The Silent Divides in Education's Promise: Uneven Wealth Gains from College

Fernando Loaiza*

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Abstract

This paper examines whether higher education serves as an equalizing force in wealth accumulation in the United States. Using twenty years of PSID data and multiple empirical strategies, the study shows that the wealth returns to tertiary education differ sharply by race. White individuals experience substantial wealth gains from college, while Non-White individuals see little to no improvement, even when comparing biological siblings from the same family. The analysis also reveals that younger cohorts receive much smaller wealth benefits from college than earlier generations. Evidence on mechanisms suggests that weaker labor market returns and higher student debt burdens limit the extent to which Non-White households can convert education into long-term wealth. The findings indicate that while higher education improves economic outcomes on average, its ability to reduce racial wealth disparities remains limited by broader structural inequalities.

Keywords: Wealth · Education · Race · College

JEL Codes: I24 · I26 · J15 · J16 · J24

*Contact: Max Planck Institute for Innovation and Competition, Herzog-Max-Str. 4, 80333, Munich, Germany. Email: fernando.loaiza@ip.mpg.de. The views expressed here, and all potential errors, are those of the authors. Declarations of interest: none

1 Introduction

Education is widely viewed as a cornerstone of economic success, consistently associated with higher earnings (Card, 1999) and substantial financial returns to college degrees (Cappelli, 2020). Yet treating higher education as a uniform route to upward mobility obscures major disparities in who actually benefits from it. U.S. policy continues to promote college completion as the primary pathway to the middle class (Dynarski & Scott-Clayton, 2013; College Board, 2023), but persistent racial wealth gaps raise doubts about whether tertiary education delivers comparable financial returns across racial groups. Despite similar levels of educational attainment, large racial wealth gaps remain among college graduates. This creates a central puzzle: two individuals with the same degree can end up on entirely different wealth trajectories depending on the racial and financial circumstances of the households they come from. If higher education were the great equalizer, graduates of all racial backgrounds would convert degrees into similar wealth gains. Instead, persistent gaps among equally educated households suggest that the returns to education depend critically on household-level financial conditions.

Human capital theory predicts that education increases productivity and wealth accumulation (Becker, 2009; Heckman et al., 2006; Card, 1999), but mounting evidence suggests that these returns vary sharply by race. Differences in labor market access, credit constraints, financial resources, and intergenerational transfers may limit how educational attainment translates into economic outcomes for non-White households. If education equalized opportunities, we would expect similar wealth returns across racial groups. Instead, systemic racial inequalities in income, borrowing costs, housing markets, and wealth inheritance may attenuate or reverse the financial benefits of higher education. This study, therefore, asks: Does tertiary education increase household wealth equally across racial groups, and what mechanisms account for unequal returns?

Structural and institutional inequities shape these disparities. Theories of social capital (Coleman, 1988) and cumulative disadvantage (DiPrete & Eirich, 2006) highlight how unequal access to networks, financial markets, and high-opportunity environments compounds over the life course. Substantial evidence documents persistent racial gaps in intergenerational wealth transmission (Pfeffer & Killewald, 2019) and discrimination in labor, credit, and housing markets (Chetty et al., 2014). These barriers can restrict access to high-return assets or impose higher debt burdens on non-White individuals, even when educational attainment is equal.

Education influences wealth both directly, through labor income, and also indirectly through financial literacy, investment behavior, and portfolio composition. More educated individuals tend to exhibit greater financial sophistication and hold higher-yield financial assets (Loaiza, 2024, 2021). Yet these wealth-building channels may operate differently across racial groups because of unequal access to credit, discriminatory lending practices, or historical exclusion from appreciating asset markets. Accordingly, the mechanisms linking education to wealth may be less accessible or less profitable for non-White households.

To evaluate these dynamics, this study uses data from the Panel Study of Income Dynamics (PSID) from 1999 to 2019 and implements three complementary empirical strategies: random-effects panel regressions, within-sibling fixed-effects models, and an instrumental-variable design leveraging parental job loss. Together, these approaches address unobserved family background, reduce endogeneity concerns, and provide a robust assessment of racial heterogeneity in the wealth returns to education.

