany, and Poland) account for 72 percent of the observations.

Robustness Check 25: Clustered Standard Errors at MSA level

Instead of using robust Huber-White sandwich standard errors, we estimate (3.1) with clustered standard errors at the metropolitan area level. Table (B12) presents the regression results, replicating all columns of Table 3 in the main text. Table (B12) show that clustering at the MSA-level hardly affects the results.

Robustness Check 26: Two-way Clustered Standard Errors (MSA and COO level)

Instead of using robust Huber-White sandwich standard errors, we estimate (3.1) with two-way clustered standard errors at the metropolitan area and the country-of-origin level simultaneously. Our results are affected by the two-way clustering presented in Table (B13). The cultural proxy is still highly significant for the most homogenous samples of migrants (we expect for these samples higher correlations within clusters and a lower correlation across clusters—compared to the baseline sample):

- 1st generation immigrants married to a spouse of same cultural background (Column 7)

- 2nd generation immigrants married to a spouse of same cultural background (Column 6)

The cultural proxy is not statistically significant for the baseline sample ($p > 0.184$; Column 1) and the subsample of single household heads ($p > 0.120$; Column 3). We suspect that the assumption that errors are solely correlated within but not across clustered is not valid in these cases.

For a better understanding, we run two additional regression, using for each sample (baseline and singles) a more homogenous sample to increase the correlation within clusters. In Column 2, we use all second-generation migrants but exclude those that have two foreign-born parents not sharing the same country of origin. The sample size drops by 7.4 percent, and the cultural proxy's significance improves ($p > 0.118$; Column 2). In Column 3, we use all second-generation single migrants but exclude those that have two foreign-born parents not sharing the same country of origin. The sample size drops by 7.6 percent, and the cultural proxy becomes significant ($p > 0.022$; Column 4).

Dependent Variable: Homeownership status of immigrant i				
	(1)	(2)	(3)	(4)
HO_{OECD}	0.053***			
	(0.020)			
$HO^{mean}_{high-low}$		0.012***		
		(0.004)		
$HO^{median}_{high-low}$			0.038***	
			(0.004)	
$HO^{p75}_{high-low}$				0.019***
				(0.005)
age	0.022***	0.022***	0.022***	0.022***
	(0.001)	(0.001)	(0.001)	(0.001)
age squared	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
male	-0.010**	-0.005	-0.005	-0.005
	(0.004)	(0.004)	(0.004)	(0.004)
marital status	0.177***	0.172***	0.172***	0.172***
	(0.005)	(0.004)	(0.004)	(0.004)
number of children	0.004	0.002	0.003	0.003
	(0.002)	(0.002)	(0.002)	(0.002)
savings	-0.000*	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)
employment status	✓	✓	✓	✓
income categories	✓	✓	✓	✓
education categories	✓	✓	✓	✓
race categories	✓	✓	✓	✓
metropolitan area	✓	✓	✓	✓
year (dummy)	✓	✓	✓	✓
N	58354	68666	68666	68666
pseudo R^2	0.230	0.228	0.228	0.228

Marginal effects (at the mean). * p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Number of metropolitan area categories: 415. $HO^{mean}_{high-low}$ is equal to one if the homeownership rate in the country of origin in 2011 is larger than the mean value and zero otherwise. $HO^{median}_{high-low}$ is equal to one if the homeownership rate in the country of origin in 2011 is larger than the median value and zero otherwise. $HO^{p75}_{high-low}$ is equal to one if the homeownership rate in the country of origin in 2011 is larger than the 75th percentile value and zero otherwise.

Table B1: Robustness Check 1 (1a-1d): Alternative Cultural Proxies

Dependent Variable: Homeownership status of second-generation immigrant i			
	all countries of origin (no restrictions) (1)	only countries of origin with >100 obs. (2)	only countries of origin with >200 obs. (3)
HO_{origin}	0.062*** (0.023)	0.065*** (0.023)	0.059** (0.023)
age	0.022*** (0.001)	0.022*** (0.001)	0.022*** (0.001)
age squared	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)
male	-0.005 (0.004)	-0.005 (0.004)	-0.005 (0.004)
marital status	0.172*** (0.004)	0.172*** (0.004)	0.172*** (0.004)
number of children	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)
savings	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
employment status	✓	✓	✓
education categories	✓	✓	✓
income categories	✓	✓	✓
race categories	✓	✓	✓
metropolitan area	✓	✓	✓
year (dummy)	✓	✓	✓
N	68715	68639	68152
pseudo R^2	0.227	0.227	0.227

