CENTER for RETIREMENT RESEARCH at BOSTON COLLEGE

WHAT DRIVES THE RACIAL HOUSING WEALTH GAP FOR OLDER HOMEOWNERS?

Siyan Liu and Laura D. Quinby

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Center for Retirement Research at Boston College
Haley House
140 Commonwealth Avenue
Chestnut Hill, MA 02467
Tel: 617-552-1762 Fax: 617-552-0191
https://crr.bc.edu

Both authors are with the Center for Retirement Research at Boston College. Siyan Liu is a research economist and Laura D. Quinby is a senior research economist. The research reported herein was pursuant to a grant from the U.S. Social Security Administration (SSA) funded as part of the Retirement and Disability Research Consortium. The findings and conclusions expressed are solely those of the authors and do not represent the views of SSA, any agency of the federal government, or Boston College. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of the contents of this report. Reference herein to any specific commercial product, process or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply endorsement, recommendation or favoring by the United States Government or any agency thereof. The authors thank Deyin Jia for excellent research assistance.

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Haley House
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phone: 617-552-1762 Fax: 617-552-0191
https://crr.bc.edu

Affiliated Institutions:
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Abstract

Housing wealth is an important resource for economic security in retirement. Yet, Black households approaching retirement have only a fraction of the housing wealth held by White households. One reason is that Black households are less likely to own homes in the first place. A second reason, which is the focus of this paper, is that when they do own homes, they see lower wealth accumulation than White homeowners. This study uses the *Panel Study of Income Dynamics* to determine what share of the age-55 housing wealth gap is due to disadvantage at the time of first purchase and what share is due to slower appreciation of subsequent housing wealth.

The paper found that:

- Older Black homeowners faced obstacles at every step – from accumulating a down payment to buying in attractive areas to accessing credit to upsize.
- Both factors – smaller down payments and slower growth in home values – were equally important contributors to the age-55 gap.

The policy implications are:

- Racial disparities in housing wealth are stark among homeowners nearing retirement.
- Future research should consider how structural changes in the housing market over the past 30 years might have alleviated some barriers for younger homebuyers.

Introduction

Homeownership is one of the largest sources of retirement wealth for most households and is promoted as a key tool for wealth accumulation. However, a long history of discrimination in the housing market has constrained the ability of Black households to accumulate housing wealth relative to their White counterparts.[1] Consequently, Black households approaching retirement are less likely to own homes and, when they do, they see lower wealth accumulation compared to White homeowners. This paper focuses on the homeowners.

The goal is to determine what share of the age-55 housing wealth gap is due to disadvantage at the time of first purchase – namely, less parental assistance with the mortgage down payment – and what share is due to slower appreciation of subsequent housing wealth? To isolate the impact of these factors, the analysis compares older Black and White homeowners who seem equally able to accumulate housing wealth based on their socioeconomic characteristics, but who still ended up with different outcomes.

The discussion proceeds as follows. The first section provides background on how older Black families faced disadvantage in nearly every aspect of the housing market. The second section outlines the data and methodology used to evaluate the racial housing wealth gap over the lifecycle for otherwise similar homeowners. The third section presents the results, which show that both factors – disparities at first purchase and subsequent appreciation – play an important role in explaining the gap at age 55. The final section concludes that future research should consider how structural changes in the housing market over the past 30 years might have alleviated some barriers for younger homebuyers.

