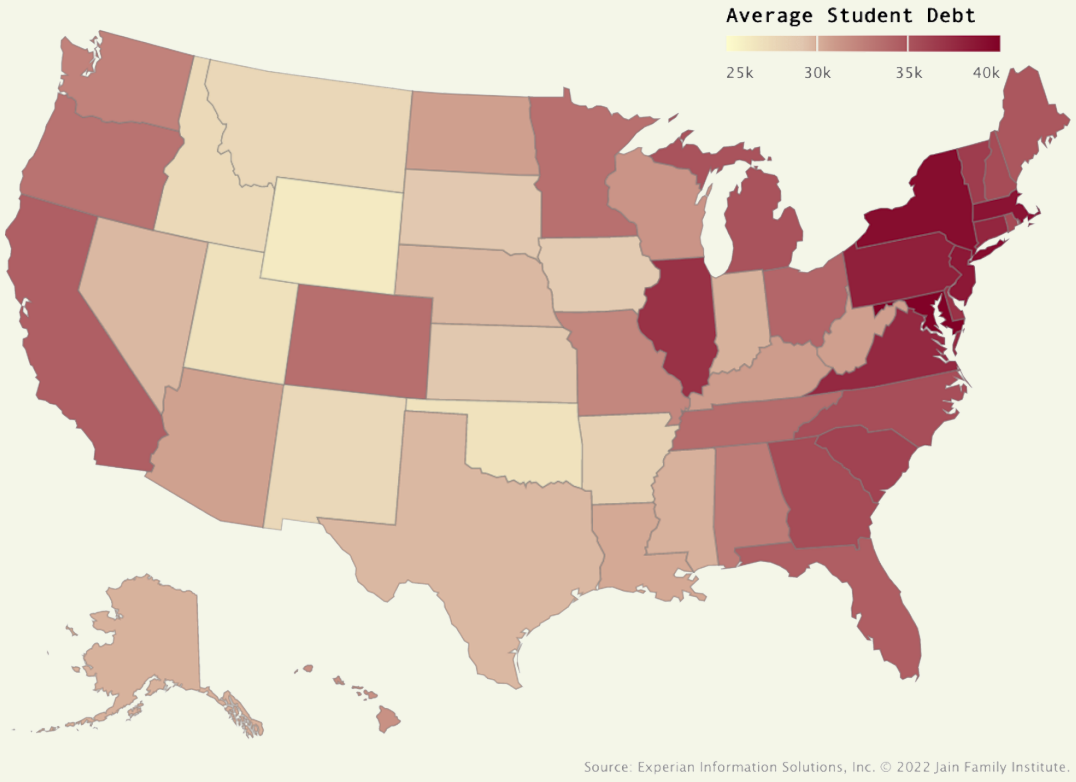
Student Debt and Young America in 2022

Jain Family Institute Annual Student Debt Report - December 2022



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View this report as a web page with interactive charts.

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N.B. Previous Millennial Student Debt reports may be downloaded at:
https://www.jainfamilyinstitute.org/projects/millennial-student-debt/

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About This Report

The Biden administration started 2022 initially skeptical of extending the federal student loan repayment pause and canceling student debt. In late December 2021 the administration extended the pause to May 2022, reneging on the finality of a January 2022 deadline. In April 2022, rumors began swirling that President Biden was considering cancellation by executive action. All the while, the administration accelerated efforts to relieve systemic issues plaguing millions of borrowers by approving (and improving access to) borrower defense claims, closed school discharges, total and permanent disability discharge (TPD), and public service loan forgiveness. Then, in late August 2022, Biden advanced a massive policy shift, announcing student debt cancellation through executive authority, which, though not yet implemented, has the potential to relieve the debt burdens of 40 million Americans. All of these policies bring necessary change to a system riddled with false promises, bad actors, lax oversight, and regressive outcomes. This report reviews these troubling trends as well as the policies in play that could help solve them.

The U.S. is nearly three years into the federal student loan repayment pause. It has been a long-overdue reprieve for those who are eligible and sorely missed one by those who are not. As borrowers await debt cancellation and the eventual resumption of repayments, our annual report provides a full analysis of the state of student debt in 2022—and what it could look like after debt cancellation. The results are mixed. We find that systemic disparities in student debt burdens persist when it comes to race and class: Black borrowers still suffer from disparate burdens on top of already having lower incomes, and most borrowers distribute into the lowest wealth categories despite many having high incomes. In 2022, debt burdens are still alarmingly high despite most borrowers not owing monthly payments on their obligations. However, for the first time in our cross-sectional sample, student debt balances have decreased for two years in a row—the combination of an enrollment slump, federal debt not accruing interest, private loan holders paying off their debts, and initial waves of borrower defense, total and permanent disability, and closed school discharges. The decreases are concentrated amongst low-income and minority borrowers—a sign that targeted relief is working. Debt relief, as envisioned through student debt cancellation and an improved income driven repayment program, will allow that hopeful trend to endure. These are promising signs to ultimately address the student debt crisis.

Highlights

- Many current student loan holders accelerated payments on their privately-held debt during the unprecedented Covid-19 repayment pause. As a result, median and average balances have fallen for two years in a row—the first time in our millennial student debt sample. However, borrower incomes dropped as well.
- Decreases in balances across new loans signal that young borrowers have become more hesitant to indebt themselves during the pandemic, despite the unprecedented interest rate moratorium.
- Systemic student debt disparities along lines of race and wealth are greater determinants of a borrower's continued indebtedness than higher incomes.
    - Despite the pandemic-era narrowing of the racial income gap, borrowers in Black and Latino neighborhoods still have the lowest incomes and, consequently, disproportionately struggle with the non-repayment crisis.
    - While borrowers in Black communities experience the steepest declines in average balances during the Covid-19 repayment pause, they still suffer from the worst effects of the repayment crisis—67.2 percent of loan balances are greater than the origination amount. Across all borrowers, a troubling 54.7 percent of loan balances were greater than the origination amount in 2022.
- Between 2012 and 2022, lowest-income borrowers experienced a 25.2 percent decrease in the median student debt-to-income ratio, but continue to have a greater debt-to-income burden than those in the highest income deciles (incomes between $82,000–$345,000), attesting to the regressivity of student debt.
    - The most burdened debtors are more likely to be in the bottom of the wealth distribution, even if they have a high income. Higher income borrowers have more variation in debt balances.
    - Far more households in the bottom of the wealth distribution hold student debt than households in higher wealth categories, which has significant implications for who benefits from the administration's debt relief plan.
- Homeownership rates of young borrowers increased in 49 states and DC from 2020 to 2022. Despite this increase, we still find a negative and significant relationship between student loan debt and homeownership for young borrowers in 2022.
- Analysis indicates that student debt cancellation (pending further legal challenges) reduces debt burdens across the country, especially among Black borrowers and those with the lowest incomes.
    - For eligible borrowers, the average amount of debt relief across the country, conditional on full participation and maximum allotment, could be as high as

$16,173. This relief could cause typical student loan balances to fall dramatically to levels not seen since the early 2000s.

- The new Income-Driven Repayment (IDR) plan could address both unaffordable repayments and ballooning balances. The remaining challenge is making sure that most borrowers, if not all, have access to the program and, equally important, remain enrolled.
    - Student debt repayment has improved substantially since 2020, but the crisis of non-repayment continues for many borrowers. Policy change must not only ensure borrowers have affordable payments relative to their incomes, but also that borrowers are making progress in paying down their balances with those payments.

About Us

This is the second annual report released through the Millennial Student Debt (MSD) research project. This year's report includes numerous visual charts with accompanying analysis, an interactive map, and a downloadable dataset. We also review key takeaways from various MSD reports that have been released in the last year, which include topics on accountability, deceptive industry practices, cancellation strategies, and access to credit. Much of MSD's research, including within this report, utilizes public[1] and/or proprietary[2] datasets to spotlight the plight of student loan borrowers—for more details on our data sources, see the Work Cited and Methodology section.

The MSD project is run by researchers within the Higher Education Finance Initiative at the Jain Family Institute. This initiative develops pilots, studies, and research with the aim of gaining insight into the student debt crisis and finding the most high-impact interventions to alleviate debt and improve the higher education financing system. Our pilot and policy design within this initiative focuses on income contingent financing and debt relief. The MSD inaugural annual report was released in February 2021 and brought to light the deep disparities present in student debt burdens across income and race. The report's accompanying comparison tool exposed the severity of the crisis, ever-present in every corner of the United States, and how it relates to higher education costs and access.

The Jain Family Institute (JFI) is a nonpartisan applied research organization in the social sciences that works to bring research and policy from conception in theory to implementation in society. Founded in 2014 by Robert Jain, JFI focuses on building evidence around the most pressing social problems.

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[1] Public datasets utilized are: American Community Survey, Survey of Consumer Finances, Student Aid, and College Scorecard.
[2] Two random, anonymized credit bureau datasets, purchased annually by Jain Family Institute, are: 1.) one million 18-35 year old student debtors pulled each year from 2009 through 2022, and; 2.) one million 18-35 year old student debtors in 2009, followed through annual credit archives to 2022.

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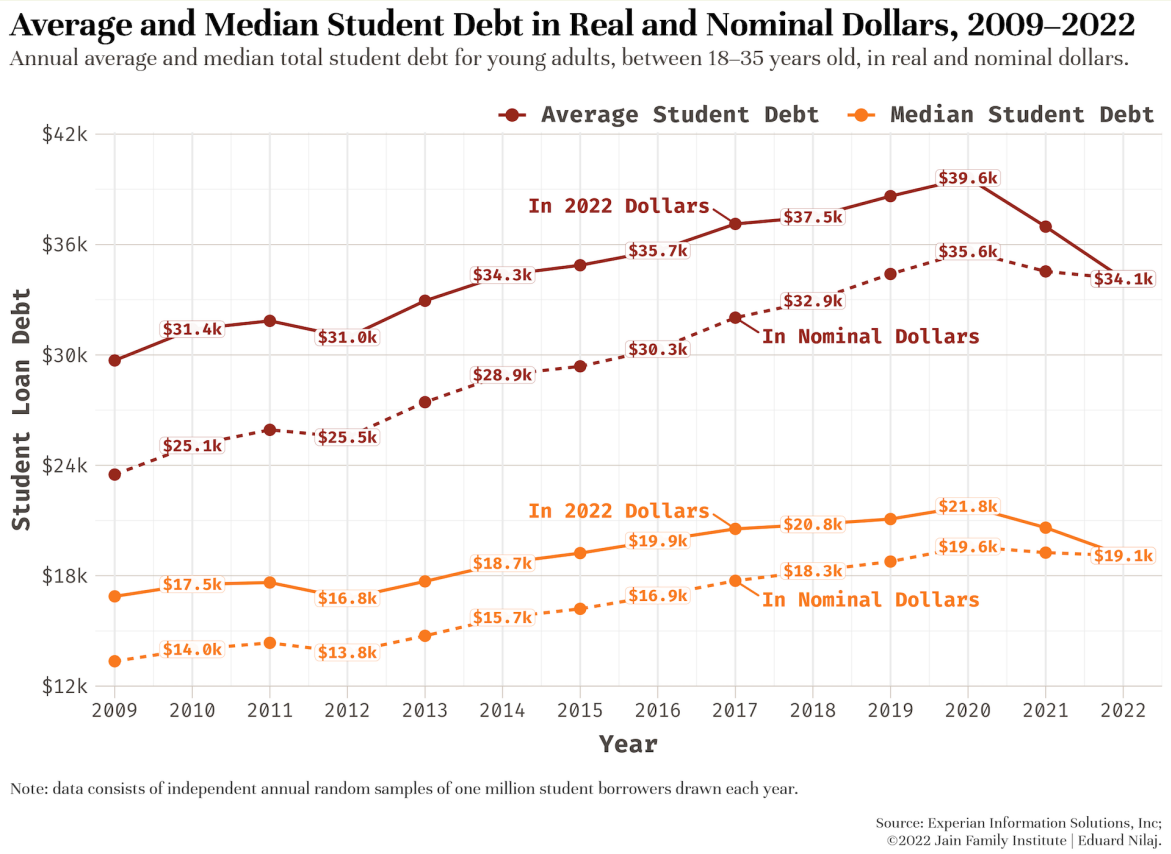
Student Debt in 2022

The Great Recession motivated an unprecedented number of people to seek higher education in the pursuit of the college premium. Student debt made this increase in enrollment possible, and continues to do so, especially for groups of students who face systemic hurdles: women, first generation, minority, and Pell Grant recipient students. But over a decade later, when the US economy bottomed out upon the onset of the pandemic in 2020, a similar boom in enrollment failed to materialize. Expanded unemployment insurance and economic impact payments meant Americans needed to rely less on credentialization—gaining higher education to boost job security—than during the Great Recession. Remote classes—without discounts to tuition—meant even more students refrained from enrolling. This has led to a reversal of student debt trends, especially among younger cohorts who were already showing a proclivity to borrow less.[3]

While newer cohorts eschew student loans, current loan holders staved off growing balances under the unprecedented Covid-19 repayment pause, with many choosing to accelerate payments on their privately-held debt. As a result, median and average balances have fallen for two years in a row, in real and nominal dollars, for the first time in our MSD sample, which goes back to 2009. In this section, we investigate this drop in balances in terms of the MSD sample and the student loan borrowing population as a whole. In section two, we examine concurrent trends in student debt accrual and repayment as they relate to income, wealth, and racial inequities. Given that the struggle to afford debt payments has rippling effects across the economy, section three examines how student debt impacts homeownership. Lastly, sections four and five analyze the distributional impacts of President Biden's debt cancellation plan and changes to the income-driven repayment system. We look at how these two programs could make permanent the trend we examine first: year-over-year decreases in student loan balances.

