

Home Ownership and the American Dream

Goodman and Mayer

Online Appendix

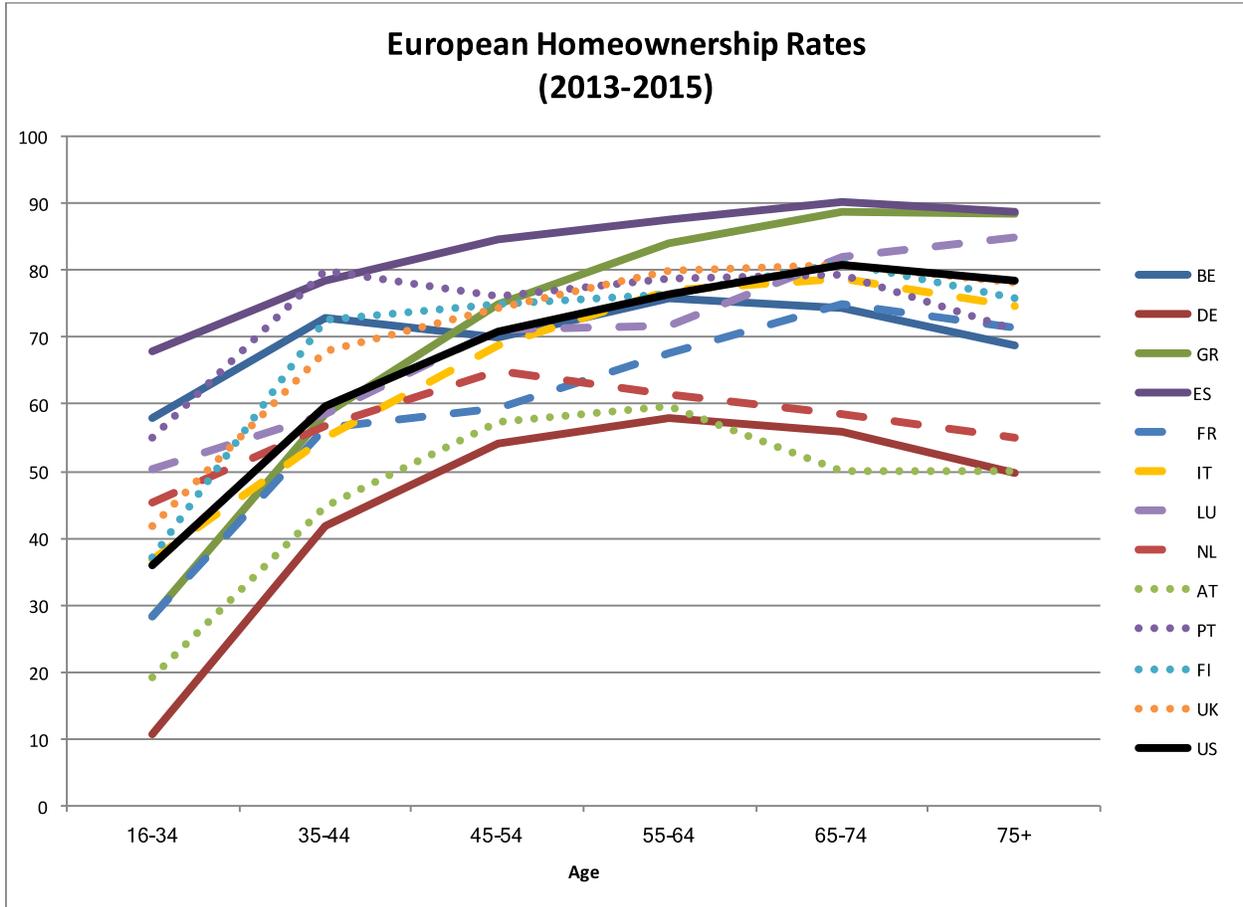
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Appendix Table A-1.1: Global Homeownership Rates by Country and Year, 1990-2015

