The Silent Divides in Education's Promise

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Abstract

This study examines the impact of education on wealth by gender, race, and generation in the U.S., utilizing different identification strategies. This research reveals that the benefits of higher levels of education vary significantly: males and White individuals experience more pronounced gains compared to females and Non-White groups, highlighting disparities in economic returns. Further analysis into generational effects uncovers that the advantages of higher education diminish over time for all groups, with the youngest cohorts facing the least economic benefit. This generational decline calls for a deeper understanding of the evolving role of education in wealth accumulation, stressing the importance of developing policy interventions that address the diverse impacts of education across different demographic segments and over time.

Keywords: Wealth · Education · Race · Gender · College

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

1 Introduction

Education has long been considered a cornerstone of economic success, with higher educational attainment frequently associated with increased earnings (Card, 1999) and even more importantly, college education (Cappelli, 2020). Common perceptions of education as a uniform pathway to economic success fail to capture the nuanced disparities in its outcomes. This complex relationship, marked by generational shifts, underscores that the wealth returns of education are distinctly shaped by gender, race, and evolving socio-economic contexts. This study examines the causal effect of college education on wealth and how it varies by race, sex, and over generations, challenging the view that education universally enhances wealth accumulation.

The related literature is focused on understanding and quantifying the gender (Lee, 2022) and race (Derenoncourt et al., 2023) wealth gaps. Education is a crucial, yet partial, factor in understanding these gaps. Despite extensive research on the economic benefits of education, little has been explored about how these advantages are reflected in wealth accumulation and even less on how they evolve across generations or vary among gender and racial groups. Previous studies show that a causal effect of education on wealth only exists for college and postgraduate levels of education (Loaiza, 2021). However, the literature on the specific effects of higher education on wealth by race and sex still requires further exploration especially considering generational changes and detailed parental background into account.

Exploring birth cohorts has the potential to clarify if wealth returns of education vary over time (Stephens Jr & Yang, 2014), particularly amid the educational enrollment surge that different demographic groups benefited from at different periods. Controlling for parental wealth and inheritance is crucial in analyzing wealth accumulation, alongside examining generational shifts, due to the significant role of dynastic wealth (Edlund & Kopczuk, 2009). This consideration of generational wealth and educational access sets the stage for addressing the contemporary barriers to college education in the United States. High education fees present an important challenge (Archibald & Feldman, 2011), with parental socioeconomic status not only influencing college attendance (Chevalier et al., 2013) but also having a lasting impact on an individual's economic success, including wealth accumulation (Charles & Hurst, 2003). Hence, delving into the relationship between education and wealth, given varying socio-economic backgrounds and over generations, is key to enhancing our understanding of social stratification and opportunities for upward mobility.

2 Empirical Model

To explore the causal effect of education on wealth by gender and race, the analysis starts by implementing ordinary least squares. By adjusting for variables like personal skills and family background, the study aims to determine education's role in accumulating wealth. The model used is:

$$\text{Wealth}_{it} = \alpha_0 + \beta_1 \, \text{Education}_i + \alpha_2 \, \text{X}_i + \alpha_3 \, \text{D}_{it} + \epsilon_t + \upsilon_{it} \qquad (1)$$

where X is a matrix of covariates including personal ability, inheritances, and parental presence, education and wealth. D includes age, gender, and race. ϵ_t captures year-specific effects, while υ is the idiosyncratic 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 v_{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 inherited or environmental factors.

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

$D.W_{jt}$ represents the wealth difference between two siblings at time t, $D.Educ_{jt}$ the difference in their education, and $D.Age_{jt}$ the age gap. γ_t accounts for time-fixed effects, and v_{jt} is the error term. This approach acknowledges potential limitations, such as unequal parental support or the influence of a more educated sibling on the other, which could affect the strategy's efficacy in completely isolating education's impact on wealth. The additional limitations are addressed by using instrumental variables in table A1 in the Appendix.