[3] Appendix Figure 1 shows the distribution of student debt for 18 to 26 year olds versus 27 to 35 year olds. Starting at around 2017, the younger cohort begins to experience slightly lower student loan balances as measured at the 25th, 50th, 75th, and 90th percentile, whereas the 27 to 35 year olds only show a decline after 2020.

Figure 1.1: Distribution of outstanding student debt balances for young borrowers from 2009 to 2022, in nominal and real (2022) dollars.



The two-year downward trend in typical student debt balances is not present among student loan borrowers unrestricted by age. For borrowers as a whole, year-over-year growth, across both total outstanding debt and average debt balances, has stagnated, but not as significantly. The younger population's head start in diminishing debt burdens is likely due to three concurrent forces. First, the Covid-19-induced enrollment slump created a loan accrual interruption. In the MSD sample of 18 to 35 year olds, which includes many borrowers still enrolled (and those who completely forewent attendance altogether during Covid-19), loan-level originations (medians and averages) are smaller for newer loans in 2022 versus 2019, as shown in Table 1.2. Second, these newer loans with lower originations are not accruing interest because of the repayment pause's zero percent interest rate, unlike some of the new loans of 2019, which accrued interest while the borrower was in school. Third, there are likely to be more new loans in the MSD sample of young adults (when most people attend college) than in the population of

borrowers unrestricted by age, such that we expect a larger share of lower loan originations in the sample than in the greater borrower population.

Origination Amounts for Student Loans Reported in 2019 vs 2022[1]

Year	Average Origination Amount of New Loans*	Median Origination Amount of New Loans	Share of Loans Less Than Two Years Old	Average Age of All Loans
2019	$22,349	$6,176	7.5%	6.82
2022	$18,272	$5,108	7.2%	7.04

[1] Sample of student loans for borrowers, between 18–35 years old, with student loan activity in 2019 and 2022.
* Loans that were less than a year old at the time they were sampled. All monetary values in 2022 USD.

Source: Author's calculations utilizing data from Experian Solutions, Inc.

Table 1.2: A 2019 vs 2022 comparison for the average and median student loan origination amounts for loans under one year old, share of student loans that are less than two years old, and average age of all student loans. This table uses the 2019 and 2022 cross-sectional MSD samples.

Fourth, a larger share of the younger borrowers do not owe Family Federal Education Loans (FFEL), a program which ended in 2010 but which previously provided a federal guarantee for these loans from private lenders. Younger and older borrowers with privately-held loans all continued to pay off student debt during the Covid-19 pandemic, but while non-FFEL private debtors sped up repayment during the pandemic, a growing share of FFEL borrowers experienced increasing balances. Their struggle to pay down debt during Covid-19 likely contributed to the lag in trends between the population of borrowers on the whole and the MSD sample. While 31.5 percent of borrowers affected by the repayment pause are over 40 years old and their balances are not increasing, the repayment pause does not off-set the rise in FFEL loan balances, which account for the majority of privately-held debt.[4]

Table 1.2 also shows that borrowers are not needlessly borrowing to take advantage of zero percent interest during the Covid-19 repayment pause. This moral hazard claim has been used by some economists to rationalize ending the repayment pause:

[4] FFEL borrowers represent over 4 million of the 10 million borrowers who owe privately-held loans and are more likely to be older borrowers since the program was discontinued in 2010. According to a March 2022 report from the New York Fed, in February 2020, $133 billion of a total $228 billion in privately-held student loan debt is FFEL loans held by commercial banks.

> "The direct costs of the repayment-pause extension are concerning, but so are the unintended consequences. One implication of this de facto giveaway is that a growing number of new borrowers are likely taking on debt with the expectation that it won't need to be repaid, encouraging them to borrow and spend more for college than they would otherwise."
> - Beth Akers, The National Review (November 2022)

Loan-level data in our 2022 cross-section disproves this prediction. Table 1.2 shows loans are, on average, of lower origination and older than in the 2019 sample. The trend is present at the borrower-level as well—average origination amount per borrower was $34,594 in 2019 and $28,488 in 2022. The gap in the median is $14,163 in 2019 versus $10,250 in 2022.

Family resources and college costs primarily determine whether a student borrows for college and their borrowing amount. Over the past two years, there have not been significant changes in these two factors to explain the declines in newer student loans displayed in Table 1.2. Most likely, the pandemic's effects on college attrition come at a time when fewer than one-third of prospective students think college is worth the cost, down from 50 percent in the Spring of 2020. Decreases in balances across new loans and borrowers signals that young borrowers have become more hesitant to indebt themselves over the pandemic, despite the unprecedented interest rate moratorium.

Interest rate policy and earnings drive balance fluctuations after originating student loans, especially for those who accrue more debt through further schooling. Similar to unchanging trends in family resources and college costs, interest rate policy and earnings have not improved for borrowers. In fact, earnings have dropped considerably during the pandemic (covered in the next section). For cohorts further along in their schooling or career, the aggregate decreases in balances can be attributed to the effects of the repayment pause and improved debt relief programs. Because over 90 percent of student loans are managed by the federal government, bureaucratic procedures heavily impact balance variation. Bureaucratic failings, like servicer fraud and inaccessible forgiveness programs, push balances to grow. Conversely, bureaucratic corrective measures, like the repayment pause and improved discharge programs, permit balances to fall. The repayment pause allowed federal borrowers with non-FFEL commercially-held student loans to speed up their repayment. This causes average balances across all student debt to fall. Expansion to federal programs that offer debt cancellation, like borrower defense to repayment, have further steepened that decline in averages.

For this reason, investigating drops in aggregate balances is incomplete without also analyzing trends in repayment. Aggregate balances and repayment rates are two sides of the same coin. Unfortunately, repayment rates have improved only slightly during the pandemic. Racial disparities in repayment are covered in the next section, and repayment in relation to forgiveness programs is investigated in the income-driven repayment (IDR) section. Additionally, the factors which influence repayment and student loan accrual are also important to analyze: low earnings, which is compounded by low wealth and racial inequality. Unmanageable student debt has had many other harmful effects on borrowers, including lower homeownership. The final section of the report examines the intricacies of student loan interest rate policies and repayment programs, which have the potential of making debt harder to repay. Still, debt is debt whether interest rates are set to zero, tied to inflation, or set at well-above the 10-year treasury rate (as federal student loans are). This report illuminates how the student debt crisis is evolving in response to the administration's programmatic changes during the pandemic.

Debt x Race, Income, and Wealth

The recent two year decline in balances is evident across many different types of borrowers. Decreases in balances could be the result of a number of pandemic-related impacts, but it's possible that targeted relief programs, including the repayment pause, are affecting groups of borrowers differently. In this section we examine balance, repayment, distributional trends for borrowers delineated by racial-plurality (based on the census tract where the sampled borrower lives), income (credit bureau estimates for each sampled borrower), and wealth (via an external dataset that is representative of the entire borrower pool). **The data indicate that high income correlates with lower debt-to-income burdens, but systemic student debt disparities along lines of race and wealth are greater determinants of a borrower's continued indebtedness.**

Of note in the below chart is the outsized decrease in balances for borrowers living in plurality-Black neighborhoods, likely related to the disproportionate exposure that Black borrowers have to the student debt crisis. Black students disproportionately suffer from higher rates of borrowing for college, larger loans on average, worse repayment, delinquency and default rates, and nefarious for-profit institutions, which rely almost entirely on federal student debt for student tuition. Furthermore, a March 2022 study by the California Policy Lab highlights that Black communities are at a higher risk of delinquency when the repayment pause ends. Alternatively, the steeper drop in balances for Black communities may be related to increased exposure to the effects of Covid-19—Black students saw higher pandemic-related discontinuation rates than non-Black counterparts, causing a greater incidence of loan accrual interruptions.

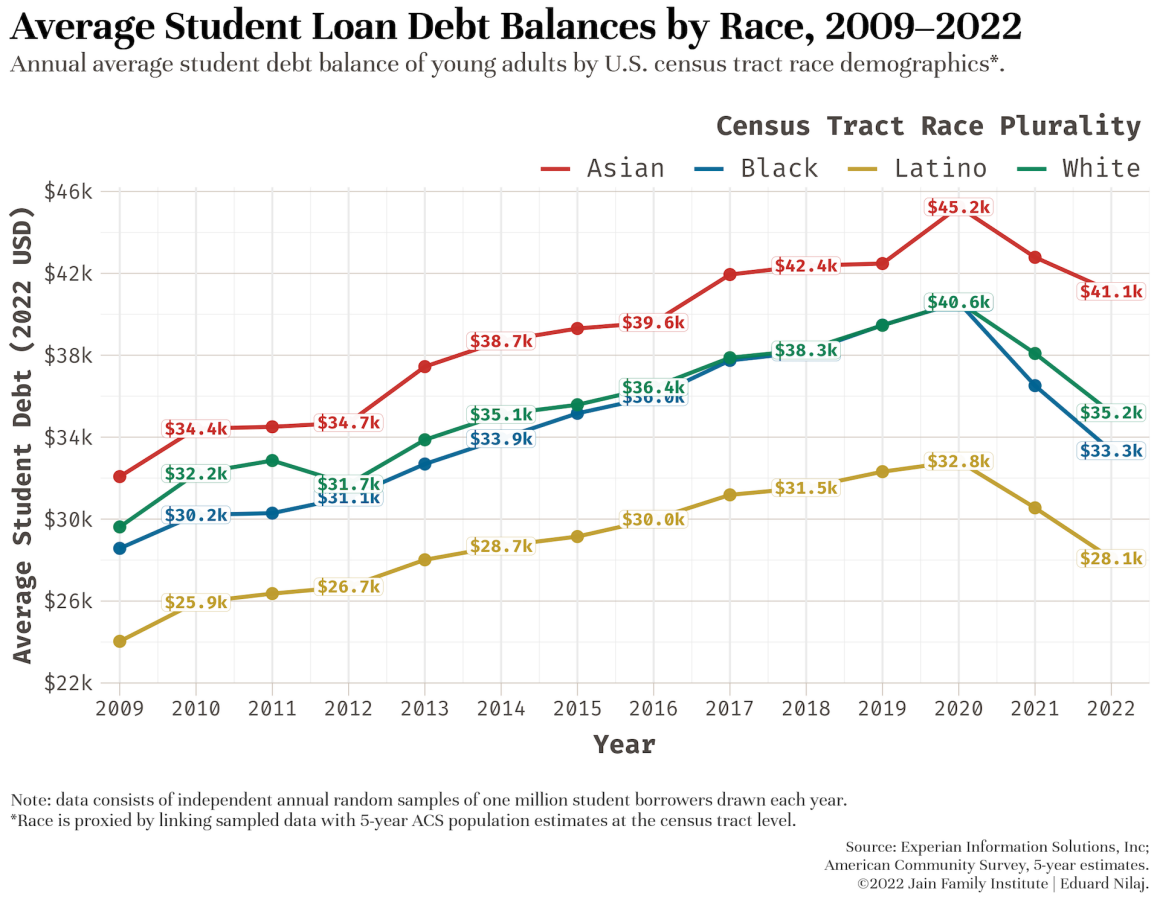


Figure 2.1: Average student loan debt by census tract race plurality from 2009 to 2022, in 2022 dollars, as categorized by the racial-plurality of the census tract where the borrower lives.