Literature Review

The explanation for the racial housing wealth gap among households approaching retirement begins early in the lifecycle. Lower household incomes hinder the ability of Black families to save for a down payment and access the financial services needed to purchase a first home.[2] Even among households with similar income, Black families often lack generational

[1] Munnell et al. (1996).
[2] For example, see Aaronson, Hartley, and Mazumder (2021) and Faber (2021).

wealth, making them less likely to receive assistance from their parents on a down payment.[3] Previous studies find that young White households are three times as likely as Black households to receive parental assistance for a home purchase, resulting in a higher mortgage approval rate and facilitating homeownership at a slightly younger age.[4] Moreover, older Black households faced pervasive discrimination in mortgage lending during the 1980s and 1990s, although recent evidence shows that discriminatory lending has largely abated due to increased regulation and widespread adoption of automated underwriting systems.[5]

When Black households eventually transition into homeownership, they are constrained to purchase less valuable first homes.[6] In addition to having a smaller down payment, Black households are rarely able to purchase homes with the same amenities as White households because of historical redlining that pushed Black families into segregated neighborhoods with less public investment. Residential segregation not only limits the purchase price of Black homes, but also depresses subsequent growth in the value of the house.[7] Since families typically live in the same house for long periods, slower appreciation leads to much lower compounding and ultimately, lower housing values.[8]

Finally, Black households are more likely to sell or lose their home, a phenomenon that was particularly stark during the financial crisis of 2008.[9] Indeed, one recent study argues that disparities in distressed home sales explain most of the racial gap in appreciation rates.[10] However, since the goal here is to evaluate the racial housing wealth gap between homeowners approaching retirement, families who lose their house drop out of our sample entirely.

Given that Black households face disadvantage in nearly every aspect of the housing market, this brief asks a simple question: what share of the housing wealth gap among older

[3] Bond and Eriksen (2021).
[4] Choi and Goodman (2018); Lee et al. (2020); and Charles and Hurst (2002).
[5] Bhutta, Hizmo, and Ringo (2022). Similarly, recent studies no longer find evidence of discrimination in mortgage pricing (see, for example, Bartlett et al. 2022).
[6] Choi, McCargo, and Goodman (2019) and Neal, Choi, and Walsh (2020).
[7] Di, Belsky, and Liu (2007); Newman and Holupka (2016); Mayock and Malacrida (2018); and Markley et al. (2020). Lower appreciation could also push Black households to invest less in their homes since other asset classes perform relatively better.
[8] Additionally, Black buyers typically pay a premium to purchase their home due to pervasive price discrimination (Bayer et al. 2017; Ihlanfeldt and Mayock 2009; Myers 2004; and Zonta 2019). And similar discrimination in home appraisals raises the amount of property taxes levied on Black homes (Amornsiripanitch 2020; Avenancio-Leon and Howard 2022; and Berry 2021).
[9] Bayer, Ferreira, and Ross (2016).
[10] Kermani and Wong (2021).

Black and White homeowners is due to disparities at the time of first purchase, and what share is due to slower appreciation over the course of homeownership?

Data and Methodology

This analysis relies on the *Panel Study of Income Dynamics* (PSID), a nationally representative survey conducted since 1968, which includes extensive information on homeownership and housing wealth accumulation, and race. The analysis focuses on Black and White households who buy their first home between 1980-2000 and follows them through 2019, limiting the sample to those who are still homeowners at age 55. Specifically, we follow households until the financial respondent (typically the primary earner) is age 55. Since some households transition between renter and homeowner multiple times, the sample is further limited to households that remain homeowners consistently from the time of first purchase to age 55. And the focus is on the primary residence rather than wealth built through vacation or investment properties since a majority of households own only one home. All dollar values are in 2019 dollars.

The goal is to compare older Black and White homeowners who, based on their own socioeconomic characteristics, might seem equally well situated to accumulate housing wealth. The extent to which Black households fall short in this comparison reflects two sources of structural disadvantage: the lack of parental assistance and persistent discrimination in the housing market. Hence, the analysis uses OLS regression to estimate racial disparities in various housing market outcomes after controlling for household income and other demographic characteristics:

$$Y_i = \beta_0 + \beta_1 \log(I_i) + \beta_2 Black_i + \beta_3 X_i + \epsilon_i \quad (1)$$

where Y_i is the outcome of interest; I_i is the real income of household i at the time of purchase; $Black_i$ is an indicator for whether the household head is Black; and X_i is a vector of controls containing education, marital status, and the number of children living with the household head. The coefficient β_2 represents the adjusted racial gap.