The results reveal stark racial disparities. White individuals consistently experience significant wealth gains from tertiary education, whereas non-White individuals experience much smaller, and sometimes negligible, returns. These findings indicate that higher education does not erase pre-existing racial inequalities; instead, it interacts with structural barriers that shape wealth accumulation differently across groups. Generational analysis further shows declining wealth returns for younger cohorts, suggesting that college has become a weaker engine of mobility over time. Parental wealth remains a powerful predictor of adult wealth, underscoring the importance of intergenerational transfers in shaping racial inequality.

This paper makes three contributions. First, it provides new causal evidence on racial heterogeneity in the wealth returns to tertiary education using PSID data and multiple identification strategies. Second, it strengthens causal inference by integrating random-effects models, sibling fixed effects, and an IV strategy based on parental job loss. Third, it documents generational declines in the wealth premium associated with higher education and shows that these declines differ sharply between White and non-White households. It is important to emphasize that higher education remains strongly associated with improved economic outcomes on average. The results in this paper do not suggest that education fails to promote mobility; rather, they show that under current structural conditions, the economic gains from education are distributed unequally across racial groups. In other words, education raises wealth, but it does not raise it equally.

The remainder of the paper proceeds as follows. Section 2 reviews related literature. Section 3 presents the empirical strategy. Section 4 reports the main findings, and Section 5 examines mechanisms behind racial differences in wealth returns. Section 6 discusses the findings and Section 7 concludes.

2 Literature Review

A large literature documents the origins and persistence of the racial wealth gap in the United States. Historical analyses show that racial disparities in wealth are rooted in long-standing institutional and policy structures that restricted asset accumulation for non-White households (Derenoncourt et al., 2023b). Discriminatory housing and credit policies, barriers to business ownership, and unequal access to education and employment have produced durable intergenerational disadvantages for Black and other non-White families (Chetty et al., 2020). These structural foundations mean that educational attainment alone may be insufficient to equalize economic outcomes.

A central mechanism is intergenerational wealth transmission. Pfeffer and Killewald

(2019) show that inherited wealth, financial transfers, and parental resources explain a substantial share of racial differences in adult wealth. White families are significantly more likely to own assets, receive large financial transfers, and benefit from parental resources that support homeownership, entrepreneurship, or educational investments (Charles & Hurst, 2003; Fagereng et al., 2021). Non-White families, by contrast, have faced historical barriers to wealth accumulation, limiting their ability to pass down wealth and reinforcing racial stratification.

Labor market dynamics further contribute to persistent racial disparities. Occupational segregation, discrimination, and unequal career trajectories generate large and persistent earnings gaps between White and non-White workers (Bayer & Charles, 2018). These differences compound over the life cycle and shape savings, portfolio composition, and opportunities for wealth accumulation. Historical evidence shows that economic institutions and policy choices have systematically advantaged White wealth building while limiting gains for Black workers (Derenoncourt et al., 2023a).

Parallel to this, extensive research examines the role of education in promoting economic mobility. Human capital theory posits that schooling increases productivity and lifetime earnings (Becker, 2009; Card, 1999). However, recent empirical work challenges the assumption that college reduces racial wealth inequality. Bartscher, Kuhn, and Schularick (2020) document a significant college wealth premium since the 1980s, but find that racial differences in portfolio choice, financial literacy, and business ownership amplify disparities among the college educated.

A growing body of work directly analyzes the effect of college on racial wealth gaps. Using the PSID data and a set of mixed methods, Meschede et al. (2017) show that while White college-educated households accumulate substantial wealth, Black college-educated households experience stagnant or even declining wealth. Financial transfers are key: White graduates are far more likely to receive support for college or homeownership, whereas Black graduates are more likely to provide financial assistance to parents (Taylor et al., 2018). These transfers meaningfully affect post-college asset accumulation.

