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

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Abstract

This study examines the impact of tertiary education on wealth in the U.S. by gender, race, and generation, using multiple identification strategies. The findings reveal that, compared to individuals without a college education, males and White individuals gain more wealth from higher education, while females and Non-White groups see less benefit or even negative impacts. Generational analysis shows diminishing returns for younger cohorts, with those born after 1960 facing the least benefit. The effects are mediated by labor income and student loan burdens, highlighting the need to understand how these factors influence educational and wealth disparities across different demographics and generations.

Keywords: Wealth · Education · Race · Gender · College

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

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1 Introduction

Education has long been considered a cornerstone of economic success, frequently associated with higher earnings (Card, 1999) and, in particular, with the financial benefits of college education (Cappelli, 2020). However, treating education as a uniform pathway to economic mobility overlooks critical disparities in wealth returns across demographic groups. This study examines whether higher education consistently enhances wealth accumulation or whether its benefits depend on factors such as labor market outcomes, financial decision-making, and structural inequalities.

While human capital theory suggests that education enhances productivity and wealth accumulation (Becker, 2009; Heckman, Lochner, & Todd, 2006; Card, 1999), growing evidence indicates that economic returns to education are shaped by gender, race, and socio-economic background. Differences in labor market access, financial resources, and intergenerational wealth transfers may result in unequal financial benefits from education. If higher education functions as an equalizer, we should observe similar wealth returns across demographic groups. However, if systemic inequalities persist, wealth gaps may remain despite comparable levels of educational attainment. This study hypothesizes that while tertiary education contributes to wealth accumulation, its benefits are not uniformly distributed across demographic groups. Additionally, it explores whether generational differences have altered these patterns over time. This study examines these competing perspectives by analyzing how the wealth effects of tertiary education vary across gender, race, and generations.

This analysis is grounded in several key economic theories that provide a framework for interpreting these disparities. Human capital theory (Becker, 2009) posits that education enhances individual productivity and skills, leading to higher earnings and, consequently, greater wealth accumulation. However, gender inequality theories highlight how systemic biases, occupational segregation, and social norms hinder women's ability to translate educational attainment into wealth at the same rate as men (Bergmann, 2005; England, 2010; Kleven, Landais, & Søgaard, 2019). Similarly, theories of social capital (Coleman, 1988) and cumulative disadvantage (DiPrete & Eirich, 2006) emphasize how barriers to access to networks and economic opportunities compound over time, particularly for racial minorities. While education theoretically enhances economic outcomes, persistent discrimination in labor markets, unequal financial resources, and limited access to high-return investments mean that racial minorities do not experience the same wealth gains from education as White individuals (Chetty, Hendren, Kline, & Saez, 2014).

However, structural barriers are not the only mechanisms that influence how education translates into wealth. Beyond its effects on labor income, education directly shapes wealth accumulation through financial literacy, financial behavior, and capital returns. More educated individuals tend to possess greater financial knowledge, which enables them to navigate investment decisions, retirement planning, and asset accumulation more effectively. Education also influences financial behavior, leading to higher savings rates, lower financial distress, and better risk management strategies. Furthermore, education

affects capital returns, as those with higher education are more likely to diversify their assets and invest in higher-yield financial instruments (Loaiza, 2024, 2021). Importantly, these financial mechanisms might not be experienced equally across demographic groups, potentially reinforcing disparities in wealth accumulation.

To examine these dynamics, this study employs data from the Panel Study of Income Dynamics (PSID) from 1999 to 2019 and implements a range of empirical strategies to identify causal effects. Ordinary least squares regression, sibling comparisons, and instrumental variables—including state variations in compulsory schooling laws and parental job loss—are used to account for potential endogeneity. The analysis specifically investigates how the effect of tertiary education on wealth accumulation varies across race, gender, and generational cohorts, providing new insights into the role of higher education in perpetuating or mitigating wealth inequality.

Existing research has documented gender (Lee, 2022) and racial (Derenoncourt et al., 2023b) wealth gaps, with education often viewed as a key determinant. However, while prior studies highlight the economic benefits of education, less is known about how these advantages translate into wealth accumulation across different demographic groups and generations. Previous work suggests that a causal link between education and wealth exists primarily for college and postgraduate levels of education (Loaiza, 2021), yet the specific wealth returns to education by gender and race remain underexplored. This study contributes to the literature by incorporating parental wealth into the analysis, offering a more precise understanding of how family financial background mediates the wealth returns to education.

The findings reveal significant gender and racial disparities in the wealth accumulation benefits of tertiary education. Men and White individuals consistently gain substantial wealth from higher education, while women and non-White individuals often experience less pronounced or even negative effects. These disparities suggest that education does not eliminate pre-existing economic inequalities; instead, it reflects and reinforces structural barriers that shape wealth outcomes across demographic groups. Additionally, generational analysis indicates declining wealth returns to education for younger cohorts, reinforcing concerns that education is becoming a weaker driver of upward mobility over time. Family financial background—including inheritance and parental wealth—plays a crucial role in shaping these outcomes across all groups. Parental wealth is widely recognized as a key determinant of children's economic outcomes, influencing their educational attainment and long-term financial well-being. A substantial body of research has documented a strong intergenerational correlation in wealth, highlighting mechanisms such as direct financial transfers, access to credit, and the role of social capital (Charles & Hurst, 2003; Fagereng, Mogstad, & Rønning, 2021; Pfeffer & Killewald, 2019).

The remainder of the paper is structured as follows. Section 2 reviews the relevant literature. Section 3 presents the econometric strategy, detailing the methods used to estimate the causal effect of tertiary education on wealth accumulation across demographic groups. Section 4 discusses the main findings, while Section 5 explores the underlying mechanisms driving these disparities. Finally, Section 7 concludes with key takeaways

and avenues for future research.

2 Literature Review

Recent literature extensively examines the determinants of racial and gender wealth and income inequalities, emphasizing the significant role of systemic factors in perpetuating these disparities. Pfeffer and Killewald (2019) highlights the role of intergenerational wealth transmission in maintaining racial disparities, illustrating how inherited wealth significantly influences economic outcomes. Derenoncourt et al. (2023b) trace the historical evolution of these disparities, attributing them to long-standing discrimination and unequal access to opportunities. This view is supported by Chetty, Hendren, Jones, and Porter (2020), who highlight how differences in neighborhood environments, school quality, and family resources largely drive racial disparities in economic opportunity.