The primary outcomes of interest are housing wealth at the time of initial purchase and at age 55 (measured in logs). The PSID asks respondents to report whether they rent or own their

primary residence in every survey wave. In the latter case, homeowners are asked to report the current value of their house and any remaining mortgage principal. A household is considered to have purchased its first home if it never owned a home before, rented in the last wave, and reports owning a home in the current wave.[11] Housing wealth is simply the current value of the house minus the remaining mortgage principal. At the time of initial purchase, housing wealth reflects the household's down payment – the difference between the price of the first home and mortgage principal at the time of first purchase.

To present the results from these regressions in an intuitive way, the coefficients are used to simulate housing wealth for hypothetical Black and White families who are assumed to have the same characteristics (chosen to be representative of the PSID sample). With the regression coefficients, we generate two predicted outcomes for each household in the sample – one assuming that the household is White (setting $Black_i = 0$), and another assuming that the household is Black (setting $Black_i = 1$). Taking the mean of these two "predicted" distributions yields simulated Black and White housing wealth, controlling for household income and basic demographics.[12]

With these simulated values in hand, it is possible to decompose the racial housing wealth gap at age 55 into the portion attributable to experiences at initial purchase (the initial housing wealth gap), and the portion due to subsequent appreciation. Since prior literature has shown that Black households purchase their first homes slightly later, the first step is to estimate the racial gap in age at first purchase, which determines for how long the hypothetical Black and White households earn a return on their housing investments before age 55. We estimate this age gap with an OLS regression similar to equation (1). Once we know the duration of each household's investment, the next step is to calculate an internal rate of return that, when applied to the down payment, yields housing wealth at age 55.

The final step is to estimate counterfactual Black housing wealth at age 55 eliminating initial racial disparities – what the hypothetical Black household could have had in simulated

[11] Those observed owning in the first wave are not included in the sample.

[12] Since the outcomes of interest are measured in log points, these predicted values are also measured in log points. Hence, one must exponentiate the mean predicted values in order to obtain simulated housing wealth in dollars. We calculate the initial housing wealth for Black and White households by multiplying the simulated price of the first home by the simulated down payment rate, i.e. one minus the loan-to-value ratio at first purchase, by race.

housing wealth, had it been able to make the same down payment as the White household, holding all else equal:[13]

$$Counterfactual\ wealth\ at\ age\ 55_{Black} = Down\ payment_{White}(1 + r_{Black})^{55 - Age\ at\ purchase_{Black}} \quad (2)$$

Then, the actual (simulated) housing wealth gap at age 55 can be decomposed as follows:

$$Share\ of\ age - 55\ gap\ due\ to\ initial\ disparities = \frac{Wealth\ at\ age\ 55_{Black} - Counterfactual\ wealth\ at\ age\ 55_{Black}}{Wealth\ at\ age\ 55_{Black} - Wealth\ at\ age\ 55_{White}} \quad (3)$$

$$Share\ of\ age - 55\ gap\ due\ to\ subsequent\ appreciation = \frac{Counterfactual\ wealth\ at\ age\ 55_{Black} - Wealth\ at\ age\ 55_{White}}{Wealth\ at\ age\ 55_{Black} - Wealth\ at\ age\ 55_{White}} \quad (4)$$

Intuitively, $Counterfactual\ wealth\ at\ age\ 55_{Black}$ shows how much higher simulated Black housing wealth would have been had the Black family not had a resource deficit when purchasing its first home. Hence, any remaining wealth gap must be due to racial disparities in subsequent appreciation.

Previous studies using similar decomposition techniques have noted that the results are sensitive to the order in which the various factors are applied.[14] For instance, if we run the inverse thought experiment – asking how large the age-55 gap would have been had Black households started off with their actual down payment, but had subsequently earned the faster White appreciation rate – we would get a different answer. Fortunately, however, both approaches yield the same general conclusion, so for simplicity we present equations (3) and (4) as the main results.