	1990	1995	2000	2005	2010	2015
Australia	68.9	69.5	69.8	69.8	67.0	
Austria			56.0	51.6	57.4	55.7
Belgium		67.7	71.7	72.2	71.6	71.4
Brazil				74.0	74.4	
Bulgaria	89.8		96.5	85.4	86.9	82.3
Canada	62.6	63.6	65.8	67.1	66.9	63.7
Chile	58.6		65.8		64.3	62.3
China		65.0	73.0	82.3	84.3	89.7
Croatia	66.2			96.1	88.2	90.5
Cyprus			68.3	74.1	73.1	73.0
Czech Republic	38.4		47.0	73.5	78.7	78.0
Denmark	54.5		51.0	66.6	66.6	62.7
Estonia			85.0	87.8	85.5	81.5
Finland	67.0	65.4	61.0	71.8	74.3	72.7
France	54.4	54.7	54.8	61.8	62.0	64.1
Germany	37.3	36.3	40.5	53.3	53.2	51.9
Greece	78.7			74.3	77.2	75.1
Hungary			92.0	88.1	89.7	86.3
Iceland				83.0	81.3	77.8
India	86.3		87.7		86.6	
Ireland	80.0		78.0	78.2	73.3	70.0
Italy	64.2		69.0	72.8	72.6	72.9
Japan	63.2	59.5	64.9	63.1	62.4	64.9
Latvia	27.0		78.0	86.0	84.3	80.2
Lithuania			93.6	88.3	93.6	89.4
Luxembourg	70.0		66.6	74.6	68.1	73.2
Macedonia					90.5	90.6
Malta			74.1	79.6	79.5	80.8
Mexico	78.4	77.6	72.7	71.3	69.8	71.7
Netherlands		47.5	53.0	63.9	67.2	67.8
New Zealand				66.9		64.8
Norway			76.7	82.7	82.9	82.8
Poland				75.0	81.3	83.7
Portugal			64.0	74.4	74.9	74.8
Romania			97.2	82.2	97.6	96.4
Serbia			88.7			81.1

Singapore	87.5	90.0	92.0	91.1	87.2	90.8
Slovakia			49.2	82.1	90.0	89.3
Slovenia	68.0		82.3	83.2	78.1	76.2
South Africa				71.3	67.2	60.5
South Korea				55.6	54.2	56.0
Spain	77.8		82.0	86.3	79.8	78.2
Sweden	41.0	55.0	67.0	68.1	70.8	70.6
Switzerland	31.3		34.6	38.4	44.4	51.3
Taiwan	78.5		82.5		84.0	
Turkey			68.3	60.7	60.2	67.0
United Kingdom	65.8	67.3	69.1	69.2	65.7	63.5
United States	64.0	64.0	66.8	68.9	66.9	63.7

Appendix Figure A-1.1: Homeownership Rates by Age for the US and selected European Countries, 2013-2015



- BE** Belgium
- DE** Germany
- GR** Greece
- ES** Spain
- US** United States
- FR** France
- IT** Italy
- LU** Luxembourg
- NL** Netherlands
- AT** Austria
- PT** Portugal
- FI** Finland
- UK** United Kingdom

Sources for Global Homeownership Rates

Allen, J., J. Barlow, J. Leal, T. Maloutas, & L. Padovani. 2004. *Housing & Welfare in Southern Europe*. Malden, MA: Blackwell Pub.

Anonymous. 2014. "Study finds china's home ownership and housing vacancy rates are high." *Chinascoppe* 70: 42. <http://search.proquest.com/docview/1644565943?accountid=10226>

Australian Bureau of Statistics. 2011. *2011 Census Quickstats*, Data file. http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/quickstat/0?opendocument

European Central Bank. 2017. *Housing Finance and Consumption Network (HFCN): First Wave Statistical Tables*, April 2017. Available at: https://www.ecb.europa.eu/pub/economicresearch/researchnetworks/html/researcher_hfcn.en.html

European Central Bank. 2017. *Housing Finance and Consumption Network (HFCN): Second Wave Statistical Tables*. April 2017. Available at: https://www.ecb.europa.eu/pub/economic-research/research-networks/html/researcher_hfcn.en.html

European Mortgage Federation. 2016. *2003-2015 Hypostat*. April 2017. Available at: <https://hypo.org/emf/publications/hypostat/>

Eurostat, European Commission. 2017. *Distribution of population by tenure status, type of household and income group - EU-SILC survey[ilc_lvho02]*, Data file. Available at: <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>

Federal Reserve Bank of St. Louis. 2017. *Homeownership Rate for the United States*, Data file. <https://fred.stlouisfed.org/series/RHORUSQ156N>

Gan, Li. 2013. *Findings from China Household Finance Survey*, PowerPoint slides. <http://people.tamu.edu/~ganli/Report-English-Dec-2013.pdf>.

Huang, Youqin and William A. V Clark. 2002. "Housing Tenure Choice in Transitional Urban China: A Multilevel Analysis." *Urban Studies* 39: 7-32.