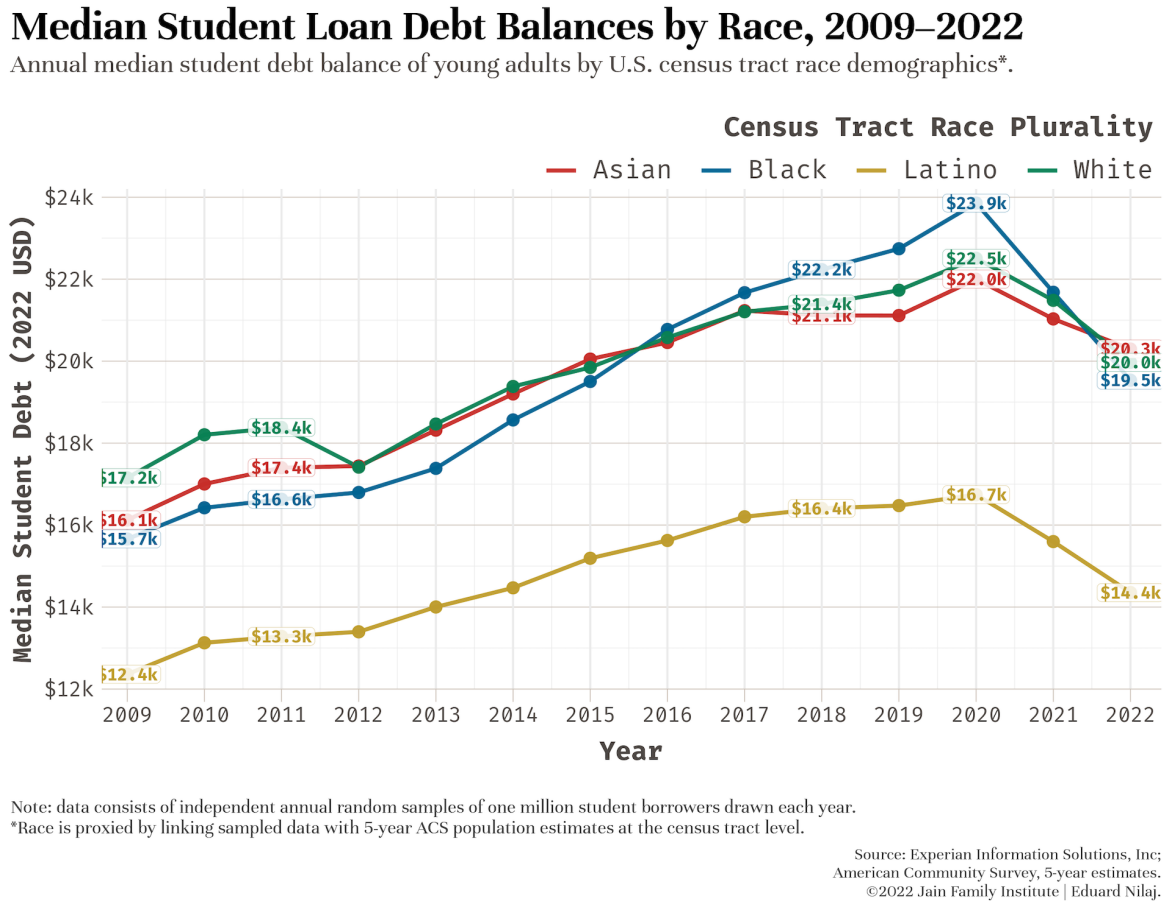


Figure 2.2: Median student loan debt by census tract race plurality from 2009 to 2022, in 2022 dollars, as categorized by the racial-plurality of the census tract where the borrower lives.

A larger drop in student debt balances for Black borrowers supports the research finding that Black borrowers will benefit most from debt relief, targeted or otherwise. Black borrowers were disproportionately targeted by predatory for-profit colleges, and expanded access to borrower defense and closed school discharges ensure that they can receive much deserved, albeit delayed, relief. Another wave of 200,000 borrower defense discharges are just around the corner.

All racial demographic groups in the MSD sample benefited from a decline in average and median student loan balances during the pandemic repayment pause. Whether the result of targeted relief programs, borrowers paying off their debt, or the repayment pause, lower balances are a crucial development because incomes have dropped as well. National median income for 18-35 year old student loan borrowers decreased 5 percent between

2009 and 2022, from $63,197 (USD 2022) to $60,000. Over the same period, the median student loan balance increased 13 percent. The drop in balances over the pandemic is hopeful but does not make up for the many previous years of growth, especially considering the drop in real income since 2009.

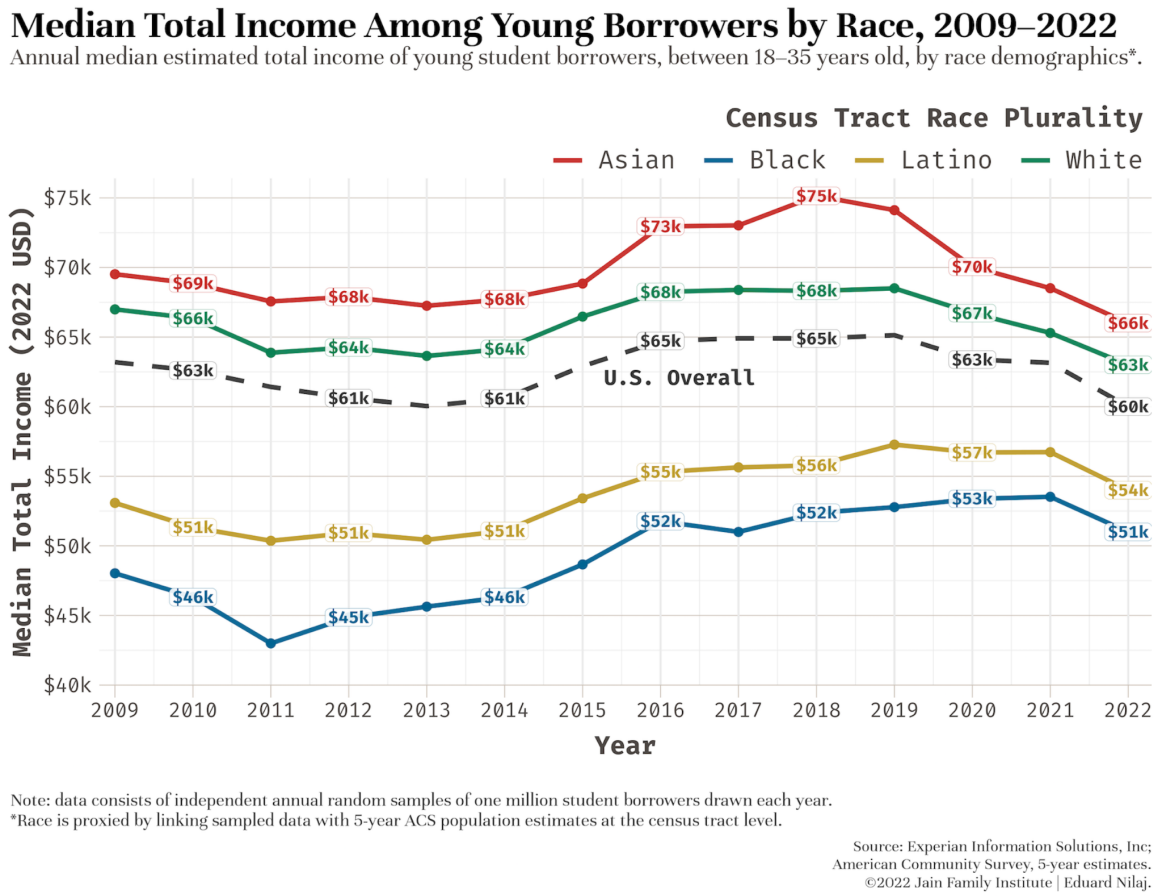


Figure 2.3: The median incomes of young student debtors using credit bureau data, as categorized by the racial-plurality of the census tract where the borrower lives, from 2009 to 2022, in 2022 dollars. The "U.S. Overall" line (a dashed black line) includes the full MSD sample over all the years, including borrowers who were not categorized into a racial-plurality category.

The graph above displays the narrowing of racial income disparities in combination with real income reductions. Real income declines are steeper for borrowers in white and Asian communities than those of Black and Latino communities—likely related to overall decreases in wage inequality during the pandemic, but especially for the lowest wage

workers compared to the highest wage workers.[5] Despite this narrowing income gap, borrowers in Black and Latino neighborhoods still have the lowest incomes and, consequently, disproportionately struggle with the non-repayment crisis (Figure 1.5). Additionally, growth in student loans has far outpaced growth in income for all racial groups of the last decade.[6] Falling incomes are particularly troublesome as it's even more difficult to pay off debt.

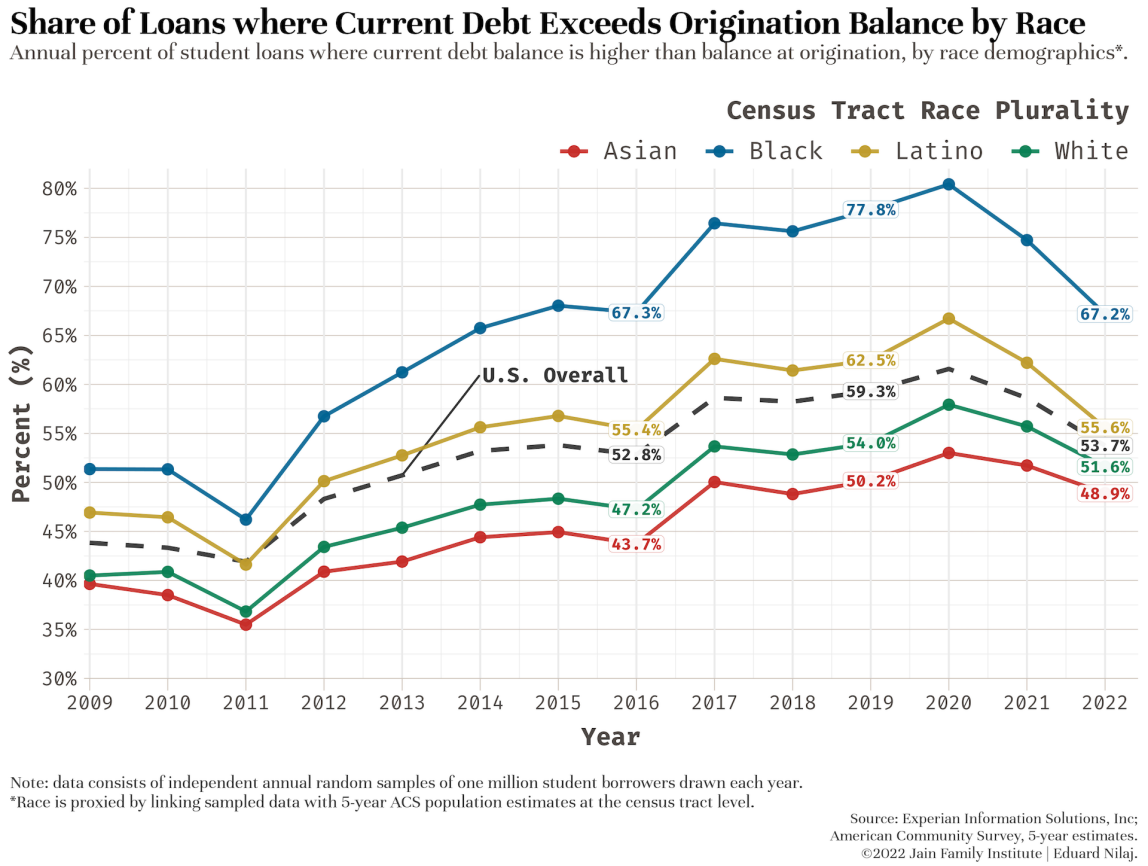


Figure 2.4: A table depicting the share of student loans in each year where the current balance is above the loan origination amount, as categorized by the racial-plurality of the census tract where the borrower lives. The "U.S. Overall" line (a dashed black line) includes the full MSD sample over all the years, including borrowers who were not categorized into a racial-plurality category.