[13] Note that, conceptually, this decomposition considers racial disparities in purchase age as contributing to the cumulative appreciation gap.

[14] See, for example, Liebman (2015).

Results

To set the stage for the main results, Table 1 presents summary statistics for the older homeowners in our sample. As expected, this group is relatively well-off. However, Black and White homeowners still differed along several important dimensions at the time of first home purchase. Specifically, household income is slightly less than $70,000 for Black households and over $90,000 for White households And, in this group, Black household heads were less likely to have a college degree, were more often single, and had fewer children living at home.

Figure 1 compares housing wealth at age 55 for the hypothetical Black and White households. As expected, after controlling for income and basic demographics, Black homeowners approaching retirement have only 61 percent of the housing wealth held by older White homeowners.[15]

To understand the drivers of this gap, the first step is to consider housing market experiences in young adulthood. Recall that initial housing wealth is simply the household's down payment (first house price less mortgage principal); as expected, Black households approached the housing market with fewer resources to invest. Specifically, initial housing wealth for Black households was only 74 percent of initial wealth for their otherwise-similar White counterparts (see Figure 2).

Because of this resource deficit, Black households ended up buying less expensive first homes than White households.[16] They also bought them slightly later (see first row of Table 1). Consequently, Black families had a little less time to see their houses grow in value and pay down their debt before age 55.

Not only did older Black homeowners start from a weaker position, but their housing wealth also grew more slowly over time. The second row of Table 1 calculates the internal rate of return that, when applied to the down payment, yields housing wealth at age 55. For both Black and White homeowners, this internal rate of return exceeds the annual appreciation rate of the house itself (around 2 percent during this period) because housing is a highly leveraged investment. Nevertheless, Black housing wealth grew 0.7 percentage points slower per year.

[15] See Appendix Table A1 for full regression results.

[16] Specifically, the purchase price of Black-owned homes in our analysis was 15 percent less. In theory, smaller down payments could have resulted from Black households taking on more debt to acquire homes of similar value to White households. However, the simulated loan-to-value ratio is almost identical. See Appendix Table A2 for full regression results.

Compounded over two decades, this annual appreciation penalty explains most of the cumulative difference in the growth of housing wealth.

From a policy perspective, one might wonder what caused such a stark difference in appreciation: weak growth in the value of Black-owned homes, or slower amortization of mortgage debt? Hence, Figure 3 breaks wealth into its components: the asset value of the house and the remaining mortgage principal. On the asset side, the value of Black-owned homes grew by only 40 percent (from $126,000 to $176,000), compared to 77 percent for homes owned by White households (from $149,000 to $264,000). On the debt side, remaining mortgage principal dropped by 11 percent for Black households, but actually grew slightly for White households between the time of first purchase and age 55.

The growth in debt for White households may seem surprising given that, by age-55, households had been making mortgage payments for two decades. It turns out that many older households traded their "starter home" for a larger, more valuable house with higher appreciation, and financed the purchase with additional debt. Black households were 26 percent less likely to take advantage of this leveraged upsizing.[17] And when they did, they borrowed less. In addition, older White households were more likely to refinance their original mortgage as interest rates fell, and some of these transactions were cash-out refinances. Although they are infrequently discussed in the literature on mortgage lending, both of these factors suggest that racial barriers to accessing credit persisted over the lifecycle for this cohort of older homeowners.

Ultimately, the goal of this study is to determine what share of the age-55 wealth gap is driven by initial disparities, and what share is due to subsequent appreciation. So as a final exercise we conduct a thought experiment: how large would the age-55 gap have been had Black households started off with the same initial housing wealth as White households, but then subsequently earned their actual, lower appreciation rate? Figure 4 presents the results, with initial disparities accounting for 53 percent of the actual gap and slower appreciation generating the other 47 percent. However, as discussed earlier, the exact share is sensitive to how the thought experiment is framed.[18]

[17] See Appendix Table A3.