This study investigates the influence of family connections across generations, focusing on parent-child and sibling relationships from 1999 to 2019, using data from individuals over 30 who lead their family units. The analysis specifically includes biological relationships to reduce variability, excluding adopted or step-relations. Data sourced from the Panel Study of Income Dynamics (PSID), which since 1984 provides a detailed picture of household wealth. The study employs an inverse hyperbolic sine transformation for the wealth variables. Education is categorized from high school dropout to postgraduate level. It is treated as fixed post-adulthood, reflecting the assumption that further education is unlikely beyond a certain age. Parental wealth and presence are measured when the individual is young. IQ scores are included as a proxy for individual ability.

3 Results

Table 1: OLS Regression: Effects of Education on Wealth

| | Dependent Variable: Wealth | | | |
| | Sex | | Race | |
	Male	Female	White	Non-White
College	4334.07***	316.71	4021.44***	390.03
	(990.89)	(1321.03)	(1025.01)	(1118.32)
Postgraduate	5590.76***	−3009.60+	4531.84***	−3335.74+
	(1234.01)	(1731.31)	(1229.76)	(1802.55)
Observations	14141	6417	13450	7108
Adjusted R^2	0.23	0.15	0.23	0.12

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. The comparison base is high-school drop-outs. Inheritance, parental education and education, 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.

The initial findings demonstrate that higher levels of education consistently correlate with

Table 2: Within Variation Regression: Effects of Education on Wealth

| | Dependent Variable: Wealth | | | |
| | Sex | | Race | |
	Male	Female	White	Non-White
D.College	10277.26***	4371.88*	12105.58***	1598.11+
	(1212.91)	(1702.17)	(1140.81)	(939.33)
D.Postgraduate	10004.58***	3432.51+	7889.29***	−1072.62
	(1428.88)	(1950.77)	(1285.48)	(1259.16)
Observations	6922	2464	7826	7031
Adjusted R^2	0.02	0.01	0.02	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. Time, the difference of age between siblings, and cohort effects are included but not reported for brevity. The constant term is included but not reported for brevity.

increased wealth for males, with significant gains from college education onwards. Conversely, females do not experience a statistically significant wealth boost from college education, but a negative impact from postgraduate education. Racial disparities are evident, where White individuals benefit more from higher education in wealth accumulation compared to their Non-White counterparts, except at the postgraduate level where Non-Whites face a decline. Table A2 shows that inheritance and parental wealth have a positive influence on wealth across all groups, emphasizing the significance of family financial background in wealth outcomes. However, there are clear differences in their impact depending on the category.

Focusing on within-sibling differences, the analysis underscores substantial wealth advantages linked to higher education, more so among siblings with college or postgraduate degrees. The impact is more pronounced by race than gender, highlighting White individuals' disproportionate gains over Non-White siblings. Notably, the advantage diminishes for Non-White individuals at the postgraduate level. This examination reveals that while education is an important factor in wealth generation, its benefits vary drastically by gender and race.

3.1 Generational Effects

The decision to incorporate birth cohorts into the analysis stems from an understanding that the access, role, and economic value of education are not constant but vary across time. The results of two identification strategies reported by sex are presented in tables A3 and A4 for the male category and in A5 and A6 for females respectively in the Appendix. For males born between 1939 and 1988, early generations experienced significant wealth increases with higher education levels, particularly at the college level. This trend, however, gradually diminished, with the youngest cohort witnessing a decrease in wealth associated with higher education. Females exhibited a contrasting trajectory. Early cohorts, 1939-48, saw substantial economic mobility through higher education, aligning with societal shifts towards gender equality. However, from the 1949-58 cohort onwards, the relationship between education and wealth began to diverge from male counterparts, with a significant decline in the economic returns from higher education in later cohorts.