Additional studies highlight the limited equalizing power of education. Emmons and Ricketts (2017) show that college attainment explains less than half of the Black–White wealth gap; financial behavior, portfolio composition, and differential debt burdens play larger roles. Student loan disparities exacerbate these dynamics: Black young adults accumulate substantially more debt than White counterparts, even when parental wealth is similar (Houle & Addo, 2016; Addo et al., 2016). Recent evidence finds that the wealth premium from college is historically low for White families born in the 1980s and statistically indistinguishable from zero for non-White families (Ricketts & Emmons, 2020), raising further concerns about the diminishing economic value of higher education.

This literature shows that while college education raises earnings, it does not eliminate racial wealth disparities and may even reinforce them. Differences in intergenerational wealth transfers, debt burdens, labor market outcomes, and access to financial opportunities all contribute to unequal wealth returns to education across racial groups. What remains less understood, however, is the extent to which these unequal wealth returns

reflect causal effects of education itself rather than differences in family background, selection into college, or unobserved heterogeneity. Existing studies provide valuable evidence but often have limited controls for parental wealth or identification strategies that cannot fully separate education effects from underlying racial disparities. This study addresses this gap by providing new causal evidence on how the wealth returns to tertiary education differ across racial groups.

3 Empirical Analysis

To estimate the effect of tertiary education on wealth accumulation, the analysis begins with a random-effects (RE) panel model, which allows for unobserved individual-specific components that are constant over time while retaining time-invariant regressors. The specification is:

$$Y_{it} = \beta_0 + \beta_1 \text{Education}_i + \beta_2 X_i + \beta_3 D_{it} + \gamma_t + c_i + \upsilon_{it}, \tag{1}$$

where Y_{it} denotes household wealth, and Education_i is an indicator equal to 1 for college or postgraduate completion. The vector X_i includes time-invariant parental and individual characteristics drawn from the PSID childhood files, such as parental wealth, parental education, parental presence in the household at age 16, and indicators of inheritances received. The vector D_{it} contains time-varying covariates, including age and household characteristics observed in adulthood. Year fixed effects γ_t capture macroeconomic shocks common to all individuals, while c_i denotes unobserved individual heterogeneity.

Although informative, this model may still suffer from omitted variable bias if unobserved family background or individual traits influence both education and wealth. To address these concerns, the analysis leverages a within-sibling estimator. This is a key strength of the PSID, as it allows us to compare biological siblings who make educational decisions independently. Because siblings share parental wealth, parental education, household environment, and much of their genetic endowment, sibling fixed effects absorb the core sources of confounding emphasized in the racial wealth gap literature. The sibling fixed-effects model is:

$$\Delta Y_{jt} = \alpha_0 + \alpha_1 \Delta\text{Education}_{jt} + \alpha_2 \Delta X_{jt} + \gamma_t + \upsilon_{jt}, \tag{2}$$

where Δ denotes differences between siblings within the same family. The vector ΔX_{jt} includes only characteristics that plausibly vary within families. These include (i) age differences, (ii) indicators of childhood socioeconomic disadvantage such as growing up in a poor household or experiencing periods of financial hardship, (iii) measures of school performance such as participation in gifted programs or repeating a grade, and (iv) behavioral indicators such as disciplinary issues or instances of breaking the law during adolescence. All shared family characteristics, such as parental wealth, parental education, parental presence, and the broader household environment, drop out by construction. As a result, the sibling fixed-effects estimator directly addresses the central

identification challenge in this context: disentangling the wealth returns to education from intergenerational family resources. For these reasons, the sibling fixed-effects results serve as the core causal evidence in this paper.

Despite its advantages, the sibling estimator cannot rule out differential parental investments across siblings or spillovers in which one sibling's educational attainment affects the other's wealth trajectory. To further probe endogeneity and assess the robustness of the sibling estimates, the study implements an instrumental-variables (IV) strategy based on parental job loss (PJL) during high school years. The first and second stages are:

$$\text{Education}_{it} = \beta_1 \, \text{PJL}_i + \delta_i + \gamma_c + \epsilon_{it}, \tag{3}$$

$$Y_{it} = \alpha_0 + \alpha_1 \widehat{\text{Education}}_{it} + \delta_i + \gamma_c + \upsilon_{it}, \tag{4}$$