Further research by Addo, Houle, and Simon (2016) and Zaw, Hamilton, and Darity (2016) explores the disproportionate effects of student loan debt and incarceration on Black Americans, exacerbating economic inequalities. Derenoncourt, Kim, Kuhn, and Schularick (2023a) provides a historical analysis showing that systemic economic policies have historically favored White wealth accumulation. Complementing these findings, Bayer and Charles (2018) identify labor market discrimination and occupational segregation as significant contributors to earnings differences between Black and White men. Additionally, Bartscher, Kuhn, and Schularick (2020) documents the emergence of a substantial college wealth premium since the 1980s, noting that systematic portfolio differences, financial literacy, and business ownership have increased wealth inequality between college-educated and non-college households. These studies collectively emphasize that racial and economic disparities are entrenched in systemic inequalities.

Parallel to racial disparities, gender wealth and income inequalities are also perpetuated by systemic factors. Blau and Kahn (2017) provides a comprehensive review of the gender wage gap, focusing on discrimination, occupational segregation, and labor market dynamics. Goldin (2014) discusses the convergence of gender roles in the labor market while highlighting the remaining barriers to full equality. Additionally, Olivetti and Petrongolo (2016) analyzes the evolution of gender gaps across industrialized countries, and Bertrand, Kamenica, and Pan (2015) investigates the influence of gender identity norms on labor supply and household income dynamics.

Examining birth cohorts reveals how the wealth returns from education have varied over time and across demographic groups. During periods of increased educational enrollment, such as those examined by Stephens Jr and Yang (2014), the wealth returns on education have fluctuated significantly. This analysis necessitates controlling for factors like parental wealth and inheritance due to the influence of dynastic wealth, as highlighted by Edlund and Kopczuk (2009). Understanding these dynamics is crucial for identifying barriers to college education in the U.S., such as high tuition fees (Archibald & Feldman, 2011) and the impact of parental socioeconomic status on college attendance (Chevalier et al., 2013). Studying these relationships across different socio-economic backgrounds

and generations enhances our understanding of social stratification and opportunities for upward mobility.

3 Empirical Model

Different identification methods are implemented to explore the causal effect of tertiary education on wealth. The analysis initially implements ordinary least squares (OLS) by adjusting for variables like personal skills and family background. This detailed control of the variables addresses potential confounders and leads to more accurate estimates. The OLS specification is provided by:

$$\text{Wealth}_{it} = \alpha_0 + \beta_1 \,\text{Education}_i + \alpha_2 \,\text{X}_i + \epsilon_t + \upsilon_{it} \tag{1}$$

The variable Education is operationalized as a binary indicator, where 1 represents individuals who have attained a college or postgraduate degree, and 0 includes those with some college, high school, or lower levels of education. X includes personal ability, inheritances, and parental presence, education, and wealth. It also includes age, gender, and race. ϵ_t captures year-specific effects, and υ is the error term. The approach also considers birth-cohort effects.

Despite controlling for the parental background and individual abilities, there might be unobservables in the error term υ_{it}. A different approach is included to address endogeneity by examining the differences in wealth outcomes between biological siblings who made their schooling decisions independently. By comparing siblings, the approach controls for shared family backgrounds, socio-economic status, and genetics, assuming these factors contribute equally to each sibling's development. The main hypothesis is that any disparity in wealth observed post-education stems from their educational choices, not from other factors.

This method inherently eliminates controls that are identical for both siblings, such as parental education and household characteristics, since these factors do not vary within sibling pairs. Instead, it focuses on individual-level behavioral and experiential differences that may influence wealth accumulation, such as participation in gifted programs, class repetition, and risk-taking behavior. The within-sibling approach isolates the effects of educational attainment by leveraging variation that exists between siblings, ensuring that observed wealth differences are not confounded by shared family background.

$$\text{D.W}_{jt} = \alpha_0 + \alpha_1 \,\text{D.Educ}_{jt} + \alpha_2 \,\text{D.X}_{jt} + \gamma_t + \upsilon_{jt}, \tag{2}$$

$D.W_{jt}$ represents the wealth difference between two siblings, and $D.Educ_{jt}$ the difference in their education, with values of 1 indicating that the first sibling has a tertiary education while the second does not, -1 indicating the reverse, and 0 indicating no difference. $D.X_{jt}$ includes differences in age, socioeconomic backgrounds and parental presence during upbringing, participation in gifted programs, and class repetition, as well as behavioral factors like breaking the law. γ_t accounts for time-fixed effects, and υ_{jt} is the

error term.

The reason for using different sets of controls in specifications (1) and (2) lies in the nature of the within-sibling approach: while pooled OLS requires explicit controls for parental education and household background, these factors are inherently accounted for in the within-sibling comparison. Including them in the sibling specification would be redundant, as they do not vary between siblings. Instead, the model includes individual behavioral and developmental factors that differ within sibling pairs and may influence wealth accumulation.

This approach acknowledges potential limitations, such as unequal parental support or the influence of a more educated sibling on the other. To mitigate potential endogeneity and to address further concerns regarding the assumptions needed for causal inferences, the study employs instrumental variables. This approach leverages the natural variation in compulsory schooling lengths across U.S. states and parental job loss before college decisions to overcome these limitations.

The first instrument uses state variations in compulsory education laws (CSL) as a proxy to explore education's exogenous effects on individuals' schooling levels. This perspective shifts focus away from unmeasured individual traits, directly examining how external changes in education levels influence financial outcomes. The first stage equation 3 and the second stage equation 4 are presented to model schooling as a function of compulsory education:

$$\text{Education}_{it} = \beta_1 \, \text{CSL}_i + \gamma_t + \epsilon_{it} \tag{3}$$

$$\text{Wealth}_{it} = \alpha_0 + \alpha_1 \, \text{Education}_{it} + \gamma_t + \upsilon_{it} \tag{4}$$

where *Education* reflects the education an individual receives, and *CSL* indicates the mandated years of schooling in their state and period. However, some suggest that compulsory schooling laws predominantly influence high school completion and do not target college education.

