

Presented by: Shiven, Tien, Jennifer, and Sanjar



# The System of Wealth Inequality

# History of Wealth Inequality

	ase					
200	HOMESTEAD.					
	Ennd Office at Brownille Old Cannay 20" 1868.					
	Clannay 20" 1868.					
	CERTIFICATE, ) (APPLICATION,					
	No. / Sapplication,					
	It is hereby tertified, That pursuant to the provisions of the act of Congress, approved May 20, 1862, entitled "An act to secure homesteads to actual settlers on the public domain."					
NAME OF THE PARTY	made payment in full for Strofe Will SUNG SWING SWING OF Section Living Sin 261 in Township four 41 Ch					
STATE OF	of Range five (5) & containing 160 acres.					
	Tow, therefore, be it known, That on presentation of this Certificate to the COMMISSIONER OF THE GENERAL LAND OFFICE, the said Daniel					
	Frumen shall be entitled to & Patent for the Tract of Land above described.  Wary M. Ollkmein Register.					

- Wealth inequality in America has deep historical roots.
- Policies favored white Americans in gaining wealth and property.
- The Homestead Act of 1862 granted land to white settlers.
- Native people were forcibly removed from their land.
- Enslaved Africans were treated as property, enriching white slaveholders.

### Systems of Inequality

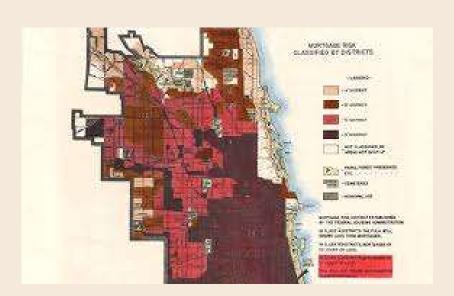
### Jim Crow & Discrimination

- The U.S. government failed to deliver "40 acres and a mule" after slavery ended
- Jim Crow laws and racial violence suppressed Black economic progress



### Redlining for communities of color

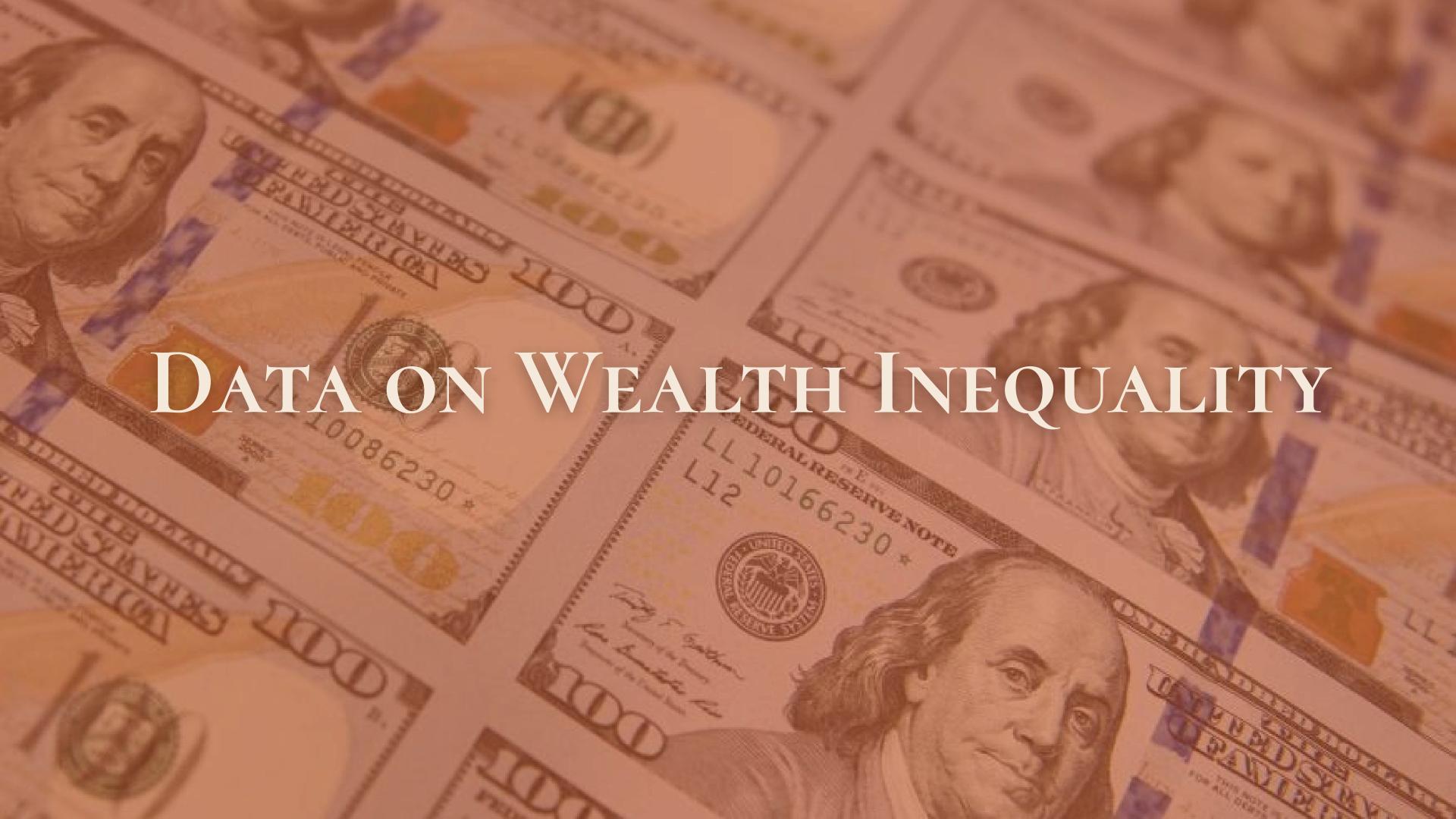
- Redlining used government maps to deny loans to communities of color
- Limited access to homeownership prevented wealth accumulation and deepened the gap



### New Deal policies & further inequalities

New Deal programs
 excluded many Black
 Americans from Social
 Security and housing
 benefits

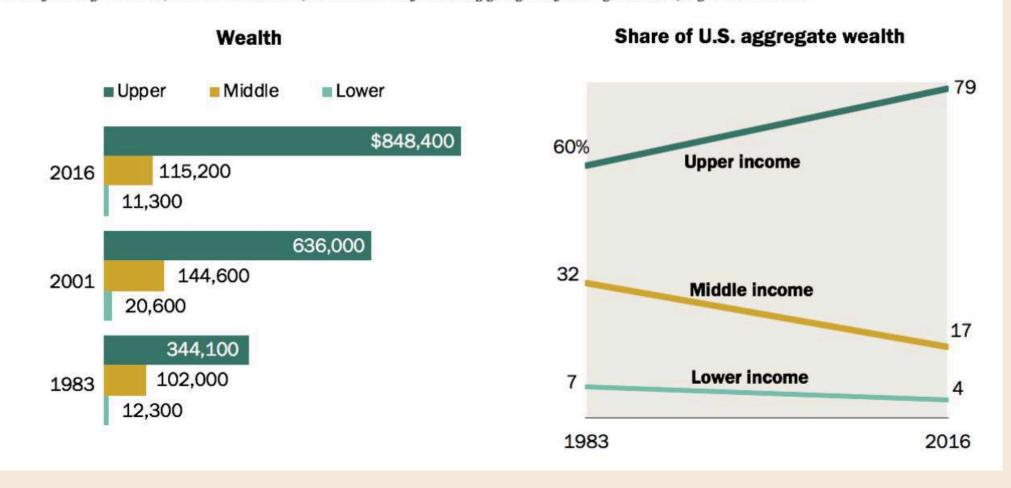




# Growing Wealth Inequality in the United States

#### The gaps in wealth between upper-income and middle- and lower-income families are rising, and the share held by middle-income families is falling