[18] If we instead ask how large the age-55 gap would have been had Black households started off with their actual initial housing wealth, but had subsequently earned the faster White appreciation rate, we find that initial disparities account for 64 percent of the age-55 gap, and appreciation the other 36 percent.

Conclusion

Black families face disadvantage in nearly every aspect of the housing market. Consequently, Black households approaching retirement are less likely to own homes than White households; and even among homeowners with similar household income and demographics, older Black households have less housing wealth than their White counterparts. Hence, this study addressed a simple question: what share of the housing wealth gap at age 55 is due to adverse experiences at the time of first purchase – namely, fewer resources to support a down payment – and what share is due to slower appreciation in subsequent years? Although the exact answer is somewhat sensitive to the details of the analysis, the conclusion is clear – each factor contributed meaningfully to the age-55 gap.

Closing the housing wealth gap is a complex problem to solve. However, in at least one aspect of the housing market – mortgage lending – conditions seem to be improving for young Black homebuyers. Hence, future research should consider how structural changes in the housing market over the past 30 years could reduce the age-55 housing wealth gap moving forward.

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Table 1. *Summary Statistics for Homeowners in the PSID, 1980-2019, in Real 2019 Dollars*

Household characteristics at time of first purchase	Black households	White households
Household income	$68,595	$93,415
College-educated	14%	46%
Married	48	69
Lives with children (<= 2)	36	54
Lives with children (> 2)	19	19
Sample size	93	311

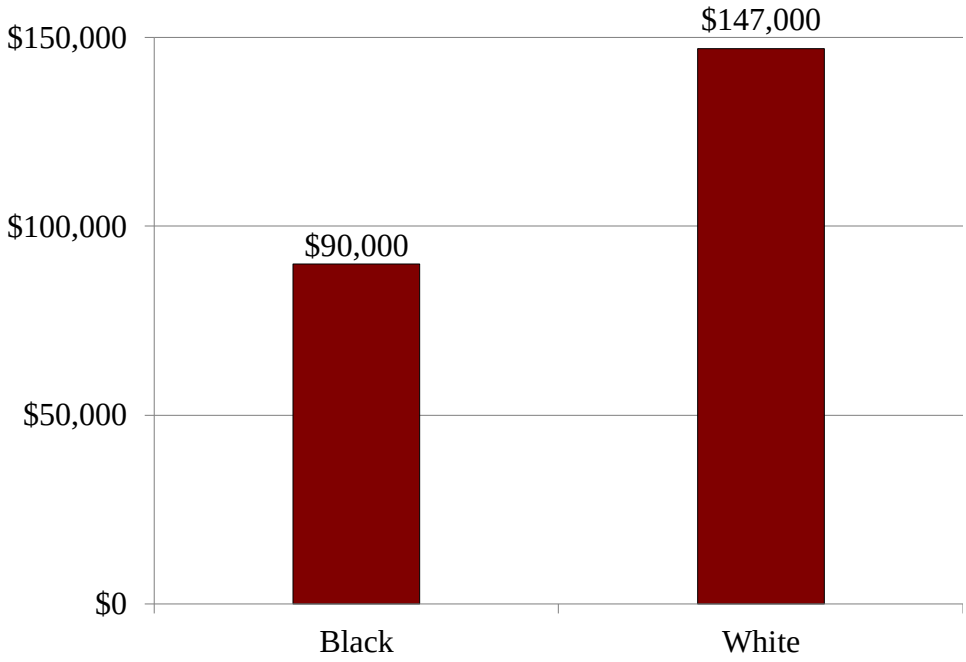
Notes: The baseline sample includes all households who first purchased a home between 1980 and 2000 under the age of 40, stayed a homeowner for at least 20 years, and were observed until age 55.
Source: Authors' estimates from the *Panel Study of Income Dynamics* (1980-2019).