where δ_i captures individual fixed effects and γ_c captures birth-cohort fixed effects. PJL represents an unexpected and plausibly exogenous labor-market shock occurring when the child is aged 15–18, a period during which household liquidity constraints play a pivotal role in shaping college enrollment decisions. As documented in prior work, job displacement sharply reduces household income, increases financial stress, and tightens credit access in ways that directly affect the ability to finance higher education (Stevens and Schaller (2011); Charles et al. (2018)). By operating at the margin between high school completion and college entry, PJL provides a source of exogenous variation in tertiary education that is particularly relevant for studying wealth accumulation later in life.

The PJL instrument complements the sibling fixed-effects estimator by capturing financially driven shocks that alter educational choices in ways not attributable to family background or long-run characteristics. Whereas the sibling design removes all shared family factors, the IV design identifies the component of education driven by short-term liquidity constraints during the college decision window. Together, these approaches address distinct sources of endogeneity and provide a more complete view of the causal pathways linking education and wealth.

3.1 Data

This study uses data from the PSID spanning 1999–2019. The PSID is a nationally representative longitudinal survey that interviews families biennially, allowing individuals to be followed across multiple waves and enabling the construction of intergenerational links. The analytic sample consists of biological siblings observed in adulthood. Restricting the sample to biological siblings ensures comparability within families and facilitates the sibling fixed-effects strategy used in Section 3. Individuals are required to be age 30 or older to ensure that educational attainment is complete and that meaningful wealth accumulation has begun. Wealth is measured at the household level, corresponding to the family unit headed by the respondent. Wealth is measured at the household level in the

PSID, but the analysis focuses on individual educational attainment as the determinant of long-run economic outcomes.

Wealth is observed in multiple survey waves and includes financial assets (stocks, bonds, mutual funds), retirement accounts, business and farm equity, real estate holdings, and both mortgage and non-mortgage debt. Social Security wealth and defined-benefit pensions are excluded. Because wealth may take zero or negative values, all regressions use a generalized inverse hyperbolic sine (IHS) transformation with scaling parameter $\lambda = 0.0001$, which preserves observations with negative wealth while stabilizing the transformation for large magnitudes.

The key explanatory variable is an indicator for tertiary education, equal to one for individuals who completed a four-year college degree or postgraduate education. This classification is consistent with the assumption that educational attainment is typically completed before age 30. Additional covariates include parental wealth measured during the respondent's childhood, parental education, indicators of parental presence at age 16, inheritances received in adulthood, and socio-demographic characteristics such as age and race. Measures of individual ability are proxied using IQ test scores, which prior research has shown to produce patterns comparable to alternative ability measures. To provide context for readers unfamiliar with the PSID, descriptive statistics for the main variables by racial group are presented in Table A1 in the Appendix.

Information on parental job loss is drawn from the PSID employment history files and is constructed as the total number of hours of parental unemployment during the respondent's high school years (ages 15–18). This measure is used as an instrumental variable under the assumption that unexpected parental employment shocks tighten household liquidity constraints at precisely the stage when college decisions are made, consistent with Oreopoulos et al. (2008). While parental job loss may also affect long-run wealth directly, for example, through reduced parental savings or financial support, the inclusion of parental wealth and other family background measures helps mitigate this concern.

4 Results

Table 1 presents the results from both the RE regressions and the within-sibling specifications, with estimates reported separately for White and Non-White individuals. The coefficients capture the wealth difference between individuals with a tertiary education and those without one. The RE estimates show that tertiary education substantially increases wealth for White individuals, while Non-White individuals do not experience statistically significant gains and, in some cases, display negative point estimates. These results imply that the wealth returns to higher education differ sharply across racial groups.

The within-sibling estimates in the same table provide a more demanding comparison by examining siblings with different educational attainment. Because siblings share the same family environment, parental wealth, and early-life context, this specification absorbs unobserved family background factors. The results again show large and sta-

tistically significant wealth gains for White individuals with tertiary education, while Non-White individuals exhibit no significant wealth increase. These within-family findings reinforce the conclusion that the unequal wealth returns to education across racial groups cannot be explained solely by differences in parental background or shared household characteristics.