Median family wealth, in 2018 dollars, and share of U.S. aggregate family wealth, by income tier



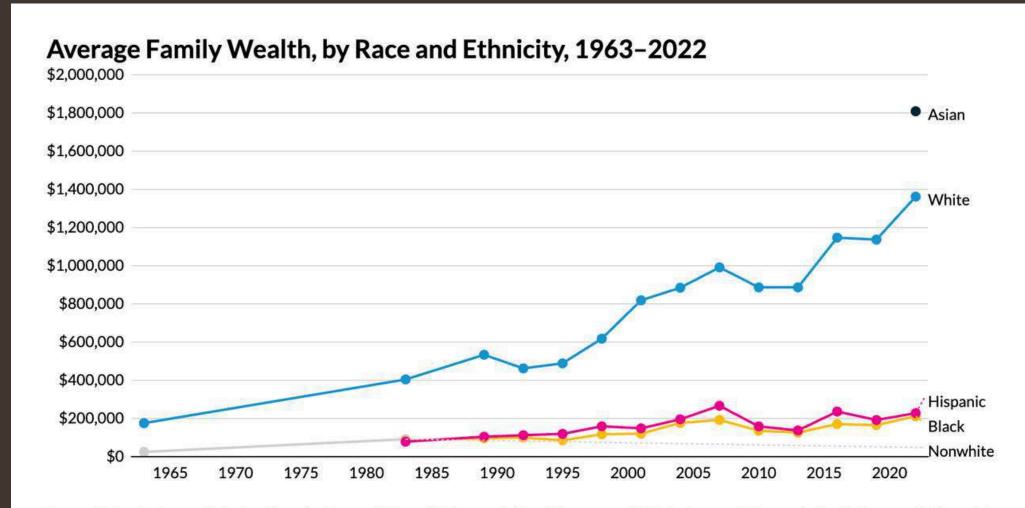
#### Lower and middle-income:

- limited social mobility
- upper-income families
   compete at faster rates for
   wealth

#### Over time,

- share of total wealth in the US by upper-income households has increased
- stagnation of low-income families' wealth growth

# Differences Between Wealth by Race and Ethnicity



**Source**: Urban Institute calculations from the Survey of Financial Characteristics of Consumers 1962, the Survey of Changes in Family Finances 1963, and the Survey of Consumer Finances 1983–2022.

Notes: 2022 dollars. Until 1983, the surveys categorized all people of color as "nonwhite." The Survey of Consumer Finances began disaggregating data for Black and Hispanic families starting in 1983 and for Asian families starting in 2022. We used inflation adjustment factors from Changes in U.S. Family Finances from 2019 to 2022: Evidence from the Survey of Consumer Finances. No comparable data are available between 1963 and 1983.

Get the data . Download image

URBAN INSTITUTE

#### White people...

- historically started with greater average family wealth
- higher rates of wealth increase, especially in recent decades

Hispanic, Black and other Non-white peoples...

 significantly lower levels of wealth and growth in comparison

# Why Wealth Inequality Impacts Minorities Asymmetrically

#### Racial Disparities

- Run in persistent cycles
- Prevalent underserved communities

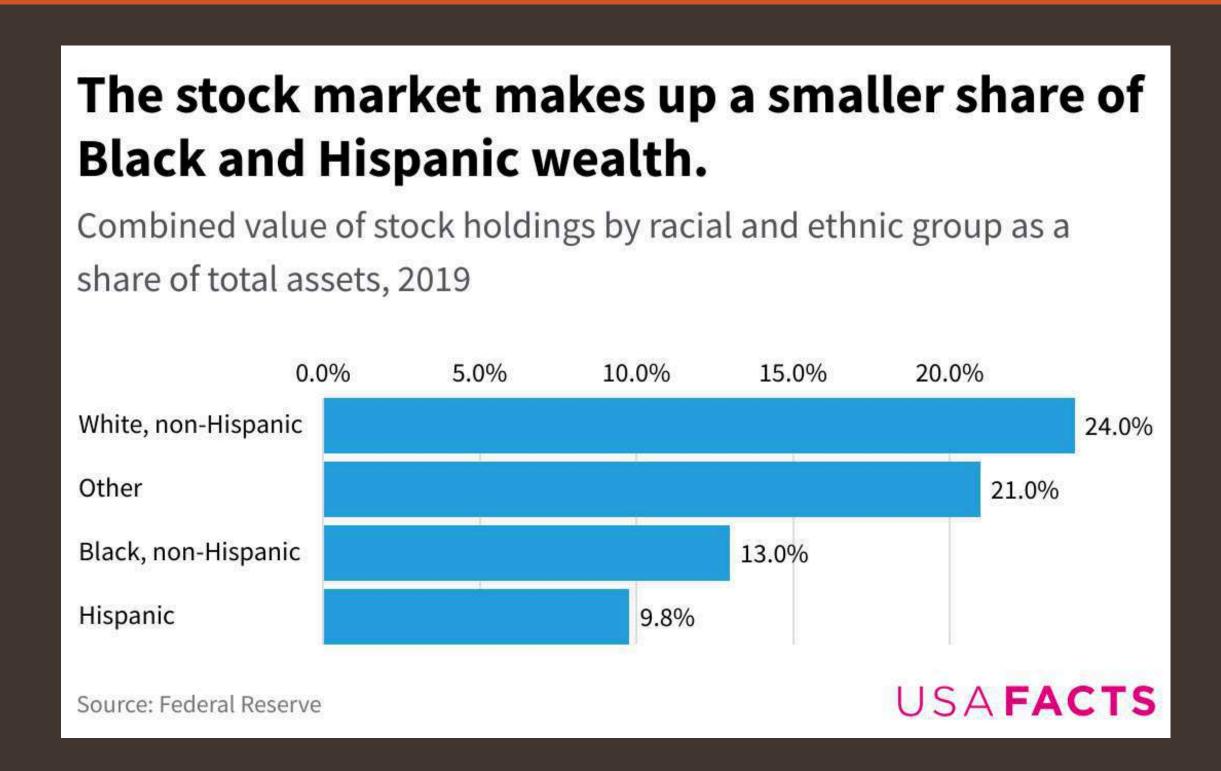
#### Inequal Inheritance

- Approx. 70% of wealth inequality comes from inheritance.
- Wealth stays in the same families for generations
- Makes it harder for people born with less to catch up.

Minorities are less likely to inherit wealth due to historical exclusion & systemic feedback loops.