Instituto Nacional de Estadística y Geografía, Mexico. 2014. *Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) 1984-2014: Características de las viviendas que habitan los integrantes del hogar*, Data file. Available at: <http://www.beta.inegi.org.mx/proyectos/enchogares/regulares/enigh/tradicional/2014/default.html>

Kryger, Tony. 2009. "Home ownership in Australia data and trends." Parliament of Australia Research Paper no. 21 2008-2009, February. <http://www.aph.gov.au/binaries/library/pubs/rp/2008-09/09rp21.pdf>

Loudiyi, Ihsane. 2009. "Survey Results: Brazil Stays Strong in the face of the Crisis." *World Bank Growth and Crisis Blog*, October 14. <http://blogs.worldbank.org/growth/survey-results-brazil-stays-strong-face-crisis>

Ministerio de Desarrollo Social, Gobierno de Chile. 2016. *Casen 2013-2015 Vivienda: Síntesis de resultados*. http://observatorio.ministeriodesarrollosocial.gob.cl/documentos/Casen2013_Vivienda.pdf

National Statistics, Republic of China (Taiwan). 2010. *1990-2010 Statistical Tables – Housing Conditions (pdf)*, Data file. Available at: <https://eng.stat.gov.tw/public/Attachment/547155326GEYIEZG4.pdf>

Office for National Statistics. Social Survey Division. 2016. *Wealth and Assets Survey, Waves 1-4, 2006-2014: Secure Access*, Database. UK Data Service. 3rd Edition. SN: 6709. <http://doi.org/10.5255/UKDA-SN-6709-3>

Office of the Registrar General & Census Commissioner, India. 2011. *HH-4: Households By Ownership Status Of The Census Houses , Size Of The Household And Number Of Dwelling Rooms*, Data file. Available at: <http://www.censusindia.gov.in/2011census/Hlo-series/HH04.html>

Official Statistics of Japan. 2013. *Dwellings by Type of Dwelling (2 Groups), Tenure of Dwelling (6 Groups) and Year of Construction (14 Groups) – Japan*, Data file. Available at: <http://www.estat.go.jp/SG1/estat/ListE.do?bid=000001051892&cycode=0>

Singapore Department of Statistics. 2016. *M810401 - Resident Households By Tenancy, Annual*, Data file. Available at: <http://www.tablebuilder.singstat.gov.sg/publicfacing/createDataTable.action?refId=851>

Statistics Canada. 2017. *Dwelling characteristics and household equipment, by province (Canada)*. <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/famil133a-eng.htm>

Statistics Canada. 2015. *Figure 1: Homeownership rates, 1971 to 2006 Census and 2011 National Household Survey*, Plot. <http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-014-x/2011002/c-g/c-g01-eng.cfm>

Statistics Canada. 2010. *Table 203-0019 - Survey of household spending (SHS), dwelling characteristics at the time of interview, by province, territory and selected metropolitan areas, annual*, Database. Available at: <http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=2030019&tabMode=dataTable&p1=-1&p2=9&srchLan=-1>

Statistics Korea. 2011. *Results of the 2010 Population and Housing Census (Households and Housing Units)*. <http://kostat.go.kr/portal/eng/pressReleases/7/1/index.board?bmode=list&bSeq=&aSeq=&pageNo=1&rowNum=10&navCount=10&currPg=&sTarget=title&sTxt=>

Statistics Korea. 2016. *2015 Statistics of House Ownership Based on Administrative Data*. <http://kostat.go.kr/portal/eng/pressReleases/7/1/index.board?bmode=list&bSeq=&aSeq=&pageNo=1&rowNum=10&navCount=10&currPg=&sTarget=title&sTxt=>

Statistics New Zealand. 2013. *Tenure of household, for households in occupied private dwellings, 2001, 2006 and 2013 Censuses (RC, TA, AU)*, Data file. Available at: <http://nzdotstat.stats.govt.nz/wbos/Index.aspx#>.

Statistics South Africa. 2016. *General household survey 2007-2015 – Statistical Release PO318*. <https://www.statssa.gov.za/publications/P0318/P03182015.pdf>

Statistics South Africa. 2007. *General Household Survey July 2003-2006 Statistical release PO318*. <http://microdata.worldbank.org/index.php/catalog/923>

Wang, Feng. 2003. "Housing Improvement and Distribution in Urban China: Initial Evidence from China's 2000 Census." *China Review* 3: 121-143.