[5] Arindrajit Dube, David Autor, and Annie McGrew have a forthcoming paper, "The Unexpected Compression: Competition at Work in the Low Wage Economy," that examines how increases in wages for low paid workers during the pandemic has narrowed the 90-10 wage gap.

[6] Appendix Figure 2 shows the disparity in real income and debt balance growth for borrowers according to the racial plurality of where they live. The disparity is present across all demographic categories.

The chart above lists the fraction of all outstanding student loans in the yearly cross-sectional sample where loan balances are above corresponding-loan origination amounts. In contrast to previous analyses, while borrowers in Black communities experience the steepest declines in average balances during the Covid-19 repayment pause, they still suffer from the worst effects of the repayment crisis—67.2 percent of loan balances are greater than the origination amount. Across all borrowers, a troubling 54.7 percent of loan balances were greater than the origination amount in 2022. When looking at institution-level data through the College Scorecard, repayment rates are just as bad: twenty years out from entering repayment, 45 to 51 percent of origination balances are still owed for undergraduate-level borrowers, 40 to 52 percent of origination balances are still owed for graduate level borrowers, and 20 to 40 percent of origination balances are still owed for Parent PLUS borrowers.

When earnings do not cover loan obligations, interest accrues on whatever is left unpaid in each month and capitalizes into principal. As a result, balances grow over time, also known as negative amortization (covered more in-depth in the IDR section of this report). JFI Senior Fellow, Marshall Steinbaum, refers to this systemic design failure of growing balances as a "crisis of non-repayment." The non-repayment crisis raises the stakes for all borrowers who struggle to repay student loans, creating a cycle of endless interest accrual for decades to come. Fortunately, the ongoing repayment pause largely prevents unpaid interest from accumulating by re-setting interest rates to zero on federal loans. This could in part explain the declining share of loans with current balance in excess of the original during the past several years.

Disproportionately indebting those of lower socioeconomic status is regressive. This is evidenced through debt-to-income ratios in the figure below. Of note, the drop in average balances discussed in the previous section appears to be concentrated among low-income borrowers. This is evidence that targeted relief programs are working. The lowest income decile of borrowers (representing borrower incomes of $0 to $35,000) saw their median student debt-to-income ratio fall 25.2 percent between 2012 and 2022, from 40 percent to 30 percent. Unfortunately, this means that debt for these borrowers still amounts to 30 percent of income, and that percentage is higher than the median student debt-to-income ratios for the eighth, ninth, and tenth decile brackets (incomes of $82,000 to $345,000), attesting to the regressivity of student debt.

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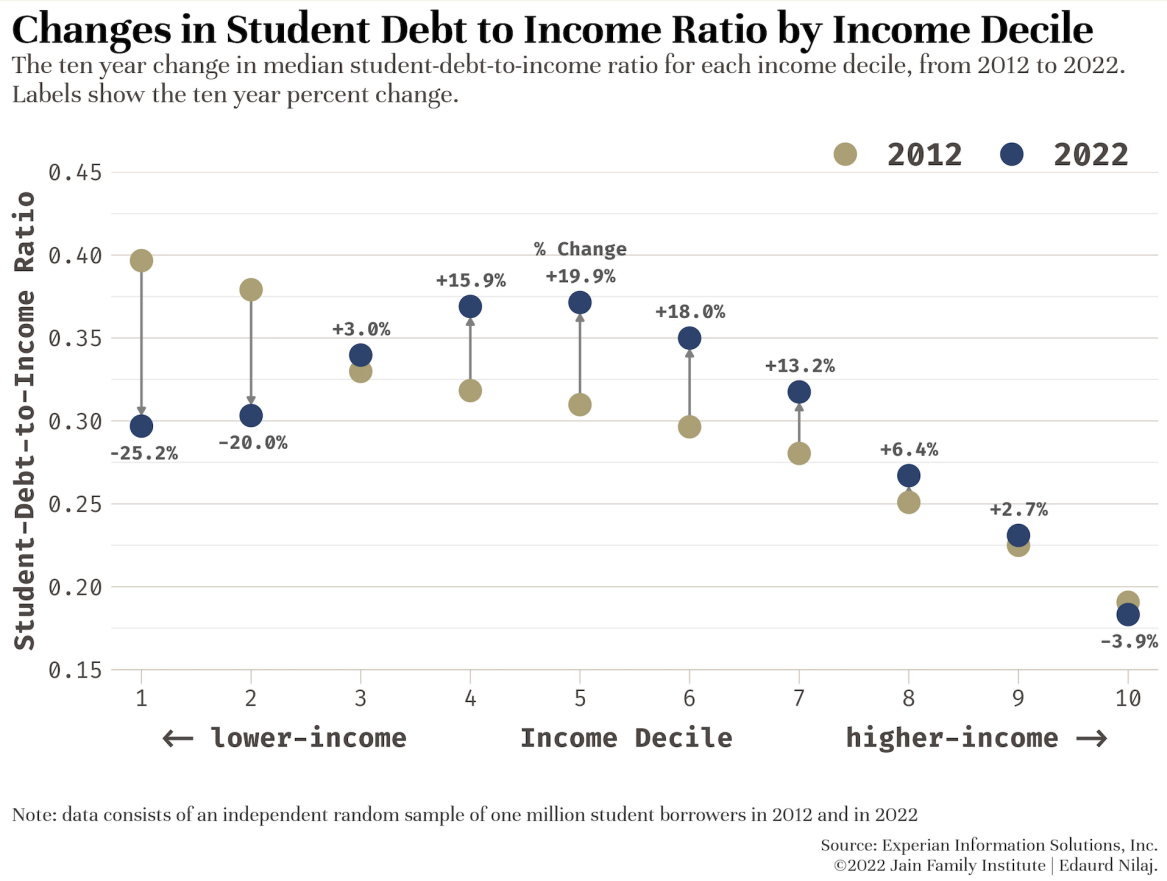

Figure 2.5: The distribution of student loan balances to income ratios within each income decile for the 2022 student loan borrower sample versus the 2012 student loan borrower sample. Borrowers are sorted into income deciles based off of their estimated credit bureau income in the given year. The top earners in the 9th decile have incomes above $125,000, the income cap where federal borrowers are no longer eligible for President Biden's student debt cancellation policy.

Income only tells a part of the narrative. For example, expensive graduate-level credentials translate to higher pay in the labor market and become the means for women and minorities to overcome wage discrimination. But these groups already experience deeper indebtedness for their undergraduate education, leading to even wider disparities after borrowing for graduate school. Though they may experience higher incomes as a result of their graduate education, the inequity of the system persists through debt burdens—the lack of wealth is the source of student debt.

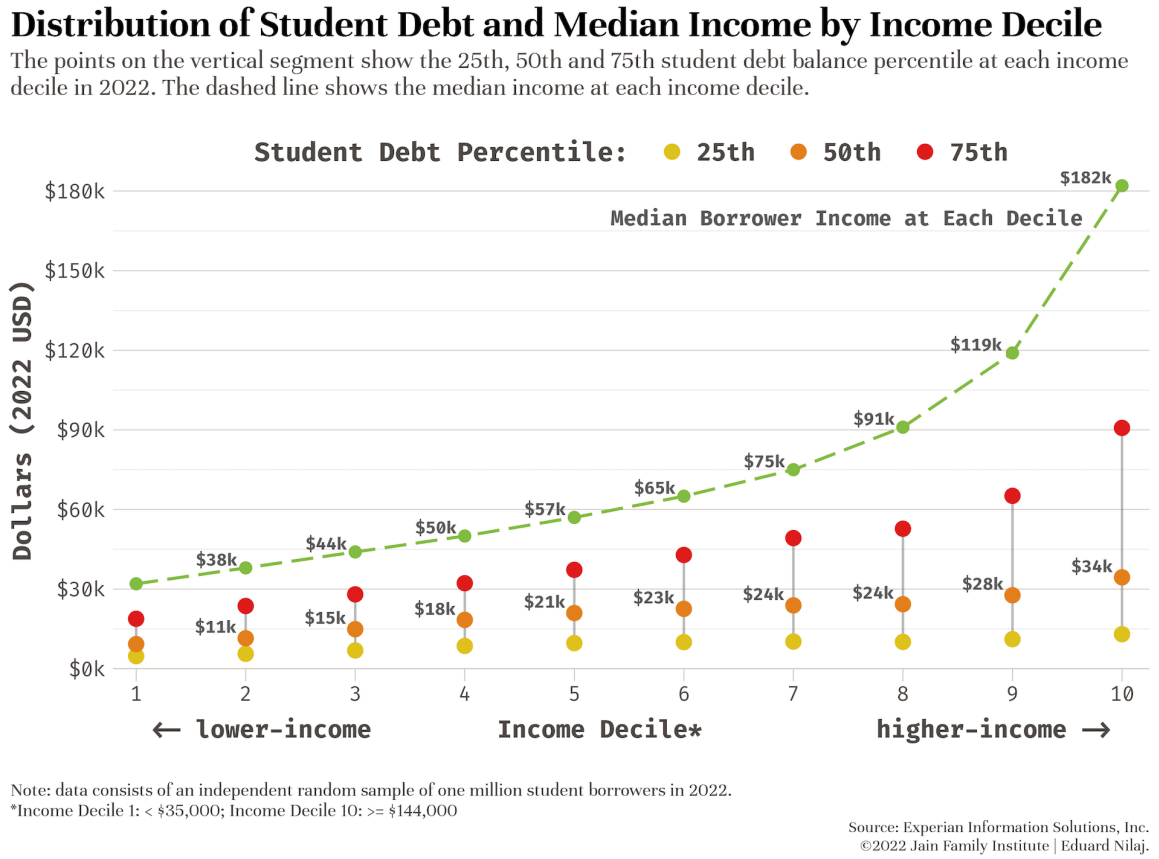

Figure 2.6: The distribution of student loan balances within each borrower income decile for the 2022 student borrower sample, plotted against the median income for each income decile. Borrowers are sorted into income deciles based off of their estimated credit bureau income in the given year. The top earners in the 9th decile have incomes above $125,000, the income cap where federal borrowers are no longer eligible for President Biden's student debt cancellation policy.

This above chart shows the variation of outstanding student debt balances across borrower income groups (as sorted through income deciles). It adds context to Figure 2.5 (Debt-to-Income Ratio along Income). We know that borrowers with high debt-to-income ratios are struggling. Roughly half of borrowers in the second through seventh income decile have debt-to-income ratios above 30 percent. In the above chart, the 75th percentile line represents how borrowers with more debt have worse debt-to-income burdens, meaning worse repayment predicaments. Higher income borrowers show more variation in student debt balances, which tracks with the drastically different average student debt balances for high earners across the wealth distribution, covered in the following charts.

The highest burdened debtors are more likely to be in the bottom of the wealth distribution, even if they have a high income.

Regressivity of the student debt system is visible along the income distribution, yet it's significantly more evident along the wealth distribution. An October 2022 JFI report demonstrates how wealth and income diverge for student loan borrowers. In that report, Figures 5 and 6 show that for households with master's level or above degree status, outstanding debt and the highest average indebtedness is concentrated at the bottom of the wealth distribution. The chart below echoes that finding: outstanding student debt distributes across household income and wealth is concentrated at the bottom. This supports previous research showing that a majority of student loan borrowers hail from households with zero or negative net worth. The second and third wealth categories owe significant student debt, but this does not equate to significant average balances for these groups (the second chart below) because the majority of households in these categories do not have student loans.