Marginal effects (at the mean). * p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy 1: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Number of metropolitan area categories: 415. For second-generation immigrants, HO_{origin} denotes the aggregate homeownership rate in the country of origin of the second-generation immigrant's father in 2011 and is $\in (0, 1)$. Difference to baseline: In the first column, we add five more countries of origin (Bulgaria, Cyrus, Estonia, Iceland, and Singapore), with each country having less than 20 observations. In the second column, we exclude all countries of origin that have less than 100 observations in the baseline sample (Croatia). In the third column, we exclude all countries of origin that have less than 200 observations in the baseline sample (Australia, Croatia, Chile, Latvia, Israel, Palestine, and New Zealand).

Table B2: Robustness Check (2)-(4): Varying Sample Size

Dependent Variable: Homeownership status of 2nd generation immigrant i			
	Excluding Mexico	Excluding Mexico, Italy	Excluding ouliers
	(1)	(2)	(3)
HO_{origin}	0.058***	0.058***	0.058***
	(0.020)	(0.021)	(0.020)
age	0.023***	0.025***	0.023***
	(0.001)	(0.001)	(0.001)
age squared	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)
male	-0.010**	-0.010**	-0.009**
	(0.004)	(0.005)	(0.004)
marital status	0.170***	0.175***	0.170***
	(0.005)	(0.005)	(0.005)
number of children	0.018***	0.015***	0.018***
	(0.003)	(0.003)	(0.003)
savings	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)
employment status	✓	✓	✓
education categories	✓	✓	✓
income categories	✓	✓	✓
race categories	✓	✓	✓
metropolitan area	✓	✓	✓
year (dummy)	✓	✓	✓
N	48737	37749	48484
pseudo R^2	0.205	0.214	0.204

Marginal effects (at the mean). * p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Number of metropolitan area categories: 415. For second-generation immigrants, HO_{origin} denotes the aggregate homeownership rate in the country of origin of the second-generation immigrant's father in 2011 and is $\in (0, 1)$. Difference to baseline: In the first column, we exclude the country of origin with the most observations, i.e. Mexico (29% of baseline observations). In the second column, we exclude the two countries of origin that have the largest number of observations, i.e. Mexico and Italy (45% of baseline observations). In the third column, we exclude all countries of origin from baseline sample that are outliers in Figure (1), (South Korea, Israel, Palestine, Mexico, and New Zealand).

Table B3: Robustness Check (5)-(7): Varying Sample Size 2

Dependent Variable: Homeownership status of second-generation immigrant i			
	no war countries	no dictator countries	no post-Soviet states
	(1)	(2)	(3)
HO_{origin}	0.057**	0.063***	0.067***
	(0.023)	(0.024)	(0.024)
age	0.022***	0.022***	0.022***
	(0.001)	(0.001)	(0.001)
age squared	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)
male	-0.005	-0.005	-0.005
	(0.004)	(0.004)	(0.004)
marital status	0.172***	0.172***	0.172***
	(0.004)	(0.004)	(0.004)
number of children	0.002	0.002	0.002
	(0.002)	(0.002)	(0.002)
savings	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)
employment status	✓	✓	✓
education categories	✓	✓	✓
income categories	✓	✓	✓
race categories	✓	✓	✓
metropolitan area	✓	✓	✓
year (dummy)	✓	✓	✓
N	68386	65777	68013
pseudo R^2	0.227	0.229	0.228

Marginal effects (at the mean). * $p<0.1$, ** $p<0.05$, *** $p<0.01$. Standard errors in parentheses. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Number of metropolitan area categories: 415. For second-generation immigrants, HO_{origin} denotes the aggregate homeownership rate in the country of origin of the second-generation immigrant's father in 2011 and is $\in (0,1)$. Difference to baseline: In the first column, we exclude all countries of origin that have been affected by wars between 1945-1994 (Isreal, Palestine, Croatia, and South Korea). In the second column, we exclude all countries that experienced a dictatorship during 1945-1994 (Portugal, Spain, and Greece). In the third column, we exclude countries of origin that are post-Soviet states (Lithuania, Estonia, and Latvia).