Table 1: OLS and Within-Sibling Estimates by Race

Dependent Variable: Wealth				
	OLS		**Within-Sibling**	
	White	Non-White	White	Non-White
Tertiary	3123.94***	−3144.19**	4950.98***	−215.46
	(800.82)	(1182.20)	(1229.33)	(1091.37)
Observations	13450	7108	3663	3215
Adjusted R^2	0.23	0.11	0.03	0.02

Source: PSID. Standard errors in parentheses. Significance levels: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. OLS models include controls for age, race, parental presence, parental wealth, parental education, inheritance, individual ability, and socio-demographic characteristics. Within-sibling models include differences in age, parental presence, socioeconomic background in childhood, school performance, and behavioral indicators. All specifications include year and cohort fixed effects. Sampling weights applied.

Table 2 presents results using PJL during high school years as an alternative instrument. For White individuals, the instrument is relatively strong and yields positive and statistically significant wealth effects of tertiary education. For Non-White individuals, however, the estimated effect is small and not statistically significant, and the first-stage F-statistics suggest that PJL may be a weak instrument in this subgroup. These findings are consistent with the OLS and sibling models, reinforcing the conclusion that the wealth returns to tertiary education are substantial for White households but limited or absent for Non-White households. At the same time, the IV estimates highlight important limitations in instrument strength for Non-White individuals, suggesting that these results should be interpreted with caution.

4.1 Generational Effects

Birth cohort differences are incorporated to capture how the economic value of education and the wealth-building environment have evolved over time. Generational effects are examined using two broad birth cohorts: individuals born between 1939–1958 and those born between 1959–1988. This allows the analysis to compare the wealth returns to tertiary education across distinct economic, institutional, and policy contexts. To ensure comparability and avoid life-cycle bias—particularly the concern that younger individuals have had less time to accumulate wealth—the sample is restricted to individuals aged 40 to 50 at the time of observation.

The race-specific estimates, presented in the Appendix in Tables A2 for White individuals and Tables A3 for Non-White individuals, reveal substantial generational shifts in

Table 2: I.V. Regression: Parental Job Loss

Dependent Variable: Wealth		
	Race	
	White	Non-White
Tertiary	25550.82*	70073.13
	(12714.51)	(183853.22)
	First Stage	
PJL	−0.17***	−0.02
	(0.03)	(0.03)
F-statistic	36.57	1.15
Observations	7588	4054

Source: PSID. Standard errors in parentheses. Significance levels: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Instrument: PJL during high school years. Year and cohort effects included. Parental wealth is included but omitted for brevity.

the returns to tertiary education. For White individuals, tertiary education significantly increases wealth in both cohorts, but the size of the effect declines for the later-born cohort. This pattern suggests that while higher education continues to yield positive wealth effects for White households, the magnitude of these returns has eroded over time.

For Non-White individuals, the generational pattern is more pronounced. In the earlier cohort, tertiary education is associated with substantial wealth gains. However, in the later cohort, the effect turns negative, indicating that the wealth benefits of tertiary education have effectively disappeared for younger generations of Non-White individuals. This reversal highlights a widening racial divide in the economic payoff to higher education.

Several implications emerge from these results. First, the declining wealth returns for younger cohorts are consistent with broader evidence that the economic value of higher education has weakened over time (Emmons et al., 2019). Rising student debt burdens, stagnating real wages, and higher costs of living may have contributed to this erosion. Second, the racial divergence in returns reflects persistent structural inequalities. While White individuals continue to benefit from higher education, the collapse of gains for younger Non-White individuals aligns with evidence on discriminatory labor market dynamics, differential access to high-return occupations, and the persistent barriers documented in historical and contemporary research (Derenoncourt et al., 2023a; Derenoncourt & Montialoux, 2021). Overall, the generational results reinforce the conclusion that tertiary education does not serve as an equalizer in wealth accumulation and that its benefits are increasingly stratified across racial groups.