To overcome this limitation and to complement the analysis, I introduce an additional instrument to enrich our analysis: parental job loss (PJL) during a child's high school years. Unlike compulsory schooling laws, this new instrument captures unexpected financial disruptions that can significantly alter a family's ability to support higher education pursuits. By focusing on the period when children are 15 to 18 years old, I leverage a critical time frame where financial instability directly impacts decisions regarding college attendance. This exogenous variation provided by parental job loss offers a robust means to specifically examine the relationship between tertiary education and wealth accumulation, thus complementing the insights gained from compulsory schooling laws. The first and second stages are presented by:

$$\text{Education}_{it} = \beta_1 \, \text{PJL}_i + \gamma_t + \epsilon_{it} \tag{5}$$

$$\text{Wealth}_{it} = \alpha_0 + \alpha_1 \, \text{Education}_{it} + \gamma_t + \upsilon_{it} \tag{6}$$

where *Education* reflects the education an individual receives, and *PJL* indicates parental unemployment during the years before college enrollment.

3.1 Data

This study focuses on parent-child and sibling relationships from 1999 to 2019, using data from the Panel Study of Income Dynamics (PSID) of individuals over 30 who lead their family units. The PSID is a longitudinal dataset, structured as a panel, meaning individuals are observed at multiple points over time rather than at a single cross-section, with observations recorded every two years as provided by the PSID. Two different datasets are constructed, one for parent-child and a second for sibling relationships. To reduce variability, only biological relationships are included. The unit of analysis is the individual, and wealth is measured at the household level, corresponding to the wealth of the family unit led by the individual. Wealth is observed at multiple time points throughout the study period, allowing for a panel structure in the analysis.

Wealth variables are transformed using an inverse hyperbolic sine transformation to handle zero and negative wealth values. Wealth includes financial assets (stocks, bonds, mutual funds), retirement savings, business equity, real estate holdings, and liabilities such as mortgage and non-mortgage debt. Social Security and defined benefit pensions are excluded from the measure. The education variable, Tertiary, is categorized into a binary variable grouping college graduates and Postgraduate educational levels, under the assumption that further education is unlikely beyond a certain age. In this data, a college degree means a four-year degree. The final dataset includes individuals who have completed their education and reached an age where wealth accumulation is relevant, ensuring consistency across comparisons. In addition to Tertiary education, the analysis also considers inherited wealth, parental presence at age 16, parental education, and socio-demographic characteristics, such as race, sex, and age. Additional parental background includes their net worth when the child is young. The final variable is IQ test scores, which are used to control for individual ability. While there may be debate about the reliability of IQ tests for this purpose, this variable has been found to produce results similar to other more robust measures of ability.

Related to the instruments, the parental job loss information is also obtained from the PSID and accounts for the aggregation of hours of parental unemployment in the years before starting college. Parental job loss serves as an instrument under the assumption that unexpected employment shocks to parents influence a child's educational trajectory by affecting household financial constraints, thereby altering the probability of attending college similar to Oreopoulos et al. (2008). While parental job loss could directly influence long-term wealth through changes in financial support or inheritance, the analysis includes controls for parental wealth and financial background to mitigate this concern.

The data used for compulsory schooling laws as an instrumental variable was obtained from Acemoglu and Angrist (2000) and is defined as the maximum between two options. The first is the minimum years required before leaving school, taking into account age

requirements. The second is the difference between the minimum dropout age and the maximum enrollment age. These laws generate exogenous variation in educational attainment by mandating additional years of schooling, thereby increasing the likelihood of tertiary education. This instrument has been widely used in the literature for example in Angrist and Krueger (1991) to estimate the causal effects of education. A potential concern is that states with stricter schooling laws may differ systematically in ways that affect long-term wealth. To address this, the analysis incorporates state fixed effects and additional socio-demographic controls.

To provide context for readers unfamiliar with the PSID, sample characteristics are presented in Tables A1 and A2 in the Online Appendix. These include descriptive statistics for the main variables broken down by race and gender.

3.2 Descriptive Analysis

The descriptive analysis of wealth accumulation by education level is presented in table 1 and it reveals important disparities across gender and racial groups. The PSID Data indicates that individuals with tertiary education consistently accumulate more wealth than those without, with this trend evident across all demographic categories. Men with higher education levels exhibit significantly greater wealth accumulation than their non-tertiary educated counterparts, highlighting the substantial economic benefits of education for males. While women with tertiary education also experience increased wealth, the gains are less pronounced than for men. Similarly, White individuals with tertiary education show markedly higher wealth levels, highlighting the significant returns on education within this group. However, Non-White individuals see relatively smaller wealth gains despite also benefiting from higher education.

Table 1: Summary Statistics

	Sex		**Race**	
	Male	Female	White	Non-White
Non-Tertiary	92880	32446	107055	24050
	(10200)	(1600)	(11000)	(2400)
Tertiary	353723	104510	331853	59336
	(52000)	(5000)	(40500)	(2000)
Observations	21817	11157	21128	11846

Note: Source: Panel Study of Income Dynamics. The median value is in parentheses. Data in this analysis is used with sampling weights.

4 Results

Table 2 presents the results from pooled OLS regressions, where each column corresponds to a separate regression stratified by gender and race. The coefficients represent the effect of tertiary education relative to individuals in the same demographic category who do not have tertiary education. The results indicate that tertiary education significantly increases wealth for males, while females do not experience a statistically significant wealth

boost and even face a negative impact. Racial differences are also evident: White individuals benefit significantly from tertiary education in wealth accumulation, whereas Non-White individuals experience a negative impact. Table A3 expands on this by showing that inheritance and parental wealth positively influence wealth across all groups, emphasizing the significance of family financial background in wealth outcomes.

Table 2: OLS Regression

Dependent Variable: Wealth				
	Sex		**Race**	
	Male	Female	White	Non-White
Tertiary	3822.99***	−2479.92*	3123.94***	−3144.19**
	(825.62)	(1099.20)	(800.82)	(1182.20)
Observations	14141	6417	13450	7108
Adjusted R^2	0.23	0.15	0.23	0.11

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors are heteroskedastic robust. The data uses sampling weights. Inheritance, parental presence, education and wealth, and individual ability are included. Year, socio-demographic, and cohort effects are also included. Socio-demographic variables include age, sex, and race of individuals. These variables and the constant term are included but not reported for brevity.

