The Distribution of Student Debtors: Data, Narrative, and Debt Cancellation

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Acknowledgements: The author would like to thank her colleagues Eduard Nilaj, Sergio Pinto, Marshall Steinbaum, Halah Ahmad, and Sanoja Bhaumik for their valuable contributions throughout the research and editorial stages of developing this report.
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N.B. Previous Millennial Student Debt reports may be downloaded at:
https://www.jainfamilyinstitute.org/projects/millennial-student-debt/
Introduction

The first sentence of President Biden’s student debt cancellation announcement calls student loan obligations “lifelong burdens” that no longer promise a pathway to a middle class life. The announcement raises how socioeconomic factors determine a borrower’s experience of the student debt crisis—minorities and low-income borrowers utilize debt at higher rates and amounts than their peers, and therefore benefit more from debt cancellation. This report uses three datasets to explore those distributive characteristics of student debtors—a loan-level credit bureau sample, College Scorecard, and the Survey of Consumer Finances—along with revenue projections on the Department of Education’s federal lending program to provide a clearer picture of how debtors stratify along the income and wealth distribution, and how they fare throughout repayment. The prevailing narrative is that most borrowers hail from advantaged backgrounds or will become wealthy due to their future cash flows. The resulting analyses directly contradict these claims.

Is student debt “a ticket to the middle class?” The historical and continued use of student debt boils down to whether the debt eventually “pays for itself” through human capital gain. The story goes that a student debtor will attain wages above those of a high school graduate; this “wage premium” results from acquiring a learning credential. However, this justification for student debt ignores systemic disparities in college financing and completion. When it comes to graduate school, existing inequities are even more pronounced. The story fails to account for those who do not attain a reliable wage premium, whether or not they finish their degrees, but still owe obligations on their loans. Such systemic failures in American higher education complicate the case for debt-financed education, yet the system persists due to an overly simplistic idea: a typical college graduate earns more than a typical high school graduate. On the surface, this data point makes public and private student loans appear a worthwhile investment.

This wage premium is assumed to outweigh the myriad costs and repercussions (financial and beyond) of borrowing for the certificate or degree—that once the present value of future credential-derived cash flows are accounted for, student debtors are actually quite well-off. The data and analysis counter that claim. Financing education through debt exhibits a regressive distribution across income, race, class, and gender, suggesting that student debt deepens existing inequities. Students who need loans face a disadvantage even if the degree “pays off.” Studies on the impacts of student debt have revealed worrisome trends in rates of marriage, entrepreneurship, homeownership, and savings—all the more worse for systemically underserved communities. Still, student
loans remain the only viable option to millions of Americans to close funding gaps. The Biden cancellation plan provides significant relief for millions of these disadvantaged borrowers, but, absent systemic change to the higher education financing system, regressive borrowing trends exhibited within this report are unlikely to change.

Distributive Characteristics of Student Debtors

Numerous researchers have already shed light on a variety of troubling trends present in America’s college financing system. For example, undergraduate students at private colleges are nearly twice as likely to borrow federal loans than their peers at public colleges; they originate higher loans as well. Pell recipients, compared to their non-Pell peers, borrow at higher rates and typically have lower rates of degree attainment meaning higher absolute and relative debt to repay. Black and Latino students are over-represented in both of these statistics because they are more likely to come from low-income households, attend expensive private institutions, and thus have lower rates of college completion compared to white students. Facing higher costs of attendance alongside already-strained financial resources contributes to higher college drop-out rates for Black students and Pell recipients. This section will expand on these statistics by focusing on the present trends in borrowing cohorts across socioeconomic groups and loan types.
Figure 1: Median accumulated federal debt for undergraduate borrowers by FAFSA income groups and Pell-grant recipient status. Weighted average of medians is calculated using a weight that equals the number of borrowers present in each institution’s 2-year pooled borrowing cohort.