5 Mechanisms

To understand why tertiary education generates substantially different wealth returns across racial groups, this section examines two key mechanisms: the role of labor income

and the financial burden associated with student loans.

5.1 Labor Income as a Mediating Channel

Table 3 shows the results from regressions that include labor income as an additional control. For White individuals, the coefficient on tertiary education remains positive and statistically significant even after conditioning on labor income. This suggests that a substantial share of the wealth premium from higher education operates through higher lifetime earnings, but that additional channels—such as higher savings rates, improved financial decision-making, or better access to high-return assets—also contribute to wealth accumulation among White college graduates.

For Non-White individuals, however, the coefficient on tertiary education becomes small and statistically insignificant once labor income is included. The coefficient on labor income itself is also not significant. These patterns indicate that higher education does not translate into proportionate earnings gains for Non-White individuals, and consequently, the income channel does not generate meaningful increases in wealth. Structural and labor market barriers—such as discriminatory hiring, limited access to high-paying occupations, and differential returns to skills—likely contribute to this muted income–wealth linkage.

Table 3: I.V. Regression Mechanism: Income Effect

Dependent Variable: Wealth		
	Race	
	White	Non-White
Tertiary	24166.40^{+}	68648.49
	(12779.50)	(193586.51)
Labor Income	0.17^{**}	0.06
	(0.06)	(0.34)
First Stage		
PJL	-0.16^{***}	-0.01
	(0.02)	(0.01)
F-statistic	43.58	2.37
Observations	7588	4054

Source: Panel Study of Income Dynamics. Standard errors in parentheses. Significance levels: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The instrument is PJL during high school years. Year and cohort fixed effects are included. Parental wealth is included but not reported for brevity.

Appendix Table A4 further show how the income channel varies across cohorts. For older White cohorts, labor income strongly mediates the education–wealth relationship, while for more recent cohorts, the effect weakens, reflecting broader declines in the college wage premium. Among Non-White individuals, earlier cohorts show modest positive income effects, but these largely disappear—or turn negative—in later cohorts. This generational decline reinforces the idea that structural constraints increasingly limit the ability of Non-White households to convert higher education into higher lifetime earnings.

5.2 Student Loan Burden and Wealth Accumulation

Rising tuition costs and increasing reliance on student loans represent a second mechanism shaping wealth outcomes. Table 4 includes student loan balances as an additional financial mechanism. For White individuals, tertiary education continues to generate positive wealth effects, but student loan balances substantially reduce the net gain. This underscores that even for groups receiving positive returns from college, increasing debt burdens erode part of the wealth advantage.

For Non-White individuals, tertiary education remains statistically insignificant in predicting wealth once student loans are included. The coefficient on student loans is negative, although not always significant, indicating that student debt produces a drag on wealth accumulation that Non-White individuals are less able to offset through higher post-college earnings or financial transfers. Appendix Table A5 show that in younger cohorts, student debt increasingly overwhelms the modest wealth gains associated with higher education.

Table 4: I.V. Regression Mechanism: Student Loan

Dependent Variable: Wealth		
	Race	
	White	Non-White
Tertiary	31434.77*	39341.36
	(15952.51)	(322359.46)
Student Loan	−0.45***	−0.45
	(0.05)	(0.31)
First Stage		
PJL	−0.17***	0.02
	(0.03)	(0.07)
F-statistic	27.47	22.41
Observations	3172	1873

Source: Panel Study of Income Dynamics. Standard errors in parentheses. Significance levels: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The instrument is PJL during high school years. Year and cohort fixed effects are included. Parental wealth is included but not reported for brevity.

These findings align with broader evidence that the rising cost of higher education and the student debt crisis have weakened the wealth-building potential of college degrees (Lochner & Monge-Naranjo, 2016). They also illustrate a compounding disadvantage: Non-White individuals face both weaker labor market returns to education and heavier relative financial burdens from student loans. These dynamics help explain why tertiary education amplifies wealth disparities rather than reducing them.