The narrative for White individuals mirrored the general trend observed in males, with early cohorts benefiting significantly from higher education. Yet, this advantage disappears over time, especially for those born after 1968, culminating in a decrease in wealth for the youngest cohort (1979-88) with higher education. Non-White individuals presented a unique set of challenges

and opportunities. The earliest cohort (1939-48) saw postgraduate education as a crucial lever for economic advancement. However, the benefits of higher education gradually reduced in subsequent generations, with the latest cohort experiencing decreases in wealth associated with higher education. This reflects significant societal and economic shifts, including persistent racial inequalities and changing labor market dynamics. These results were obtained from the tables A7 and A8 for the White category and in A9 and A10 for Non-White respectively in the Appendix

4   Mechanisms

Even though the aim of the paper is not to make a deep exploration of the mechanisms driving these results, the primary mechanism for the observed results might be attributed to the income effect, where disparities in earnings—men typically outearning women (Blau & Kahn, 2017)—play a crucial role in wealth accumulation (Killewald, Pfeffer, & Schachner, 2017). Additionally, systemic inequalities and discrimination further deepen racial wealth gaps by restricting access to lucrative employment and opportunities, particularly affecting the wealth of minorities (Pager & Shepherd, 2008). The results for this mechanism are presented in table A11. Including labor income as a variable in our analysis clarifies its important role in mediating the relationship between education and wealth accumulation. After accounting for labor income, the coefficients for college and postgraduate education indicate a more attenuated positive impact on wealth for Male and White individuals. This adjustment reveals how labor income, as a measure of earnings disparity, directly influences the economic returns of education.

The analysis of generational shifts reveals how the income effect, mediated by labor income, intersects with education to impact wealth accumulation differently across demographics and time. This is shown in tables A13, A15, A17 and A19 in the Appendix. The analysis across generations highlights the distinct impact of education on wealth through labor income, revealing trends that underscore both progress and persistent disparities. For males and Whites, labor income consistently demonstrates a positive correlation with education, reflecting an advantage that has persisted across most generations. This trend aligns with historical labor market dynamics favoring these groups. Conversely, Non-White individuals exhibit slightly higher positive coefficients, suggesting a 'catch-up' effect due to overcoming greater barriers to wealth accumulation. For females, significant positive effects of labor income on wealth emerge only in the later generations, pointing to the longstanding challenges they faced in accessing equal labor market opportunities.

The findings on the shifting economic returns of education over generations align with the U.S.'s socio-economic and policy backdrop. The post-WWII GI Bill significantly boosted male college enrollment (Zhang, 2018), emphasizing education's role in upward mobility amid industrial and technological growth and the rising demand for skilled labor. This period saw men, typically the family's primary earners, leveraging higher education to secure their place in an evolving job market. Alongside these shifts, the late 20th century saw societal and gender norms evolve, with gender equality efforts and policies like Title IX driving a rise in women's higher education enrollment (Rim, 2021). The growing necessity for dual incomes pushed women toward the workforce and underscored the importance of higher education for their career and financial autonomy. As a result, educational opportunities for women grew, encouraging their entry into fields previously dominated by men.

By the late 20th and early 21st centuries, the dynamics of education's impact on wealth underwent a profound transformation. Rising education costs and the uncertainties following the Great Recession eroded the once clear link between higher education and wealth accumulation. This era saw a saturated graduate job market and evolving societal views on education, leading to a cautious approach among potential students. Consequently, this analysis reveals diminished returns on educational investments, a trend particularly detrimental for Non-White individuals who, despite early gains from higher education, encountered setbacks due to longstanding societal and economic inequalities (Hurtado, Inkelas, Briggs, & Rhee, 1997).

