This PDF is a selection from a published volume from the National Bureau of Economic Research

Volume Title: Measuring Distribution and Mobility of Income and Wealth

Volume Authors/Editors: Raj Chetty, John N. Friedman, Janet C. Gornick, Barry Johnson, and Arthur Kennickell, editors

Volume Publisher: University of Chicago Press

Volume ISBNs: 978-0-226-81603-6 (cloth), 978-0-226-81604-3 (electronic)

Volume URL: https://www.nber.org/books-and-chapters/measuring-distribution-and-mobili ty-income-and-wealth

Conference Date: March 5-6, 2020

Publication Date: November 2022

Chapter Title: Intergenerational Home Ownership in France over the Twentieth Century

Chapter Author(s): Bertrand Garbinti, Frédérique Savignac

Chapter URL: https://www.nber.org/books-and-chapters/measuring-distribution-andmobility-income-and-wealth/intergenerational-home-ownership-franceover-twentieth-century

Chapter pages in book: p. 411 – 435

# Intergenerational Home Ownership in France over the Twentieth Century

Bertrand Garbinti and Frédérique Savignac

#### 13.1 Introduction

In a global context of rising inequality in many developed countries, social mobility is a crucial issue. A rising correlation in the home ownership status of parents and their children, and more broadly, between the income and wealth of two generations may be viewed as a threat to social mobility and is therefore of primary interest from a policy standpoint. Home ownership plays a crucial role in personal wealth accumulation behavior as well as in the design of public policies in many countries (OECD 2011), including France (Gobillon, Lambert, and Pellet 2019). However, recent studies have shown that the home ownership rate is declining for younger generations compared to older ones at the same age (see Choi, Zhu, and Goodman 2018).

Bertrand Garbinti is a researcher and assistant professor at CREST-Institut Polytechnique Paris.

Frédérique Savignac is head of the Microeconomic Analysis Division at the Banque de France.

A companion paper (Garbinti and Savignac 2020) studies more broadly intergenerational wealth correlation in France. We thank Arthur Kennickell, as well as the participants at the CRIW-NBER conference on "Measuring and Understanding the Distribution and Intra/ Inter-Generational Mobility of Income and Wealth," Bethesda, Maryland, March 5–6, 2020, for fruitful discussions. We also thank Salomé Fofana, Thomas Lloyd, and Sylvie Tarrieu for their excellent research assistance and Barbara Castillo Rico for her great help harmonizing the first waves of the French Wealth Survey at an early stage of this project. This work is supported by a public grant overseen by the French National Research Agency (ANR) as part of the "Investissements d'Avenir" program (LabEx Ecodec/ANR-11-LABX-0047). This chapter reflects the opinions of the authors and does not necessarily express the views of their institution. In particular, this chapter does not necessarily reflect the position of the Banque de France or the Eurosystem. For acknowledgments, sources of research support, and disclosure of the authors' material financial relationships, if any, please see https://www.nber.org/books -and-chapters/measuring-distribution-and-mobility-income-and-wealth/intergenerational -homeownership-france-over-20th-century. for the US;<sup>1</sup> Cribb, Hood, and Joyce 2016 for the UK). For France, Bonnet, Garbinti, and Grobon (2018) show that the apparent stable home ownership rate for young households hides a diverging pattern between low-income and high-income households. Such a pattern may be viewed as an obstacle to upward social mobility for younger cohorts. Indeed, at the macro level, housing assets account for a large share of household wealth.<sup>2</sup> Moreover, in many developed countries being a homeowner typically means being wealthier than a renter, since it reflects a higher position in the wealth distribution (see the companion paper Garbinti and Savignac 2020).

There are many reasons why people may benefit from becoming homeowners. First, it is seen as a way to be insured against negative income shocks due to illness, unemployment, or retirement (Angelini, Laferrère, and Weber 2013), or to hedge against inflation (Malmendier and Steiny 2017) or against increases in house prices (Agarwal, Hu, and Huang 2016). Second, the empirical literature highlights the positive externalities associated with home ownership status, with children who grew up in owner-occupied homes typically attaining higher educational levels or having better cognitive and behavioral outcomes (Green and White 1997; Haurin, Parcel, and Haurin 2002; Spilerman and Wolff 2012). Third, for many families it can be perceived as a symbol of social success and family stability (Henretta 1984; Bourdieu 2000). Becoming a homeowner has been put forward as a key stepping stone to achieving the American Dream (Kulkarni and Malmendier 2015; Goodman and Mayer 2018).

This chapter studies the evolution of the intergenerational correlation in housing tenure status in France. It relies on cohorts covering a large part of the twentieth century. We provide new insights on the evolution of this correlation across children cohorts born from 1933 to 1992. Based on the French Wealth Survey (Enquête Patrimoine) conducted by the Institut National de la Statistique et des Etudes Economiques (French National Statistical Institute, Insee), we study the home ownership status of the second generation for various age categories, which provides an insight into the persistence of the intergenerational correlation over the life cycle of the different cohorts. More precisely, we estimate the intergenerational correlation in tenure status at the family level.<sup>3</sup> We use the information provided by the survey respondent (both for the household reference person and his/her partner—if any) regarding the asset holdings of the parents when she/he was 14 years old. In order to have a precise estimate, we define cohort groups, and consider

<sup>1.</sup> For the US, Fritsch and Heimer (2020) document a correlation between the homeownership rates of young adults and the mortgage experiences of their parents, especially during the financial crisis, which could explain part of this decline.

<sup>2.</sup> In the case of France, the share of housing (net of debt) increased from about 30 percent to 50 percent in total personal wealth over the period 1970–2014 (Garbinti, Goupille-Lebret, and Piketty 2021).

<sup>3.</sup> As robustness tests, we also estimate individual level regressions.

five-year cohorts and 10-year cohorts. We estimate the probability of being a homeowner at three life-cycle stages (25–34 years old, 35–44 years old, and 45–54 years old), accounting for year cohort specific effects.

Most papers studying the intergenerational correlation in home ownership status are not able to compare the evolution of the intergenerational correlation over time. Moreover, they focus on the home ownership status of the children at a fixed age, or by controlling for age (e.g., Charles and Hurst 2003 and Choi, Zhu, and Goodman 2018 for the US; Mulder et al. 2015 for several European countries including France; and Helderman and Mulder 2007 for the Netherlands). Blanden and Machin (2017) offer one exception: they study the intergenerational correlation in the UK for two children cohorts (born in 1958 and 1970) and find evidence of an increasing intergenerational correlation in tenure status over time.<sup>4</sup>

We document four main results.