Yanyun Man, J., S. Zheng, & R. Ren. 2011. "Housing Policy and Housing Markets: Trends, Patterns, and Affordability." In *China's Housing Reform and Outcomes*, edited by J. Yanyun Man, 3-18. Cambridge, MA: Lincoln Institute of Land Policy.

Appendix Table A-2.1 Demographics and Household Composition

	AHS			
	1985	1995	2005	2015
Race of Householder				
White	81.1%	76.9%	72.3%	67.1%
Black	11.0%	11.8%	12.0%	12.9%
Asian, Pacific Islander	1.6%	2.4%	3.4%	4.8%
Hispanic	5.7%	7.9%	10.7%	13.2%
Other	0.5%	0.9%	1.6%	1.9%
Age of Householder				
15 - 24	6.4%	5.2%	5.5%	3.1%
25 - 34	22.5%	19.9%	17.1%	15.1%
35 - 44	20.4%	23.1%	20.6%	17.5%
45 - 54	14.5%	18.2%	20.7%	20.0%
55 - 64	14.9%	12.2%	15.6%	20.3%
65 - 74	12.8%	11.7%	10.2%	13.7%
75 - 84	7.0%	7.5%	7.6%	6.9%
85 +	1.7%	2.1%	2.7%	3.3%
Education Level of Householder				
Less than High School	25.9%	23.3%	19.7%	14.0%
High School	35.4%	37.9%	33.2%	30.5%
Some Post-Secondary	17.1%	10.3%	12.8%	15.7%
College Degree or Higher	21.5%	28.6%	34.3%	39.8%
Household Composition				
Living alone, male	9.2%	10.2%	11.8%	12.8%
Living alone, female	14.5%	14.4%	15.0%	15.1%
Married couple with kids	28.8%	26.0%	24.4%	19.7%
Married couple without kids	28.5%	27.2%	27.6%	29.3%
Male single householder, with kids	2.0%	2.8%	2.6%	2.6%
Male single householder, no kids	4.0%	4.6%	4.5%	5.8%
Female single householder, with kids	7.7%	9.3%	8.4%	7.3%
Female single householder, no kids	5.3%	5.4%	5.8%	7.5%
Source: American Housing Survey, 1985, 1995, 2005, and 2015				

Alternative Specifications of the Regression Correlates of Homeownership

A Flexible Income Term, Regional Variation, and Race/Year Interactions

Appendix Table A-2.2, the first column repeats the regression in the main text. Column 2 includes a more flexible income and income squared term. This slightly reduces the size of black and Hispanic dummy variables and suggests that 35-64 year olds have even lower predicted homeownership rates. More strikingly, the inclusion of the more flexible income variable substantially reduces the magnitude and statistical significance of the education variables, suggesting, not surprisingly, that the predominant impact of education on homeownership is through household earnings. There were few changes in other coefficients

We added geographic factors in Column 3. Unfortunately, the only geographic identifiers in the American Housing Survey data are the four regions: Northeast, Midwest, South, and West. Adding geography has little impact on most of the variables, although including region dummies, increases the homeownership differential between whites and blacks/Hispanics.

We also ran the regressions with interaction terms for race by year to understand how racial/ethnic differences in homeownership are changing over time (column 4). The interaction terms for all years 1995, 2005 and 2015 were negative for black families, and positive for Asian families. The 2015 interaction terms were very significant for these populations. That is, after controlling for demographics, the year dummy was always more negative for blacks and more positive for Asians. The coefficients were also positive for Hispanics in 2005 and 2015, but the results were never significant at the 99% level.

More Results by Race/Ethnicity

Appendix Table A-2.3 shows the results of running regressions separately for each race/ethnicity. For ease of comparison, we have also repeated the base regression. While all coefficients have the expected sign, a few important insights emerge from these regressions.

These results confirm what we saw in the regression with the interaction terms. For white families, the homeownership rate was 2.9 percent higher in 1995 and 6.1 percent higher in 2005 than can be accounted for by other factors and it was 0.7 percent lower in 2015. This 6.8 percent swing from 2005 to 2015 completely eliminated the homeownership gain since 1985. By comparison, the unconditional change in the homeownership rate for whites was a 2.5 percent increase from 1985-2015. This suggests that for white households (column 2), as for the US population as a whole (column 1), homeownership rates have fallen in the last 30 years, once we account for a variety of demographic and income variables.