The surge in university fees and the deepening crisis of student debt further complicated these dynamics for later generations (Lochner & Monge-Naranjo, 2016), effectively neutralizing the traditional benefits of higher education across all demographics. The role of student loans is observed in table A12 for the average effects but also in tables A16, A14, A18 and A20 for the generational effects. While student loans directly reduce wealth, the heightened coefficients for higher education levels suggest that the intrinsic value of college and postgraduate degrees in enhancing wealth is more significant when the direct financial burden of loans is considered separately. Essentially, this separation highlights that higher education remains a potent tool for wealth accumulation but also brings to light the considerable hindrance posed by student debt. It underscores the importance of considering the dual role of education as both a driver of wealth and a source of financial strain through debt

5 Conclusions

The analysis reveals that education, specifically college and postgraduate levels, significantly boosts wealth accumulation with high certainty, with robust and statistically significant results, for the Male category and with lower certainty for White individuals. Conversely, for Female and Non-White groups, the findings indicate that the causal effect of education on wealth is not so clear, with negligible or even negative effects on wealth accumulation. This discrepancy underscores the varied impact of education across different demographics. Moreover, the examination of generational shifts adds a layer of complexity, showing that the economic returns of education have evolved over time, with recent generations facing diminishing benefits.

Importantly, the incorporation of income effects and student loans as mechanisms provides critical insights, proving instrumental in accounting for generational shifts. These mechanisms are particularly relevant as they capture the evolving economic landscape and the increasing financial burdens of education, offering a nuanced understanding of how and why the returns on education have changed over time. Their inclusion highlights the importance of considering both income dynamics and the growing impact of student debt to fully grasp the shifting value of education in promoting wealth accumulation across generations.

These shifts necessitate a critical reassessment of the role of education in fostering economic success and underscore the urgent need for policies aimed at bridging systemic gaps, ensuring equitable access to education, and re-establishing the value of higher education as a cornerstone for upward mobility.

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Appendix

Additional Results: Compulsory Schooling Laws

Previous methods may not fully address unobserved differences among individuals, potentially skewing education's estimated impacts. This approach leverages the natural variation in compulsory schooling lengths across U.S. states to overcome these limitations. It employs an instrumental variable (IV) strategy, using state variations in compulsory education 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 IV method first introduces the first stage equation 3 and the second stage equation 4 to model schooling as a function of compulsory education:

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

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

where *Education* reflects the education an individual receives, and *CSL* indicates the mandated years of schooling in their state and period.

Table A1: I.V. Regression: Effects of Education on Wealth

	Sex		Race	
	Male	**Female**	**White**	**Non-White**
	(a) Avg. Education			
Education	6966.33***	7257.86*	−445.40	6570.00*
	(1730.41)	(3520.14)	(4820.27)	(3056.34)
F-statistic	28.93	2.32	32.91	2.95
Observations	8015.00	2738.00	7132.00	3621.00
	(b) College Education			
College	35571.00***	44271.03$^+$	−2052.69	36977.36$^+$
	(9759.11)	(26473.00)	(22310.81)	(18972.93)
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.

For the Male and White categories, the F-statistics indicate a strong instrument, suggesting that compulsory schooling laws are a relevant and robust predictor of educational attainment in these groups. However, for Female and Non-White, the opposite is observed, lower F-statistics which suggest a weaker instrument in these groups. Overall, the instrumental variable analysis only confirms the effect of education on wealth for men with high levels of statistical significance.

Ordinary Least Squares Regression: Details

Table A2: OLS Regression: Effects of Education on Wealth

| | Dependent Variable: Wealth | | | |
| | Sex | | Race | |
	Male	Female	White	Non-White
College	4334.07***	316.71	4021.44***	390.03
	(990.89)	(1321.03)	(1025.01)	(1118.32)
Postgraduate	5590.76***	−3009.60+	4531.84***	−3335.74+
	(1234.01)	(1731.31)	(1229.76)	(1802.55)
Inheritance	0.13***	0.24***	0.15***	0.18***
	(0.02)	(0.04)	(0.02)	(0.05)
Parental Wealth	0.29***	0.23***	0.29***	0.15***
	(0.03)	(0.04)	(0.03)	(0.04)
Par.Education W.	659.22*	−164.10	426.21	230.93
	(324.05)	(411.62)	(323.89)	(392.67)
Par.Education H.	34.40	1465.22***	523.70	806.33+
	(338.93)	(400.20)	(336.86)	(443.23)
Par.Presence	1686.02+	−66.14	1081.23	149.21
	(880.58)	(1025.81)	(1060.75)	(769.64)
Ability	335.96*	127.13	293.03	177.52
	(168.30)	(187.91)	(218.30)	(140.76)
Observations	14141	6417	13450	7108
Adjusted R^2	0.23	0.15	0.23	0.12