First, we find a significant correlation between the home ownership status of parents and that of their children. For instance, children born between 1973 and 1977, whose parents were homeowners, are about 38 percentage points more likely to be homeowners when aged between 34 and 45 years old, compared to children whose parents were not homeowners. We compare our estimates with those obtained by Blanden and Machin (2017) for the UK. We find higher intergenerational correlation in France: the gap in home ownership between children whose parents were not homeowners and children whose parents were homeowners is about 0.23 to 0.25 for the 1958 cohort, while their estimate for the UK lies between 0.13 and 0.14. Such a gap for France is close to the results obtained by Charles and Hurst (2003) for the US for similar cohorts. For the cohort born in 1970, Blanden and Machin (2017) find that the gap lies between 0.20 and 0.23 for the UK, while we obtain an estimate of 0.28 to 0.29 for France.

Second, the intergenerational correlation is increasing over time when we consider children's home ownership status at 35–44 or at 45–54 years old. We find significant negative and decreasing cohort-specific effects compared to the 1973–77 reference cohort. For instance, the probability of being a homeowner between 35 and 44 years old decreases from about 45 percent for the 1943–52 cohort to about 30 percent for the 1973–82 cohort, for children whose parents were not homeowners; while it remains quite stable for children whose parents were homeowners (around 65 percent). In other words, our results show that the increasing intergenerational correlation over cohorts offsets the decline in the probability of being a homeowner when parents are nonhomeowners.

Third, the effect of parents' tenure status is persistent over the children's life cycle. The estimated intergenerational correlation in home ownership

<sup>4.</sup> The home ownership status of the children is however looked at a fixed age (42 years old). See also Castillo-Rico (2020) for another approach based on the date of purchase of the main residence.

status is statistically significant for all three age groups and seems to follow an inverted U-shape pattern.

Fourth, we investigate the potential sources of the intergenerational correlation. We find significant intergenerational correlation in tenure status for children who did not receive any gift or inheritance. For children who received intergenerational transfers, the parental tenure status still plays a role in the home ownership rate. It suggests that other factors such as the intergenerational income correlation or the transmission of preferences might also explain this intergenerational correlation.

We conduct various robustness tests (considering several cohort groupings, household level versus individual level estimates, linear probability model versus logistic regressions, etc.) which lead to similar conclusions.

This chapter is organized as follows. In section 13.2, we provide an overview of the evolution of the home ownership rate in France. Section 13.3 presents the data we use. Our empirical design is detailed in section 13.4. Our estimates of the intergenerational correlation in tenure status are presented in section 13.5. Section 13.6 discusses the sources of the intergenerational correlation. Section 13.7 concludes.

#### 13.2 Home Ownership Rate in France

After World War II, the home ownership rate rose considerably in France, like in other OECD countries. In 1955, 35 percent of households were homeowners. This rate increases over the 60s and 70s due to the various housing policies implemented by governments (Bonvalet and Bringé 2013). In the early 80s more than half of the households (55 percent) were homeowners. Since then, the home ownership rate slightly increased over the 2000s and leveled off at 58 percent in 2019. In particular, the home ownership rate did not decrease after the financial crisis in France, in contrast with the sharp decline observed in the US.<sup>5</sup> In line with these trends, the French National Statistical Institute (Insee 2017) documents that half of the households with a reference person from the 1924 cohort were homeowners at 47 years old while about half of those from the cohorts born in 1964 and afterwards were homeowners at 35–39 years old.

However, inequalities have increased in first-time home ownership over the past 40 years. Bonnet, Garbinti, and Grobon (2018) find that home ownership increases among wealthier households and decreases among the most modest: 32 percent of young low-income households were homeowners in 1973, as compared to only 16 percent in 2013. In contrast, the share of owners among young well-off households increased over the period: in 2013, 66 percent of them were owners, as compared to 45 percent in 1973.

<sup>5.</sup> The US home ownership rate leveled at 69 percent in 2006, and then continuously dropped to about 63 percent in 2016. In 2020, it was back to about 67 percent (US Census Bureau).

The authors argue that these trends are driven by both macroeconomic and institutional factors (real estate prices, interest rates, term of loans granted) and by changes in family structure and by the role of family support (such as gift assistance, inheritance and other forms of aid), which played an important part in the  $2000s.^6$ 

This chapter aims at studying the role of parental tenure status as a determinant of children's tenure status and at investigating possible changes over time.

# 13.3 Data and Definitions

#### 13.3.1 Data Source

This chapter is based on the data and sample selection, which are extensively presented in the companion paper, Garbinti and Savignac (2020). We use all waves (i.e., 1986, 1992, 1998, 2004, 2009, 2014, and 2017) of the French Wealth Survey. This survey enables us to link the home ownership status of two generations for several cohorts.

As the Survey of Consumer Finances (SCF) does for the US, this survey aims at measuring household wealth and its components (housing and financial assets, debt) and collects detailed information on the household composition and background history. It also collects information on whether the parents of the household (i.e., for both the reference person and her/ his partner—if any) were owners of their main residence when the reference person was 14 years old, and if they were owners of other real estate assets. More precisely, the information regarding the real estate assets of the parents during childhood is elicited with the following question: "During the childhood of [the reference person], were the parents [of the reference person] owners of:

- their main residence (Yes/No)
- any other real estate property (Yes/No)?"

A similar question is also asked for the partner of the reference person.

#### 13.3.2 Sample Definition

We restrict the sample to cohorts born before 1993 (i.e., who are at least 25 years old in the last wave of the survey, in 2017) and exclude cohorts born before 1933 with only a few observations. In order to keep precise estimates given our sample size, we then define cohort groups based on the year of birth of the household's reference person that we group in two alternative

<sup>6.</sup> See also Arrondel, Garbinti, and Masson (2014) for an investigation of the impact of gift and inheritance on the probability to become homeowner over the life cycle.

ways: five-year cohorts and 10-year cohorts for robustness tests. When considering five-year cohorts, we need to drop the cohorts born before 1943 due to a limited number of observations for these five-year cohorts. Considering 10-year cohorts reduces the overall number of cohorts but allows us to include cohorts born between 1933 and 1942 (see table 13.1 for sample statistics at the household level by five-year cohorts).