6 Discussion

This study provides new evidence on how tertiary education affects wealth accumulation across racial groups. The results consistently show substantial disparities in the wealth

returns to higher education: White individuals experience sizeable wealth gains from tertiary education, whereas Non-White individuals do not, even when comparing biological siblings who share the same family background. These findings indicate that higher education does not translate into equivalent wealth-building opportunities across racial lines.

The mechanism analysis in Section 5 clarifies part of this divergence. For White individuals, labor income explains a large share of the wealth premium from tertiary education. For Non-White individuals, by contrast, the income channel is weak or statistically insignificant, consistent with evidence of racial differences in labor market returns, occupational sorting, and access to high-earning career pathways. Student debt further attenuates returns, particularly for Non-White households, who face weaker labor market opportunities and tighter financial constraints.

Several limitations should be acknowledged. First, survey-reported wealth, inheritances, and parental transfers may contain measurement error, especially at the top of the distribution. Second, the PSID lacks detailed data on financial behavior, portfolio allocation, and risk preferences, limiting the ability to fully identify the mechanisms behind racial heterogeneity in wealth returns. Third, although the sibling fixed-effects design mitigates many concerns about family background confounding, unobserved within-family differences, such as variation in school quality, peer networks, or early life shocks, may still influence both education and wealth. Fourth, parental job loss may violate the exclusion restriction if it affects long-run wealth directly, and the IV estimates should therefore be interpreted cautiously. Finally, the focus on individuals aged 30–50 may understate life-cycle heterogeneity in wealth accumulation.

The findings point to several promising avenues for future research. Linking survey data with administrative wealth or credit records would improve measurement of assets, liabilities, and intergenerational transfers. Incorporating richer information on financial behavior, savings, and portfolio composition would clarify the mechanisms through which education generates (or fails to generate) wealth. Future work should also examine how college quality, fields of study, and labor market sorting contribute to divergent wealth trajectories, and how the education–wealth relationship evolves across the life cycle. Finally, integrating neighborhood characteristics, access to credit, and local housing market conditions would help identify the structural factors that shape racial differences in the financial returns to higher education.

7 Conclusions

This study examines the relationship between tertiary education and household wealth using PSID data from 1999 to 2019. Across random-effects estimates, within-sibling comparisons, and an IV strategy based on parental job loss, the results consistently show that the wealth returns to higher education differ sharply across racial groups. White individuals experience substantial wealth gains from tertiary education, whereas Non-White individuals show no statistically significant increase in wealth, even when

holding constant shared family background. These findings challenge the idea that higher education functions as a universal pathway to long-term wealth accumulation.

The mechanism analysis indicates that labor income accounts for a meaningful portion of the wealth premium among White individuals but plays a limited role for Non-White individuals, consistent with racial disparities in labor market opportunities and earnings. Rising tuition costs and student debt further attenuate the net wealth benefits of tertiary education, with relatively larger effects for Non-White households that face weaker labor market returns and tighter financial constraints.

In general, the evidence shows that tertiary education does not provide equal wealth-building opportunities across racial groups. Rather, its economic payoff is conditioned by broader structural inequalities in labor markets, credit access, and the financial resources available to households. Understanding these structural barriers is essential for evaluating the role of higher education in promoting intergenerational mobility and for designing policies aimed at narrowing persistent racial wealth gaps.

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Appendix

A1 Descriptive Analysis: Race

Table A1: Summary Statistics by Race

Variable	Race	Mean	Std. Dev.
Panel A: Wealth			
Wealth (IHS)	White	15593.50	21660.83
	Non-White	7629.46	16338.44
Panel B: Education			
Tertiary Education (=1)	White	0.394	0.489
	Non-White	0.198	0.399
Panel C: Demographics			
Age	White	47.49	10.83
	Non-White	46.74	10.60
Panel D: Parental Background			
Inheritance	White	1349.21	7026.71
	Non-White	541.44	5074.98
Parental Presence (age 16)	White	0.868	0.338
	Non-White	0.756	0.429
Parental Wealth (IHS)	White	19658.41	15169.67
	Non-White	8515.28	11447.05

Notes: Statistics are weighted using PSID survey weights. Wealth and parental wealth are inverse hyperbolic sine-transformed.