Table B4: Robustness Check (8)-(10): Systematic Selection of Migrants

Dependent Variable: Homeownership status of immigrant i						
	(1)	(2)	(3)	(4)	(5)	(6)
$HO_{HFCN,2010}$	0.071** (0.029)					
$HO_{HFCN,2010}^{age}$		0.072** (0.028)				
$HO_{HFCN,2010}^{income}$			0.037 (0.024)			
$HO_{HFCN,2017}$				0.066*** (0.018)		
$HO_{HFCN,2017}^{age}$					0.053** (0.022)	
$HO_{HFCN,2017}^{income}$						0.047*** (0.016)
age	✓	✓	✓	✓	✓	✓
age squared	✓	✓	✓	✓	✓	✓
male	✓	✓	✓	✓	✓	✓
marital status	✓	✓	✓	✓	✓	✓
number of children	✓	✓	✓	✓	✓	✓
savings	✓	✓	✓	✓	✓	✓
employment status	✓	✓	✓	✓	✓	✓
income categories	✓	✓	✓	✓	✓	✓
education categories	✓	✓	✓	✓	✓	✓
race categories	✓	✓	✓	✓	✓	✓
time-varying MSA FE	✓	✓	✓	✓	✓	✓
N	16249	16245	11755	23498	21347	16625
pseudo R^2	0.219	0.219	0.228	0.213	0.214	0.223

Marginal effects (at the mean). * p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Time-varying metropolitan area fixed effects: 415 MSAs x 24 years. In columns 1 and 4, the dependent variable equals the aggreagte homeownership rate in the country of origin in year 2010 and 2017, respectively (source: HFCN survey). In columns 2 and 5, $HO_{HFCN,year}^{age}$ denotes the homeownership rate in the country of origin matched to the age profile of the second generation immigrant i; five different age groups: 1 "16-34"; 2 "35-44"; 3 "45-54"; 4 "55-64"; and 5 "65+". In columns 3 and 6, $HO_{HFCN,year}^{income}$ denotes the homeownership rate in the country of origin matched to the income profile of the second generation immigrant i; seven different income groups: 1 "<1000"; 2 "1000-1499"; 3 "1500-1999"; 4 "2000-2499"; 5 "2500-3499"; 6 "3500-5499"; and 7 "5500+".

Table B5: Robustness Check (11): Location of Residence

	second-generation				first-generation
Dependent Variable: Homeownership status of immigrant i					
	all (baseline)	single	married $\neq$ background	married same background	married same background
	(1)	(2)	(3)	(4)	(5)
HO_{origin}	0.064**	0.073*	0.026	0.322*	0.438***
	(0.025)	(0.039)	(0.032)	(0.187)	(0.081)
male	-0.002	-0.027***	0.003	0.002	0.006
	(0.004)	(0.007)	(0.006)	(0.016)	(0.007)
marital status	0.183***				
	(0.004)				
age	0.023***	0.023***	0.020***	0.028***	0.030***
	(0.001)	(0.001)	(0.001)	(0.003)	(0.002)
age squared	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
number of children	0.002	-0.008**	0.012***	0.012*	0.020***
	(0.002)	(0.004)	(0.003)	(0.007)	(0.002)
savings	✓	✓	✓	✓	✓
employment status	✓	✓	✓	✓	✓
education categories	✓	✓	✓	✓	✓
income deciles	✓	✓	✓	✓	✓
saving proxies	✓	✓	✓	✓	✓
race categories	✓	✓	✓	✓	✓
metropolitan area	✓	✓	✓	✓	✓
year (dummy)	✓	✓	✓	✓	✓
N	64524	32372	13305	4464	36448
pseudo R^2	0.249	0.176	0.222	0.249	0.218

Marginal effects (at the mean). * $p<0.1$, ** $p<0.05$, *** $p<0.01$. Standard errors in parentheses. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Number of metropolitan area categories: 415. For second-generation immigrants, HO_{origin} denotes the aggregate homeownership rate in the country of origin of the second-generation immigrant's father in 2011 and is $\in (0,1)$. Difference to baseline: we exclude the metropolitan area and year dummies, instead we include a large set of 4,339 year per metropolitan area dummies (time-varying MSA fixed effects).