## 13.3.3 Housing Tenure Status

In our baseline analysis, we define children's and parents' tenure status at the family level.<sup>7</sup> For children, the available information regarding asset holdings is at the household level. As explained above, the information regarding the asset holdings of the parents is collected for both the reference person and his/her partner. For couples, we define the home ownership status of the parents in the following way: parents are considered to be homeowners if at least one of the members of the couple reports that their parents were homeowners during his/her childhood.<sup>8</sup>

Based on the survey questions about parents' asset holdings during childhood, four categories of parental tenure status can be defined. They are reported by cohorts in table 13.1, with the percentage of households in each category. Parents with no real estate amount to about 27 percent to 55 percent of the sample, while 41 percent to 55 percent of the five-year cohorts have parents that were owners of their main residence. About 9 percent to 17 percent of them were also owners of other real estate properties. A residual category of parents (3–4 percent of each five-year cohort) were owners of other real estate properties while renting their main residence. We add them to the parents that did not have any real estate property, and define this category as "nonhomeowner parents."<sup>9</sup>

# 13.3.4 Life-Cycle Positions

Charles and Hurst (2003) and Boserup et al. (2017a) point out the importance of the life-cycle positions of both parents and children when measuring intergenerational wealth correlations. In our case, we observe the home ownership status of the household at the time of the survey, covering thus several cohorts and age categories, while the home ownership status of the parents is measured at a fixed age. In order to provide some insights into the possible differences in home ownership correlation across the children life-cycle position, we define three age categories—25–34, 35–44, and 45–54 years old—at which we observe the home ownership status of the children.

<sup>7.</sup> In section 13.5.4 we conduct individual-level analysis in order to account for changes in family structure over time.

<sup>8.</sup> Compared to Charles and Hurst (2003) who consider correlation between fathers' and sons' family, we account for the fact that part of the asset ownership of couple may come from intergenerational correlation coming from the family of each member of the couple.

<sup>9.</sup> When excluding this category of parents, our main results are not affected.

Table 13.1 Sampl	Sample statistics											
Cohorts	1928–32	1933–37	1938-42	1943-47	1948–52	1953–57	1958–62	1963–67	1968–72	1973–77	1978–82	1983–87
Number of observations	109	455	1,042	2,103	3,284	4,103	4,695	5,909	4,821	3,241	2,301	1,391
Proportion (weighted)	2%	3%	%9	9%	12%	13%	15%	14%	10%	8%	5%	3%
Age group 25–34 years old	0%0	%0	%0	%0	%0	22%	31%	26%	27%	33%	50%	100%
35-44 years old	0%0	%0 ***	%0 *00%	33%	51%	41%	33%	28%	38% 25%	67%	50%	%0 %0
42-24 years old	100%0	100%	100%	0///0	49%	51%0	51%0	40%	0%66	0%0	0%0	0%0
Total	100%	100%	<i>100%</i>	%00I	100%	100%	<i>100%</i>	%00I	100%	100%	000% I	100%
Parents' real estate holding cates	category											
Parents with no real estate	55%	53%	47%	42%	41%	37%	32%	30%	28%	27%	28%	32%
estate properties	3%	3%	4%	3%	3%	4%	4%	4%	3%	3%	4%	3%
Homeowner parents with no												
other real estate	32%	33%	37%	43%	43%	45%	47%	51%	52%	55%	54%	52%
Homeowner parents with other	her											
real estate	%6	10%	12%	12%	13%	14%	17%	16%	16%	15%	15%	13%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	<i>100%</i>
Source: French Wealth Survey (Insee), 1986, 1992, 1998, 2004, 2009, 2014, 2017	(Insee), 1986, 1992	, 1998, 2004	t, 2009, 2014	, 2017								

Regarding the life-cycle position of the parents, in Garbinti and Savignac (2020) we argue that the reported information regarding their real estate holdings refers to their mid-life-cycle period, and more precisely when the mothers were on average from 40 to 43 years old, given the average age of women at childbirth over the period. Thus, the 35–44 age category of the second generation allows us to measure parents' and children's home ownership status at the same life-cycle period.

## 13.4 Empirical Design

#### 13.4.1 Baseline Specification

We estimate a linear probability model (equation (13.1)) for each age group: 25–34, 35–44, and 45–54 years old. We regress a dummy variable for being a homeowner in a given age group on a dummy variable for the parental home ownership status. The dummy variable is equals to zero if the parents were nonhomeowners and equals to one if they owned their main residence. In the baseline specification, the "homeowner parents" category includes parents that were also holding other real estate properties in addition to their main residence.

We introduce the cohort of birth and its interaction with the parental home ownership variable to allow for differences in the intergenerational correlation across cohorts. As previously defined, we consider two alternative ways for grouping cohorts: five-year cohorts and 10-year cohorts, and the baseline estimations are done at the household level.

Concretely, we estimate the following linear probability model:<sup>10</sup>

## (13.1) Prob(being a homeowner between age [a;b]) =

$$\sum_{c=1}^{C} \alpha_c \ cohort_{Child}^c + \sum_{c=1}^{C} \beta_c \ cohort_{Child}^c \mathbf{1}_{homeowner \ parents} + \varepsilon.$$

where  $\mathbf{1}_{homeowner parents}$  is the indicator for the tenure status of the parents, *cohort* stands for the birth cohort of the household's reference person, and  $\varepsilon$  is the error term.

#### 13.4.2 Accounting for the Ownership of Other Real Estate

In another set of regressions, we consider three types of home ownership status for the parents: among homeowners, we distinguish those who hold other real estate properties in addition to the household's main residence.<sup>11</sup>

<sup>10.</sup> For the sake of simplicity, we abstract from the subscript *i* (for the household) that should appear for each variable and for the error term.

<sup>11.</sup> Parents who had other real estate properties without holding their main residence are considered as non-homeowner (as they are renters of their main residence). They amount only

	Probab	ility of being a hom	neowner
	35–44 years old	45–54 years old	25–34 years old
Benchmark: 5-year cohorts			
Constant (no homeowner parents)	0.28***	0.39***	0.17***
Homeowner parents	0.38***	0.33***	0.23***
Cohort * homeowner parents			
1943–47	-0.14**	-0.14**	-0.13**
1948–52	-0.18***	-0.13***	-0.04
1953–57	-0.11**	-0.16***	-0.05
1958–62	-0.15***	-0.10**	-0.05
1963–67	-0.11**	-0.10**	-0.01
1968–72	-0.09*	-0.06	-0.02
1973–77	Ref.	Ref.	Ref.
1978-82	-0.05	-0.06	-0.11**
Other controls: cohorts			
Obs.	12,071	13,305	8,151
Alternative: 10-year cohorts			
Constant (No homeowner parents)	0.29***	0.40***	0.16***
Homeowner parents	0.36***	0.30***	0.20***
Cohort * homeowner parents			
1933–42	-0.32***	0.16	-0.10
1943–52	-0.15***	-0.11***	-0.04
1953–62	-0.11***	-0.10***	-0.01
1963–72	-0.08**	-0.06*	0.03
1973–82	Ref.	Ref.	Ref.
Other controls: cohorts			
Obs.	12,166	13,411	8,281

# Table 13.2 Intergenerational correlation in home ownership status: Baseline estimates

In Garbinti and Savignac (2020) we show that the ownership of other real estate assets in addition to the main residence is associated with a higher position in the wealth distribution.