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. The comparison base is high-school drop-outs. 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 Regression Results: Male

Table A3: OLS Regression by Birth Cohorts for Male

	Dependent Variable: Wealth				
	1939-48	1949-58	1959-68	1969-78	1979-88
College	12347.12*	7568.69***	4247.09**	5191.31**	−2174.90
	(5561.32)	(2233.74)	(1644.93)	(1895.15)	(2548.77)
Postgraduate	10383.50+	8244.94***	8131.72***	5896.77*	−5648.19+
	(5470.10)	(2400.96)	(2175.43)	(2810.52)	(2985.20)
Observations	751	3866	4363	3299	1800
Adjusted R^2	0.27	0.28	0.20	0.13	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. The comparison base is high-school drop-outs. Inheritance, parental education and wealth, 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.

Table A4: Within Variation Regression by Birth Cohorts for Male

	Dependent Variable: Wealth				
	1939-48	1949-58	1959-68	1969-78	1979-88
D.College	34258.05***	8639.35***	11498.18***	4056.68	−1833.43
	(7275.11)	(1782.89)	(2164.25)	(3258.00)	(5520.55)
D.Postgraduate	13956.71+	16687.72***	5027.49+	4908.64	−9931.19*
	(8049.03)	(2058.81)	(3028.49)	(3538.30)	(4779.69)
Observations	396	3397	1907	910	300
Adjusted R^2	0.08	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. Time, the difference of age between siblings, and cohort effects are included but not reported for brevity. The constant term is included but not reported for brevity.

Birth Cohorts Regression Results: Female

Table A5: OLS Regression by Birth Cohorts for Female

	Dependent Variable: Wealth				
	1939-48	1949-58	1959-68	1969-78	1979-88
College	14546.91*	3990.51	137.54	-235.55	-10905.48^{***}
	(6446.36)	(2870.84)	(2100.14)	(2453.53)	(2844.95)
Postgraduate	14071.47*	7289.77*	-3219.66	-1430.23	-22047.10^{***}
	(5618.75)	(3407.33)	(3308.10)	(2768.28)	(3227.07)
Observations	295	1649	2230	1378	801
Adjusted R^2	0.28	0.26	0.08	0.06	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. The comparison base is high-school drop-outs. Inheritance, parental education and wealth, 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.

Table A6: Within Variation Regression by Birth Cohorts for Female

	Dependent Variable: Wealth				
	1939-48	1949-58	1959-68	1969-78	1979-88
D.College	22873.53***	6703.73**	9635.37*	-14533.01^{***}	2509.02
	(5262.32)	(2444.80)	(4007.56)	(3254.55)	(5294.74)
D.Postgraduate	6160.69	16224.29***	2663.78	-11964.26^{**}	-15205.45^{**}
	(5875.50)	(3081.49)	(3706.02)	(3761.85)	(4886.12)
Observations	149	1067	841	262	135
Adjusted R^2	0.35	0.06	0.03	0.08	0.15

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. Time, the difference of age between siblings, and cohort effects are included but not reported for brevity. The constant term is included but not reported for brevity.