Table 2. *Simulated Age at First Purchase and Annualized Appreciation Rate of Housing Wealth, by Race, 1980-2019*

	Black	White
Age at first purchase	33	32
Annualized appreciation rate	5.1%	5.8%

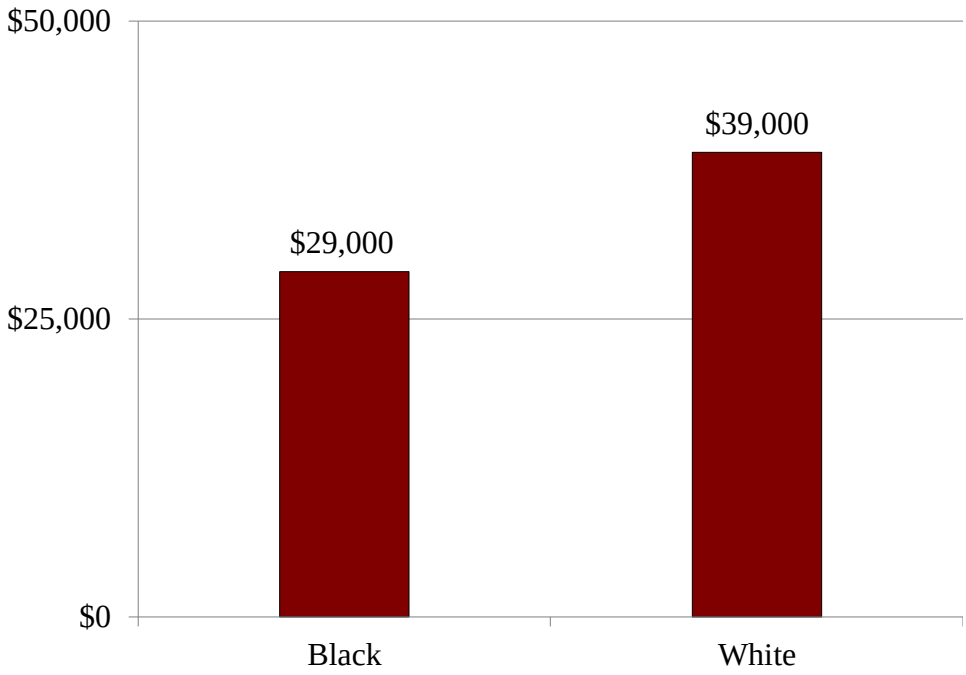
Note: Results are adjusted to control for household income and basic demographics.
Source: Authors' estimates from the PSID (1980-2019).

Figure 1. *Simulated Housing Wealth of Age 55 Homeowners by Race, 1980-2019, in 2019 Dollars*



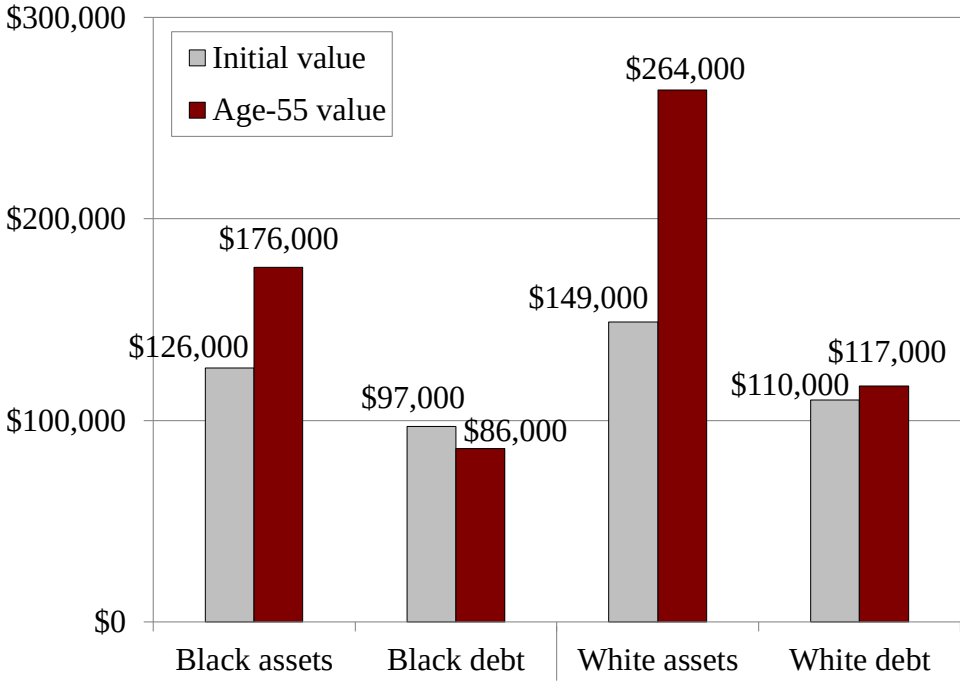
Note: Results are adjusted to control for household income and basic demographics.
Source: Authors' estimates from University of Michigan, *Panel Survey of Income Dynamics* (PSID) (1980-2019).