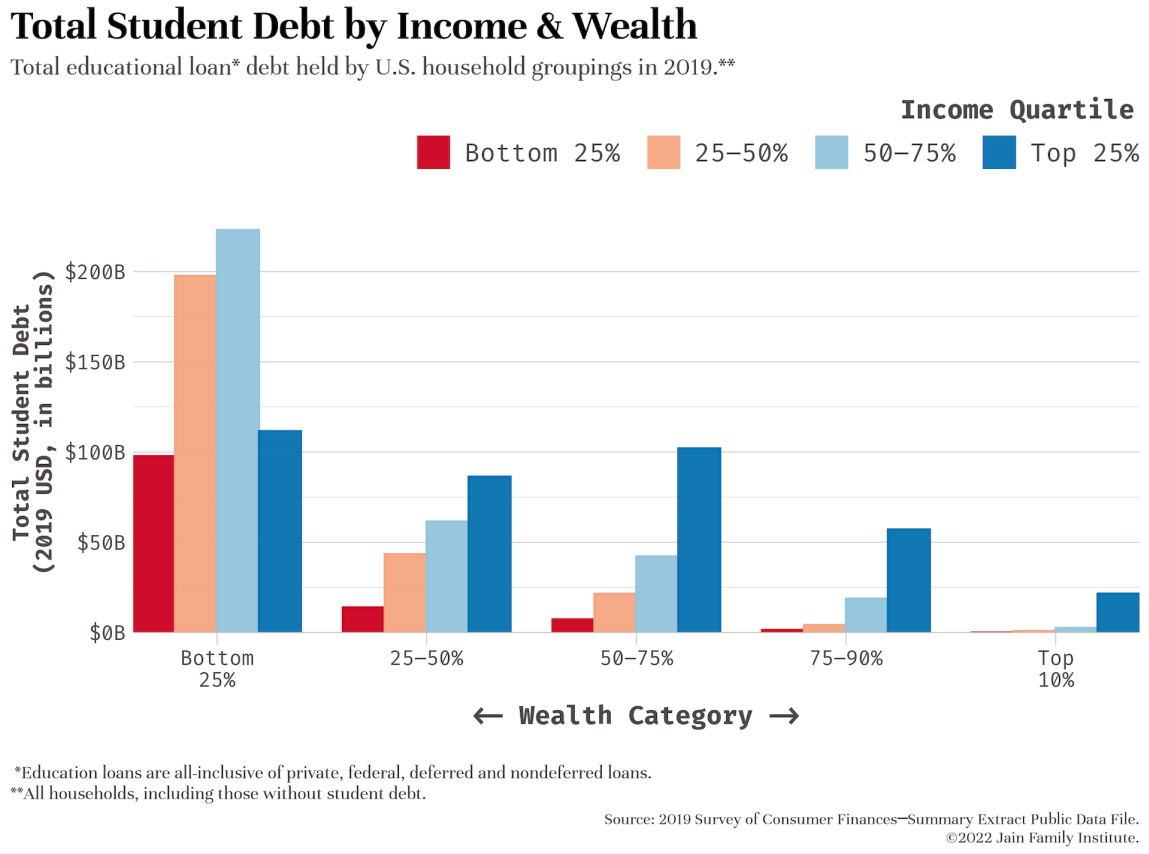

Figure 2.7: The total of outstanding student debt within each combined income-wealth category for all households in 2019, in 2019 dollars. In 2019, the

lower thresholds for household income quartiles— Q1: $0; Q2: $30,544; Q3: $59,051, and; Q4: $107,920. The lower thresholds for the household wealth: Bottom 25%: -$955,500; 25% to 50%: $12,410; 50% to 75: $121,760; 75% to 90%: $404,100; Top 10%: $1,219.499.

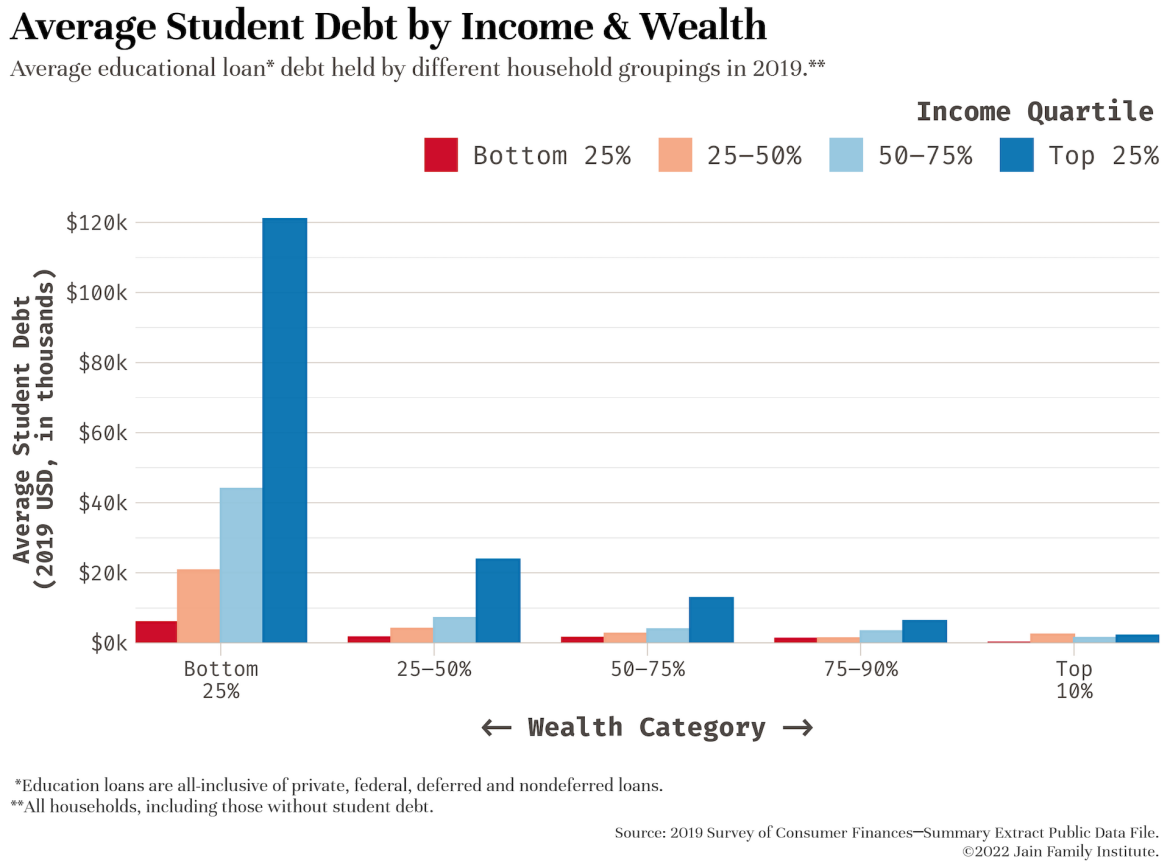

Figure 2.8: The average of student loan balances within each combined income-wealth category for all households in 2019, in 2019 dollars. This chart includes households with $0 balances in its calculations. In 2019, the lower thresholds for household income quartiles— Q1: $0; Q2: $30,544; Q3: $59,051, and; Q4: $107,920. The lower thresholds for the household wealth: Bottom 25%: -$955,500; 25% to 50%: $12,410; 50% to 75: $121,760; 75% to 90%: $404,100; Top 10%: $1,219.499.

Households in the bottom wealth category, regardless of their income, have higher average balances too, evidenced in Figure 2.8. Note that average student loan balances in this chart include households without student debt. Considered alongside Figure 2.7 above, we conclude that far more households in the bottom of the wealth distribution hold student debt than households in higher wealth categories. These findings have significant

implications for who benefits from the administration's debt relief plan, which is covered in section four, Debt X Relief.

Debt x Homeownership

Our previous research shows that rising student loan debts have effectively excluded many young borrowers from the housing market. The decline in homeownership among young borrowers continued into 2020, where the rate of homeownership declined to 17.8 percent. This is the lowest rate for all our yearly cross-section samples and represents a 38.2 percent homeownership decline for young borrowers since 2009. While the barriers to homeownership remain for the vast majority of student debtors, we notice a slight shift since 2020. Benefiting from the student loan repayment pause, which has eased debt burdens for many, young borrowers were able to participate in the recent housing boom. The rate of homeownership among young student debt borrowers increased to 18.5 percent in 2021 and improved again in 2022 to reach 18.9 percent. Table 3.1 documents how this shift was seen across the country, in states with high and low homeownership.

States With Highest and Lowest Borrower Homeownership Rates[1]

State Rank	2020	2021	2022
Five Highest Rates in 2022			
1. IA	28.7%	29.7%	30.9%
2. SD	28.5%	27.8%	29.3%
3. ND	26.0%	28.1%	28.9%
4. NE	25.9%	25.9%	28.8%
5. MN	27.0%	27.5%	28.4%
Five Lowest Rates in 2022			
47. NJ	13.8%	14.6%	15.3%
48. NY	11.8%	12.3%	12.3%
49. DC	10.2%	11.9%	11.9%
50. CA	9.9%	10.9%	11.2%
51. HI	9.7%	10.4%	10.3%

[1] Samples of borrowers, between 18–35 years old, with outstanding student debt in 2020, 2021, and 2022.

Source: Author's calculations utilizing data from Experian Solutions, Inc.
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Table 3.1: Table showing the ten states with the highest and lowest borrower homeownership rates in 2020, 2021, and 2022. Rankings based on homeownership rates in 2022.

Homeownership rates of young borrowers increased in 49 states and DC from 2020 to 2022. Arizona was the only state where the homeownership rate was lower, although only by a difference of 0.2 percentage points. Young borrowers in Alaska experienced the largest overall and percent increase (+35 percent), going from 16.7 percent in 2020 to 22.6 percent in 2022.

The regulatory changes and risk mitigation practices resulting from the Great Recession partially explains the fall in young borrower homeownership rates prior to 2020. With this shift, banks essentially stopped lending to individuals with high debt-to-income ratios and low credit scores. For young borrowers, rising student loan debt and stagnant income meant rising debt-to-income ratios and a dwindling opportunity for homeownership. Since the repayment pause, borrowers who didn't make monthly student debt payments and maintained a similar income saw their debt-to-income ratios fall and thus became more attractive to lenders. Although the decline in homeownership rates has subsided, the burdens of student debt still present an obstacle to homeownership. As figure 3.2 illustrates, the median credit score of our sample of student debtors in 2022 is only slightly higher than the tenth percentile credit score of all individuals who purchased homes in 2022.

568 Broadway, Suite 601,
New York, NY, 10012

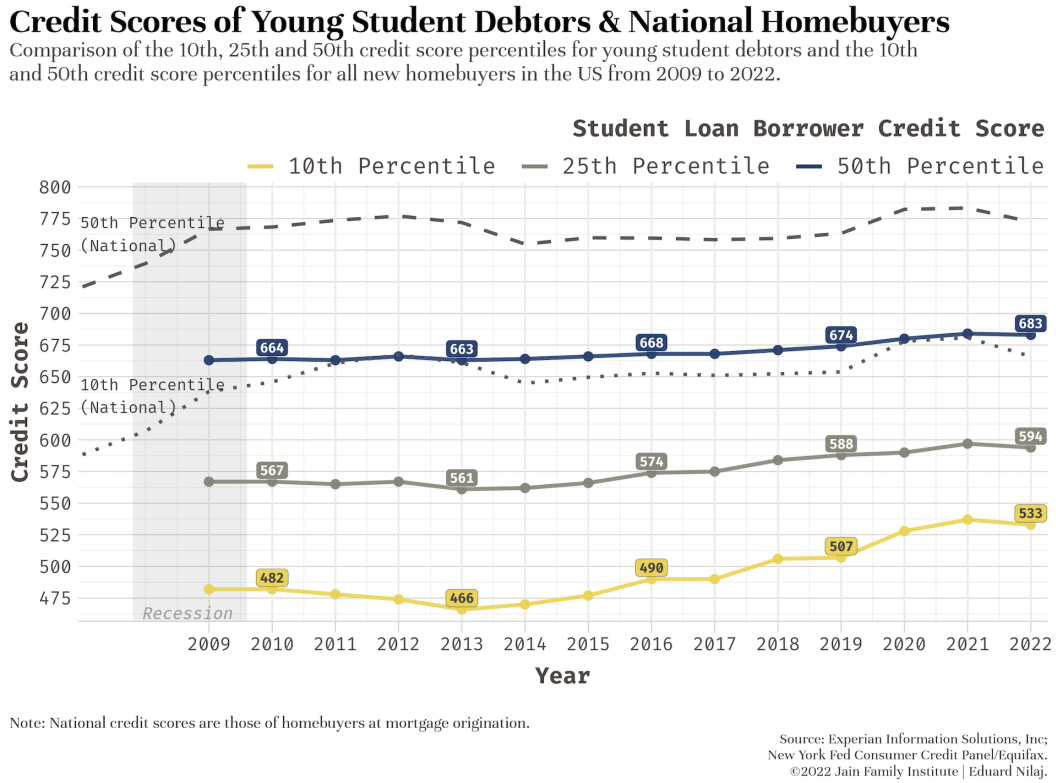


Figure 3.2: Distribution of credit scores for young student loan borrowers from 2009 to 2022 compared to the distribution of credit scores for homebuyers from 2007 to 2022.