Table B6: Robustness Check (12): Location of Residence 2

Dependent Variable: Homeownership status of second-generation immigrant i			
	w/o MSA nor year dummies (1)	MCC×Year dummy (2)	Baseline plus HO_{MSA} (3)
HO_{origin}	0.047**	0.061***	0.086***
	(0.022)	(0.022)	(0.023)
male	-0.002	-0.001	-0.004
	(0.004)	(0.004)	(0.004)
marital status	0.185***	0.171***	0.173***
	(0.004)	(0.004)	(0.004)
age	0.023***	0.022***	0.022***
	(0.001)	(0.001)	(0.001)
age squared	-0.000***	-0.000***	-0.000****
	(0.000)	(0.000)	(0.000)
number of children	0.002	0.003	0.005**
	(0.002)	(0.002)	(0.002)
savings	✓	✓	✓
employment status	✓	✓	✓
education categories	✓	✓	✓
income categories	✓ ✓	✓	
race categories	✓	✓	✓
metropolitan central city per year (MCC×Year)			✓
HO_{MSA}			✓
year (dummy)			✓
N	68666	71118	68666
pseudo R^2	0.196	0.21	0.215

Marginal effects (at the mean). * p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Number of metropolitan area categories: 415. For second-generation immigrants, HO_{origin} denotes the aggregate homeownership rate in the country of origin of the second-generation immigrant's father in 2011 and is $\in (0,1)$. Difference to baseline: In the first column, we exclude the metropolitan area and year dummies. In the second column, we exclude the separate year and metropolitan area dummies, instead we include a large set of 4,339 year per metropolitan area dummies. In the third column, we exclude the separate year and metropolitan area dummies, instead we include a set of metropolitan central city status *per* year dummies. For households within metropolitan areas, metropolitan central city status specifies whether the housing unit is inside or outside the central city of the metropolitan area. In the fourth column, we add to the baseline specification a measure for housing affordability (HO_{MSA}), which is the homeownership rate at the metropolitan area, i.e. the fraction of household heads owning the dwelling they live in.

Table B7: Robustness Checks (13)-(15): Location of Residence 3

	Parental income Proxy 1	Parental income Proxy 2	Parental income Proxy 3
Dependent Variable: Homeownership status of second-generation immigrant i			
	(1)	(2)	(3)
HO_{origin}	0.079***	0.081***	0.065**
	(0.024)	(0.024)	(0.028)
male	-0.005	-0.005	-0.009
	(0.004)	(0.004)	(0.004)
marital status	0.172***	0.172***	0.173***
	(0.004)	(0.004)	(0.004)
age	0.022***	0.021***	0.022***
	(0.001)	(0.001)	(0.001)
age squared	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)
number of children	0.003	0.003	0.004
	(0.002)	(0.002)	(0.002)
avg. household income (by year) of first-generation immigrant group	0.025*** (0.007)		
avg. personal income (by year) of first-generation immigrant group		0.027*** (0.006)	
real GDP in the country of origin (PPPs, in mil. 2011US$)			0.000105 (0.00250)
savings	✓	✓	✓
employment status	✓	✓	✓
education categories	✓	✓	✓
income categories	✓	✓	✓
race categories	✓	✓	✓
metropolitan area	✓	✓	✓
year (dummy)	✓	✓	✓
N	68410	68422	60586
pseudo R^2	0.227	0.228	0.229

Marginal effects (at the mean). * p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Number of metropolitan area categories: 415. For second-generation immigrants, HO_{origin} denotes the aggregate homeownership rate in the country of origin of the second-generation immigrant's father in 2011 and is $\in (0, 1)$. Difference to baseline: In column 1, we add the yearly average household income of the group of first-generation immigrants that the parents of the second-generation immigrant i belong to. In column 2, we add the yearly average personal income of the group of first-generation immigrants that the parents of the second-generation immigrant i belong to. In column 3, we add real GDP per capita (PPP adjusted) prevailing in the country of origin (proxy for relative living standards/income across countries).

Table B8: Robustness Checks (16)-(18): Omitted Parental Income

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Dependent Variable: Homeownership status of second-generation immigrant i				
	GDP	Education	Wage	All
	(1)	(2)	(3)	(4)
HO_{origin}	0.065**	0.074***	0.055**	0.069**
	(0.028)	(0.025)	(0.025)	(0.030)
male	-0.009**	-0.009**	-0.009**	-0.009**
	(0.004)	(0.004)	(0.004)	(0.004)
marital status	0.173***	0.173***	0.173***	0.173***
	(0.004)	(0.004)	(0.004)	(0.004)
age	0.022***	0.022***	0.022***	0.022***
	(0.001)	(0.001)	(0.001)	(0.001)
age squared	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
number of children	0.004*	0.004*	0.004**	0.004**
	(0.002)	(0.002)	(0.002)	(0.002)
real GDP (PPP) (in country of origin)	-0.000 (0.002)			0.000 (0.003)
average years of schooling (in country of origin)		0.001 (0.001)		0.002 (0.001)
average wage of employees (in country of origin)			-0.066 (0.045)	-0.082* (0.047)
savings	✓	✓	✓	✓
employment status	✓	✓	✓	✓
education categories	✓	✓	✓	✓
income categories	✓	✓	✓	✓
race categories	✓	✓	✓	✓
metropolitan area	✓	✓	✓	✓
year (dummy)	✓	✓	✓	✓
N	60586	60586	60227	60227
pseudo R^2	0.229	0.229	0.229	0.229