We used the latest College Scorecard data updated in May 2022 to display the median accumulated debt (for completers and non-completers, alike) across higher education institutions for different types of borrowers. Figure 1 shows that the median low income student and Pell-grant-recipient borrow student loan amounts comparable to their peers, but experience heavier debt burdens in relation to their income. A low income student’s FAFSA family income ranges between $0 - $30,000; $11,300 in debt for a low-income student is more burdensome than the same amount of debt for an upper-income student. This finding aligns with similar research showing that borrowers in low-income neighborhoods experience drastically higher debt-to-income ratios than borrowers in

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1 FAFSA family income is categorized by NSLDS into the three groups as follows:
- Low income borrowers: $0 - $30,000.
- Middle income borrowers: $30,000 - $75,000.
- High income borrowers: $75,001 and above.
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more affluent areas. The same concept applies when comparing the debt burdens between Pell and non-Pell recipients: debt obligations are roughly the same or many times higher for Pell recipients, while their debt-to-income burdens are always much higher. This is also true when delineating borrowers by institution type (public, private non-profit, or private for-profit). Additionally, the accumulated debt statistics in the Figure 1 do not include accrued interest, which increases expected debt obligations and lengthens repayment horizons, especially for those who enroll in income-driven repayment programs.

Figure 2: Undergraduate Federal Student Loan Borrower Counts by FAFSA income groups and Pell-grant recipient, First Generation, and Gender statuses. Categorical groupings are mutually non-exclusive, meaning individuals may fall into more than one category.

These graphs indicate that, while college attainment may signify an eventual ascendance up the economic mobility ladder, systemically shackling specific groups of students with debt will impede financial mobility. Low-income, first generation, and female students disproportionately carry student debt. Around only a third of undergraduates are Pell
grant recipients, yet in the latest College Scorecard cohort, Pell grantees represent 75 percent of the estimated\textsuperscript{2} undergraduate borrower pool. The lowest income borrowers account for 56 percent of the borrower pool, first generation borrowers account for 81 percent, and female borrowers account for 69 percent.\textsuperscript{3}

It is worth noting that there is a lack of equivalent data on Parent PLUS loans and graduate school loans. However, the data that is available trends even more regressive—parent borrowing is often the “loan of last resort” for low-income undergraduate students, and graduate-level credentials counterbalance labor market discrimination. For graduate borrowing on the whole, \textit{regressive racial and gender disparities} occur with loan take-up and result in larger aggregate balances. Interest rates on graduate loans, alongside the fact that expensive private colleges enroll nearly half of graduate students (compared to their 22 percent of undergraduate students), exacerbate these inequities. Black and Latino families \textit{more heavily rely} on the Parent PLUS program to close funding gaps compared to white families, as do colleges that predominantly serve Black students. While repayment rates on Parent PLUS loans indicate insolvency on the whole (see Figure 3), institutions that predominantly serve Black students have far worse Parent PLUS repayment rates.\textsuperscript{4}

The most explicit proof that the college wage premium is failing borrowers is the rate of repayment on student loans. We can examine repayment in the following manner: first, negative amortization rates in JFI’s loan-level credit bureau sample; second, actual repayment rates provided through College Scorecard’ institutional cohort-level data, and; third, the Department of Education’s projected revenue for the student loan program. They indicate that the college wage premium has fallen short of its promises: millions of students are saddled with debt they cannot repay.

The best depictions available to highlight individual-level repayment rates are through credit bureau archives, which offer anonymized information on origination amounts and

\textsuperscript{2} The overall rough estimate of undergraduate borrowers in the 2-year cohort is 17.3 million; this underestimated count of borrowers is due to data suppression for institutions with fewer observations. However the percentage shares mentioned in this and its following sentence are calculated by taking the headcount in the aforementioned group and dividing it by the sum total of each group within the category described.