# Difference of equity ownership between races:

- Pattern of income inequality by race
- White and non-Hispanic people benefit from racial capitalism and the wealth gap

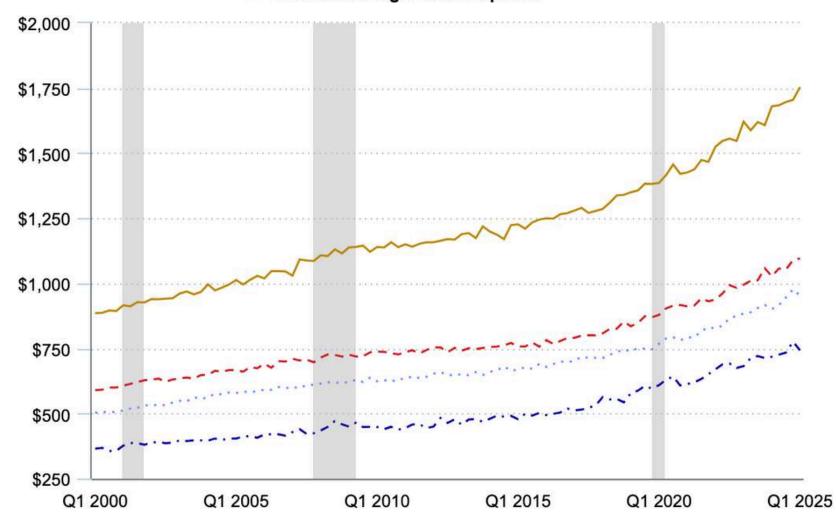




# Education: Breaking the Cycle

Median usual weekly earnings of full-time wage and salary workers age 25 years and over, by educational attainment, quarterly averages, not seasonally adjusted

- Bachelor's degree and higher
- - Some college or associate degree
- ··· High school graduates, no college
- Less than a high school diploma



Click legend items to change data display. Hover over chart to view data.

Shaded areas represent recessions as determined by the National Bureau of Economic Research.

Source: U.S. Bureau of Labor Statistics.



"Our findings are consistent with the idea that education is linked with financial outcomes, at least in part, through the enhancement of cognitive skills, particularly numeracy that then leads to greater wealth accumulation" (Yale Study).

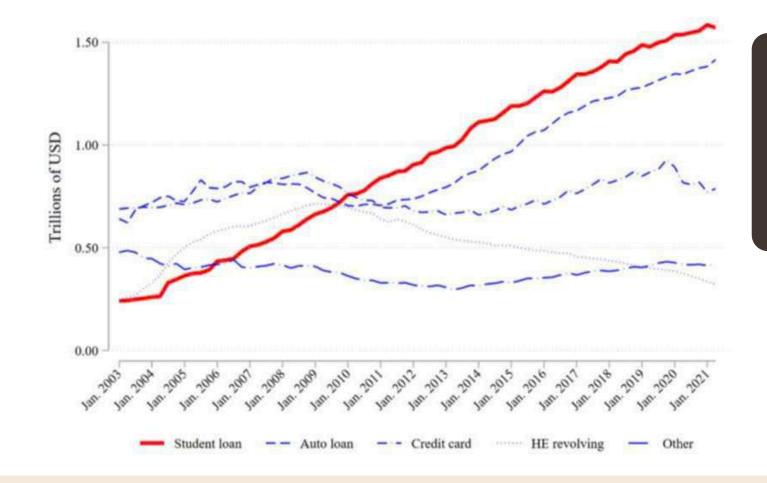
- Studies show education positively correlates with increased income & wealth
- Supporting low-income students with college access helps them build wealth and attain social mobility

# The Problem With Education: Debt

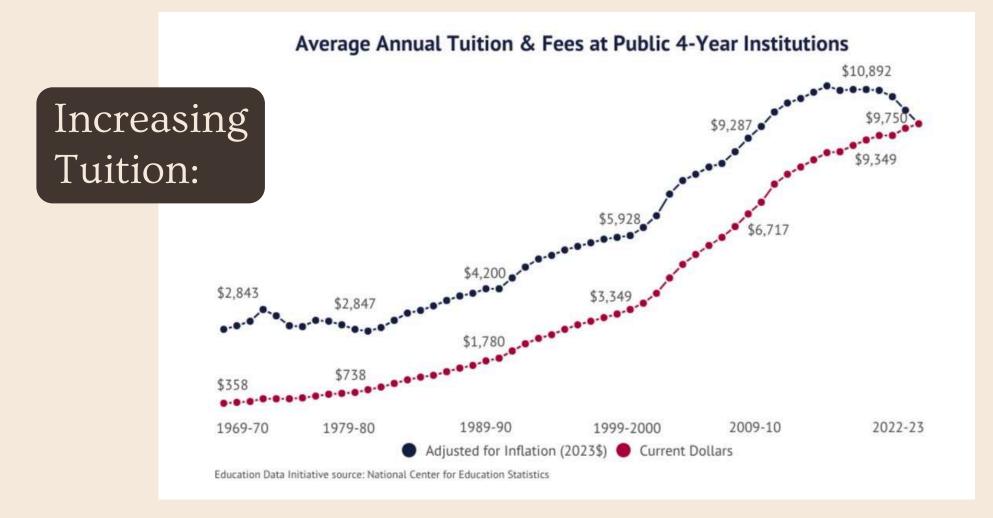
- Rising cost of education, decreasing return.
- To afford education, low-income households must take out loans.
- Struggle to pay back these debts.
- Instead of income going towards building wealth/assets, it goes to debt-repayment.
- Reduces opportunity for saving and investing.

Figure 1: Non-mortgage household debt

This figure displays the aggregate balance of different types of non-mortgage household debt in the United States, by quarter, from 2004 to 2021. Data are from the Federal Reserve Bank of New York Quarterly Report on Household Debt and Credit.



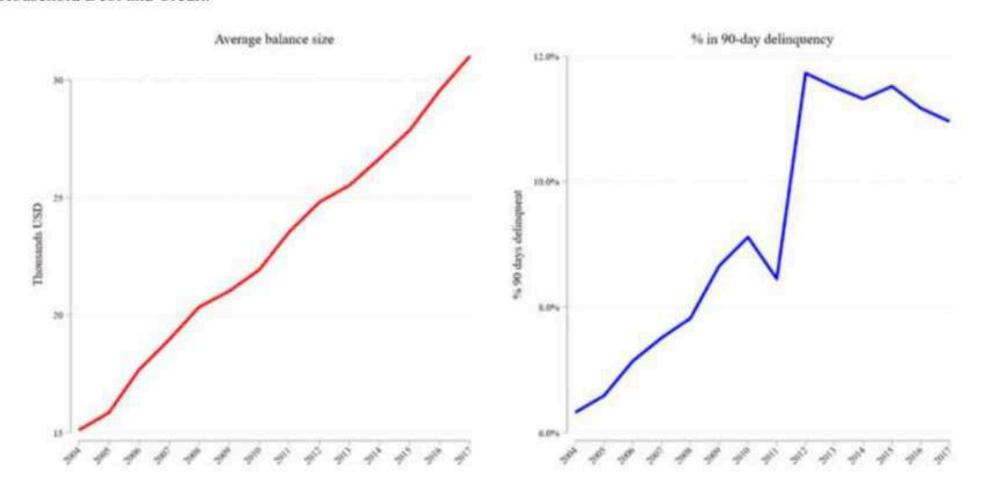
Aggregate balance of household debt:



### Inability for Students to Repay Debt

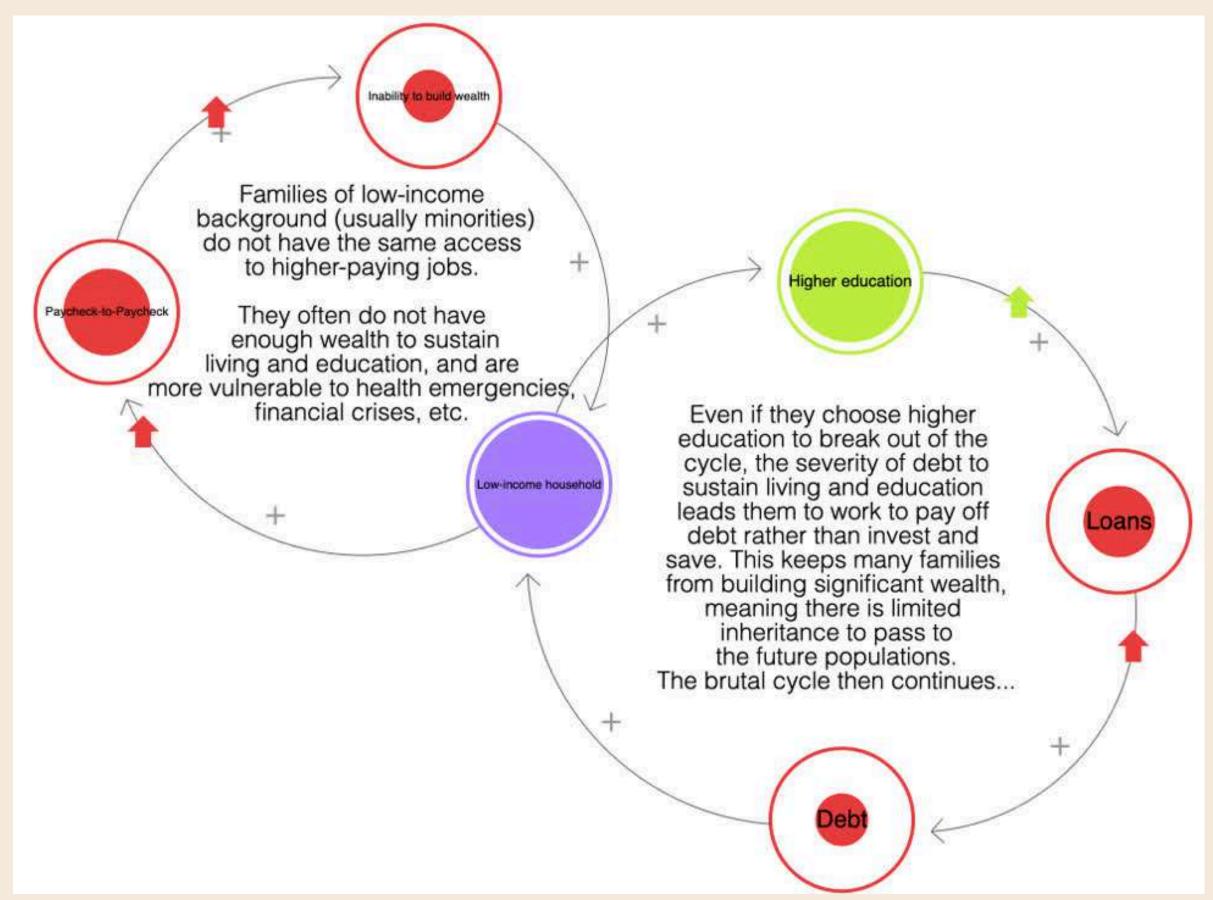
#### Figure 2: Average balances and delinquency

The left-hand panel of this figure shows the average student loan balance, by year, from 2001 to 2017. The right-hand panel displays the 90-day delinquency rate for student loan balances. Data for the left-hand panel are from the Federal Reserve Bank of New York 2018 Student Loan Update. Data for the right-hand panel are from the Federal Reserve Bank of New York Quarterly Report on Household Debt and Credit.



- Average student debt rise has risen
- Increasingly difficult to repay loans
  - Increasing defaults
     on students loan
- Exacerbates debt burden for students from low-wealth families.

# Thinking Systemically...





# Our Proposal:

#### The Plan.

A passively-managed fund that uses simple mathematical models.

We allocate donor money for low-income students for future higher education expenses.

### The Process.

After accruing money from donors and investing it, we create "sub-funds" within our main fund for each student.

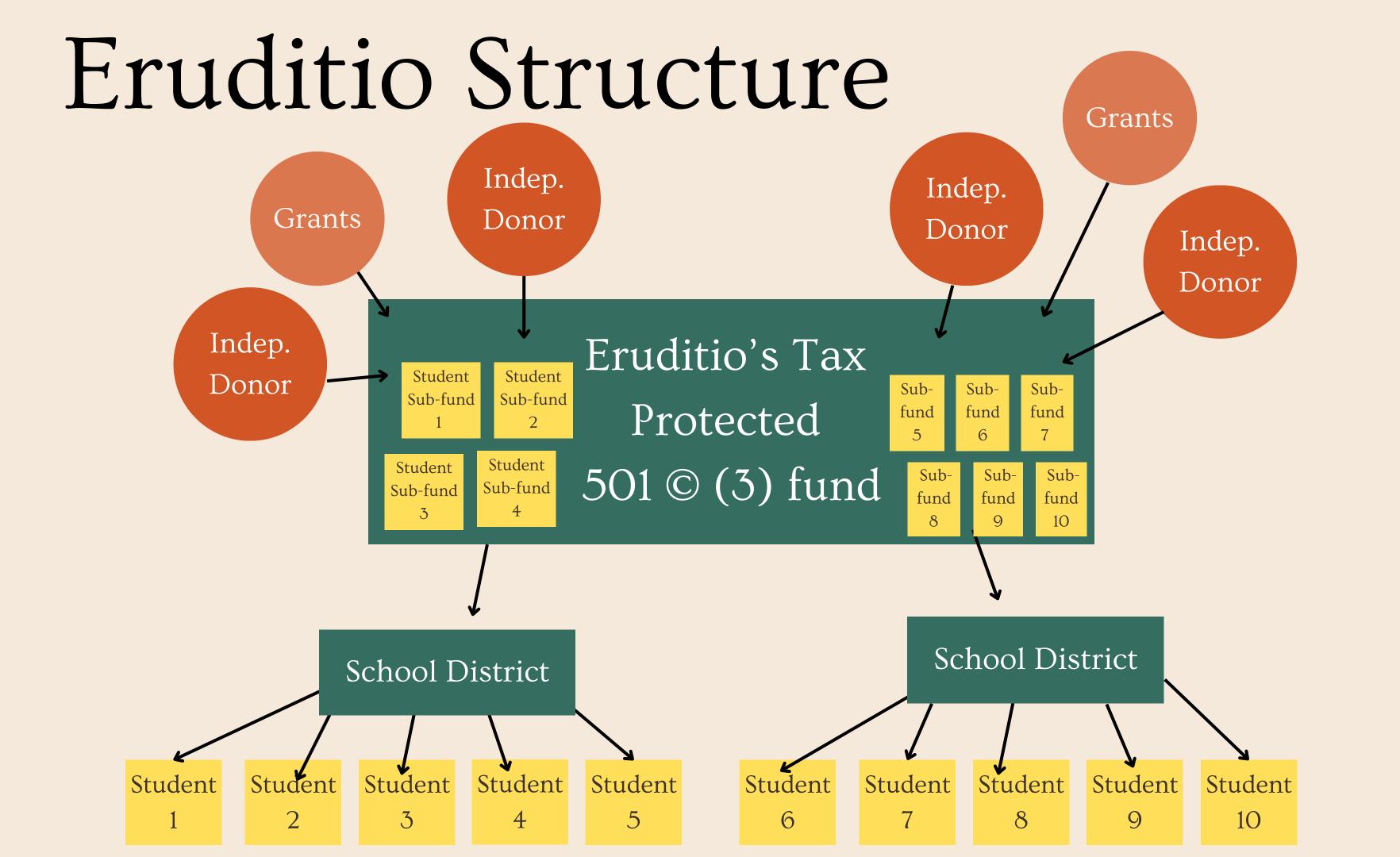
This ensures families aren't taking excessive risk and ensures money will be used for college purposes.