#### 13.5 Intergenerational Correlation in Home Ownership Status

#### 13.5.1 Baseline Results and Cross-Country Comparisons

Table 13.2 displays the baseline regression results for the home ownership correlation, for the three children age categories. We consider the 34–45 category (first column) as our benchmark category, as it allows considering

to about 3–4 percent of the sample, see table 13.1. When excluding this category of parents, our main results are not affected.



Fig. 13.1 Children's probability of being a homeowner between 35 and 44 years old by parents' tenure status (percent)

the home ownership status of both generations (parents and children) at the same life-cycle period (mid-life cycle). For the 34–45 years old, we find a significant intergenerational gap in home ownership of 0.38 for the reference cohort (1973–77): children of this cohort whose parents were homeowners are about 38 percentage points more likely to be homeowners at age 34– 45 compared to children whose parents were not homeowners. While the probability of being a homeowner for households in the reference cohort with parents who were not homeowners is 28 percent, the probability of being a homeowner is 66 percent for the households whose parents were homeowners.

We find significant differences in the intergenerational correlation across cohorts, with lower intergenerational correlation for older cohorts compared to the 1973–77 cohort. For instance, the cohort-specific effect is -0.14 for the 1943–47 cohort, meaning that for this cohort, the advantage was 24 percentage points (i.e., 38–14 percent) for households whose parents were homeowners (compared with renter parents). These results are robust when considering 10-year cohorts, we are able to cover one additional cohort of people born between 1933 and 1942, which confirms the increasing trend in the intergenerational correlation (see the bottom half of table 13.2). For people born between 1933 and 1942, the home ownership correlation is only 0.04 (as opposed to a correlation of 0.36 for the baseline cohort and thus corresponding to a cohort-specific coefficient of -0.32).

In figure 13.1, we report the estimated probabilities of being a homeowner between 35 and 44 years old with their confidence intervals by 10-year cohorts. Even if the probabilities are more imprecisely estimated for the cohort 1933–42, it clearly shows a decreasing trend over cohorts for children whose parents were not homeowners (from 45 percent for the 1943–52 cohort to 30 percent for the 1973–82 cohort) while the probability remains quite stable for children whose parents were homeowners (around 65 percent). In other words, the increasing intergenerational correlation over time offsets the decrease in the probability of being a homeowner when parents are nonhomeowners.

We are able to provide some direct comparisons with papers focusing on other countries, namely the UK and the US. For the UK, Blanden and Machin (2017) rely on cohorts born in 1958 and in 1970 at age 42. For the 1958 cohort, they find that the unconditional intergenerational gap in tenure status lies between 0.127 (considering the parental home ownership status at 10/11 years old) and 0.140 (considering the parents' tenure status at 16 years old). As for France, we find higher gap for similar cohorts, that is, about 0.23–0.25 for the 1958–62 cohort (with the five-year cohorts) or the 1953–62 cohort (with the 10-year cohorts). These results for France are thus close to those obtained by Charles and Hurst (2003) for the US. They find a children-age adjusted gap in home ownership between children whose parents were not homeowners and children whose parents were homeowners of 0.245 for individuals aged 37.5 years old on average in 1999 (who are born around 1961–62), based on the PSID. For the cohort born in 1970, Blanden and Machin (2017) find that the gap is larger (between 0.200 and 0.227), compared to 0.28 to 0.29 that we obtain for France for the cohorts 1968-72 and 1963–72. It leads us to conclude that, even if we observe similar trends in increasing intergenerational correlation over time both for the UK and France, the results for similar cohorts indicate higher intergenerational correlation in home ownership status for France than for the UK.

Some additional information from other papers is also useful, even if there are also some crucial methodological differences (e.g., in the age category, or because they do not account for cohort-specific effects) that prevent us from doing direct comparisons. Focusing on young adults aged between 18 and 34 years old over the 1999–2015 period and based on the PSID, Choi, Zhu, and Goodman (2018) find that having parents who were homeowners increased the probability of being a homeowner by 7 to 8 percentage points. For France, for similar cohorts (i.e., born after 1965) and aged 25 to 34, we find an increased probability of 23 percentage points of being a homeowner for households whose parents were homeowners (table 13.2, column 3). Based on the Survey of Health, Ageing and Retirement in Europe (SHARELIFE), Mulder et al. (2015) study the role of parental tenure status on first-time home ownership transitions for adults born between 1908 and 1963. The parental home ownership status is retrospective information provided by the children and refers to the home ownership status of their parents when they were 10 years old. Mulder et al. (2015) cover several European countries, including France (Sweden, Denmark, the Netherlands, Germany, Switzerland, France, Belgium, Italy, Spain, and Greece). They estimate logistic regressions for the transition to home ownership with country-fixed effects. They do not control for cohort-fixed effects. They find

Children's age	35	_44	45	-54	25	-34
Parental home ownership status	Non- homeowner	Homeowner	Non- homeowner	Homeowner	Non- homeowner	Homeowner
Children's						
cohorts						
1943–47	0.43	0.67	0.57	0.76	0.36	0.47
1948-52	0.47	0.67	0.54	0.74	0.16	0.35
1953-57	0.37	0.64	0.58	0.75	0.13	0.31
1958-62	0.40	0.63	0.54	0.77	0.15	0.33
1963-67	0.34	0.61	0.51	0.74	0.11	0.34
1968-72	0.34	0.62	0.43	0.69	0.15	0.37
1973-77	0.28	0.66	0.39	0.72	0.17	0.40
1978-82	0.31	0.63	0.42	0.69	0.13	0.26

Probability of being a homeowner by cohort and parental home ownership status

Table 13.3

that Dutch men (women) whose parents were homeowners were, on average, 1.24 (1.21) times more likely to become homeowners in a given year compared to those whose parents were not. Interestingly, while the correlation is also significant for France, they find smaller differences. The estimated coefficient for France is 0.13 point less than the estimate of the reference country (0.21 for the Netherlands), which corresponds to a hazard ratio of 1.09. In other words, for France, they find that men (women) whose parents were homeowners were 1.09 (1.21) times more likely to become homeowners in a given year compared to those whose parents were not.

In table 13.3, we report the probability of being a homeowner by cohort, age category, and parental home ownership status. Our results are in line with Mulder et al. (2015). We find however larger effects of the home ownership status of the parents that vary across cohorts and age categories. We find that households born before 1963 with parents who were homeowners are about 1.3 to 2.4 times more likely to become homeowners compared to those whose parents were not homeowners.