\textsuperscript{3} There is overlap between groups and hence they are mutually non-exclusive. For example, a borrower could be female as well as a pell grant recipient so would be included in the headcount for both groups.

balances due. Following a panel sample of one million young adult borrowers in 2009, over 50 percent of borrowers had not repaid their student debt ten years later. Over 25 percent of the credit panel owed at least 1.3 times their 2009 balances in 2019. Over 10 percent of the panel owed at least 3.78 times their 2009 balances in 2019. In a cross-sectional sample of young adult borrowers in 2019, loan-level data linked to racial demographic data from the American Community Survey in Figure 3 shows that roughly 75 percent and 60 percent of student loans in Black and Latino neighborhoods, respectively, have balances exceeding the original loan amount, compared to 50 percent of loans in white neighborhoods. These figures have increased substantially compared to cross-sectional samples from a decade prior. They indicate that unpayable student loans are the norm which extends repayment horizons, moreso for borrowers with fewer resources.

Figure 3: Share of Loans where Current Balance Exceeds Original. This graph is an updated version of an identical chart presented on page 23 of Jain Family Institute’s “Student Debt and Young America” report, published February 2021.
Figure 4: Repayment Rates of Federal Loans Across Higher Ed Institutions for undergraduate borrowers, Parent PLUS borrowers and Graduate student borrowers. This graph is an updated version of an identical chart presented on page 15 of Jain Family Institute’s “Rules, Accountability, and the Student Debt Crisis” report, published March 2022.

Figure 4 presents cohort-level repayment rates of distinct groups of borrowers across time. Undergraduate and graduate level borrowing cohorts have made virtually no progress on their student loan obligations within five years of entering repayment. After ten years of repayment, every borrowing cohort still owes between 50-110 percent of the original principal. Individual-level repayment within these cohorts likely mirror the

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5 Actual repayment rates are measured at particular intervals after a borrower entered repayment. College Scorecard tracks actual repayment rates by measuring an institution’s percent of student debt that is unpaid. An institution’s “percent unpaid” is defined as outstanding student debt across a borrower cohort (the group of students who entered repayment in the same two-year period) divided by the total originated amount of student loans for that cohort. When the percent unpaid is over 100%, it means original loan amounts plus interest are owed by the cohort as a whole. When percent unpaid drops below 100%, it means that borrowers have made some progress on repaying interest and the original loan amount.
variation shown in the previously-referenced panel sample—that is, an overwhelming majority of the borrowers still owe debt ten plus years after entering repayment, with many actually owing more than they originally borrowed. If college was truly equipping borrowers with a steady and reliable wage premium, after a normal 10-year amortization schedule the percent of student debt unpaid would approach zero.

Achieving a normal 10-year amortization would require reducing the use of income-driven repayment (IDR) programs. On the contrary, IDR utilization is actually increasing. A July 2022 report by the Government Accountability Office shows 47 percent of federal loan dollars are in IDR plans. As the share of dollars in IDR increases, the Department of Education modifies projected budgetary costs. According to the GAO report, federal lending revenue projections have been shifted down by $311 billion. In other words, whereas the government used to project it would earn $114 billion on all the federal direct loans issued between 1997 and 2021, it now predicts it will lose $197 billion in revenue on those same loans. Roughly a third of the shift is due to the Covid-19 repayment moratorium and the rest is due to a mixture of revised assumptions on loan performance and economic changes. These include increasing the projected borrower enrollment in IDR programs and reforecasting their projected incomes (and repayment amounts) downward. These two adjustments account for about $138 billion of the modified $311 billion budget swing—that is, the Department overestimated borrowers ability to repay debt by $138 billion. It underscores how the college wage premium can exist and still fail to help borrowers fulfill their debt obligations.

If borrowers were wealthy, or at least succeeded in attaining high incomes, then repayment horizons would concentrate around a normal 10-year amortization. Consequently, budgetary shortfalls in the federal lending program would be less severe because the debt would be repaid. The data shows a starkly different outcome: borrowing cohorts are struggling with repayment to a point where look-back analysis is not even possible. Ten, fifteen, and twenty plus years out from repayment, borrowing cohorts are not meaningfully decreasing their loan obligations. The inability for borrowers to repay debts, or for loan revenue projections to hold true, indicates that college is not paying for itself in the labor market. For most borrowers, whether they are undergraduates, Parent PLUS borrowers, or graduate students, education does not lead to incomes that enable the repayment of debt in the 10-year window. This fact has direct

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6 Figure 1 on page 5 of the report displays the share of Direct Loan dollars in IDR plans versus other plans. Direct Loans include Direct PLUS loans (Parent PLUS and Graduate PLUS). Current IDR plans provide total forgiveness after completing 20 to 25 year repayment trajectories. A separate GAO report from April of 2022 found that only 157 loans enrolled in IDR (held by 132 borrowers) have been approved for forgiveness to date. The program first started in 1994.
implications on who disproportionately benefits from student debt cancellation, discussed in the next section.