Table 3: Within Variation Regression

Dependent Variable: Wealth				
	Sex		**Race**	
	Male	Female	White	Non-White
D.Tertiary	4355.02**	2668.71	4950.98***	−215.46
	(1427.96)	(1882.85)	(1229.33)	(1091.37)
Observations	3252	1212	3663	3215
Adjusted R^2	0.03	0.04	0.03	0.02

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The comparison base is high-school drop-outs. Control variables include the difference between siblings in age, socioeconomic conditions and parental presence when young, school performance, and instances of breaking the law. The constant term, time, and cohort effects are included but not reported for brevity.

The within-sibling differences in Table 3 further explore the effect of tertiary education by comparing siblings who attained different education levels. In this analysis, the comparison group consists of siblings without tertiary education, and the coefficients measure the difference in wealth between the sibling with tertiary education and their counterpart without it. The findings confirm that tertiary education leads to substantial wealth gains for males. Females also see positive, though not statistically significant, wealth effects from tertiary education. The impact is more pronounced along racial lines, with White individuals experiencing significant wealth gains from tertiary education, whereas Non-White individuals do not show significant wealth increases. The within-sibling approach controls for unobserved family background characteristics, strengthening causal interpretation.

Table 4 presents the instrumental variable (IV) regression results using compulsory schooling laws as the instrument for tertiary education. The comparison group remains individuals without tertiary education. The findings indicate that tertiary education significantly increases wealth for males and females; however, the only high F-statistic is for males, confirming the strength of the instrument primarily for this group. Racial differences remain evident: White individuals do not experience significant wealth gains from tertiary education, while Non-White individuals show a positive effect, although the F-statistic suggests potential concerns about instrument strength.

Table 4: I.V. Regression: Compulsory Schooling Laws

	Sex		**Race**	
	Male	**Female**	**White**	**Non-White**
Tertiary	35571.00***	44271.03^{+}	−2052.69	36977.36^{+}
	(9759.11)	(26473.00)	(22310.81)	(18972.93)
	First Stage			
CSL	0.02***	0.01**	0.01**	0.01***
	(0.00)	(0.00)	(0.00)	(0.00)
F-statistic	27.25	1.75	32.92	2.76
Observations	8015.00	2738.00	7132.00	3621.00

Note: Source: Panel Study of Income Dynamics. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The instrument is the years of compulsory schooling by state. Year and birth cohort effects are included.

Table 5: I.V. Regression: Parental Job Loss

	Sex		**Race**	
	Male	**Female**	**White**	**Non-White**
Tertiary	36712.53*	22021.28	25550.82*	70073.13
	(15340.74)	(22475.57)	(12714.51)	(183853.22)
	First Stage			
PJL	−0.14***	−0.10**	−0.17***	−0.02
	(0.02)	(0.03)	(0.03)	(0.03)
F-statistic	31.47	2.31	36.57	1.15
Observations	7805	3837	7588	4054

Note: Source: Panel Study of Income Dynamics. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The instrument is the hours of parental unemployment before college decisions. Year and cohort effects are included. Parental wealth is included but not reported for brevity.

Table 5 presents the last regression results from the second instrument, parental job loss. The findings indicate that tertiary education significantly increases wealth for males and White individuals, with robust F-statistics confirming the strength of the instrument for these groups. For females, the results suggest a positive impact on wealth, though the F-statistic indicates that the instrument may be weaker and less reliable. For Non-White individuals, the effect of tertiary education on wealth is positive but not statistically significant, and the F-statistic suggests a weak instrument, making these results less reliable. These findings complement the results from the OLS and previous IV analysis,

reinforcing the significant wealth benefits of tertiary education for males and highlighting substantial gains for White individuals, while also pointing to potential limitations in the instrument for other groups.

4.1 Generational Effects

The decision to include birth cohorts reflects variations over time in the access, role, and economic value of education. Generational effects are analyzed using subgroup regressions based on two broad birth cohorts: individuals born between 1939–1958 and those born between 1959–1988. This approach allows for an examination of how the relationship between tertiary education and wealth accumulation has evolved across different economic and policy environments. To ensure comparability across cohorts and address concerns that younger individuals have had less time to accumulate wealth, the analysis is restricted to individuals aged 40 to 50 at the time of observation. This restriction helps mitigate potential confounding with life-cycle effects and ensures that differences in wealth across cohorts are not simply driven by differences in the amount of time individuals have had to benefit from education.

Analysis by sex, detailed in the Appendix in Tables A4 and A5 for males, and A6 and A7 for females, shows differing trends. For males, tertiary education significantly increases wealth for both birth cohorts, but the effect has weakened over time. For females, the pattern is different. In the earlier cohort, tertiary education is associated with an increase in wealth, while in the later cohort, the effect turns negative. This suggests that the wealth benefits of tertiary education for women have substantially declined across generations.

The economic trajectory for White individuals, detailed in the Appendix in Tables A8 and A9, mirrors the male trend, with early cohorts benefiting more from higher education. In the later cohort, the effect remains positive but weaker. This suggests that while White individuals continue to experience positive returns from higher education, the effect has weakened over time. For Non-White individuals, as shown in Tables A10 and A11, the results indicate a sharp decline in the benefits of tertiary education across generations. In the earlier cohort, tertiary education significantly increases wealth, while in the later cohort, the effect turns negative. This suggests that the wealth benefits of tertiary education for Non-White individuals have completely disappeared in the younger cohort.

Several key insights emerge from these generational effects. First, the diminishing returns on higher education for younger cohorts suggest that the economic value of education has evolved (Emmons et al., 2019). Factors such as changes in the labor market, increased cost of living, and rising education costs may have contributed to these shifts. This trend indicates that younger generations face different economic landscapes compared to earlier cohorts. Second, gender disparities in wealth accumulation reveal the persistent wage gap and occupational segregation. Despite educational gains, females, particularly in later cohorts, experience lower economic returns from higher education

(Blau & Kahn, 2017). Third, racial disparities in wealth accumulation underscore the impact of structural inequalities. While early cohorts of White individuals benefited significantly from higher education, this advantage diminished over time (Derenoncourt et al., 2023a; Derenoncourt & Montialoux, 2021). Non-White individuals, despite initial gains from tertiary education, saw a reduction in benefits in later cohorts. Systemic racism and restricted access to high-paying opportunities likely contribute to these disparities.