Birth Cohorts Regression Results: White

Table A7: OLS Regression by Birth Cohorts for White

	Dependent Variable: Wealth				
	1939-48	1949-58	1959-68	1969-78	1979-88
College	14277.76**	7649.12***	2462.67	4327.16*	−3570.81
	(5190.58)	(2225.25)	(1764.89)	(1891.09)	(2583.43)
Postgraduate	10536.73*	8587.21***	5386.58*	4407.42+	−9386.17**
	(4988.69)	(2427.47)	(2215.93)	(2600.35)	(2933.26)
Observations	807	3760	4025	3215	1583
Adjusted R^2	0.27	0.24	0.17	0.14	0.12

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. The comparison base is high-school drop-outs. Inheritance, parental education and wealth, 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.

Table A8: Within Variation Regression by Birth Cohorts for White

	Dependent Variable: Wealth				
	1939-48	1949-58	1959-68	1969-78	1979-88
D.College	22799.24***	16784.15***	12038.85***	−1569.86	−5658.93
	(5065.69)	(1683.13)	(2186.73)	(2628.92)	(4124.96)
D.Postgraduate	4928.47	16561.78***	−1340.18	−21.08	−8562.88+
	(6269.01)	(1847.62)	(2662.84)	(2936.40)	(4530.79)
Observations	548	3826	1983	1100	352
Adjusted R^2	0.06	0.03	0.04	0.02	0.00

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. Time, the difference of age between siblings, and cohort effects are included but not reported for brevity. The constant term is included but not reported for brevity.

Birth Cohorts Regression Results: Non-White

Table A9: OLS Regression by Birth Cohorts for Non-White

	Dependent Variable: Wealth				
	1939-48	1949-58	1959-68	1969-78	1979-88
College	9307.62	5094.05*	2251.06	−1574.37	−4407.96
	(7142.95)	(2593.73)	(1786.77)	(2289.45)	(2798.15)
Postgraduate	31472.63***	6066.11+	−873.31	−778.58	−13207.80***
	(7329.84)	(3641.19)	(3855.52)	(3407.30)	(3511.77)
Observations	239	1755	2568	1462	1018
Adjusted R^2	0.19	0.19	0.14	0.08	0.14

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. The comparison base is high-school drop-outs. Inheritance, parental education and wealth, 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.

Table A10: Within Variation Regression by Birth Cohorts for Non-White

	Dependent Variable: Wealth				
	1939-48	1949-58	1959-68	1969-78	1979-88
D.College	19511.31***	2577.00+	5813.68**	−10087.63***	−4471.20
	(5462.38)	(1479.89)	(1780.21)	(1894.51)	(3251.93)
D.Postgraduate	12649.16*	6822.51***	2336.36	−12727.21***	−15046.59***
	(5344.96)	(2031.49)	(2769.65)	(2278.80)	(3426.66)
Observations	297	3361	2152	816	389
Adjusted R^2	0.16	0.01	0.03	0.07	0.12

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. Time, the difference of age between siblings, and cohort effects are included but not reported for brevity. The constant term is included but not reported for brevity.

Ordinary Least Squares Regression: Income Effect

Table A11: OLS Regression Mechanism: Income Effect

	Dependent Variable: Wealth			
	Sex		Race	
	Male	Female	White	Non-White
College	3678.58***	−355.22	3571.84***	−803.18
	(973.95)	(1340.40)	(1020.59)	(1112.36)
Postgraduate	4554.10***	−4188.02*	3733.44**	−5239.76**
	(1219.05)	(1767.11)	(1226.17)	(1802.70)
Labor Income	0.16***	0.14***	0.13***	0.19***
	(0.02)	(0.03)	(0.02)	(0.03)
Observations	14141	6417	13450	7108
Adjusted R^2	0.26	0.17	0.25	0.15

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. The comparison base is high-school drop-outs. Inheritance, parental education and wealth, 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.