**Beneficiaries of Student Debt Cancellation**

The progressivity of federal student loan cancellation, or any public policy, depends on who will benefit, how they are distributed along the income and wealth distribution, and how much relief they will receive in relation to that income and wealth. Previous analysis within this report has shown that the distribution of borrowers skews towards disadvantaged groups, including those with fewer financial resources. Holding outstanding student debt constant, debt burdens in relation to income or wealth will be greater for these borrowers than for their higher income peers. Therefore, relief of any constant dollar amount is progressive because that relief decreases debt-to-income ratios for lower income borrowers more than for higher income borrowers.

Debate and skepticism still persist about whether well-off individuals—especially those with a master’s or professional degree—stand to benefit unnecessarily from student debt cancellation. Determining the worthiness of a borrower is a subjective exercise, but a distributive analysis can be conducted. Exploring the distribution of (private and federal) student loan borrowers using the 2019 Survey of Consumer Finances (SCF) expands understanding of how households with student debt stratify along the wealth and income distribution. The results illuminate a clear distinction between income and wealth.

All computations used in the following figures and analyses employ SCF sampling weights to be representative of all US households. In both Figure 5 and 6 of this section, households are categorized as followed: 1) By the “highest degree status” of the household reference person; 7) By the overall net worth category of the household, and; 3) By the annual income quartile of the household. 8

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7 The reference person in the 2019 SCF is reporting on their household’s income, net worth and student debt owed, meaning the household’s total student debt may include educational loans for a degree level that is different from the household’s “highest degree completed” category.
8 The chart is not inclusive of SCF’s numerous “highest degree completed” categories.
9 In 2019, the lower thresholds for household income quartiles: Q1- $0; Q2- $30,544; Q3- $59,051, and; Q4- $107,020.
In 2019 the outstanding student loan debt across U.S. households in the SCF was $1.11 trillion. The household breakdown of that outstanding debt by “highest degree status” was:

- 12%: “Some College, No Degree.”
- 30%: “College Degree Holder.”
- 38%: “Master’s or PhD Degree.”
- 20%: held by households in degree categories excluded from Figure 5 & Figure 6:
  - 8%: “High School Graduate.”
  - 11%: “Associate Degree in College.”
  - ~1%: Categories of “Highest Degree Status” below a High School Graduate.

Comparatively, the breakdown of households in 2019 within each degree category varies as follows:

- 17%: “Some College, No Degree.”
- 21%: “College Degree Holder.”
- 15%: “Master’s or PhD Degree.”
- 47%: held by households in degree categories excluded from Figure 5 & Figure 6:
  - 24.5%: “High School Graduate.”
  - 12%: “Associate Degree in College.”
  - 10.5%: Categories of “Highest Degree Status” below a High School Graduate.
Across the three degree categories displayed in Figure 5, the vast majority of outstanding student debt is held at the bottom of the wealth distribution, no matter which education level we examine. Households in the bottom wealth category hold 59 percent of the debt for “Some College, No Degree,” 56 percent for “College Degree Holder,” and 61 percent for “Master’s or PhD Degree.” Outstanding student debt among those 25 percent of households with the lowest net worth is mostly held by middle income earners.
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**Average Student Debt by Degree, Income, & Wealth**

Average educational loan* debt held by different household groupings in 2019. **Degree categories are mutually exclusive.**

![Image](image_url)

Households in the lowest wealth category of each degree status owe exponentially higher average balances than their wealthier counterparts, whether or not they finish their degree. On the other hand, wealthier groups have extremely low average student debt balances because these groups do not take on debt to finance their education. This trend is in line with the disproportional rates of student loan take-up by borrowers at lower socioeconomic levels, as evidenced in Figure 2. The trend also aligns with disproportional student loan take-up by low-wealth households categorized by race. Furthermore, the wealth of a Black household headed by someone with a college degree lags far behind that of a white household headed by someone with a high school degree, exacerbating the disproportionate debt burdens of low-wealth, Black households.