Marginal effects (at the mean). * p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Number of metropolitan area categories: 415. For second-generation immigrants, HO_{origin} denotes the aggregate homeownership rate in the country of origin of the second-generation immigrant's father in 2011 and is $\in (0, 1)$. Difference to baseline: We include additional covariates at the country of origin level. In column 1, we add real GDP per capita (PPPs, in mil. 2011US\$) prevailing in the country of origin. In column 2, we add average years of schooling. In column 3, we add the share of labor income in GDP, the average wage of employees. In column 4, we add real GDP per capita (PPP adjusted), average years of schooling, and the average wage of employees.

Table B9: Robustness Checks (19)-(22): Covariates at Country-of-Origin Level

Dependent Variable: Homeownership status of second-generation immigrant i		
	(1)	(2)
HO_{origin}	0.061***	0.081***
	(0.024)	(0.025)
male		-0.005
		(0.004)
marital status		0.172***
		(0.004)
age		0.022***
		(0.001)
age squared		-0.000***
		(0.000)
number of children		0.001
		(0.002)
savings		-0.000
		(0.000)
employment status		✓
education categories		✓
income categories		✓
race categories		✓
metropolitan area	✓	✓
year (dummy)	✓	✓
N	63612	63612
pseudo R^2	0.044	0.227

Marginal effects (at the mean). * p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Number of metropolitan area categories: 415. For second-generation immigrants, HO_{origin} denotes the aggregate homeownership rate in the country of origin of the second-generation immigrant's father in 2011 and is $\in (0,1)$. Difference to baseline: We define a second-generation immigrant as someone who was born in the United States and whose parents, either father or mother, were born abroad.

Table B10: Robustness Check 23: Different Definition of Migrants

	second-generation				first-generation
Dependent Variable: Homeownership status of immigrant i					
	all (baseline)	single	married $\neq$ background	married same background	married same background
	(1)	(2)	(3)	(4)	(5)
HO_{origin}	0.065*	0.092**	0.032	0.314***	0.430**
	(0.037)	(0.045)	(0.027)	(0.111)	(0.202)
male	-0.005	-0.032***	0.004	0.001	0.003
	(0.005)	(0.007)	(0.004)	(0.007)	(0.009)
marital status	0.172***				
	(0.017)				
age	0.022***	0.022***	0.018***	0.023***	0.029***
	(0.003)	(0.005)	(0.001)	(0.003)	(0.002)
age squared	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
number of children	0.002	-0.007	0.009**	0.014**	0.021***
	(0.007)	(0.015)	(0.004)	(0.006)	(0.002)
savings	-0.000	-0.000	-0.000	-0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
employment status	✓	✓	✓	✓	✓
education categories	✓	✓	✓	✓	✓
income deciles	✓	✓	✓	✓	✓
saving proxies	✓	✓	✓	✓	✓
race categories	✓	✓	✓	✓	✓
metropolitan area	✓	✓	✓	✓	✓
year (dummy)	✓	✓	✓	✓	✓
N	68666	35252	22958	8673	38843
pseudo R^2	0.228	0.152	0.219	0.262	0.201

Marginal effects (at the mean). * p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Number of metropolitan area categories: 415. For second-generation immigrants, HO_{origin} denotes the aggregate homeownership rate in the country of origin of the second-generation immigrant's father in 2011 and is $\in (0,1)$. Difference to baseline: we use clustered standard errors at the country-of-origin level of the second-generation or first-generation immigrant i. In the baseline specification we use robust Huber-White sandwich standard errors because the clusteres are very unbalanced, and second, the number of clusters is too small (33).