#### 13.5.2 Intergenerational Correlation over the Life Cycle

One of our contributions is to study the home ownership correlation for different periods in the children's life cycle. As expected, the probability of being a homeowner increased from 25 to 54 years old, irrespective of the parental home ownership status (table 13.2). For our baseline cohort (1973–77), the probability of being a homeowner increases from 17 percent at 25–34 years old to 39 percent at 45–54 years old without "homeowner parents," while it increases from 40 percent to 72 percent with "homeowner parents". We find persistent intergenerational home ownership correlation over the life cycle: the estimated intergenerational correlation in home ownership status is statistically significant for all three age groups and seems

to exhibit an inverted U-shape across ages: standing at 0.23 for the 25–34 category; 0.38 for the 35–44 category; and 0.33 for the 45–54 category (for the 1973–77 cohort). These results are robust when considering the 10-year cohorts instead of the five-year cohorts. In other words, the "advantage" provided by having parents who were homeowners does not disappear as children age.

Our results for the households aged 45 to 54 years old confirm the increasing trend in intergenerational correlation observed for the 35 to 44 years old. For instance, for the 1943–1947 cohort, the gap is 14 percentage points lower (i.e., the correlation is 0.19) compared to the 1973–77 cohort. Such a trend over the same period is robust when considering the 10-year cohorts.

Regarding the probability of being a homeowner at 25–34 years old, we do not obtain robust results regarding a potential increasing trend in the intergenerational correlation. Based on the five-year cohorts, we find that the older 1943–47 cohort faces a lower gap than the 1973–77 reference cohort (13 percentage points lower).<sup>12</sup>

# 13.5.3 Accounting for the Ownership of Other Real Estate Assets

Among homeowners, some are also owners of other real estate properties in addition to their main residence. In Garbinti and Savignac (2020), we show that the ownership of other properties in addition to the main residence reflects a higher position in the wealth distribution. In this section, we disentangle the effect of two types of parental home ownership: owners of their main residence only versus owners of other real estate properties in addition to their main residence. As expected, in most cases, we find larger correlations with the children tenure status when the parents were owners of other real estate properties than when they were only owner of their main residence (table 13.4). While children born between 1973 and 1977 whose parents were homeowners are 34 percentage points more likely to be homeowners at 35–44 years old (compared to children whose parents were not homeowners), the probability is 47 percentage points higher when parents were owners of other real estate properties in addition to their main residence.

Our regression results confirm the increasing intergenerational home ownership correlation over time already observed without disentangling the ownership of other properties among parents who were homeowners. We obtain significant negative interaction terms with the previous cohorts compared to the reference one (1973–77), for the two types of parental home ownership. For instance, children whose parents were homeowners (respectively, with parents owning other real estate properties) born between

<sup>12.</sup> The nonsignificant cohort-specific effect obtained with the 10-year cohort (for 1943–52) may be due to the grouping of the reference cohort (1973–82 with the 10-year cohorts), while there was a significant negative difference of 11 percentage points between the five-year reference cohort (1973–77) and the younger one (1978–82).

	Probabilit	y of being a h	omeowner
	35-44	45–54	25-34
	years old	years old	years old
Benchmark: 5-year cohorts			
Constant (no homeowner parents)	0.28***	0.39***	0.17***
Homeowner parents	0.34***	0.3***	0.23***
Homeowner parents with other real estate	0.47***	0.4***	0.23***
Cohort * homeowner parents			
1943–47	-0.12*	-0.12**	-0.11*
1948–52	-0.16***	-0.09*	-0.06
1953–57	-0.08*	-0.15***	-0.07
1958–62	-0.13***	-0.09**	-0.07
1963–67	-0.11**	-0.1**	-0.03
1968–72	-0.06	-0.04	-0.03
1973–77	Ref.	Ref.	Ref.
1978–82	-0.04	-0.04	-0.12**
Cohort * homeowner parents with other real estate	0101	0101	0112
1943–47	-0.19***	-0.17**	-0.17**
1948–52	-0.24***	-0.22***	-0.02
1953–57	-0.2***	-0.19***	-0.03
1958–62	-0.22***	-0.11**	0.05
1963–67	-0.12*	-0.09*	0.05
1968–72	-0.15**	-0.11**	0.02
1973–77	Ref.	Ref.	Ref.
1978–82	-0.08	-0.09	-0.05
Other controls: cohorts			
Obs.	12,071	13,305	8,151
Alternative: 10-year cohorts			
Constant (no homeowner parents)	0.29***	0.4***	0.16***
Homeowner parents	0.33***	0.28***	0.19***
Homeowner parents with other real estate	0.44***	0.36***	0.22***
Cohort * homeowner parents		0.20	0.22
1933–42	-0.30**	0.21**	-0.17
1943–52	-0.14***	-0.09**	-0.03
1953-62	-0.09**	-0.1***	-0.02
1963-72	-0.07*	-0.05	0.01
1973–82	Ref.	Ref.	Ref.
Cohort * homeowner parents with other real estate	itel.	itel.	1001.
1933–42	-0.39***	0.04	-0.01
1943–52	-0.2***	-0.17***	-0.07
1953–62	-0.18***	-0.12***	0.07
1963-72	-0.13	-0.12	0.05
1973–82	Ref.	Ref.	Ref.
Other controls: cohorts			
Obs.	12,166	13,411	8,281

# Table 13.4 Regression results: Accounting for the parental ownership of other real estate properties



Fig. 13.2 Children's probability of being a homeowner between 35 and 44 years old by parents' tenure status, accounting for the ownership of other real estate properties (percent)

1943 and 1952 are 14 percentage points (respectively, 20 percentage points) less likely to be a homeowner between 35 and 44 years old compared to children born between 1973 and 1977. In most cases, these negative differences with the reference cohort in home ownership status at 35–44 years old are statistically significant over the 1933-72 cohorts (i.e., considering both the five-year and the 10-year cohorts). Moreover, they exhibit a negative trend, meaning that the intergenerational correlation is increasing over time. For instance, based on the 10-year cohorts, we find that the probability of being a homeowner between 35 and 44 years old for households whose parents were homeowners was 3 percentage points higher for the 1933-42 cohort (i.e., 33 percentage points for the reference cohort minus 30 percentage points for the cohort interaction term with the dummy "homeowner parents"). The probability of being a homeowner for households whose parents were homeowners is 24 percentage points higher for the 1953-62 cohort and 33 percentage points higher for the 1973-82 reference cohort. When parents were owners of other real estate properties, this advantage amounts respectively to 5, 26, and 44 percentage points for the same cohorts.

Over cohorts, the probability of being a homeowner is increasing when parents were owners of other real estate properties (figure 13.2), so that the gap widens between children whose parents were not homeowners and children whose parents were homeowners with other real estate properties, for the cohorts born after 1962.

#### 13.5.4 Other Robustness Tests

In order to test for the robustness of our results, we perform several additional tests. First, we consider individual-level regressions instead of household-level ones to account for changes in family structure over time. We also check that our main conclusions are robust when considering logit regressions instead of the linear probability model.