For Hispanic families (column 4), the picture is similar; after accounting for demographics the homeownership rate in 2015 was roughly flat to 1985. For black families, the 1995 and 2005 dummies are far less positive than for white and Hispanic families, and the 2015 dummy is far more negative; after accounting for demographics the black homeownership rate is 7.4% lower in 2015 than in 1985. While much attention has been paid to low homeownership rates for blacks, this pattern continues to become more pronounced. For Asian families, the year dummies very positive in every period, and demonstrate that in 2015, correcting for demographics, the homeownership rate was 5.0 percent higher in 2015 than in 1985. In 2005, it was 10.7% higher. Thus, the homeownership rate for Asian families rose

more in the 1985-2005 period and declined less in the 2005-2015 period than for other racial/ethnic groups.

Results by Income Quartile

In Appendix Table A-2.4, we show the regression results by income quartile. That is, each year we sorted the observations by income quartile, so the results in column 1 represent the bottom quartile of household income in each American Household Survey year. While the thresholds moved a bit from year to year, the 2015 threshold was \$25,000 for the lower quartile (median of 13,000), \$51,000 for the second quartile (median of \$37,000), and \$94,000 for the third quartile (median of \$69,500). The top quartile had a median income of \$136,000.

There are a number of new results from this analysis. While a household that is married with children generally has a higher homeownership rate (versus married without children), that is not the case in the lowest quartile, where the homeownership rate is unrelated to the presence of children in the household. This result is not surprising. Whatever the aspiration to become a homeowner, it is surely harder to save for a downpayment when the low household income(s) must also support children.

One interesting finding is that income becomes much more important driver of homeownership for households within quartiles (column 1) than across quartiles (columns 2-5). In the bottom quartile, the coefficient on income is quite small and negative, possibly suggesting the impact of homeownership programs that are targeted to the lowest income households. The coefficient on income rises much higher for the middle two quartiles, where incremental earnings may make a big difference in saving for a home. Income has a much smaller impact on homeownership for households in the top quartile.

In all four regressions, the homeownership rate for blacks, Hispanics and Asians is lower than for whites (the base), although the racial differences are much narrower in the top quartile. For example, the coefficient for Hispanic families is 17.0 to 18.5 percent lower than for whites in the first-three quartiles; it is about one-half of that in the top quartile. The results for black and Asian families are similar, the coefficient on race/ethnicity is about one-half as large in the top quartile as it was in the bottom three quartiles. The fact that race is correlated with homeownership even for the highest income quartile is striking in that these households earn at least 80 percent above the median income and thus should have financial resources to become homeowners.

The impact of other demographic variables also declines for the top quartile income families. Coefficients are 40-50 percent smaller in magnitude for working age households from ages 25 to 64.

Finally, the highest quartile experienced the smallest jump in homeownership from 1985 to 2005, whereas the drop in the homeownership rate was roughly 7.0% from 2005 to 2015 for all quartiles. Thus, relative to 1985 and after accounting for demographics, the homeownership rate of the top quartile is down by almost 3.0%. By contrast, the bottom quartile is down by less than 1%.

Appendix Table A-2.2 Regressions: Results with Alternative/Additional Variables

	Base		Income, Income^2		Geographic Region		Race * Year Interaction	
Intercept	0.66628	***	0.88434	***	0.61433	***	0.66592	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
Non-Hispanic black HHer	-0.15330	***	-0.14992	***	-0.16389	***	-0.13337	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
Hispanic HHer	-0.18876	***	-0.17992	***	-0.17541	***	-0.19922	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
Asian/PI HHer	-0.15455	***	-0.15998	***	-0.13370	***	-0.20353	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
Other race	-0.14127	***	-0.13729	***	-0.13391	***	-0.12722	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
Log of HH income	0.02976	***	.		0.03039	***	0.02971	***
	(<.0001)				(<.0001)		(<.0001)	
Income (000)	.		0.00126	***	.		.	
			(<.0001)					
Income (000) squared	.		-0.00000	***	.		.	
			(<.0001)					
HHer aged 15-24	-0.56348	***	-0.56742	***	-0.56949	***	-0.56305	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
HHer aged 25-34	-0.38944	***	-0.39206	***	-0.39289	***	-0.38943	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
HHer aged 35-44	-0.22215	***	-0.23391	***	-0.22440	***	-0.22230	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
HHer aged 45-54	-0.12445	***	-0.14466	***	-0.12579	***	-0.12446	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
HHer aged 55-64	-0.04940	***	-0.06369	***	-0.05014	***	-0.04914	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
HHer aged 75-84	0.00685		0.00783	*	0.00724		0.00684	
	(0.149)		(0.097)		(0.126)		(0.150)	
HHer aged 85 or more	-0.03263	***	-0.03396	***	-0.03234	***	-0.03230	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
Less than HS	-0.10006	***	-0.06742	***	-0.10792	***	-0.10070	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
HS grad	-0.04492	***	-0.01399	***	-0.04914	***	-0.04506	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
Some postsec. ed.	-0.01929	***	0.00542		-0.02154	***	-0.01918	***
	(<.0001)		(0.103)		(<.0001)		(<.0001)	
AHS 1995	0.02501	***	0.02242	***	0.02371	***	0.02842	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
AHS 2005	0.05808	***	0.04979	***	0.05542	***	0.05768	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
AHS 2015	-0.01427	***	-0.02222	***	-0.01849	***	-0.01367	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
Male living alone	-0.25886	***	-0.24178	***	-0.25609	***	-0.25881	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
Female living alone	-0.23834	***	-0.21948	***	-0.23603	***	-0.23813	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
Married, with kids	0.06418	***	0.06101	***	0.06437	***	0.06441	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	
Single male (kids/no kids)	-0.16952	***	-0.16254	***	-0.16520	***	-0.16936	***
	(<.0001)		(<.0001)		(<.0001)		(<.0001)	