Figure 2. *Simulated Initial Housing Wealth (Down Payment) by Race, 1980-2019, in 2019 Dollars*



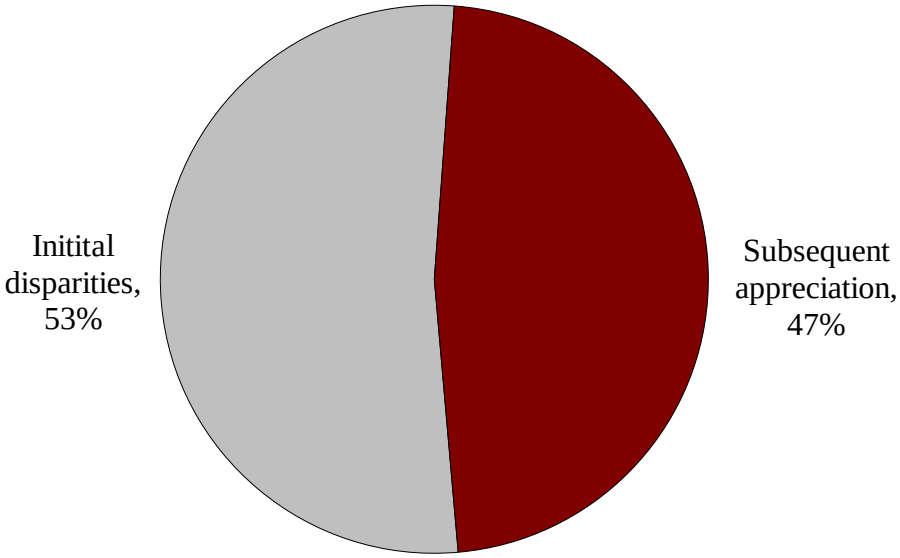
Note: Results are adjusted to control for household income and basic demographics.
Source: Authors' estimates from the PSID (1980-2019).

Figure 3. *Simulated Asset Value and Mortgage Principal, by Race, 1980-2019, in 2019 Dollars*



Note: Results are adjusted to control for household income and basic demographics.
Source: Authors' estimates from the PSID (1980-2019).

Figure 4. *Share of the Age-55 Housing Wealth Gap Explained by Initial Disparities and Subsequent Appreciation, 1980-2019*



Note: Results are adjusted to control for household income and basic demographics.
Source: Authors' estimates from the PSID (1980-2019).