#### 13.5.4.1 Individual-Level Based Regressions

In practice, the family home ownership status may result both from individual wealth (for instance, if the family lives in a flat that was partially or fully inherited by one partner) and from joint wealth accumulation of both members of the couple. Without precise information on the property rights, it is not possible to disentangle which member(s) of the household is/are the owner(s) of the real estate property. However, there have been major changes in family structure over the long run, due to the decline in marriage rates and the rise of single-headed households. In order to account for changes in family structure, the literature about wealth inequality over time generally relies on individualized wealth (i.e., wealth is divided by two and attributed to each partner; see Piketty, Postel-Vinay, and Rosenthal [2006, 2014] and Garbinti and Savignac [2020] for more recent developments). In line with these papers, we attribute the ownership of all housing assets to each partner. Concerning the home ownership status of the parents, we consider two alternative definitions. First, we define the home ownership status of the parents based on the information related only to the own parents of the individual (see table A1 in the online appendix, http://www.nber.org/data-appendix/c14432 /appendix.pdf). Second, another robustness test considers the home ownership status of the parents of both individuals (as previously defined in the household level approach—see table A2 in online appendix). As expected, the intergenerational correlation estimates are lower without accounting for the parental home ownership status of the partner (for couples). For instance, the estimate reduces to 0.18 in such a case (for the reference cohort and the 35-44 age group), as opposed to 0.38 obtained with our baseline household-level estimates (table 13.2, column 1). When accounting for the parental home ownership status of the partner, the estimates obtained for the intergenerational correlation are closer to those obtained at the household level (0.35 for the reference cohort and the 35–44 years old group). In all cases, we find evidence of increasing intergenerational correlation in tenure status over time for the groups aged 35-44 and 45-50. Overall, these results shed light on the role that mating decisions may play in explaining wealth formation and intergenerational correlation in tenure status, which is an interesting avenue for future research.

# 13.5.4.2 Logit Regressions

Our main conclusions are also robust when considering logit regressions instead of the linear probability model (table A3 in the online appendix, http://www.nber.org/data-appendix/c14432/appendix.pdf). First, we find significant intergenerational correlation in tenure status for the three age groups. Second, this correlation is increasing for more recent cohorts. Third,

the probability of being a homeowner is larger when parents were owners of other real estate properties in addition to their main residence. For instance, the probability of being a homeowner between 35 and 44 years old (for the reference cohort) is 1.4 times as large as the one obtained when parents were the owners of only their main residence.

#### 13.6 Discussion on the Sources of Intergenerational Correlation

The intergenerational correlation in tenure status, and more broadly, the intergenerational wealth correlation may result from various sources. Obviously, it may be due to direct transfers of wealth (inter vivos and inheritances) from the previous to the next generation. Second, following the Becker and Tomes (1979, 1986) approach, intergenerational correlation in wealth and in tenure status may reflect intergenerational correlation in income, the latter resulting from parental investment in human capital and correlation in abilities across generations. In the case of housing tenure status, the intergenerational advantage of children of homeowners may also come from all the positive externalities associated with the home ownership status of their parents during their childhood (Green and White 1997; Haurin, Parcel, and Haurin 2002; Spilerman and Wolff 2012). Other factors such as the intergenerational transmission of preferences (risk attitudes, patience) may also play a role. Following Easterlin (1980), Henretta (1984) argues that the parental home ownership status might influence children's housing decisions as they form expectations regarding their appropriate standard of living according to the standard of living they had with their parents when they were adolescents.

All of these channels may interact with each other (Boserup, Kopczuk, and Kreiner 2013), so that it remains very difficult to identify the exact role played by each potential channel. We provide here some insights into the heterogeneity in the children tenure status and into the intergenerational correlation depending on other parental characteristics based on simple descriptive statistics. First, we look at the children's tenure status by parental occupation (figure 13.3). Parental occupation is defined as the occupation of the father of the household's reference person when she was 14 years old. There are differences in the home ownership rate depending on the father's occupation among children whose parents were homeowners (respectively, whose parents were not homeowners). Moreover, we find larger owner-occupancy rate irrespective of the father's occupation among children whose parents were homeowners, for all age groups. For instance, at the age of 35–44, the gap varies from 22 percentage points for children of farmers to 27 percentage points for children of blue-collar workers (figure 13.3a).

Second, we look at the differences in the tenure status depending on the receipt of gifts and inheritances. The French Wealth Survey provides reliable qualitative information on whether any members of the household have received substantial gifts or inheritances (and when). Figure 13.4 displays

(a) Between 35 and 44 years old



Fig. 13.3 Percentage of homeowners among children, by parents' tenure status and occupation

*Notes:* The parents' occupation corresponds to the occupation of the father of the reference person.



Fig. 13.4 Percentage of homeowners among children, by parents' tenure status and the receipt of gifts or inheritances

the percentage of homeowners among children, by parents' tenure status and the reception of intergenerational transfers (gifts or inheritances).

Having received gifts and inheritances increases the probability of being a homeowner, both for children whose parents were homeowners and whose parents were not homeowners. The probability of being a homeowner between 35 and 44 years old is increased by about 18 to 19 percentage points when gifts or inheritances were received from parents who were not homeowners (from 35.7 to 54 percent) and from parents who were homeowners (from 60 percent to 78 percent). Moreover, without any gift or inheritance, children whose parents were homeowners still have a higher probability of being a homeowner than children whose parents were not homeowners (24 percentage points higher). Such a result could be in line with the existence of factors other than direct transfers of wealth affecting the intergenerational correlation. We estimate our baseline regression on the two subsamples of children having received or not received gifts and inheritances to investigate this point further (table 13.5).

We find significant intergenerational correlation in tenure status among children who did not receive gifts or inheritances. For the reference cohort, without gifts or inheritances, the probability of being a homeowner between 35 and 44 years old is 30 percentage points higher for children whose parents were homeowners (respectively, 41 percentage points when parents had other real estate property in addition to their main residence). We also observe that the effect of the parental tenure status is increasing over cohorts in this subsample: the probability of being a homeowner when parents were homeowners and without having received gifts and inheritances is 13 percentage points higher for the 1973–77 cohort compared to the 1948–52 cohort. The gap between both cohorts in the tenure status when the parents had other real estate is even larger (20 percentage points).

As expected, the probability of being a homeowner is larger when having received gifts and inheritances, even for children whose parents were not homeowners (it levels off at 38 percent between 34 and 45 years old instead of 27 percent without any gift and inheritance). Most importantly, among children who received gifts and inheritances, the parental tenure status still affects the probability of being a homeowner, for all age groups. Among children born between 1973 and 1977 who received gifts or inheritances, the probability of being a homeowner between 35 and 44 years old is 35 percentage points (respectively, 45 percentage points) higher for children whose parents were homeowners (respectively, when parents had other real estate properties) compared to children whose parents were not homeowners.