Ordinary Least Squares Regression: Student Loan

Table A12: OLS Regression Mechanism: Student Loan

	Dependent Variable: Wealth			
	Sex		Race	
	Male	Female	White	Non-White
College	9987.27***	1391.27	9744.43***	3428.54*
	(1316.67)	(1533.97)	(1431.62)	(1340.88)
Postgraduate	10508.23***	91.18	9493.61***	2423.94
	(1527.91)	(1930.57)	(1569.88)	(2001.68)
Student Loan	−0.53***	−0.45***	−0.54***	−0.46***
	(0.05)	(0.05)	(0.06)	(0.05)
Observations	7578	3704	7221	4061
Adjusted R^2	0.35	0.31	0.36	0.25

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. The comparison base is high-school drop-outs. Inheritance, parental education and wealth, 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 Regression Mechanisms: Male

Table A13: OLS Regression Mechanism: Income Effect for Male

| | **Dependent Variable: Wealth** | | | | |
	1939-48	1949-58	1959-68	1969-78	1979-88
College	12523.29*	7586.83***	3551.03*	4135.14*	−4599.42+
	(5581.35)	(2147.70)	(1631.89)	(1867.61)	(2570.48)
Postgraduate	10661.70+	8211.03***	6846.25**	4270.79	−8358.38**
	(5505.98)	(2350.38)	(2143.01)	(2768.36)	(3004.19)
Labor Income	−0.03	0.12***	0.21***	0.23***	0.31***
	(0.06)	(0.03)	(0.04)	(0.05)	(0.08)
Observations	751	3866	4363	3299	1800
Adjusted R^2	0.27	0.30	0.23	0.16	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. The comparison base is high-school drop-outs. Inheritance, parental education and wealth, 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.

Table A14: OLS Regression Mechanism: Student Loans for Male

| | **Dependent Variable: Wealth** | | | | |
	1939-48	1949-58	1959-68	1969-78	1979-88
College	16590.53+	13972.98***	13554.16***	11385.49***	5469.37*
	(9208.32)	(2858.23)	(2562.69)	(2425.77)	(2240.11)
Postgraduate	18220.58*	16328.09***	16180.47***	11050.32***	5222.86+
	(7892.22)	(3366.34)	(2978.65)	(2984.84)	(2704.92)
Student Loan	0.15	−0.23**	−0.41***	−0.53***	−0.81***
	(0.18)	(0.07)	(0.10)	(0.09)	(0.09)
Observations	305	1573	1797	2083	1800
Adjusted R^2	0.31	0.35	0.29	0.29	0.30

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. The comparison base is high-school drop-outs. Inheritance, parental education and wealth, 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 Regression Mechanisms: Female

Table A15: OLS Regression Mechanism: Income Effect for Female

	Dependent Variable: Wealth				
	1939-48	1949-58	1959-68	1969-78	1979-88
College	14223.90*	3926.40	−841.86	−901.61	−11641.14***
	(6707.58)	(2798.27)	(1993.46)	(2523.76)	(2932.87)
Postgraduate	15027.87*	7203.35*	−5875.78+	−2861.89	−22900.46***
	(5969.57)	(3349.91)	(3336.64)	(2832.02)	(3374.68)
Labor Income	0.09	0.02	0.29***	0.23**	0.09
	(0.14)	(0.05)	(0.05)	(0.08)	(0.10)
Observations	295	1649	2230	1378	801
Adjusted R^2	0.29	0.26	0.14	0.08	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. The comparison base is high-school drop-outs. Inheritance, parental education and wealth, 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.

Table A16: OLS Regression Mechanism: Student Loans for Female

	Dependent Variable: Wealth				
	1939-48	1949-58	1959-68	1969-78	1979-88
College	16828.69	7310.19*	2469.66	−43.43	−1528.39
	(13488.07)	(3319.81)	(3493.25)	(2547.39)	(3180.51)
Postgraduate	0.00	15965.61***	2688.81	279.62	−5749.33
	(.)	(4791.63)	(4397.69)	(3555.29)	(4518.77)
Student Loan	0.05	−0.24*	−0.45***	−0.40***	−0.74***
	(0.07)	(0.09)	(0.09)	(0.08)	(0.16)
Observations	139	775	1055	904	801
Adjusted R^2	0.32	0.36	0.20	0.24	0.50