Single female, with kids	-0.20112 *** (<.0001)	-0.18617 *** (<.0001)	-0.19684 *** (<.0001)	-0.20129 *** (<.0001)
Single female, no kids	-0.16962 *** (<.0001)	-0.15534 *** (<.0001)	-0.16401 *** (<.0001)	-0.16949 *** (<.0001)
Midwest region	.	.	0.07580 *** (<.0001)	.
South region	.	.	0.08505 *** (<.0001)	.
West region	.	.	0.00830 ** (0.010)	.
Race (black) X 1995 interaction term	.	.	.	-0.01893 * (0.044)
Race (hisp) X 1995 interaction term	.	.	.	-0.01094 (0.354)
Race (asian) X 1995 interaction term	.	.	.	0.02849 (0.183)
Race (otherrace) X 1995 interaction term	.	.	.	-0.05399 (0.140)
Race (black) X 2005 interaction term	.	.	.	-0.01738 * (0.058)
Race (hisp) X 2005 interaction term	.	.	.	0.01623 (0.140)
Race (asian) X 2005 interaction term	.	.	.	0.05211 ** (0.008)
Race (otherrace) X 2005 interaction term	.	.	.	0.00049 (0.988)
Race (black) X 2015 interaction term	.	.	.	-0.03839 *** (<.0001)
Race (hisp) X 2015 interaction term	.	.	.	0.02146 * (0.042)
Race (asian) X 2015 interaction term	.	.	.	0.06866 *** (0.000)
Race (otherrace) X 2015 interaction term	.	.	.	-0.01383 (0.660)
R-squared	0.260	0.269	0.267	0.261