Table B11: Robustness Check (24): Clustered Standard Errors (COO level)

	Dependent Variable: Homeownership status of immigrant i				
	second-generation				first-generation
	all (baseline)	single	married $\neq$ background	married same background	married same background
	(1)	(2)	(3)	(4)	(5)
HO_{origin}	0.065**	0.092**	0.032	0.314**	0.430***
	(0.030)	(0.042)	(0.029)	(0.143)	(0.106)
male	-0.005	-0.032***	0.004	0.001	0.003
	(0.006)	(0.011)	(0.005)	(0.012)	(0.010)
marital status	0.172***				
	(0.006)				
age	0.022***	0.022***	0.018***	0.023***	0.029***
	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)
age squared	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
number of children	0.002	-0.007	0.009**	0.014**	0.021***
	(0.004)	(0.006)	(0.004)	(0.007)	(0.003)
savings	✓	✓	✓	✓	✓
employment status	✓	✓	✓	✓	✓
education categories	✓	✓	✓	✓	✓
income deciles	✓	✓	✓	✓	✓
saving proxies	✓	✓	✓	✓	✓
race categories	✓	✓	✓	✓	✓
metropolitan area	✓	✓	✓	✓	✓
year (dummy)	✓	✓	✓	✓	✓
N	68666	35252	22958	8673	38843
pseudo R^2	0.228	0.152	0.219	0.262	0.201

Marginal effects (at the mean). * p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Number of metropolitan area categories: 415. For second-generation immigrants, HO_{origin} denotes the aggregate homeownership rate in the country of origin of the second-generation immigrant's father in 2011 and is $\in (0,1)$. Difference to baseline: we use clustered standard errors at the metropolitan area of residence of the second-generation or first-generation immigrant i.

Table B12: Robustness Check (25): Clustered Standard Errors (MSA level)

	Dependent Variable: Homeownership status of immigrant i						
	second-generation						first-generation
	all (baseline)	reduced (baseline)	all singles	reduced singles	married $\neq$ background	married same background	married same background
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
HO_{origin}	0.204	0.255	0.238	0.348**	0.192	1.113***	1.087**
	(0.154)	(0.163)	(0.153)	(0.152)	(0.205)	(0.349)	(0.542)
male	-0.016	-0.015	-0.082**	-0.082**	0.026	0.005	0.009
	(0.031)	(0.031)	(0.038)	(0.038)	(0.035)	(0.040)	(0.029)
marital status	0.550***	0.548***					
	(0.099)	(0.102)					
age	0.069***	0.068***	0.057***	0.056***	0.108***	0.083***	0.073***
	(0.017)	(0.017)	(0.020)	(0.021)	(0.009)	(0.013)	(0.005)
age squared	-0.000***	-0.000**	-0.000*	-0.000*	-0.001***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
number of children	0.008	0.004	-0.017	-0.020	0.053	0.048	0.053***
	(0.029)	(0.027)	(0.061)	(0.058)	(0.036)	(0.030)	(0.006)
savings	✓	✓	✓	✓	✓	✓	✓
employment status	✓	✓	✓	✓	✓	✓	✓
education categories	✓	✓	✓	✓	✓	✓	✓
income deciles	✓	✓	✓	✓	✓	✓	✓
saving proxies	✓	✓	✓	✓	✓	✓	✓
race categories	✓	✓	✓	✓	✓	✓	✓
metropolitan area	✓	✓	✓	✓	✓	✓	✓
year (dummy)	✓	✓	✓	✓	✓	✓	✓
N	68666	63612	35252	32568	22958	8673	38843
pseudo R^2	0.228	0.227	0.152	0.154	0.219	0.262	0.201

Probit estimation coefficients. * p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses. Dependent variable: equal to one if the second-generation immigrant is a homeowner, zero otherwise. Marital status dummy: equal to one if married and living with partner. Number of race categories: 21. Income measured in deciles, the first decile is the reference category. The education categories are: high school or less, college without degree, college +. The first category 'high school or less' is the reference category. The employment status categories are: unemployed, employed, not in labor force. 'Employed' is the reference category. Saving proxy: pre-tax income received from interest on saving accounts, certificates of deposit, money market funds, bonds, treasury notes, IRAs, and/or other investments which pay interest. Number of metropolitan area categories: 415. For second-generation immigrants, HO_{origin} denotes the aggregate homeownership rate in the country of origin of the second-generation immigrant's father in 2011 and is $\in (0,1)$. Difference to baseline: we use two-way clustered standard errors at the metropolitan area level of residence and the country of origin level of the second-generation or first-generation immigrant i. The baseline in Col.1 (Col.2)is significant at 19 (11) percent level. Singels in Col.3 are significant at the 12 percent level.

Table B13: Robustness Check (26): Two-way Clustered Standard Errors