Tax-free and efficient!

### The Result.

Eruditio tackles both issues that lead to wealth inequality:

- 1. Lowered educational expenses allow for wealth building instead debt repayment.
- 2. Minority families own disproportionally low equities, reducing wealth potential.



# Eruditio's Outreach Model



#### Connection

Eruditio connects with school districts in vulnerable areas, with majority lowincome and minority populations.

(75k & 75%+)

#### Collaboration

Within targeted school districts, Eruditio collaborates with elementary & middle schools to find interested families.

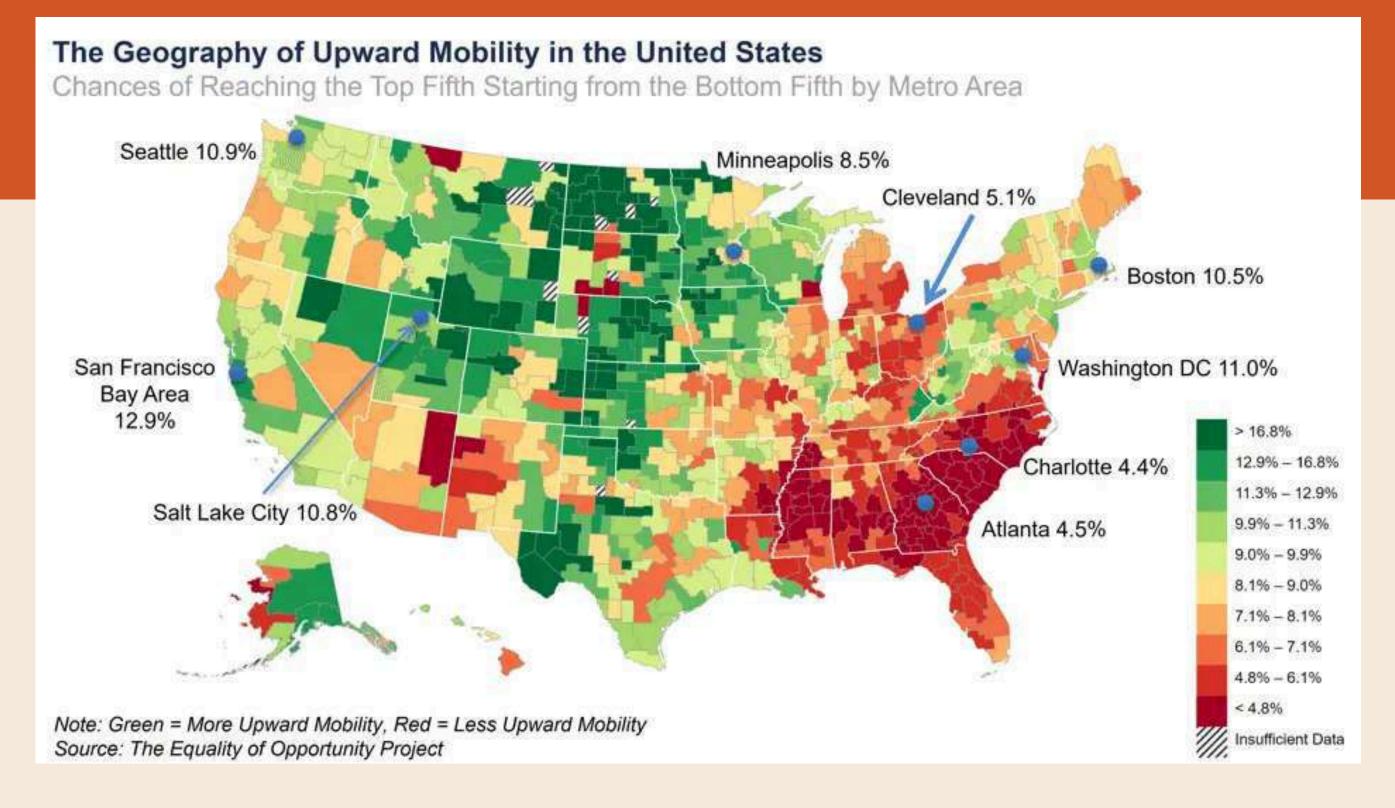
We set up free informational meetings with parents to introduce them to our co-financing program.

#### Protection

If parents are interested in joining the program, we sign a legal contract on our behalf.

This ensures that our pre-agreed share contribution will be fulfilled (adjusting for changes in income).

### Where We Start:



- Social mobility is the ability of families to progress out of the lowincome trap.
- We'll start in the southeast, where upward mobility compared is some of the lowest in the United States.
- We will expand our operations to other lowincome and minorities area in need.



# Co-Financing Model of Funding College Expenses

Household Income	Eruditio Contribution	Parent Contribution
<60k	100%	0%
60k-80k	90%	10%
80k-90k	70%	30%
90-100k	60%	40%
100k-110k	50%	50%
110k-120k	40%	60%
120k-130k	30%	70%
130k-140k	20%	80%
140k-150k	10%	90%
150k+	0%	100%

#### Variables:

- "Amount" is the amount we allocate in the fund on start date
- "Avg" is the average cost of community college in the students state on start date
- "P" is the Fund contribution %
   (based on the income table earlier)
- "Y" is the number of years till the student goes to college
- "1.03" is the average increase in cost of community college each year
- "1.1" is the projected average rate of return (8%) after a 6.66% margin of safety