* = Significant at the 0.1 level

** = Significant at the 0.01 level

*** = Significant at the 0.001 level

Appendix Table A-2.3 Regressions: Results by Race/Ethnicity

	Base	White HH	Black HH	Asian HH	Hispanic HH
Intercept	0.66628 *** (<.0001)	0.64845 *** (<.0001)	0.73174 *** (<.0001)	0.43301 *** (<.0001)	0.44814 *** (<.0001)
Non-Hispanic black HHer	-0.15330 *** (<.0001)	.	.	.	.
Hispanic HHer	-0.18876 *** (<.0001)	.	.	.	.
Asian/PI HHer	-0.15455 *** (<.0001)	.	.	.	.
Other race	-0.14127 *** (<.0001)	.	.	.	.
Log of HH income	0.02976 *** (<.0001)	0.02917 *** (<.0001)	0.02430 *** (<.0001)	0.03142 *** (<.0001)	0.03758 *** (<.0001)
HHer aged 15-24	-0.56348 *** (<.0001)	-0.59339 *** (<.0001)	-0.53077 *** (<.0001)	-0.46429 *** (<.0001)	-0.46861 *** (<.0001)
HHer aged 25-34	-0.38944 *** (<.0001)	-0.37362 *** (<.0001)	-0.46382 *** (<.0001)	-0.40733 *** (<.0001)	-0.38514 *** (<.0001)
HHer aged 35-44	-0.22215 *** (<.0001)	-0.20541 *** (<.0001)	-0.29583 *** (<.0001)	-0.20171 *** (<.0001)	-0.23947 *** (<.0001)
HHer aged 45-54	-0.12445 *** (<.0001)	-0.11507 *** (<.0001)	-0.16764 *** (<.0001)	-0.11680 *** (<.0001)	-0.13403 *** (<.0001)
HHer aged 55-64	-0.04940 *** (<.0001)	-0.04391 *** (<.0001)	-0.07572 *** (<.0001)	-0.00783 (0.758)	-0.05211 ** (0.001)
HHer aged 75-84	0.00685 (0.149)	-0.00048 (0.924)	0.05977 *** (0.000)	-0.11153 ** (0.003)	0.05757 ** (0.010)
HHer aged 85 or more	-0.03263 *** (<.0001)	-0.05281 *** (<.0001)	0.09328 *** (0.000)	-0.09577 (0.104)	0.12051 *** (0.000)
Less than HS	-0.10006 *** (<.0001)	-0.06928 *** (<.0001)	-0.20507 *** (<.0001)	-0.22040 *** (<.0001)	-0.17447 *** (<.0001)
HS grad	-0.04492 *** (<.0001)	-0.02513 *** (<.0001)	-0.14572 *** (<.0001)	-0.09866 *** (<.0001)	-0.10538 *** (<.0001)
Some postsec. ed.	-0.01929 *** (<.0001)	-0.01156 ** (0.002)	-0.09419 *** (<.0001)	-0.00873 (0.653)	-0.01683 (0.216)
AHS 1995	0.02501 *** (<.0001)	0.02936 *** (<.0001)	0.00512 (0.584)	0.05765 ** (0.007)	0.02162 * (0.070)
AHS 2005	0.05808 *** (<.0001)	0.06168 *** (<.0001)	0.02861 ** (0.002)	0.10734 *** (<.0001)	0.07431 *** (<.0001)
AHS 2015	-0.01427 *** (<.0001)	-0.00685 * (0.039)	-0.07354 *** (<.0001)	0.04955 ** (0.009)	0.00414 (0.698)
Male living alone	-0.25886 *** (<.0001)	-0.25842 *** (<.0001)	-0.30319 *** (<.0001)	-0.22957 *** (<.0001)	-0.23466 *** (<.0001)
Female living alone	-0.23834 *** (<.0001)	-0.23687 *** (<.0001)	-0.27616 *** (<.0001)	-0.14508 *** (<.0001)	-0.25064 *** (<.0001)
Married, with kids	0.06418 *** (<.0001)	0.07050 *** (<.0001)	0.04327 *** (0.000)	0.06792 *** (<.0001)	0.02840 ** (0.008)

Single male (kids/no kids)	-0.16952 *** (<.0001)	-0.17076 *** (<.0001)	-0.20027 *** (<.0001)	-0.09129 *** (0.000)	-0.19054 *** (<.0001)
Single female, with kids	-0.20112 *** (<.0001)	-0.20844 *** (<.0001)	-0.20782 *** (<.0001)	-0.02876 (0.345)	-0.21599 *** (<.0001)
Single female, no kids	-0.16962 *** (<.0001)	-0.17247 *** (<.0001)	-0.19189 *** (<.0001)	-0.11042 *** (<.0001)	-0.17328 *** (<.0001)
Number of regressors in model	24	20	20	20	20
R-squared	0.260	0.223	0.239	0.203	0.192