5 Mechanisms

The primary observed effect of education on wealth appears to be driven by the income effect, as detailed in Table 6. For males, accounting for labor income shows a diminished but still significant positive impact of higher education on wealth, suggesting that a substantial portion of this effect is mediated through higher earnings associated with tertiary education. Similarly, for White individuals, the impact of tertiary education on wealth remains positive and significant, even when labor income is included, indicating that higher earnings play a crucial role in wealth accumulation for this group.

For females, the coefficient on tertiary education remains positive but not statistically significant, and the impact of labor income itself is also not significant. This suggests a more complex relationship between college education and wealth for females, possibly influenced by persistent gender disparities in earnings and labor market opportunities. For Non-White individuals, while the coefficient on tertiary education is positive, it is not statistically significant, and the effect of labor income is also not significant. These results indicate that racial disparities may limit the wealth accumulation benefits of higher education for Non-White individuals, despite similar educational achievements.

Table 6: I.V. Regression Mechanism: Income Effect

	Sex		**Race**	
	Male	**Female**	**White**	**Non-White**
Tertiary	34677.08*	21373.21	24166.40^{+}	68648.49
	(16120.96)	(23135.74)	(12779.50)	(193586.51)
Labor Income	0.13^{+}	0.14	0.17**	0.06
	(0.07)	(0.13)	(0.06)	(0.34)
			First Stage	
PJL	−0.13***	−0.09***	−0.16***	−0.01
	(0.02)	(0.02)	(0.02)	(0.01)
F-statistic	38.36	5.89	43.58	2.37
Observations	7805.00	3837.00	7588.00	4054.00

Note: Source: Panel Study of Income Dynamics. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The instrument is the hours of parental unemployment before college decisions. Year and cohort effects are included. Parental wealth is included but not reported for brevity.

The analysis, shown in tables A12, A14, A16, and A18, reveals how income influences wealth accumulation across different demographics over time. For males and Whites,

there's a positive correlation between labor income and education, reflecting historical labor market advantages. Conversely, Non-White groups show a 'catch-up' effect with slightly higher positive coefficients, pointing to efforts in overcoming barriers to wealth accumulation. For females, notable gains from labor income on wealth are evident in recent generations, underscoring their ongoing battle for equality in the labor market. Economic returns from education have evolved due to socioeconomic changes and policies in the U.S. The post-WWII GI Bill notably increased male college enrollment (Zhang, 2018), while policies like Title IX and the need for dual incomes have enhanced educational opportunities for women, integrating them more into the workforce (Rim, 2021). By the late 20th and early 21st centuries, the relationship between education and wealth had significantly shifted.

Table 7: I.V. Regression Mechanism: Student Loan

	Sex		**Race**	
	Male	**Female**	**White**	**Non-White**
Tertiary	53071.68^{+}	-5872.33	31434.77^{*}	39341.36
	(28424.09)	(23384.85)	(15952.51)	(322359.46)
Student Loan	-0.44^{***}	-0.39^{***}	-0.45^{***}	-0.45
	(0.05)	(0.08)	(0.05)	(0.31)
	First Stage			
PJL	-0.13^{***}	-0.09^{**}	-0.17^{***}	0.02
	(0.03)	(0.03)	(0.03)	(0.07)
F-statistic	28.06	21.57	27.47	22.41
Observations	3294.00	1751.00	3172.00	1873.00

Note: Source: Panel Study of Income Dynamics. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The instrument is the hours of parental unemployment before college decisions. Year and cohort effects are included. Parental wealth is included but not reported for brevity.

Rising education costs have weakened the strong link between higher education and wealth accumulation, particularly affecting Non-White groups who face ongoing societal and economic challenges despite educational gains (Hurtado et al., 1997). The increase in university fees and the deepening student debt crisis have further complicated the benefits of higher education for recent generations (Lochner & Monge-Naranjo, 2016). The primary observed effect of student loans on wealth is detailed in Table 7. For males, accounting for student loans shows a positive impact of tertiary education on wealth, although the high cost of student loans significantly offsets these gains. For White individuals, the effect remains positive and significant, but again, student loans substantially reduce the net benefit of higher education.

For females, the coefficient on tertiary education is negative and not statistically significant, suggesting that the burden of student loans may outweigh the financial benefits of higher education. Similarly, for Non-White individuals, the positive impact of tertiary education on wealth is not statistically significant, and student loans further exacerbate the financial strain, although the coefficient on student loans is not significant. Tables in the Appendix, A15, A13, A17, and A19 for generational effects. While student loans

reduce net wealth, higher education still provides significant intrinsic value for wealth enhancement, highlighting its dual role as both a valuable asset and a potential financial burden.

6 Discussion

This research provides new insights into how tertiary education influences wealth accumulation across gender, race, and generational cohorts. The findings document significant disparities in the wealth returns to education, but they also highlight open questions about the underlying mechanisms driving these differences. While the analysis controls for several factors, including parental wealth and socioeconomic background, wealth accumulation is a multi-faceted process influenced by additional elements such as financial literacy, risk preferences, career trajectories, and investment behavior.

A key contribution of this paper is showing that the wealth benefits of education are not uniform across demographic groups. However, the exact reasons for these disparities remain important for further research. The analysis of mechanisms presented in Section 5 provides insights into some of these channels. Specifically, labor income plays a significant role in explaining wealth accumulation for males and White individuals, while its impact is weaker for females and Non-White individuals. This suggests that gender and racial disparities in earnings contribute to the differential wealth effects of education. Additionally, rising education costs and student debt significantly reduce the wealth returns to higher education, particularly for younger cohorts and Non-White individuals, reinforcing the financial burden of pursuing tertiary education.

Several potential explanations for these disparities emerge from the literature, including differential access to financial education, varying levels of risk tolerance, differences in occupational choices, and structural labor market inequalities. Future research should aim to disentangle these factors more precisely by incorporating measures of financial literacy, investment behavior, and savings decisions to better understand why education translates into wealth for some groups but not others (Loaiza, 2024, 2021).