# Calculating Amount of Money Invested:

# Our Mathematical Model

$$Amount = \left[\frac{Avg \times 1.03^{Y}}{1.1^{Y}}\right] \times P$$



### Management of the Fund

#### Three main components:

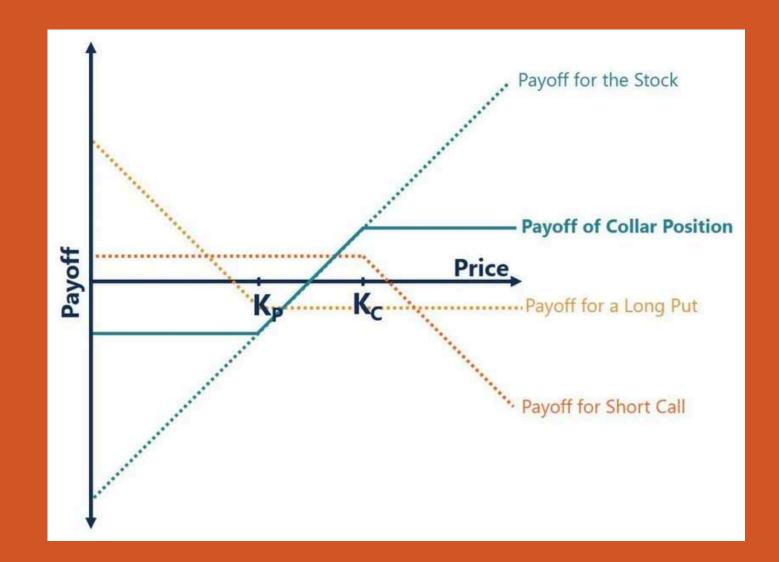
- 1.<u>S&P 500</u> Historically, the S&P has returned 10% per year, outperforming almost every other asset class and manager in the long term.
- 2. <u>Hedging (collar) Strategies</u> Reduces Downside this, in our backtesting models has shown to improve the S&P's returns from 10% to 14.66% by limiting downside in bear markets.
- 3. <u>Liquidity</u> We keep 20% of our fund in cash (similar to a lot of hedge/mutual/pension funds) to allocate for any unforeseen expenses or market crashes

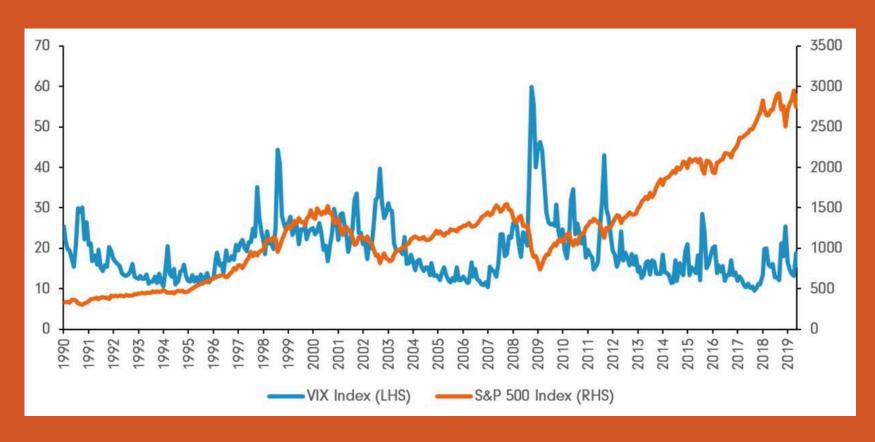
### Hedging (Collar) Strategies to Minimise Downside Potential

We plan on implementing a collar strategy (Long Stock + Long Put + Short Call) to manage downside risk. Though, this may limit upside.

To manage the downsides while keeping the upside, we plan on only using the collar high-volatility periods, since volatility has been consistently been shown to correlate with downtrends in index ETFs.

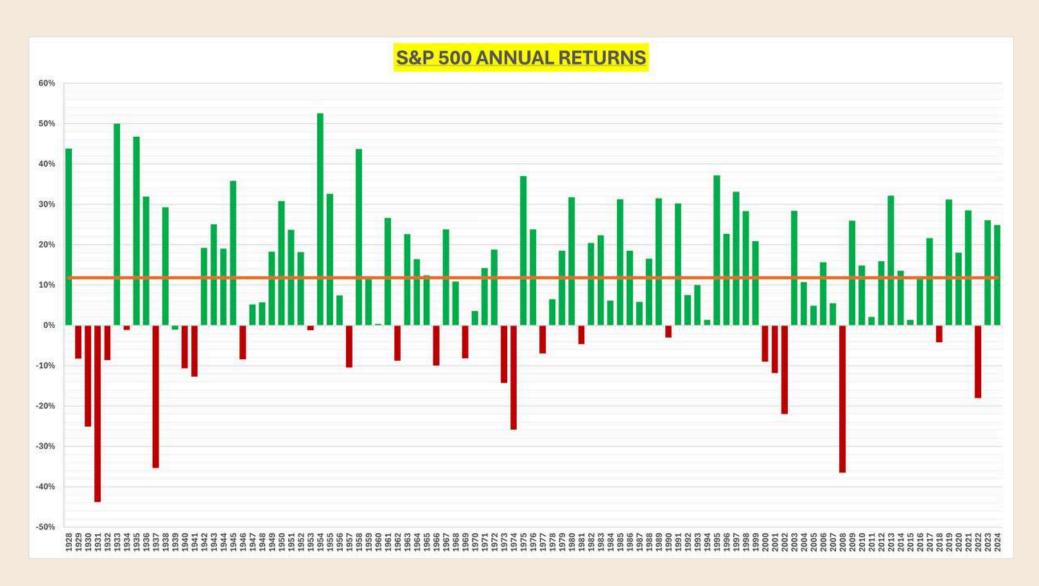
When volatility is gauged, we will activate our collar strategy to manage short term movements (1-3 months).





### Sustainability of Investing Structure

- Pooled sub-funds group families by income, reducing risk and administrative costs while increasing efficiency.
- As a 501(c), we don't pay taxes on investment gains all returns go directly toward students' education.
- Our model uses a long-term horizon (ex. 10 years), giving investments time to compound and reduce long term volatility.



"2024's return came in well above the average of 11.8% since 1928."



### Meet Jonathan, an Eruditio Beneficiary.



Jonathan is a second grade student who is studying at a partner public school in Atlanta, Georgia.

We met him through the school, and since his parents filled in our standard form and showed interest regarding our financing model, we arranged a meeting with them.

Household Income	Eruditio Contribution	Parent Contribution
<60k	100%	0%
60k-80k	90%	10%
80k-90k	70%	30%
90-100k	60%	40%
100k-110k	50%	50%
110k-120k	40%	60%
120k-130k	30%	70%
130k-140k	20%	80%
140k-150k	10%	90%
150k+	0%	100%

He plans on attending college in 10 years (following his senior year) and comes from a family with a household income of \$75,000 a year.

His family income puts the fund at a contribution percentage of 10%.

# Jonathan's Process

The Mathematical Model For Jonathan:

$$Amount = \left\lceil \frac{Avg \times 1.03^{Y}}{1.1^{Y}} \right\rceil \times P$$

$$Amount = \left[ \frac{90,000 \times 1.03^{10}}{1.1^{10}} \right] \times 0.9$$

$$Amount = 41,969.17$$

- Based on average projected college costs in 10 years (public in-state, private, or trade school options), we estimate Jonathan's expected education cost.
- Based on Georgia's average total expenses for an in-state community college, the projected total cost is \$90,000.
- With a 10% parental contribution rate, Jonathan's family would aim to contribute \$9,000, and the fund would allocate \$81,000 towards his education target.
- The mathematical model for John shows that we need to allocate 41,969.17 today to hit the \$81,000 in ten years.