Overall, these results suggest that factors other than direct intergenerational transfers of wealth explain the intergenerational correlation in tenure status. As explained above, it might also be driven by intergenerational income correlation or the transmission of preferences.

-	D					
			Probability of b	Probability of being a homeowner		
	35-44	35–44 years old	45-54	45–54 years old	25-34	25–34 years old
Benchmark: 5 year-cohorts	No gift or inheritance received	With a gift or inheritance received	No gift or inheritance received	With a gift or inheritance received	No gift or inheritance received	With a gift or inheritance received
Constant (no homeowner parents)	$0.27^{***}$	0.38***	$0.34^{***}$	0.53***	$0.15^{***}$	$0.33^{***}$
Homeowner parents	$0.30^{***}$	$0.35^{***}$	0.29***	0.23 * * *	0.23 * * *	0.18
Homeowner parents with other real estate	$0.41^{***}$	0.45***	$0.33^{***}$	$0.33^{***}$	$0.17^{***}$	$0.23^{**}$
Cohort * homeowner parents						
1943-47	-0.11	-0.10	-0.09	-0.17	-0.11*	-0.02
1948–52	$-0.13^{**}$	-0.19	-0.04	-0.17*	-0.06	0
1953–57	-0.05	-0.14	$-0.13^{**}$	$-0.16^{*}$	-0.07	-0.05
1958–62	$-0.11^{**}$	-0.14	$-0.1^{*}$	-0.09	-0.06	-0.09
1963–67	-0.09	-0.17	$-0.14^{***}$	0.02	-0.03	0.02
1968–72	-0.04	-0.05	-0.04	-0.08	-0.05	-0.01
1973–77	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1978–82	-0.02	0.03	-0.04	-0.02	$-0.12^{**}$	-0.08
Cohort * homeowner parents with other real estate						
1943-47	-0.16*	-0.14	-0.12	-0.18	$-0.16^{**}$	-0.1
1948–52	$-0.20^{***}$	-0.25*	-0.11	$-0.29^{***}$	0	0.19
1953-57	$-0.15^{**}$	$-0.27^{**}$	$-0.15^{**}$	-0.17*	0.02	-0.08
1958-62	$-0.19^{**}$	-0.28**	-0.09	-0.13	0.04	-0.05
1963-67	-0.10	-0.22*	-0.08	-0.04	0.04	0.18
1968–72	$-0.19^{**}$	-0.07	-0.07	-0.17*	-0.03	0.13
1973–77	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1978–82	-0.1	-0.01	-0.09	-0.09	-0.03	0.1
Other controls: cohorts						
Obs.	8,680	3,391	7,668	5,637	6,807	1,344 (continued)
						~

Subsample estimates: Children who received gifts or inheritances versus those who did not

Table 13.5

			Probability of b	Probability of being a homeowner		
	35-44 3	35–44 years old	45-54	45–54 years old	25-34	25–34 years old
Alternative: 10 year-cohorts	No gift or inheritance received	With a gift or inheritance received	No gift or inheritance received	With a gift or inheritance received	No gift or inheritance received	With a gift or inheritance received
Constant (no homeowner parents)	0.28***	0.36***	0.36***	0.53***	$0.14^{***}$	0.28***
Homeowner parents	$0.29^{***}$	$0.37^{***}$	$0.28^{***}$	$0.22^{***}$	$0.19^{***}$	$0.16^{*}$
Homeowner parents with other real estate	$0.38^{***}$	$0.46^{***}$	$0.3^{***}$	$0.29^{***}$	$0.16^{***}$	$0.26^{***}$
Cohort * homeowner parents						
1933-42	$-0.29^{**}$	-0.31	0.23*	0.08	-0.16	$-0.56^{***}$
1943-52	$-0.12^{***}$	-0.18	-0.04	$-0.16^{**}$	-0.03	-0.06
1953-62	-0.07*	$-0.16^{*}$	$-0.1^{**}$	-0.11*	-0.02	-0.06
1963–72	-0.06	-0.12	-0.07*	-0.02	0.01	0.03
1973-82	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Cohort * homeowner parents with other real estate						
1933-42	$-0.41^{**}$	-0.29	0.02	0.12	-0.01	$-0.45^{***}$
1943-52	$-0.15^{***}$	-0.22*	-0.08	$-0.22^{**}$	-0.05	-0.08
1953-62	$-0.13^{**}$	$-0.28^{***}$	-0.09	-0.11*	0.02	-0.09
1963-72	-0.11*	-0.13	-0.04	-0.07	0.01	0.1
1973–82	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Other controls: cohorts						
Obs.	8,749	3,417	7,735	5,676	6,916	1,365

Table 13.5(cont.)

#### 13.7 Conclusion

We contribute to the literature on long-term trends in inequality by showing the increasing role that parental tenure status has on children's home ownership status.

Based on the French Wealth Survey, we estimate the intergenerational association in home ownership status for cohorts of children born throughout the twentieth century. The parental tenure status is elicited in the survey by asking whether the parents of the reference person and her/his partner were the owners of their main residence when the respondent was 14 years old. We account for possible variations in the intergenerational association across five-year cohorts (or 10-year cohorts). The children's home ownership status is considered at three life-cycle periods: 25–34, 35–44, and 44–55 years old.

First, we find a significant association in home ownership status of parents and children. For similar cohorts, the intergenerational association in France is higher compared to the results obtained by Blanden and Machin (2017) for the UK. Second, the intergenerational association is increasing over time, considering the children's home ownership status at 35–44 or at 45–54 years old. The increasing intergenerational association over cohorts offsets the decline in the probability of being a homeowner when parents are not homeowners. Third, the effect of parents' tenure status is persistent over the children's life cycle. Fourth, when isolating two subpopulations based on the receipt of intergenerational transfers, we find significant intergenerational association in tenure status for children who did not receive any gift or inheritance, as well as for children who received intergenerational transfers, suggesting that other factors, such as intergenerational income correlation or the transmission of preferences, might also explain this intergenerational association.

# References

- Agarwal, Sumit, Luojia Hu, and Xing Huang. 2015. "Rushing into the American Dream? House Prices Growth and the Timing of Homeownership." *Review of Finance* 20 (6): 2183–218.
- Angelini, Viola, Anne Laferrère, and Guglielmo Weber. 2013. "Home-Ownership in Europe: How Did It Happen?" Advances in Life Course Research 18 (1): 83–90.
- Arrondel, Luc, Bertrand Garbinti, and André Masson, 2014. "Inégalités de patrimoine entre générations: Les donations aident-elles les jeunes à s'installer?" *Economie et Statistique* 472 (1): 65–100.
- Becker, Gary S., and Nigel Tomes. 1979. "An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility." *Journal of Political Economy* 87 (6): 1153–89.
- Becker, Gary S., and Nigel Tomes. 1986. "Human Capital and the Rise and Fall of Families." *Journal of Labor Economics* 4 (3, pt. 2): S1–S39.