Despite the recent increase in homeownership rates, we still find a negative and significant relationship between student loan debt and homeownership for young borrowers in 2022. We base our conclusions from a multivariate probit regression model with homeownership as the dependent variable and three predictor variables: total student debt balance (standardized) of borrower, total income (standardized) of borrower, and the age of the borrower. The regression output is presented in Table 3.3, where the predicted probability of homeownership can be calculated using the coefficients in the first column and the marginal effects of the three predictor variables are shown in the last column.

Probit Regression Results of Homeownership Predictors

	Estimate (SE)[1,2]	Marginal Effects (SE)[1,2]
Borrower Student Debt (Standardized)	-0.26*** (0.002)	-0.06*** (0.000)
Borrower Income (Standardized)	0.87*** (0.002)	0.18*** (0.001)
Borrower Age	0.05*** (0.001)	0.01*** (0.000)
Observations	914,884	914,884
Log-likelihood	-296,073	-296,073
AIC	592,153	592,153
BIC	592,200	592,200

[1] *p<0.05; **p<0.01; ***p<0.001
[2] SE = Standard Error

Source: Author's calculations utilizing data from Experian Solutions, Inc.

Table 3.3: Probit regression coefficients and marginal effects on the probability of homeownership for young borrowers in 2022.

The relationship between student loan debt and homeownership is negative and highly significant. Overall, the predicted probability of homeownership for a young borrower is

$$\phi(-\ 2.43\ +\ StudentDebStrd\ *-.26\ +\ IncomeStrd\ *.87\ +\ age\ *.05)$$

where ϕ is the cumulative distribution function of the standard normal distribution. Because interpreting the coefficients isn't straightforward in a probit regression, we show the marginal effects to highlight the effect of each predictor on the probability of homeownership. When it comes to student debt and homeownership, holding income and age constant, a one standard deviation increase in debt balance ($42,324 in 2022) corresponds to a 6 percent decrease in probability of homeownership. Unsurprisingly, total income is highly influential when it comes to homeownership opportunities for young borrowers.[7] Our results show that a one standard deviation increase ($47,377) in total income corresponds to an 18 percent increase in probability of homeownership, controlling for student debt and age.

The suspension of repayments for federal student loans and interest accrual in general has been a boon for some young borrowers looking to become homeowners. However, it is

[7] Notably, while we address the differences between wealth and income for borrower outcomes throughout the brief, we do not have similar data on wealth and homeownership for borrowers.

evident that more action is required for the benefits to extend to the majority of borrowers. Given our findings and other recent research, **we contend that comprehensive student debt relief will aid more young borrowers in becoming homeowners and will even narrow the racial homeownership gap.**

Debt x Relief

The Biden administration's substantial policy shifts stand to transform the higher education lending system. On top of an extended repayment pause, borrowers learned of or became eligible for a variety of new and improved programs this past year. The Department of Education estimates that this has already led to 1.8 million borrowers and counting experiencing debt relief. The most significant new policies are the President's student debt cancellation program, offering eligible borrowers up to $20,000 in debt cancellation on federally-held debt, and an income-driven repayment (IDR) program that halts interest accrual during repayment. The administration's debt cancellation policy, though means-tested and full of caveats, has the potential to erase federal student loan balances for up to 20 million borrowers and lower outstanding balances for an additional 20 million borrowers. The revamped IDR potentially will ensure those who remain in the debt-financing system, especially future borrowers, will not suffer needlessly from unaffordable payments and unceasing interest accrual. This section's analysis shows how both programs will drastically alter student debt trends across the country, allowing a much-needed financial reprieve for federal borrowers—a group of Americans who are disproportionately Black, female, and first generation college students, and who overwhelmingly distribute into the lowest wealth quartile. Despite legal challenges and programmatic shortfalls, the evidence below demonstrates that student debt cancellation reduces debt burdens across the country, especially for borrowers with the lowest incomes.

The Biden cancellation program provides $10,000 in federal student loan cancellation for those with annual earnings under $125,000 (or $250,000 for couples who file taxes jointly). It offers up to $20,000 of cancellation for Pell Grant recipients earning under the same income threshold. According to a September 2022 statement from the White House, roughly 40 million Americans are eligible for the cancellation program, but there are a number of caveats. First, borrowers must first be aware of the program and then apply to it. This application itself serves as an administrative burden which the department estimates will prevent roughly 19 percent (~7.6 million) of eligible borrowers from accessing relief. Second, eligible borrowers can receive up to $10,000 in cancellation or as much as $20,000 for Pell Grant recipients. Those with federal balances under these thresholds will receive relief below the maximum allocated amount, despite possibly owing debt in the private market or having repaid in excess of that amount during their repayment plan. Third, Parent PLUS borrowers can only receive up to $10,000 in relief, regardless of whether their dependent received a Pell Grant and regardless of the number of dependents for whom the parent borrowed on behalf of. Lastly, rather than 40 million

borrowers, the original announcement predicted 43 million borrowers were eligible. At least part of the discrepancy is due to recent eligibility criteria that excludes federally-guaranteed commercially-held FFEL loans (at least 800,000 borrowers)—which, as mentioned above, accounts for the majority of privately-held debt and is not eligible for the Covid-19 repayment pause. Despite these shortcomings, the prospect of lower debt burdens—for many, a student debt jubilee—have led 26.6 million borrowers to apply for the program.

The Department of Education's original announcement estimated that nearly 27 million Pell Grant recipients are eligible for cancellation. Pell recipient status accounts for the role that wealth plays in student loan accrual, the income threshold limits that effect. To reiterate, most student debt is held in the bottom of the wealth distribution (Figure 2.7) and the highest average balances occur in the lowest wealth groups, even for the highest income quartile (Figure 2.8). Pell Grant recipients borrow more often and more in absolute terms. They start college with a disadvantage and then are further burdened with increased debt. Wealth status, as proxied through Pell Grant status, ought to overcome income caps when it comes to debt cancellation, as wealth is a better predictor of financial burden than income. Cancellation will undoubtedly lower burdens more substantially for low-income borrowers than their high-income peers, but a comprehensive policy would not limit the Pell Grant recipients' access to relief—income caps limit the corrective power that cancellation has for wealth inequality.

In September 2022, the Department of Education released estimates on the number of borrowers in each state and territory eligible for the administration's cancellation program, including the number eligible Pell-recipient borrowers. Using this data, we were able to estimate the average amount of debt relief at the state- and national level. These estimates assume 100 percent take-up, maximum relief granted per eligible borrower, and 5.5 percent of outstanding debt nationwide ineligible because it is privately held. We integrate them into our aggregated student debt dataset and the latest Millennial Student Debt interactive map, previewed below, to understand how student debt burdens change for young Americans across the country. We stress that, given these assumptions, the relief amount estimated within this section (and used on the map) is, by construction, an overestimate. Nevertheless, we agreed the calculations we used were the most straightforward for estimating the impacts of Biden's debt cancellation plan.[8]

[8] There is a section on the interactive map where you can download the relief estimates. The associated data dictionary has definitions on how columns were calculated.

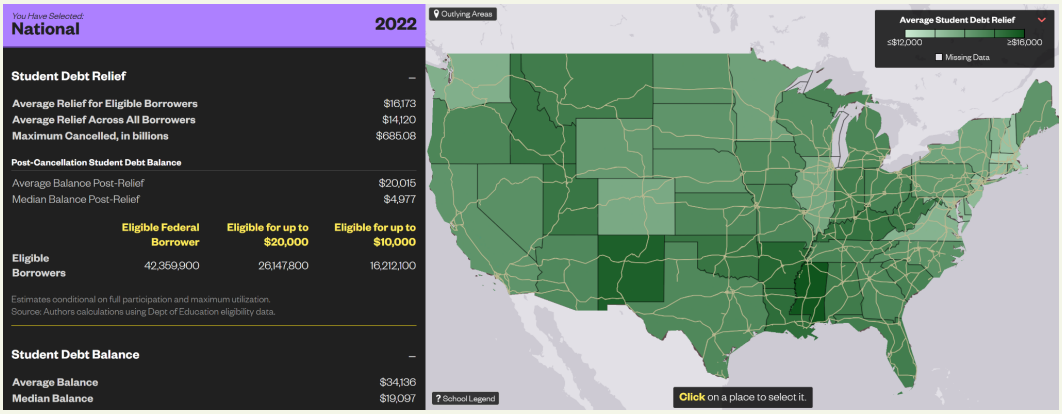


Figure 4.1: A preview of the interactive map released alongside this report showing a heat map of how much student debt relief, on average, may be granted to each state.

For eligible borrowers, the average amount of debt relief across the country, conditional on full participation and maximum allotment, could be as high as $16,173. This relief could cause typical student loan balances to fall precipitously to levels not seen since the early aughts. For example, using student debt data from June 2022, the average balance for 18 to 35 year olds could fall as low as $20,015 after all debt relief is granted. For context, the average student debt for this age group was already above $20,000 as early as 2004. Unwinding debt balances by two decades proves that student debt cancellation is a vital tool at the executive's disposal. Among a random sample of 18 to 35 year olds in 2022, the pre-relief median debt balance is $19,097, while the post-relief median balance is $4,977, a decrease of $14,120.[9] In the figure below, the "National" marker shows this decrease plotted against the median income of 18 to 35 year old borrowers across our sample.

[9] The average relief across eligible borrowers is $16,173, while average relief is $14,120 across our sample; the decrease in average balances after debt cancellation is less significant across the sampled population because the MSD sample includes privately-held loans which are not eligible. We have assumed that about 5.5 percent of all outstanding student debt is privately-held.

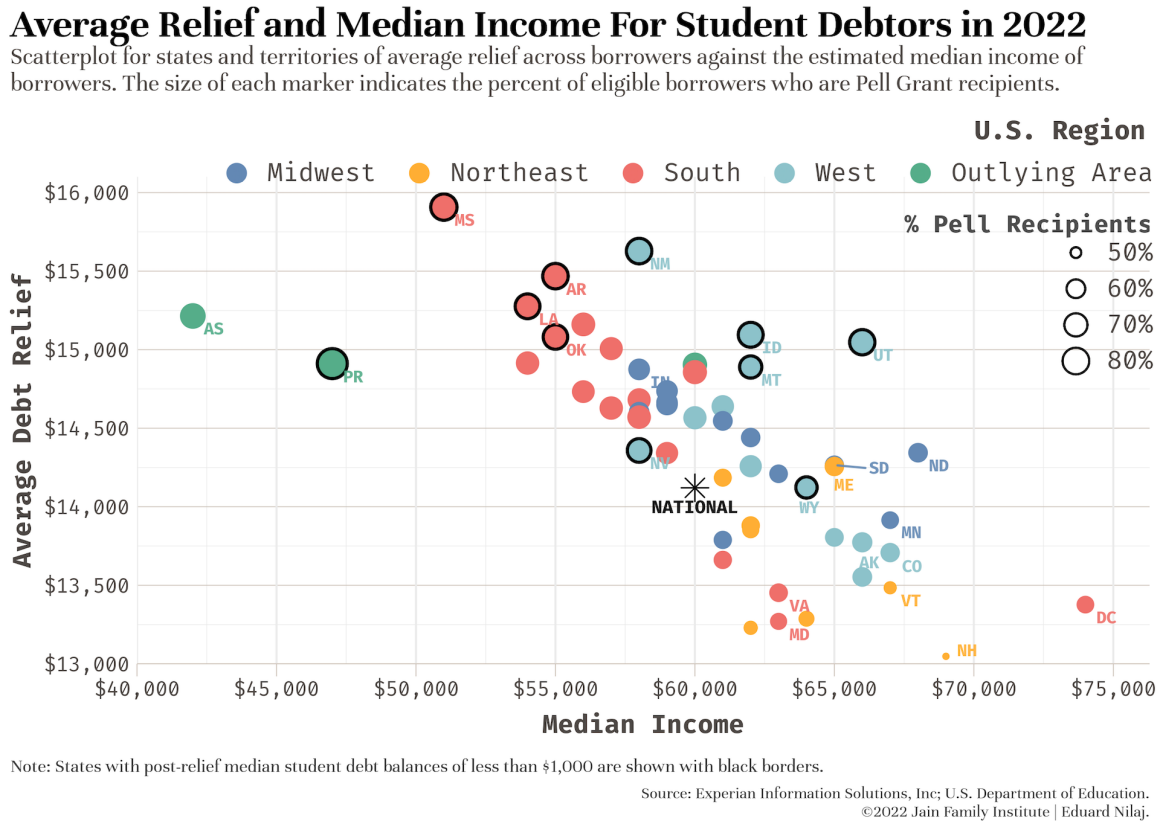


Figure 4.2: Scatter plot of state-level estimates for average student debt relief plotted against median income for young adult student debtors.