Another important consideration concerns the role of household dynamics in wealth accumulation. Since wealth is measured at the household level, factors such as marriage, divorce, and joint financial decision-making can influence observed wealth outcomes. However, these variables are themselves influenced by education, making it challenging to disentangle their effects without introducing post-treatment bias. Household size, for example, may be shaped by education through delayed marriage or fertility decisions, which in turn affect wealth accumulation. To maintain a clean identification strategy, this study controls only for pre-education factors and relies on its empirical design to address potential confounders. While this approach ensures a more precise estimation of the causal effect of education on wealth, future research could explore these household dynamics in greater depth.

Lastly, while this study employs robust empirical strategies, including within-sibling comparisons and instrumental variables, certain unobserved factors remain. Variations

in school quality, peer networks, and early career opportunities may also influence wealth trajectories in ways that are difficult to measure. Future research could leverage richer datasets that track individuals' financial decision-making over time to refine our understanding of how education interacts with wealth accumulation.

While this study controls for age in all specifications, it does not model age-specific effects of education on wealth accumulation. The standard life-cycle model suggests that wealth follows an inverted U-shaped trajectory, which is particularly relevant when considering educational investments. Individuals with higher education tend to accumulate wealth at a slower rate early in life due to foregone earnings and student debt but may experience higher accumulation later. Future research could explore age-heterogeneous effects more directly, but given the stratification by gender, race, and generation in this study, further sample division by age would have resulted in small subsamples with reduced statistical power.

7 Conclusions

This study explores the relationship between tertiary education and wealth accumulation. The analysis of data from the PSID from 1999 to 2019 reveals critical insights into the impact of college on wealth accumulation by gender, race, and over generations. By employing different identification strategies, the study indicates that the causal effect of education on wealth is clear only for males and White individuals meanwhile no effect for females and non-White individuals. These results challenge the notion that education universally enhances wealth, highlighting the need for targeted policies to address these inequities.

The income effect, where men typically outearn women (Blau & Kahn, 2017), plays a crucial role in explaining differences in wealth accumulation (Killewald et al., 2017). For Non-White individuals, the findings suggest that systemic inequalities and restricted access to lucrative opportunities further exacerbate wealth gaps, despite educational advances (Pager & Shepherd, 2008). However, these disparities are likely driven by a combination of factors beyond earnings alone, including differences in financial literacy, investment behavior, risk preferences, and household financial decision-making. The mechanisms outlined in Section 5 suggest that while labor income plays a key role in explaining wealth accumulation differences, it is not the sole determinant. Further research is needed to disentangle the relative contributions of these various factors.

Additionally, the findings highlight the important role of student loans in shaping wealth accumulation outcomes. The significant negative coefficients on student loans across most demographic groups indicate that rising education costs and student debt significantly undermine the wealth accumulation potential associated with tertiary education. These results underscore the importance of addressing the student debt crisis to mitigate its impact on wealth inequality.

The study acknowledges certain limitations: First, it relies on survey data from the PSID, which may be subject to reporting biases. Future research could complement these

findings with administrative data to validate the results. Second, despite the use of IV and sibling comparison methods, there may still be unobserved factors that influence both education and wealth accumulation. Future research could benefit from examining the long-term effects of education on wealth accumulation across different stages of the life cycle. Exploring the role of financial literacy and wealth management practices in mediating the relationship between education and wealth could reveal important mechanisms. This can help design interventions that enhance the financial outcomes of educational investments.

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

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Online Appendix

(NOT FOR PUBLICATION)

Descriptive Analysis: Gender

Table A1: Summary Statistics by Gender

Variable	Obs	Mean	Std. Dev.	Min - Max
Wealth				
Male	21,628	17,332.85	21,625.79	-64,134.62 – 93,082.84
Female	11,103	8,295.42	18,688.41	-46,052.7 – 92,058.3
Tertiary				
Male	21628	0.381	0.486	0 – 1
Female	11103	0.334	0.472	0 – 1
Age				
Male	15409	46.87	10.62	31 – 93
Female	7182	48.52	11.11	31 – 88
White				
Male	21628	0.880	0.326	0 – 1
Female	11103	0.796	0.403	0 – 1
Inheritance				
Male	21628	1289.10	7109.26	0 – 122060.7
Female	11103	1105.94	6029.09	0 – 122060.7
Par. Presence				
Male	21628	0.865	0.342	0 – 1
Female	11103	0.824	0.381	0 – 1
Parental Wealth				
Male	19673	18359.89	14847.26	-50497.59 – 75264.48
Female	9785	17477.54	15926.28	-32595.72 – 75264.48

Notes: Summary statistics are weighted using survey weights.

Descriptive Analysis: Race

Table A2: Summary Statistics by Race

Variable	Obs	Mean	Std. Dev.	Min - Max
Wealth				
White	21123	15593.50	21660.83	-64134.62 – 93082.84
Non-White	11608	7629.46	16338.44	-45932 – 79415.09
Tertiary				
White	21123	0.394	0.489	0 – 1
Non-White	11608	0.198	0.399	0 – 1
Age				
White	14539	47.49	10.83	31 – 93
Non-White	8052	46.74	10.60	31 – 85
Sex: Male				
White	21123	0.699	0.459	0 – 1
Non-White	11608	0.553	0.497	0 – 1
Inheritance				
White	21123	1349.21	7026.71	0 – 122060.7
Non-White	11608	541.44	5074.98	0 – 122060.7
Par. Presence				
White	21123	0.868	0.338	0 – 1
Non-White	11608	0.756	0.429	0 – 1
Parental Wealth				
White	19411	19658.41	15169.67	-50497.59 – 75264.48
Non-White	10047	8515.28	11447.05	-38271.83 – 54680.78

Notes: Summary statistics are weighted using survey weights.