- Blanden, Jo, and Stephen Machin. 2017. "Home Ownership and Social Mobility." CEP Discussion Paper No. 1466. London: Centre for Economic Performance.
- Bonnet, Carole, Bertrand Garbinti, and Sébastien Grobon. 2018. "Rising Inequalities in Access to Home Ownership among Young Households, in France, 1973– 2013." *Economie et Statistique*, 500–502: 117–38.
- Bonvalet, Catherine, and Arnaud Bringé. 2013. "Les effets de la politique de logement sur l'évolution des taux de propriétaires en France." *Revue Européenne des Sciences Sociales* 151 (1): 153–77.
- Boserup, Simon Halphen, Wojciech Kopczuk, and Claus Thustrup Kreiner. 2013. "Intergenerational Wealth Mobility: Evidence from Danish Wealth Records of Three Generations." https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1 .593.4714&rep=rep1&type=pdf.
- Boserup, Simon Halphen, Wojciech Kopczuk, and Claus Thustrup Kreiner. 2017. "Intergenerational Wealth Formation over the Life Cycle: Evidence from Danish Wealth Records, 1984–2013." Unpublished mimeo. http://www.columbia.edu /~wk2110/bin/WealthAcrossGen.pdf.
- Bourdieu, Pierre. 2000. Les structures sociales de l'économie. Paris: Seuil.
- Castillo-Rico, Barbara. 2020, "Trends in Intergenerational Homeownership Mobility in France between 1960–2015." AMSE Working Papers 2008. Aix-Marseille School of Economics.
- Charles, Kerwin Kofi, and Erik Hurst. 2003. "The Correlation of Wealth across Generations." *Journal of Political Economy* 111 (6): 1155–82. https://doi.org/10 .1086/378526.
- Choi, Jung Hyun, Jun Zhu, and Laurie Goodman. 2018. "Intergenerational Homeownership: The Impact of Parental Homeownership and Wealth on Young Adults" Tenure Choices." Research Report. Washington, DC: Urban Institute.
- Cribb, Jonathan, Andrew Hood, and Robert Joyce. 2016. "The Economic Circumstances of Different Generations: The Latest Picture." IFS Briefing Note BN187. London: Institute for Fiscal Studies.
- Easterlin, Richard A. 1980. Birth and Fortune: The Impact of Numbers on Personal Welfare. Chicago: University of Chicago Press.
- Fritsch, Nicholas, and Rawley Heimer. 2020. "Intergenerational Homeownership and Mortgage Distress." *Economic Commentary* 2020 (12): 1–7.
- Garbinti, Bertrand, Jonathan Goupille-Lebret, and Thomas Piketty. 2021. "Accounting for Wealth-Inequality Dynamics: Methods, Estimates and Simulations for France." *Journal of the European Economic Association* 19 (1): 620–63.
- Garbinti, Bertrand, and Frédérique Savignac. 2020. "Accounting for Intergenerational Wealth Mobility in France over the 20th Century: Method and Estimations." Banque de France Working Paper No. 776. Paris.
- Gobillon, Laurent, Anne Lambert, and Sandra Pellet. 2019. "The Suburbanization of Poverty: Homeownership Policies and Spatial Inequalities in France." INED Working Paper No. 250. Paris: Institut National d'Études Démographiques. https://hal.archives-ouvertes.fr/hal-02164985/document.
- Goodman, Laurie S., and Christopher Mayer. 2018. "Homeownership and the American Dream." *Journal of Economic Perspectives* 32 (1): 31–58.
- Green, Richard, and Michelle White. 1997. "Measuring the Benefits of Homeownership: Effects on Children." Journal of Urban Economy 41 (1997): 441–61.
- Haurin, Donald R., Toby L. Parcel, and R. Jean Haurin. 2002. "Does Homeownership Affect Child Outcomes?" *Real Estate Economics* 30 (4): 635–66.
- Helderman, Amanda, and Clara Mulder. 2007. "Intergenerational Transmission of Homeownership: The Roles of Gifts and Continuities in Housing Market Characteristics." Urban Studies 44 (2): 231–47.

- Henretta, John C., 1984. "Parental Status and Child's Home Ownership." *American Sociological Review* 49 (1): 131–40.
- Insee. 2017. "Les conditions de logement en France." Insee Références. Paris: Institut National de la Statistique et des Études Économiques. https://www.insee.fr/fr /statistiques/2586377.
- Kulkarni, Nirupama, and Ulrike Malmendier. 2015. "Homeownership and the American Dream: An Analysis of Intergenerational Mobility Effects." Unpublished manuscript.
- Malmendier, Ulrike, and Alexandra Steiny. 2017. "Rent or Buy? The Role of Lifetime Experiences of Macroeconomic Shocks within and across Countries." Unpublished manuscript. https://eml.berkeley.edu/~ulrike/Papers /Rent percent20or percent20Buy percent2022dec2016 percent20- percent20final .pdf.
- Mulder, Clara H., Caroline Dewilde, Mark van Duijn, and Annika Smits. 2015. "The Association between Parents' and Adult Children's Homeownership: A Comparative Analysis." *European Journal of Population* 31 (5): 495–527.
- Organization for Economic Cooperation and Development (OECD). 2011. "Housing and the Economy: Policies for Renovation." In *Economic Policy Reforms 2011: Going for Growth*, 181–203. Paris: OECD.
- Piketty, Thomas, Gilles Postel-Vinay, and Jean-Laurent Rosenthal. 2006. "Wealth Concentration in a Developing Economy: Paris and France, 1807–1994." *American Economic Review* 96 (1): 236–56.
- Piketty, Thomas, Gilles Postel-Vinay, and Jean-Laurent Rosenthal. 2014. "Inherited vs Self-Made Wealth: Theory and Evidence from a Rentier Society (Paris 1872– 1927)." *Explorations in Economic History* 51 (1): 21–40.
- Pfeffer, Fabian T., Robert F. Schoeni, Arthur Kennickell, and Patricia Andreski. 2016. "Measuring Wealth and Wealth Inequality: Comparing Two U.S. Surveys." *Journal of Economic and Social Measurement* 41 (2): 103–20.
- Spilerman, Seymour, and François-Charles Wolff. 2012. "Parental Wealth and Resource Transfers: How They Matter in France for Home-Ownership and Living Standards." Social Science Research 41 (2): 207–23.