These trends counter the narrative that average balances are higher in the mid- to high-wealth distribution. We find, instead, that while the most burdened borrowers have middle- and higher-incomes, they come from the poorest households. Wealth, then, is a
much stronger determinant of high student burdens than income. Coupled with the fact that under-resourced students are disproportionately represented in the borrowing pool (Figure 1 and Figure 2) and that worrisome repayment rates prevail across borrowers cohorts and loan types (Figure 3 and Figure 4), the concentration of borrowers in the bottom of the wealth distribution warrants a reevaluation of borrowing as a tool for socioeconomic mobility. A student's financial and social position upon entering college, including the predisposition to borrow, holds much more weight on ex-post financial stability than previously thought.

The charts shed light on the distributive impacts of President Biden’s means-tested student debt cancellation of $10,000 per borrower, with up to $20,000 for Pell grant recipients. The cancellation will meaningfully erase or lower the average balance of non-completers and high wealth graduates, but it’s unclear whether average balances for low-wealth borrowers, especially where typical borrowing exceeds $10,000 and $20,000, will decrease significantly. Under the plan, only borrowers earning income under $125,000 per year are eligible to receive cancellation. The SCF data indicates that having high income is not synonymous with wealth and the financial stability that wealth provides, yet millions of high-income individuals are excluded from relief. The administration’s plan references how student loans impede borrowers from attaining a middle-class standing. If the goal of Biden’s cancellation plan is to increase the class standing for student loan borrowers, it’s unclear whether the plan will go far enough for those with little wealth experiencing high student debt burdens.

Student debt burdens can vary dramatically, which makes prescribing policy solutions and predicting their impacts is a difficult task, especially when solutions are restrictive or conditional. Coverage of President Biden’s cancellation policy, an arbitrary limited amount targeted at a specific income group, demonstrates how difficult it is to estimate costs, define eligibility, limit political pushback, and avoid scammers. Comparatively, wide-scale, automatic federal student debt cancellation is straightforward—all the neediest borrowers will benefit, administrative costs and constraints will be minimized, political pushback is limited, and debt burdens will be dramatically reduced.
Conclusion

The college wage premium argument is riven with oversimplification and misuse, especially when used to justify the existence and expansion of student debt. It devalues the socioeconomic and institutional disparities in both the utilization and repayment of student loans and downplays the class, racial and gender inequities in the labor market that make measuring college wage premiums even more difficult. Students from disadvantaged backgrounds have higher borrowing rates. Low-income borrowers carry debt loads comparable to their high-income peers but experience much heavier debt burdens because of their financial standing. Lastly, repayment patterns suggest that student debt is difficult to pay off even twenty years after entering repayment. The typical borrower twenty years ago originated smaller loans than a borrower today, meaning repayment patterns for today’s cohort of borrowers will likely be even more dire.

Despite this, a narrative persists that the typical borrower, especially one with a professional degree, is affluent, has a high income, and has a valuable degree to further enrich their status. The findings in this report counter that claim, showing that most outstanding student loan debt is held by households in the bottom 25th percent of the wealth distribution. Much of that debt is held by high- and middle-income households with low wealth, demonstrating that being a high income borrower does not equate to being wealthy. Households who have never completed their degrees also hold 12 percent of outstanding student debt. Limiting debt relief based on income neglects the role of race, class, and completion in debt burdens, affecting the incidence and intensity of using student loans, the likelihood of graduating on time, and the financial “pay-offs” from higher education. This research aligns with other work dispelling the myth of the typical, affluent student debtor. We find that students who already face disadvantages in the higher education system and the labor market are further burdened with mounting student loan balances. The promise of an equitable higher education, then, must consider more just avenues for financing.