Ordinary Least Squares Regression: Details

Table A3: OLS Regression: Effects of Education on Wealth

	Dependent Variable: Wealth			
	Sex		**Race**	
	Male	Female	White	Non-White
Tertiary	3822.99***	−2479.92*	3123.94***	−3144.19**
	(825.62)	(1099.20)	(800.82)	(1182.20)
Inheritance	0.13***	0.24***	0.14***	0.18***
	(0.02)	(0.04)	(0.02)	(0.05)
Parental Wealth	0.30***	0.24***	0.29***	0.15***
	(0.03)	(0.04)	(0.03)	(0.04)
Par.Education W.	657.64*	−200.18	377.02	321.38
	(325.39)	(409.16)	(324.60)	(392.29)
Par.Education H.	33.41	1434.66***	505.42	840.35+
	(336.34)	(403.25)	(331.67)	(446.12)
Ability	381.61*	121.66	309.54	204.03
	(167.99)	(188.52)	(217.85)	(142.04)
Par.Presence	1836.72*	216.67	1009.07	535.58
	(875.78)	(1027.47)	(1059.99)	(745.29)
Observations	14141	6417	13450	7108
Adjusted R^2	0.23	0.15	0.23	0.11

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors are heteroskedastic robust. The data uses sampling weights. Year, socio-demographic, and cohort effects are included. Socio-demographic variables include age, sex, and race of individuals. The constant term is included but not reported for brevity.

Birth Cohorts: Male

Table A4: OLS Regression: Effects of Education on Wealth: Male

Dependent Variable: Wealth		
	1939-58	1959-88
Tertiary	8592.84***	4113.65**
	(1685.85)	(1566.53)
Inheritance	0.09*	0.18***
	(0.04)	(0.03)
Parental Wealth	0.24***	0.31***
	(0.06)	(0.05)
Observations	1360	3455
r2_o	0.23	0.17

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors are heteroskedastic robust. The data uses sampling weights. Inheritance, parental presence, education and wealth, and individual ability are included. Year, socio-demographic, and cohort effects are also included. Socio-demographic variables include age, sex, and race of individuals. These variables and the constant term are included but not reported for brevity.

Table A5: Within Variation Regression: Effects of Education on Wealth - Male

Dependent Variable: Wealth		
	1939-58	1959-88
D.Tertiary	4505.35	4209.58*
	(5642.29)	(2080.26)
Observations	450	1232
Adjusted R^2	0.04	0.02

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The comparison base is high-school drop-outs. Control variables include the difference between siblings in age, socioeconomic conditions and parental presence when young, school performance, and instances of breaking the law. The constant term, time, and cohort effects are included but not reported for brevity.

Birth Cohorts: Female

Table A6: OLS Regression: Effects of Education on Wealth: Female

Dependent Variable: Wealth		
	1939-58	1959-88
Tertiary	5899.14*	−2659.04
	(2297.89)	(1879.82)
Inheritance	0.16	0.37***
	(0.12)	(0.10)
Parental Wealth	0.17*	0.20**
	(0.09)	(0.06)
Observations	526	1683
r2_o	0.20	0.08

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors are heteroskedastic robust. The data uses sampling weights. Inheritance, parental presence, education and wealth, and individual ability are included. Year, socio-demographic, and cohort effects are also included. Socio-demographic variables include age, sex, and race of individuals. These variables and the constant term are included but not reported for brevity.

Table A7: Within Variation Regression: Effects of Education on Wealth - Female

Dependent Variable: Wealth		
	1939-58	1959-88
D.Tertiary	21393.90***	−553.22
	(3924.38)	(3267.09)
Observations	143	417
Adjusted R^2	0.17	0.01

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The comparison base is high-school drop-outs. Control variables include the difference between siblings in age, socioeconomic conditions and parental presence when young, school performance, and instances of breaking the law. The constant term, time, and cohort effects are included but not reported for brevity.

Birth Cohorts: White

Table A8: OLS Regression: Effects of Education on Wealth: White

Dependent Variable: Wealth		
	1939-58	1959-88
Tertiary	7077.20***	3210.15*
	(1563.26)	(1511.35)
Inheritance	0.13**	0.24***
	(0.04)	(0.03)
Parental Wealth	0.22***	0.29***
	(0.05)	(0.05)
Observations	1298	3255
r2_o	0.21	0.17

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors are heteroskedastic robust. The data uses sampling weights. Inheritance, parental presence, education and wealth, and individual ability are included. Year, socio-demographic, and cohort effects are also included. Socio-demographic variables include age, sex, and race of individuals. These variables and the constant term are included but not reported for brevity.

Table A9: Within Variation Regression: Effects of Education on Wealth - White

Dependent Variable: Wealth		
	1939-58	1959-88
D.Tertiary	6383.31	4310.55*
	(4249.91)	(1834.74)
Observations	486	1447
Adjusted R^2	0.05	0.03

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The comparison base is high-school drop-outs. Control variables include the difference between siblings in age, socioeconomic conditions and parental presence when young, school performance, and instances of breaking the law. The constant term, time, and cohort effects are included but not reported for brevity.

Birth Cohorts: Non-White

Table A10: OLS Regression: Effects of Education on Wealth: Non-White

Dependent Variable: Wealth		
	1939-58	1959-88
Tertiary	9758.74***	−2083.93
	(2609.75)	(1995.48)
Inheritance	0.03	0.05
	(0.05)	(0.05)
Parental Wealth	0.27**	0.17**
	(0.10)	(0.06)
Observations	588	1883
r2_o	0.24	0.10

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors are heteroskedastic robust. The data uses sampling weights. Inheritance, parental presence, education and wealth, and individual ability are included. Year, socio-demographic, and cohort effects are also included. Socio-demographic variables include age, sex, and race of individuals. These variables and the constant term are included but not reported for brevity.

Table A11: Within Variation Regression: Effects of Education on Wealth - Non-White

Dependent Variable: Wealth		
	1939-58	1959-88
D.Tertiary	1469.61	−1454.86
	(2759.64)	(1722.27)
Observations	428	1120
Adjusted R^2	0.00	0.02

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The comparison base is high-school drop-outs. Control variables include the difference between siblings in age, socioeconomic conditions and parental presence when young, school performance, and instances of breaking the law. The constant term, time, and cohort effects are included but not reported for brevity.