Appendix

Table A1. *Regression Results for the Racial Housing Wealth Gap at Age 55, 1980-2019, in 2019 Dollars*

Household characteristics	Log of housing wealth
Black	-0.495***
	(0.177)
Log household income	0.579***
	(0.124)
College-educated	0.429***
	(0.107)
Married	-0.004
	(0.142)
Lives with one or two children	-0.238*
	(0.131)
Lives with two or more children	-0.206*
	(0.121)
Purchase year fixed effects	Yes
Sample size	382
R-squared	0.324
Mean predicted housing wealth for Black households	$89,551
Mean predicted housing wealth for White households	146,843

Notes: The sample includes all households who first purchased a home between 1980 and 2000 under the age of 40, stayed a homeowner for at least 20 years, and were observed until age 55. We have dropped extreme values at the lower and upper ends of the distribution that add up to 5% of the sample. Robust standard errors are in parentheses. *** p<0.01, * p<0.05, * p<0.1.
Source: Authors' estimates from the *Panel Study of Income Dynamics* (1980-2019).

Table A2. *Regression Results for the Relationship Between Housing Market Experiences at the Time of First Purchase and Race, 1980-2019, in 2019 Dollars*

	(1)	(2)	(3)
Household characteristics	Purchase age	Log price of first home	Loan-to-value ratio at first purchase
Black	0.954*	-0.168*	0.030
	(0.577)	(0.102)	(0.084)
Log household income	1.360***	0.709***	-0.061**
	(0.440)	(0.120)	(0.029)
College-educated	-0.447	0.267***	0.077**
	(0.475)	(0.071)	(0.033)
Married	-1.401**	-0.114	0.093**
	(0.604)	(0.086)	(0.043)
Lives with one or two children	0.949	-0.127	-0.048
	(0.612)	(0.095)	(0.044)
Lives with two or more children	3.006***	-0.055	-0.060
	(0.538)	(0.085)	(0.042)
Age at purchase		0.003	-0.000
		(0.009)	(0.004)
Purchase year fixed effects	Yes	Yes	Yes
Sample size	404	404	363
R-squared	0.289	0.447	0.106
Mean predicted values for Black households	32.6	$126,135	76.7%
Mean predicted values for White households	31.6	149,223	73.7

Notes: The sample includes all households who first purchased a home between 1980 and 2000 under the age 40, stayed a homeowner for at least 20 years, and were observed until age 55. The sample of the loan-to-value ratio regression excludes households who first purchased a home in 1982 due to missing information on mortgages in that PSID wave. Robust standard errors in parentheses. *** p<0.01, * p<0.05, * p<0.1.
Source: Authors' estimates from the *Panel Study of Income Dynamics* (1980-2019).

Table A3. *Regression Results for the Relationship Between Housing Market Experience Since First Purchase, and Race, 1980-2019, in 2019 Dollars*

Household characteristics	Ever upsized	Additional mortgage relative to initial purchase price	Ever refinanced
Black	-0.263***	-0.464**	-0.188**
	(0.080)	(0.180)	(0.085)
Log household income	0.089***	-0.059	0.052*
	(0.032)	(0.162)	(0.030)
College-educated	0.110*	0.044	0.010
	(0.059)	(0.161)	(0.045)
Married	0.061	0.291*	0.142**
	(0.072)	(0.163)	(0.068)
Lives with one or two children	0.120	-0.141	0.033
	(0.080)	(0.173)	(0.045)
Lives with two or more children	-0.114	-0.345	0.031
	(0.150)	(0.308)	(0.079)
Purchase year FE	Yes	Yes	Yes
Sample size	404	404	404
R-squared	0.184	0.078	0.132
Mean predicted values for Black households	28.0%	21.3%	66.3%
Mean predicted values for White households	54.3	67.7	85.1

Notes: The sample includes all households who first purchased a home between 1980 and 2000 under the age of 40, stayed a homeowner for at least 20 years, and were observed until age 55. Upsizing in 1982 is excluded from the analysis due to missing information on mortgages in that PSID wave. Robust standard errors are in parentheses. *** p<0.01, * p<0.05, * p<0.1.
Source: Authors' estimates from the *Panel Study of Income Dynamics* (1980-2019).

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