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. The comparison base is high-school drop-outs. Inheritance, parental education and wealth, 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 Regression Mechanisms: White

Table A17: OLS Regression Mechanism: Income Effect for White

| | Dependent Variable: Wealth | | | | |
	1939-48	1949-58	1959-68	1969-78	1979-88
College	14318.38**	7684.22***	1852.60	3702.00*	−5158.33[+]
	(5216.44)	(2191.69)	(1778.06)	(1879.64)	(2648.70)
Postgraduate	10655.93*	8582.88***	4080.54[+]	3100.37	−11007.39***
	(5025.41)	(2400.01)	(2221.64)	(2577.33)	(3006.32)
Labor Income	−0.03	0.08*	0.20***	0.24***	0.22*
	(0.06)	(0.03)	(0.04)	(0.05)	(0.09)
Observations	807	3760	4025	3215	1583
Adjusted R^2	0.27	0.25	0.20	0.17	0.14

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. The comparison base is high-school drop-outs. Inheritance, parental education and wealth, 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.

Table A18: OLS Regression Mechanism: Student Loans for White

| | Dependent Variable: Wealth | | | | |
	1939-48	1949-58	1959-68	1969-78	1979-88
College	14990.94[+]	14196.16***	13351.82***	11561.28***	5072.18*
	(8400.90)	(3007.91)	(3056.97)	(2718.29)	(2492.34)
Postgraduate	13405.85[+]	17721.63***	15115.74***	9854.36**	3637.47
	(7099.37)	(3283.14)	(3251.38)	(3157.35)	(2873.58)
Student Loan	0.04	−0.16*	−0.46***	−0.50***	−0.91***
	(0.21)	(0.08)	(0.10)	(0.10)	(0.09)
Observations	352	1567	1693	2000	1583
Adjusted R^2	0.36	0.30	0.28	0.30	0.37

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. The comparison base is high-school drop-outs. Inheritance, parental education and wealth, 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 Regression Mechanisms: Non-White

Table A19: OLS Regression Mechanism: Income Effect for Non-White

	Dependent Variable: Wealth				
	1939-48	1949-58	1959-68	1969-78	1979-88
College	10239.59	4228.52$^+$	846.41	−2984.68	−6929.29*
	(7527.63)	(2560.34)	(1713.20)	(2267.55)	(2886.27)
Postgraduate	33061.08***	5141.58	−3493.34	−2721.26	−16252.65***
	(7477.47)	(3661.92)	(3941.86)	(3326.47)	(3622.60)
Labor Income	−0.12	0.15**	0.28***	0.23***	0.28***
	(0.13)	(0.05)	(0.04)	(0.07)	(0.07)
Observations	239	1755	2568	1462	1018
Adjusted R^2	0.19	0.22	0.20	0.11	0.15

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. The comparison base is high-school drop-outs. Inheritance, parental education and wealth, 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.

Table A20: OLS Regression Mechanism: Student Loans for Non-White

	Dependent Variable: Wealth				
	1939-48	1949-58	1959-68	1969-78	1979-88
College	16025.87	6813.31$^+$	5649.18*	2476.00	2355.58
	(15210.05)	(3571.45)	(2824.50)	(2462.78)	(2400.36)
Postgraduate	0.00	8391.45	6239.51	7436.93*	−494.26
	(.)	(9916.53)	(5166.85)	(3747.98)	(3355.48)
Student Loan	0.05	−0.34***	−0.40***	−0.47***	−0.65***
	(0.08)	(0.07)	(0.09)	(0.08)	(0.12)
Observations	92	781	1159	987	1018
Adjusted R^2	0.25	0.25	0.21	0.24	0.35

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. The comparison base is high-school drop-outs. Inheritance, parental education and wealth, 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.