Overall, it's clear that states with lower income borrowers generally receive more relief on average. This is largely due to the progressive nature of Biden's cancellation plan granting up to $20,000 in cancellation to Pell Grant recipients, which are more prevalent in lower earning areas. The size of the markers in Figure 4.2 indicate the share of Pell-recipient borrowers for each state's pool of cancellation-eligible borrowers. Lower earning states generally have higher Pell-recipient percentages, which range from 48 percent (New Hampshire) to 87 percent (Puerto Rico). After Biden's student debt relief is granted, as many as eleven states and territories could experience median student debt balances drop under $1,000. In the figure above, these eleven areas are outlined in black. Post-relief debt balances approaching zero will be especially helpful to those states which have lower incomes than other parts of the country: Arkansas, Louisiana, Mississippi, Oklahoma and Puerto Rico.

The scatter plot also alludes to debt cancellation's varying impacts depending on income. As student loan obligations rise in relation to income, any flat dollar amount of

cancellation will provide greater relief to those earning the least. Biden's cancellation plan offers twice as much relief to Pell Grant recipients, making it more progressive. For these borrowers, whether or not they earn higher income after departing college, a higher amount of debt cancellation can provide retroactive relief for regressive policies that caused the most vulnerable students to borrow more in the first place. Pell Grant recipients have higher borrowing rates and similar (or higher) borrowing amounts than their peers, but they suffer from lower completion rates.

Average Student Debt vs Average Potential Debt Relief, by State

SEARCH FOR STATE

	Total Eligible Borrowers ↓	Average Student Debt Balance	Rank	Average Relief For Eligible Borrowers	Rank	Average Relief Across All Borrowers	Rank
National	42,359,900	$34,136		$16,173		$14,120	
California	3,549,300	$34,434	22	$16,595	23	$14,258	33
Texas	3,323,200	$29,728	41	$16,941	13	$14,570	25
Florida	2,427,600	$34,451	21	$17,070	11	$14,857	16
New York	2,258,800	$39,233	3	$15,844	42	$13,880	39
Pennsylvania	1,717,300	$38,110	6	$15,758	45	$14,185	36
Ohio	1,677,800	$33,971	23	$16,471	26	$14,737	17
Georgia	1,506,100	$35,539	15	$16,899	14	$14,628	23
Illinois	1,486,600	$37,068	9	$15,809	44	$13,789	42
Michigan	1,316,000	$35,103	19	$16,454	28	$14,664	20
North Carolina	1,190,500	$35,391	18	$16,598	22	$14,342	31
New Jersey	1,082,900	$38,588	5	$15,451	50	$13,287	50
Virginia	965,100	$37,594	8	$15,870	40	$13,453	48
Indiana	856,400	$29,951	40	$16,486	25	$14,875	15
Massachusetts	813,000	$38,861	4	$14,935	53	$12,885	54
Arizona	810,800	$30,658	36	$16,844	17	$14,566	26
Tennessee	795,300	$33,643	24	$16,815	18	$14,681	19
Missouri	777,300	$32,033	30	$16,461	27	$14,651	21
Maryland	747,100	$39,867	2	$15,614	49	$13,270	51
Minnesota	729,700	$33,423	26	$15,705	47	$13,915	38
Colorado	698,100	$33,474	25	$16,002	37	$13,708	44

1–21 of 55 rows Previous 1 2 3 Next

Table 4.3: A table depicting the number of total borrowers eligible for relief in each state next to corresponding average student debt balances and estimated average debt relief.

While the scatterplot speaks to which states benefit from debt cancellation relative to debt burdens, Table 4.3 acknowledges which states stand to benefit through outright borrower

counts. The top ten states have over one million eligible borrowers each, and therefore would receive a greater share of relief dollars. Conditional on borrowers receiving the maximum relief amount, the eligible borrowers in seven of those top ten states—California, Texas, Florida, Ohio, Georgia, Michigan, and North Carolina—could receive more debt relief than what we calculated as the national average amount of relief. For the eligible borrower in Florida and Texas (over 5 million individuals), typical balances could be halved. For many states, eligible borrower counts are much lower, which likely indicate a combination of either a less populous state, lower access to higher education, or more affordable college costs (i.e: fewer student loan borrowers).

The limited analyses above offer two possible effects across both debt burdens and numbers of borrowers in each state. Other effects could differentiate the impacts of debt relief across demographic groups, as referenced earlier in this report. For example, given steeper declines in balances for Black borrowers and alleviated debt-to-income ratios for low-income borrowers, the distribution of relief across these groups likely skew towards them, providing the most relief for the neediest groups. More analyses could focus on other relief effects: redirected finances due to borrowers' increased spending power, social decision-making, wealth redistribution, and intergenerational borrowing. These analyses could affirm our findings thus far: there are no losers when it comes to student debt cancellation. Student debtors are already disadvantaged by their need to borrow in the first place, intensifying inequality across other socioeconomic predictors. On the whole, we find that cancellation is a progressive policy, even more so for those with fewer resources and higher debt burdens.

Debt x Income-Driven Repayment

Tackling the student debt crisis requires two objectives: 1.) reducing debt burdens for borrowers in the present, and; 2.) curtailing unmanageable debt-burdens down the road. President Biden's debt cancellation plan targets the first objective and, announced alongside that directive, a forthcoming IDR plan ostensibly will target the latter. The new IDR plan has the potential to drastically alleviate repayment burdens, though it does not address debt accumulation in the first place. Aspects of the new plan offer the best tools to counter commonplace, nefarious practices prevalent in higher education's debt-financing system.

Currently there are four IDR programs, with the most generous among them offering undergraduate borrowers the chance to pay towards their loan obligations, rather than the 10-year amortized amount, 10 percent of their discretionary income (defined as annual income minus 150 percent of the federal poverty guideline) over a 20-year period followed by full debt forgiveness. The first of the IDR programs was implemented in 1994. A borrower entering repayment in 1995 would qualify for IDR forgiveness in 20 years (2015) for undergraduate loans and 25 years (2020) for graduate level loans. However, as of June 2021, only 132 borrowers (157 loans) had successfully navigated the program.

Prolonged repayment of 20 to 25 years has historically led to increased balances, known as negative amortization. This is because income-adjusted payments often do not cover interest payments (in the private market, creditors are banned from charging consumers a monthly payment that is not sufficient to cover interest—that type of arrangement is known as a "debt trap"). Absent sufficient income growth to afford mounting balances—a phenomenon common in federal student debt[10]—borrowers see ever-larger amounts of accruing interest. The borrower relies more so on IDR with each passing year because ex-ante IDR forgiveness increases in step with higher risk of delinquency and default upon IDR attrition.[11] Conversely, mounting interest (especially when capitalized into principal)

[10] Growing balances is a common issue in IDR: 48 percent of IDR-enrolled borrowers owed $0 monthly payments according to a 2017 study.

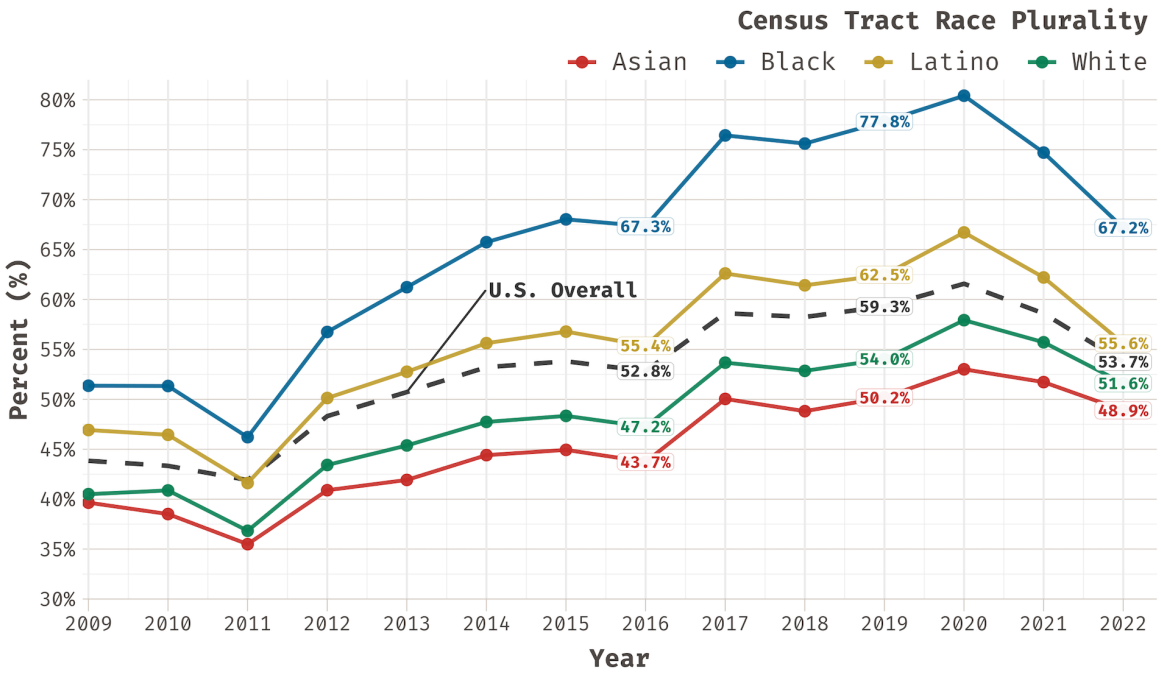
[11] Fortunately, Income Driven Repayment (IDR) programs protect the borrower from the unpaid interest capitalizing into principal, but the administrative burden of these programs actually leads many to drop out of the program and experience capitalized interest. During IDR enrollment and throughout a borrower's repayment term, programmatic failings are evident. For example, there is low take-up, 20 to 60 percent of enrollees fail to recertify income and fall out of the program, and, finally, success rates are dismally low (132 loans so far since the program's induction in 1994).

means the creditor realizes higher returns, such that it is advantageous for the government when borrowers drop out of IDR.

The chart below, reprinted from a previous section, shows loan-level data on the share of loans in our sample that have not seen any progress on paying down the origination balance—in fact, the balances are above the origination. In 2022, over half of all student loans have balances above the loan origination amount. Borrowers living in Black and Latino communities have worse rates at 67.2 percent and 55.6 percent, respectively. That being said, repayment has improved substantially since 2020, but much more work needs to be done. The challenge in student loan repayment should not only include ensuring that borrowers have affordable payments but that borrowers are able to make progress in paying down the debt with those payments. The interest rate policy as it stands, whether a borrower is in IDR or not, makes paying down loans very difficult, creating a debt trap.

Share of Loans where Current Debt Exceeds Origination Balance by Race

Annual percent of student loans where current debt balance is higher than balance at origination, by race demographics*.



Note: data consists of independent annual random samples of one million student borrowers drawn each year.
*Race is proxied by linking sampled data with 5-year ACS population estimates at the census tract level.

Source: Experian Information Solutions, Inc; American Community Survey, 5-year estimates.