Birth Cohorts Mechanisms: Male

Table A12: OLS Regression: Income Effect for Male

Dependent Variable: Wealth		
	1939-58	1959-88
Tertiary	7268.54***	2840.96+
	(1666.58)	(1529.00)
Inheritance	0.08*	0.18***
	(0.04)	(0.03)
Parental Wealth	0.23***	0.30***
	(0.06)	(0.05)
Labor Income	0.25***	0.25***
	(0.06)	(0.04)
Observations	1360	3455
Adjusted R^2	0.27	0.21

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors are heteroskedastic robust. The data uses sampling weights. Inheritance, parental presence, education and wealth, and individual ability are included. Year, socio-demographic, and cohort effects are also included. Socio-demographic variables include age, sex, and race of individuals. These variables and the constant term are included but not reported for brevity.

Table A13: OLS Regression: Student Loans for Male

Dependent Variable: Wealth		
	1939-58	1959-88
Tertiary	10766.77***	7689.38***
	(2312.76)	(1402.76)
Inheritance	0.13	0.16***
	(0.09)	(0.04)
Parental Wealth	0.31***	0.26***
	(0.08)	(0.06)
Student Loan	−0.14	−0.50***
	(0.09)	(0.09)
Observations	787	3009
Adjusted R^2	0.31	0.28

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors are heteroskedastic robust. The data uses sampling weights. Inheritance, parental presence, education and wealth, and individual ability are included. Year, socio-demographic, and cohort effects are also included. Socio-demographic variables include age, sex, and race of individuals. These variables and the constant term are included but not reported for brevity.

Birth Cohorts Mechanisms: Female

Table A14: OLS Regression: Income Effect for Female

Dependent Variable: Wealth		
	1939-58	1959-88
Tertiary	5404.07*	−3550.18+
	(2296.49)	(1857.76)
Inheritance	0.16	0.39***
	(0.12)	(0.09)
Parental Wealth	0.17+	0.17**
	(0.09)	(0.06)
Labor Income	0.13	0.22***
	(0.09)	(0.06)
Observations	526	1683
Adjusted R^2	0.22	0.11

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors are heteroskedastic robust. The data uses sampling weights. Inheritance, parental presence, education and wealth, and individual ability are included. Year, socio-demographic, and cohort effects are also included. Socio-demographic variables include age, sex, and race of individuals. These variables and the constant term are included but not reported for brevity.

Table A15: OLS Regression: Student Loans for Female

Dependent Variable: Wealth		
	1939-58	1959-88
Tertiary	11186.33**	1357.15
	(3649.49)	(2053.19)
Inheritance	0.34**	0.36***
	(0.12)	(0.08)
Parental Wealth	0.05	0.16*
	(0.09)	(0.06)
Student Loan	−0.26**	−0.44***
	(0.09)	(0.07)
Observations	380	1607
Adjusted R^2	0.27	0.20

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors are heteroskedastic robust. The data uses sampling weights. Inheritance, parental presence, education and wealth, and individual ability are included. Year, socio-demographic, and cohort effects are also included. Socio-demographic variables include age, sex, and race of individuals. These variables and the constant term are included but not reported for brevity.

Birth Cohorts Mechanisms: White

Table A16: OLS Regression: Income Effect for White

Dependent Variable: Wealth		
	1939-58	1959-88
Tertiary	6301.84***	2015.89
	(1557.39)	(1508.20)
Inheritance	0.12**	0.24***
	(0.04)	(0.03)
Parental Wealth	0.21***	0.28***
	(0.05)	(0.05)
Labor Income	0.17**	0.23***
	(0.06)	(0.04)
Observations	1298	3255
Adjusted R^2	0.23	0.20

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors are heteroskedastic robust. The data uses sampling weights. Inheritance, parental presence, education and wealth, and individual ability are included. Year, socio-demographic, and cohort effects are also included. Socio-demographic variables include age, sex, and race of individuals. These variables and the constant term are included but not reported for brevity.

Table A17: OLS Regression: Student Loans for White

Dependent Variable: Wealth		
	1939-58	1959-88
Tertiary	11013.65***	6776.61***
	(2241.32)	(1434.22)
Inheritance	0.13	0.19***
	(0.09)	(0.04)
Parental Wealth	0.26***	0.25***
	(0.08)	(0.05)
Student Loan	−0.09	−0.50***
	(0.08)	(0.09)
Observations	758	2878
Adjusted R^2	0.28	0.29

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors are heteroskedastic robust. The data uses sampling weights. Inheritance, parental presence, education and wealth, and individual ability are included. Year, socio-demographic, and cohort effects are also included. Socio-demographic variables include age, sex, and race of individuals. These variables and the constant term are included but not reported for brevity.

Birth Cohorts Mechanisms: Non-White

Table A18: OLS Regression: Income Effect for Non-White

Dependent Variable: Wealth		
	1939-58	1959-88
Tertiary	7886.01**	−3328.09+
	(2668.93)	(1917.51)
Inheritance	0.03	0.05
	(0.04)	(0.05)
Parental Wealth	0.24*	0.14*
	(0.10)	(0.06)
Labor Income	0.28***	0.28***
	(0.08)	(0.05)
Observations	588	1883
Adjusted R^2	0.29	0.16

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors are heteroskedastic robust. The data uses sampling weights. Inheritance, parental presence, education and wealth, and individual ability are included. Year, socio-demographic, and cohort effects are also included. Socio-demographic variables include age, sex, and race of individuals. These variables and the constant term are included but not reported for brevity.

Table A19: OLS Regression: Student Loans for Non-White

Dependent Variable: Wealth		
	1939-58	1959-88
Tertiary	10359.12**	2005.04
	(3898.57)	(1988.75)
Inheritance	0.28*	0.22**
	(0.13)	(0.07)
Parental Wealth	0.01	0.13*
	(0.12)	(0.05)
Student Loan	−0.31***	−0.45***
	(0.08)	(0.07)
Observations	409	1738
Adjusted R^2	0.25	0.21

Note: Source: PSID. Standard errors in parentheses. Significance levels are denoted as follows: + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors are heteroskedastic robust. The data uses sampling weights. Inheritance, parental presence, education and wealth, and individual ability are included. Year, socio-demographic, and cohort effects are also included. Socio-demographic variables include age, sex, and race of individuals. These variables and the constant term are included but not reported for brevity.