# Q1: What if Jonathan no longer wants to attend college?

A: Because we manage these allocations for each student as subfunds within our own account, it allows for fluidity.

If Jonathan eventually decides that he does not want to attend college and wants to pursue an alternative education path, we are able to transfer the funds to another student's account.

### Q2: What if Jonathan's parents start earning more?

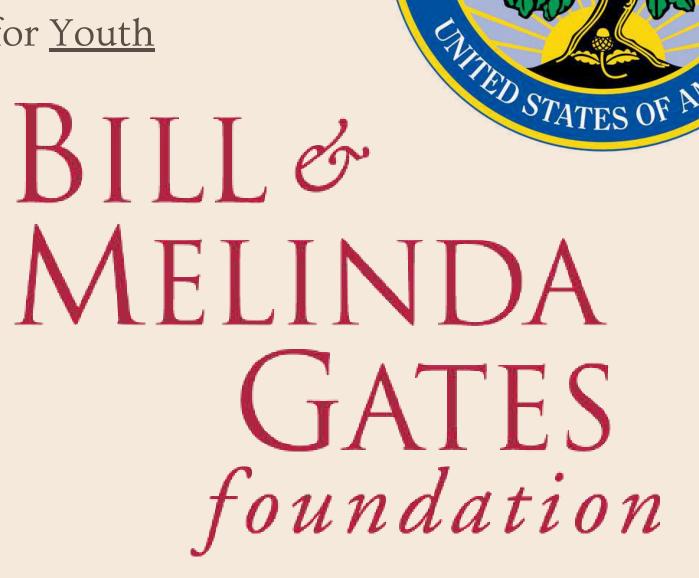
A: Let's say Jonathan's household income increases from \$75,000 to \$100,000, over the 10-year period.

- Original income of \$75,000 -> 10% parent contribution.
- New income of \$100,000 —> revaluation of income and ability to spend on college expenses
- To understand how much we need to allocate following a change of parent income we:
  - Calculate how far out from college expenses the parents income/wealth changes
  - Factor in the extent to which wealth and ability to pay changes
  - Revaluate allocation



### Funding Structure & Other Sources

- 1. Individual Donors and Philanthropists
- 2. Grants:
  - a. Public
    - i. The Neighbourhood Fund
    - ii. Grant for Community Empowerment
  - b. Private
  - The Arthur M. Blank Family Foundation grant for <u>Youth</u> <u>Development</u>
  - Economic Empowerment Grant
  - Impact100 Atlanta Education Grant
- 3. Public Government Grant:
- U.S. Department of Education
- Americorps
- 4. Private Foundation Grants:
- Bill & Melinda Gates Foundation
- Ford Foundation



### Why Our Funding Structure is Sustainable

- Investing money means that we need small amounts to start with (contribution for a single student's college experience could be as little as \$15,000)
- Up to 1% of the total fund money could go into management expenses based on how much is needed
- Over \$500 billion to education experiences are donated anually on average tapping 1% of that market could make all the difference.

## Why Donors Will Choose Us:

- 1) Tax benefits. This matters to high-net-worth individuals and institutions looking to align philanthropy with financial planning.
- 2) Their money goes a longer way. Traditional education nonprofits often stop at scholarships. We go further by investing donor money to create long-term funds for families, which grow over time and compound.
- 3) Transparency. Donors don't need to guess if their money is working—you can show them through algorithms, allocation models, and measurable ROI (return on impact).

We surveyed 23 HNIs and the three criteria they had for investing funds in a non profit was 1) Tax Benefits, 2) Impact and 3) Honesty and we fulfill all three.

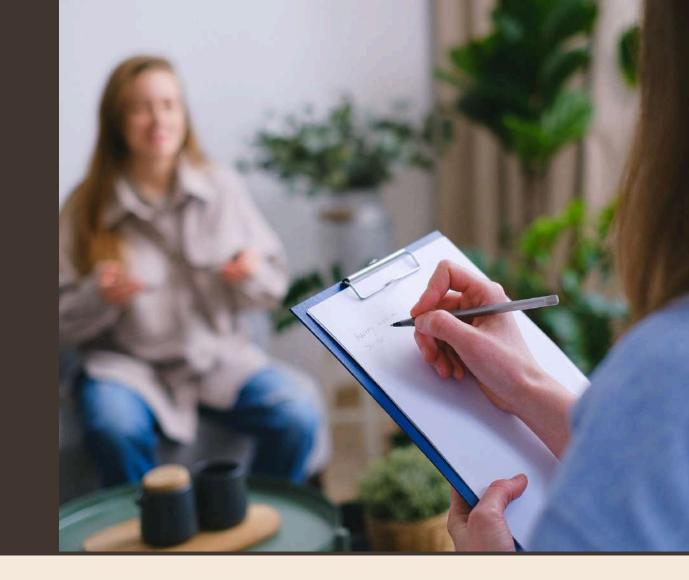


### Personnel Structure

- Entirely student-led organization, with external and internal volunteers.
  - Volunteers meet one-on-one with parents & act as direct contact points
  - Core staff oversee operations and financial tracking
    - President/CEO
    - Financial Chair (CFO)
      - Manage expenses and revenues regarding our fund: like rent, salaries, donors
    - Fund Manager (CIO)
      - Mostly managing the actual fund itself, maintaining investment growth and hedging strategies
    - Outreach Chair (COO)
      - Reaches out to school districts by priority, maintains communications between different staff, oversees regional coordinators
    - Regional coordinators (once we start expanding operations)
      - Train and manage volunteers in their region
      - Research into schools in the area that may benefit from priority college funding support
    - PR Manager (necessary later, with the bandwidth to service several large regions)

### Volunteer Recruitment Process

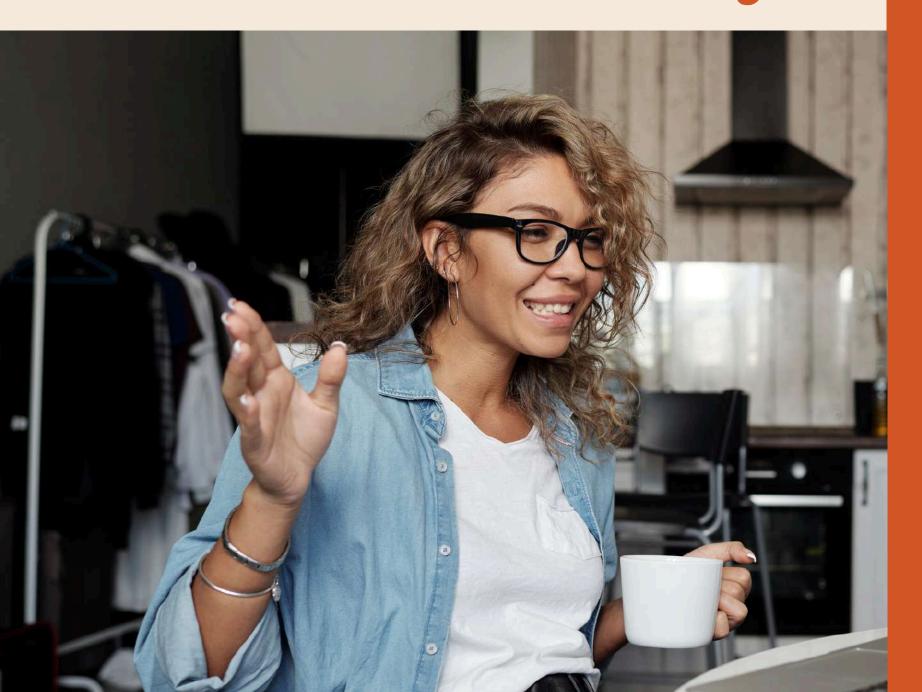
The main targets are young students with the goal of furthering their background.