* = Significant at the 0.1 level

** = Significant at the 0.01 level

*** = Significant at the 0.001 level

Appendix Table A-2.4 Regressions: Results by Income Quartile

	Base	Bottom Income Quartile	2nd Income Quartile	3rd Income Quartile	Top Income Quartile
Intercept	0.66628 *** (<.0001)	0.92213 *** (<.0001)	-0.84222 *** (<.0001)	-1.28667 *** (<.0001)	0.39824 *** (<.0001)
Non-Hispanic black HHer	-0.15330 *** (<.0001)	-0.14375 *** (<.0001)	-0.15054 *** (<.0001)	-0.14397 *** (<.0001)	-0.07241 *** (<.0001)
Hispanic HHer	-0.18876 *** (<.0001)	-0.18422 *** (<.0001)	-0.18380 *** (<.0001)	-0.16977 *** (<.0001)	-0.08685 *** (<.0001)
Asian/PI HHer	-0.15455 *** (<.0001)	-0.21623 *** (<.0001)	-0.18646 *** (<.0001)	-0.18725 *** (<.0001)	-0.07652 *** (<.0001)
Other race	-0.14127 *** (<.0001)	-0.14139 *** (<.0001)	-0.11144 *** (<.0001)	-0.11310 *** (<.0001)	-0.12216 *** (<.0001)
Log of HH income	0.02976 *** (<.0001)	-0.00574 *** (<.0001)	0.16723 *** (<.0001)	0.20135 *** (<.0001)	0.04969 *** (<.0001)
HHer aged 15-24	-0.56348 *** (<.0001)	-0.52505 *** (<.0001)	-0.62922 *** (<.0001)	-0.59244 *** (<.0001)	-0.50915 *** (<.0001)
HHer aged 25-34	-0.38944 *** (<.0001)	-0.45752 *** (<.0001)	-0.50768 *** (<.0001)	-0.37736 *** (<.0001)	-0.24635 *** (<.0001)
HHer aged 35-44	-0.22215 *** (<.0001)	-0.32503 *** (<.0001)	-0.34769 *** (<.0001)	-0.22652 *** (<.0001)	-0.11980 *** (<.0001)
HHer aged 45-54	-0.12445 *** (<.0001)	-0.21512 *** (<.0001)	-0.21287 *** (<.0001)	-0.13082 *** (<.0001)	-0.06499 *** (<.0001)
HHer aged 55-64	-0.04940 *** (<.0001)	-0.08508 *** (<.0001)	-0.08232 *** (<.0001)	-0.05505 *** (<.0001)	-0.02531 *** (0.000)
HHer aged 75-84	0.00685 (0.149)	0.02082 ** (0.006)	-0.00987 (0.283)	0.01299 (0.290)	-0.00478 (0.707)
HHer aged 85 or more	-0.03263 *** (<.0001)	-0.01684 * (0.093)	-0.04917 *** (0.001)	-0.03724 * (0.083)	-0.10532 *** (<.0001)
Less than HS	-0.10006 *** (<.0001)	-0.05418 *** (<.0001)	-0.00065 (0.927)	0.00266 (0.711)	-0.03811 *** (<.0001)
HS grad	-0.04492 *** (<.0001)	-0.01616 * (0.026)	0.01775 ** (0.003)	0.02262 *** (<.0001)	0.00487 (0.225)
Some postsec. ed.	-0.01929 *** (<.0001)	-0.00613 (0.506)	0.01409 * (0.056)	0.03236 *** (<.0001)	-0.00045 (0.923)
AHS 1995	0.02501 *** (<.0001)	0.03795 *** (<.0001)	0.01405 * (0.025)	0.02136 *** (0.000)	0.02067 *** (<.0001)
AHS 2005	0.05808 *** (<.0001)	0.06123 *** (<.0001)	0.05365 *** (<.0001)	0.06222 *** (<.0001)	0.03764 *** (<.0001)
AHS 2015	-0.01427 *** (<.0001)	0.00095 (0.879)	-0.01034 * (0.097)	-0.01418 * (0.019)	-0.02937 *** (<.0001)
Male living alone	-0.25886 *** (<.0001)	-0.25210 *** (<.0001)	-0.17721 *** (<.0001)	-0.19400 *** (<.0001)	-0.24221 *** (<.0001)
Female living alone	-0.23834 *** (<.0001)	-0.24307 *** (<.0001)	-0.13652 *** (<.0001)	-0.14019 *** (<.0001)	-0.14338 *** (<.0001)
Married, with kids	0.06418 ***	-0.01856 *	0.06252 ***	0.07501 ***	0.05397 ***

Single male (kids/no kids)	(<.0001)	(0.057)	(<.0001)	(<.0001)	(<.0001)
	-0.16952 ***	-0.15235 ***	-0.13068 ***	-0.15920 ***	-0.19113 ***
Single female, with kids	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(<.0001)
	-0.20112 ***	-0.20558 ***	-0.07833 ***	-0.08475 ***	-0.10969 ***
Single female, no kids	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(<.0001)
	-0.16962 ***	-0.16535 ***	-0.12970 ***	-0.15140 ***	-0.16302 ***
Number of regressors in model	24	24	24	24	24
R-squared	0.260	0.229	0.253	0.201	0.163
Income quartile threshold (2015 \$)					
1985		24,105	47,335	81,959	
1995		24,987	47,415	86,066	
2005		25,908	53,740	94,474	
2015		25,000	51,000	94,000	
* = Significant at the 0.1 level					
** = Significant at the 0.01 level					
*** = Significant at the 0.001 level					