A2 Birth Cohorts - Generational Effects

Table A2: Effects of Education on Wealth: White

Dependent Variable: Wealth				
	RE		Within Variation	
	1939-58	1959-88	1939-58	1959-88
Tertiary / D.Tertiary	7077.20***	3210.15*	6383.31	4310.55*
	(1563.26)	(1511.35)	(4249.91)	(1834.74)
Observations	1298	3255	486	1447
Adj. R^2	0.21	0.17	0.05	0.03

Note: Source: PSID. Standard errors in parentheses. Significance levels: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. OLS regressions use sampling weights and include inheritance, parental presence, education, wealth, individual ability, and socio-demographic controls (age, sex, race), plus year and cohort effects. Within-sibling regressions compare siblings and include differences in age, socioeconomic conditions and parental presence when young, school performance, and instances of breaking the law. Constant terms and fixed effects included but not reported.

Table A3: Effects of Education on Wealth: Non-White

Dependent Variable: Wealth				
	RE		Within Variation	
	1939-58	1959-88	1939-58	1959-88
Tertiary / D.Tertiary	9758.74***	−2083.93	1469.61	−1454.86
	(2609.75)	(1995.48)	(2759.64)	(1722.27)
Observations	588	1883	428	1120
Adj. R^2	0.24	0.10	0.00	0.02

Note: Source: PSID. Standard errors in parentheses. Significance levels: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. OLS regressions use sampling weights and include inheritance, parental presence, education, wealth, individual ability, and socio-demographic controls (age, sex, race), plus year and cohort effects. Within-sibling regressions compare siblings and include differences in age, socioeconomic conditions and parental presence when young, school performance, and instances of breaking the law. Constant terms and fixed effects included but not reported.

A3 Birth Cohorts Mechanisms

Table A4: RE Regression: Mechanisms Linking Education and Wealth – White

Dependent Variable: Wealth				
	Income Effect		Student Loans	
	1939-58	1959-88	1939-58	1959-88
Tertiary	6301.84***	2015.89	11013.65***	6776.61***
	(1557.39)	(1508.20)	(2241.32)	(1434.22)
Inheritance	0.12**	0.24***	0.13	0.19***
	(0.04)	(0.03)	(0.09)	(0.04)
Parental Wealth	0.21***	0.28***	0.26***	0.25***
	(0.05)	(0.05)	(0.08)	(0.05)
Labor Income	0.17**	0.23***		
	(0.06)	(0.04)		
Student Loan			−0.09	−0.50***
			(0.08)	(0.09)
Observations	1298	3255	758	2878
Adj. R^2	0.23	0.20	0.28	0.29

Note: Source: PSID. Standard errors in parentheses. Significance levels: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. All regressions use sampling weights and control for inheritance, parental presence, individual ability, education, wealth, and socio-demographic factors (age, sex, race). Year and cohort effects included. Constant terms not reported for brevity.

Table A5: RE Regression: Mechanisms Linking Education and Wealth – Non-White

Dependent Variable: Wealth				
	Income Effect		Student Loans	
	1939-58	1959-88	1939-58	1959-88
Tertiary	7886.01**	−3328.09^{+}	10359.12**	2005.04
	(2668.93)	(1917.51)	(3898.57)	(1988.75)
Inheritance	0.03	0.05	0.28*	0.22**
	(0.04)	(0.05)	(0.13)	(0.07)
Parental Wealth	0.24*	0.14*	0.01	0.13*
	(0.10)	(0.06)	(0.12)	(0.05)
Labor Income	0.28***	0.28***		
	(0.08)	(0.05)		
Student Loan			−0.31***	−0.45***
			(0.08)	(0.07)
Observations	588	1883	409	1738
Adj. R^2	0.29	0.16	0.25	0.21

Note: Source: PSID. Standard errors in parentheses. Significance levels: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. All regressions use sampling weights and control for inheritance, parental presence, individual ability, education, wealth, and socio-demographic factors (age, sex, race). Year and cohort effects included. Constant terms not reported for brevity.