#### All internal volunteers will be University students across America

- Hire experienced consultants to screen and interview college student volunteers.
- Select volunteers based on commitment to equity, communication, and leadership.
- Everytime major changes in management takes place, consultants are hired for recruiting.

# Volunteer Structure Sustainability



- Our volunteers will only have 1-3 parent meetings a week (1-3 hours of work a week) based on availability
- Quarterly bonding sessions / social events allow volunteers to meaningfully connect.
- A collaborative and transparent work culture where all of our values are aligned.
- Networking opportunities, professional pathways

### Timeline

2025: Fundraising round (Goal to raise \$10 million), initial management for the non-profit are hired

2026-2027: First two school districts (elementary and middle school) + Refining the Process + Passively raising up to \$100 million

2028-2030: Covering all eligible elementary/middle schools in Atlanta + Passively raising up to \$500 million

2025 — 2027 — 2030

Initial fundaising stage and investments

Expansion of program & continued fundraising

Full coverage of underprivileged Atlanta

# Monitoring Success and Measuring Impact

- Track investment growth and assess return based of benchmarks.
- Evaluate hedging strategy effectiveness in markets and adjust accordingly.
- Track student enrollment, and money raised as compared to our benchmarks on our timeline.
- Measure volunteer participation and school partnerships.
- Regular reviews of fund impact and outreach effectiveness.

We are asking for

\$40,757

to make Eruditio a reality

Expense			Cost associated with expense (\$)	Recurring	One-Time
Set Up Expenses:					
	Full Form 1023		600		
	State Incorporation Fee		500		
	Attorney for Incorporation		3000		
	Ongoing Expenses:				
		IRS Form 990	100		
		State Annual Report	100		
		Charity Registeration	100		
		Accounting Fee	689		
Total			5089		
Office Expenses			8880		
Total			8880	<b>/</b> /	
Insurance:					
	Financial Lines Insurance		600		
	General Liability Insurance		480		
	Professional Liability Insurance		600		
T2421	Volunteer Accident and Liability Insurance		140		
Total			1820	Ø.	
Marketing:					
	Social Media Content Creation:	Ovembia Design	4000		į I
		Graphic Design	1800		
		Reels	2400		
		Content Strategy	600		
		Tools + Subscription Analytics and Boosting	408 360		
Total		Allacytics and Doosting	5568		
Website Costs:			5508		
Wensite Costs.	Design		2500	N.	
	Hosting + Domain		400		
	Cybersecurity		500		
Total	and particular states of the s		3400		
Consultant Costs:			0.100		
- STORMATH COULD	Management Consultant		3000		T I
	Fund Management Consultant		3000		
Total			6000	_	
Social Bonding Events:					
2	Venue		3000		1
	Food/Drinks		2000		
Total			5000		
Unforseen Expenses			5000		
Sub-Total			40757		

# Financial Breakdown



# Thank you!



Opening education opportunities.

- 0991-234-5678
- eruditio@gmail.com
- www.eruditioeducation.com

### Bibliography

National Archives - Homestead Act

National Archives. "The Homestead Act of 1862." National Archives, www.archives.gov/education/lessons/homestead-act#background. Accessed 14 July 2025.

Cornell Law - Redlining

Cornell Law School. "Redlining." Legal Information Institute, www.law.cornell.edu/wex/redlining. Accessed 14 July 2025.

PubMed - Zewde et al.

Zewde, Naomi, et al. "Health Outcomes of Children of the Great Migration." Health Services Research, vol. 53, no. 6, 2018, pp. 4333–4350. PubMed, doi:10.1111/1475-6773.12975.

RSF Journal - Rothstein and Quillian

Rothstein, Richard, and Lincoln Quillian. "Housing Discrimination and Segregation in the United States: Analyzing the Evidence." RSF: The Russell Sage Foundation Journal of the Social Sciences, vol. 7, no. 3, 2021, pp. 101–122, www.rsfjournal.org/content/7/3/101. Accessed 14 July 2025.

JEP - Oliver and Shapiro

Oliver, Melvin L., and Thomas M. Shapiro. "Black Wealth/White Wealth: A New Perspective on Racial Inequality." Journal of Economic Perspectives, vol. 8, no. 4, 1994, pp. 145–156, doi:10.1257/jep.8.4.145.

Statista – Stock Ownership

Statista. "Share of Americans Who Own Stock from 1998 to 2023." Statista, www.statista.com/chart/30224/share-of-americans-who-own-stock/. Accessed 14 July 2025.

USAFacts - Stock Ownership

USAFacts. "What Percentage of Americans Own Stock?" USAFacts, www.usafacts.org/articles/what-percentage-of-americans-own-stock/. Accessed 14 July 2025.

Pew Research - Wealth Inequality

Horowitz, Juliana Menasce, et al. "Trends in Income and Wealth Inequality." Pew Research Center, 9 Jan. 2020, www.pewresearch.org/social-trends/2020/01/09/trends-in-income-and-wealth-inequality/. Accessed 14 July 2025.

Urban Institute – Wealth Inequality Charts

Urban Institute. "Nine Charts about Wealth Inequality in America." Urban Institute, apps.urban.org/features/wealth-inequality-charts/. Accessed 14 July 2025.

Wiley Online Library - Jones

Jones, Marcus D. "Racial Inequality, Wealth, and the Role of Institutions." Journal of Consumer Affairs, vol. 55, no. 3, 2021, pp. 957-975, doi:10.1111/joca.12294.

Investing.com – Roberts

Roberts, Lance. "S&P 500 10/20-Year Compounded Returns Not Yet in Bubble Territory." Investing.com, 22 Mar. 2024, www.investing.com/analysis/sp-500-10-20year-compounded-returns-not-yet-in-bubble-territory-200655824. Accessed 14 July 2025.

Yannelis, Constantine, and Greg Tracey. "Student Loans and Borrower Outcomes." SSRN Electronic Journal, 2022, https://doi.org/10.2139/ssrn.4063097.

### AI Declaration

- Used ChatGPT 4.0 to generate a logo for our nonprofit.
- Generated MLA citations using ChatGPT 4.0.

#### Citations:

"make a logo for an education non-profit named Erudition with orange and green accents. The design should be sleek, clean and professional" ChatGPT, 4.0, OpenAI, July 16<sup>th</sup> 2025. https://chatgpt.com/c/6877a9d6-7e80-800e-8c36-48977b322599

"take these links and cite them in MLA8" ChatGPT, 4.0, OpenAI, July 16<sup>th</sup> 2025. https://chatgpt.com/c/6877a9d6-7e80-800e-8c36-48977b322599