Figure 4.4: (A copy of Figure 2.4) A table depicting share of student loans in each year above the loan's origination amount, as categorized by the racial-plurality of the census tract where the borrower lives. The "U.S. Overall" line (a dashed black line) includes the full MSD sample over all the years, including borrowers who were not categorized into a racial-plurality category.

In fact, the government and its federal contractors have reaped substantial profits by making relief programs difficult to access and by hounding the most vulnerable borrowers for repayments.[12] Tangential dimensions of student debt, like larger balances and lower income, exacerbate the experience of negative amortization for low-income, Black, and Latino borrowers. As does the type of federal debt accrued–for example, Federal PLUS loans that have higher interest rates and/or require consolidation before the borrower can benefit from IDR. As the student debt crisis balloons to encompass more debt and more debtors, abating negative amortization becomes the chief goal for ensuring those with debt stand a chance at ever paying it off.

The administration's proposed IDR plan (full details yet to be released upon this report's publishing) is the Department's answer to negative amortization. Under the proposed IDR plan, a new rule will dictate that when a borrower's income-contingent payment is not sufficient to cover interest payments, accumulated interest is waived. This is critically important for lowering debt burdens for borrowers, but also for stifling growth of the student debt crisis—the pandemic repayment pause is a great example why. Loans have not accumulated interest during the pause and we have seen average and median debt balances fall for two consecutive years.

Additional aspects of the new plan also include:

1. Lowering the IDR repayment term to ten years for borrowers with origination amounts under $12,000, after which outstanding debts will be canceled.
2. As early as summer 2023, allowing the IRS to automatically certify borrower income for the Department of Education. This eliminates the administrative burden of IDR borrowers (and their employers) manually filling out the income certification form every year which contributes to program attrition.
3. Reducing the proportion of a borrower's income subject to repayment by:
    a. Capping the income-contingent share to 5 percent for undergraduate borrowers (currently the lowest income share under federal IDR

[12] Student loan borrowers have had to navigate a system plagued with false promises and made worse by mismanagement—public service loan forgiveness (PSLF), discharge policies for those defrauded by their college or filing for bankruptcy, the bureaucracy that deterred debt discharged on account of total and permanent disability (TPD).

programs is 10 percent. Research has shown that the arbitrary 10% income share was still too burdensome for borrowers, especially those with dependent expenses, medical expenses, or who live in expensive areas.

b. Allocating a larger portion of a borrower's income, 225 percent of the federal poverty guideline (FPL), as non-discretionary and therefore protected from IDR payments. 225 percent of the FPL translates to $15/hour annual salary. The current limit is set at 150 percent of the FPL. One problem when using a flat FPL rate for every borrower enrolled in IDR is that it fails to account for all student debt owed by the household, including private student loans or Parent PLUS loans, or local variation in costs-of-living.

Until the plan's full details are available, many questions remain unanswered. It's unclear when it will be available to borrowers, whether critical aspects of the plan will be available to those borrowing for graduate school or on behalf of a dependent, what will happen to the other IDR plans, and how the Department will account for consolidated loans and those who refinanced. Accessibility to the new IDR plan will impact all borrowers but especially the 47 percent of federal loans which are already enrolled in IDR programs,[13] a share that is expected to rise. That's because rising costs continue to propel students to borrow for college and college premiums are not lucrative enough for borrowers to afford standard repayment plans. When paired with greater awareness and accessibility to IDR, the share of borrowers and federal loans enrolled in the programs is sure to increase. A more affordable IDR plan may incentivize both a higher incidence and intensity of indebtedness among college students. Furthermore, IDR programs do not affect interest rate policy—like fixed rates locked-in for each borrowing cohort, a matter especially relevant given the Fed's ongoing interest rate hikes (and borrower prospects of 20 to 25 years in repayment).[14]

Nevertheless, the new IDR plan could address both unaffordable repayments and ballooning balances. The remaining challenge is making sure that as many borrowers, if not all, have access to the program and, equally important, remain enrolled. Automatic enrollment for borrowers was not mentioned in the plan's announcement so how the Department communicates with borrowers will be crucial, especially in the months before the Covid-19 repayment pause ends. Nevertheless, the information we have thus far about the new plan is promising and has the potential to alleviate debt burdens. But, if history

[13] Government Accountability Report. "Education Has Increased Federal Cost Estimates of Direct Loans by Billions Due to Programmatic and Other Changes." July 2022

[14] Currently, student loan interest rates are set at fixed percentage points above the 10-year Treasury note such that the add-on provides a profit to the government.

teaches us anything about federal IDR programs, poor administration far outweighs good intentions and messaging. The administration of this program will ultimately determine its effectiveness.

Conclusion

The Higher Education Act is meant to be renewed every five years, but deepening partisanship has meant settling for temporary extensions instead of the typical policy overhaul. In the fourteen years since the last reauthorization in 2008, typical student debt loads have increased along with college costs, but without equivalent increases in earnings. Outstanding student debt has nearly tripled since 2008, from $600 billion to $1.7 trillion. That being said, average student loan balances have fallen for two years in a row, and the Biden administration's changes to the federal student lending and repayment system indicate a new normal on the horizon.

The Covid-19 pandemic has deterred would-be borrowers from enrolling in college, causing average and median balances to drop in step with college attrition. This downward trend is exacerbated by the increasing distrust that families and students have in the student lending system and supposed benefits of student loans. Balances for established student loan borrowers are stagnating and declining too, albeit more slowly, signaling that targeted relief programs have begun effecting change at scale. The trends are consistent across racial groups, but more prevalent for Black borrowers, because Black borrowers are disproportionately exposed to the negative impacts of the student debt crisis. The declines in balances across all groups for the past two years have not made up for stagnant incomes, especially in light of historic cost-of-living increases. When accounting for inflation, the median student loan borrower in 2022 earns less than in 2009. The two-year drop in balances has also not made up for the systemic failings that have led over half of loans to be larger now than the amount originally borrowed. But, at least for the most vulnerable borrowers, debt-to-income ratios have actually fallen since 2012 levels. Middle-income borrowers are not fortunate in that regard. Income is a surface-level marker of student debt burdens—wealth predicts the ability to pay more reliably: the majority of student debt and the majority of borrowers distribute into the bottom of the wealth distribution, even for those with higher incomes. This important distinction very likely played into the bump in cancellation eligibility for Pell Grant recipients. Cancellation ought to have significant impacts on the financial and social predicament of student loan borrowers, especially since up to 20 million could potentially have their federal balances zeroed out. The repayment pause, for example, likely contributed to an increase in homeownership amongst young student loan borrowers, but there is still a long way to go before rates return to 2009 levels and the racial homeownership gap disappears.

The administration's debt cancellation program is a historic course correction—and the new income-driven repayment (IDR) program has the potential to set the corrected course

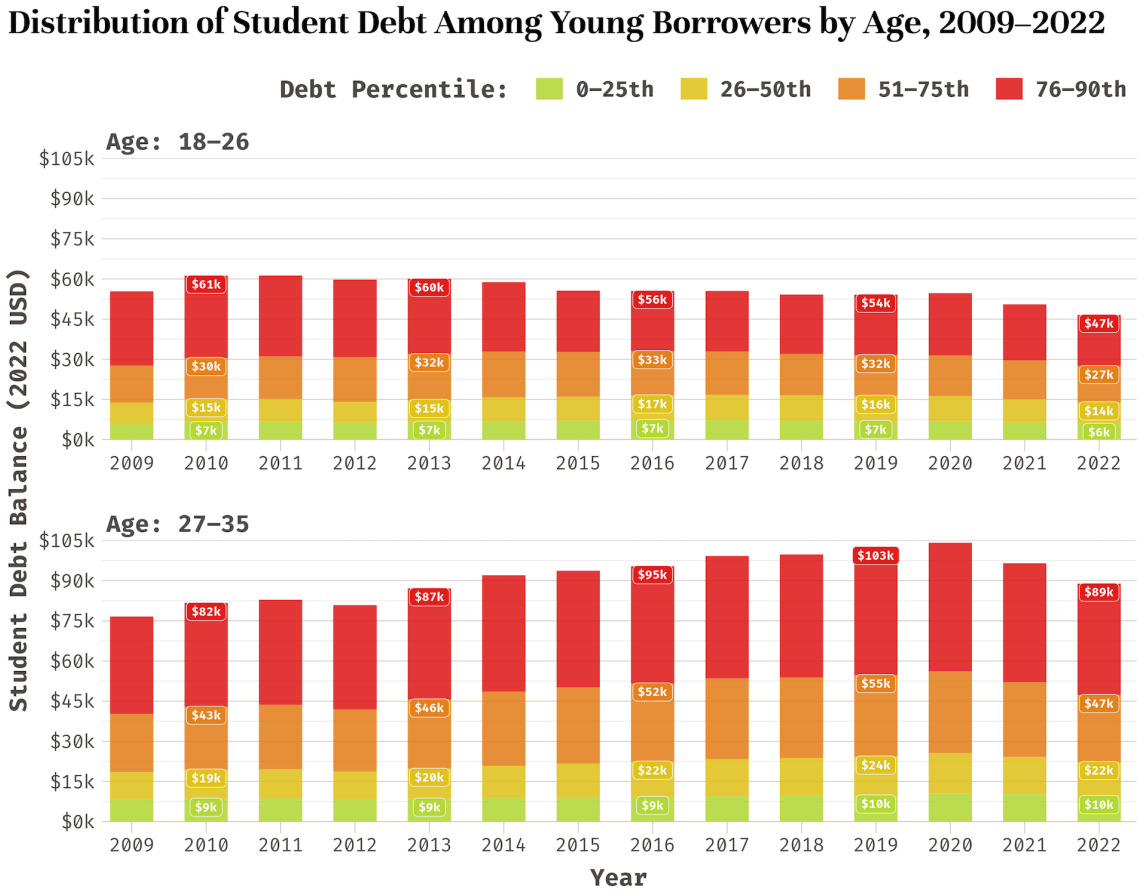
in stone. On top of the IDR changes, cancellation policies, and four separate extensions to the repayment pause, the administration has expanded retroactive access to closed school discharges, Borrower Defense to Repayment, Total and Permanent Disability discharges, and public service loan forgiveness (PSLF), and the Pell Grant has been increased in dollar amount. Furthermore, in 2023, the Department will carry-out a system-wide IDR adjustment to bring millions of borrowers closer to the necessary 20-25 years of payments. After the adjustment, borrowers with the necessary number of monthly payments will receive automatic forgiveness. All these programmatic improvements combined with mass debt relief and more affordable monthly payments means that borrowers will have lower or nonexistent debt obligations, affording them opportunities to go back to school, save for retirement, provide for their family, or even borrow for a home.

Notwithstanding progress on the federal side, millions of borrowers will be excluded, either because they refinanced their federal debt at a private institution or because their federally-guaranteed student loans are commercially-held (FFEL loans). These borrowers are disproportionately those from older cohorts who have been trapped in the predatory system the longest. Even millions of federal borrowers who benefit from the IDR adjustment and PSLF waivers may still be caught making student loan payments for many more years than they originally anticipated.

Finally, we anticipate future cohorts owing increasingly more debt, either because college costs continue to rise or because the loan repayment structure remains unchanged. Colleges have problematically capitalized on the federal student loan program with increased tuition costs. To halt rises in college costs, the system must have student-focused rules and regulations and a larger transformation of higher education financing. Instead, the current system places exorbitant cost burdens on students, and those with the least resources bear the highest financing costs in the present and future. With outright cancellation and expanded IDR both directed towards the individual borrower, the federal government shields exploitative institutions who bear no consequences for charging exorbitant and unjustified costs. If student loans persist in the higher education system, unrestricted tuition hikes, a punitive interest rate policy, and non-repayment crises cannot be allowed to reoccur. Debt relief serves to rectify the systemic failings of debt-financed education, but a permanent solution requires moving beyond debt-financed education itself.

Appendix

Appendix Figure 1: Distribution of outstanding student debt balances for young borrowers, categorized by age group, from 2009 to 2022. The labels show the debt balance for the 25th, 50th, 75th, and 90th percentile.



Note: data consists of independent annual random samples of one million student borrowers drawn each year.

Source: Experian Information Solutions, Inc;
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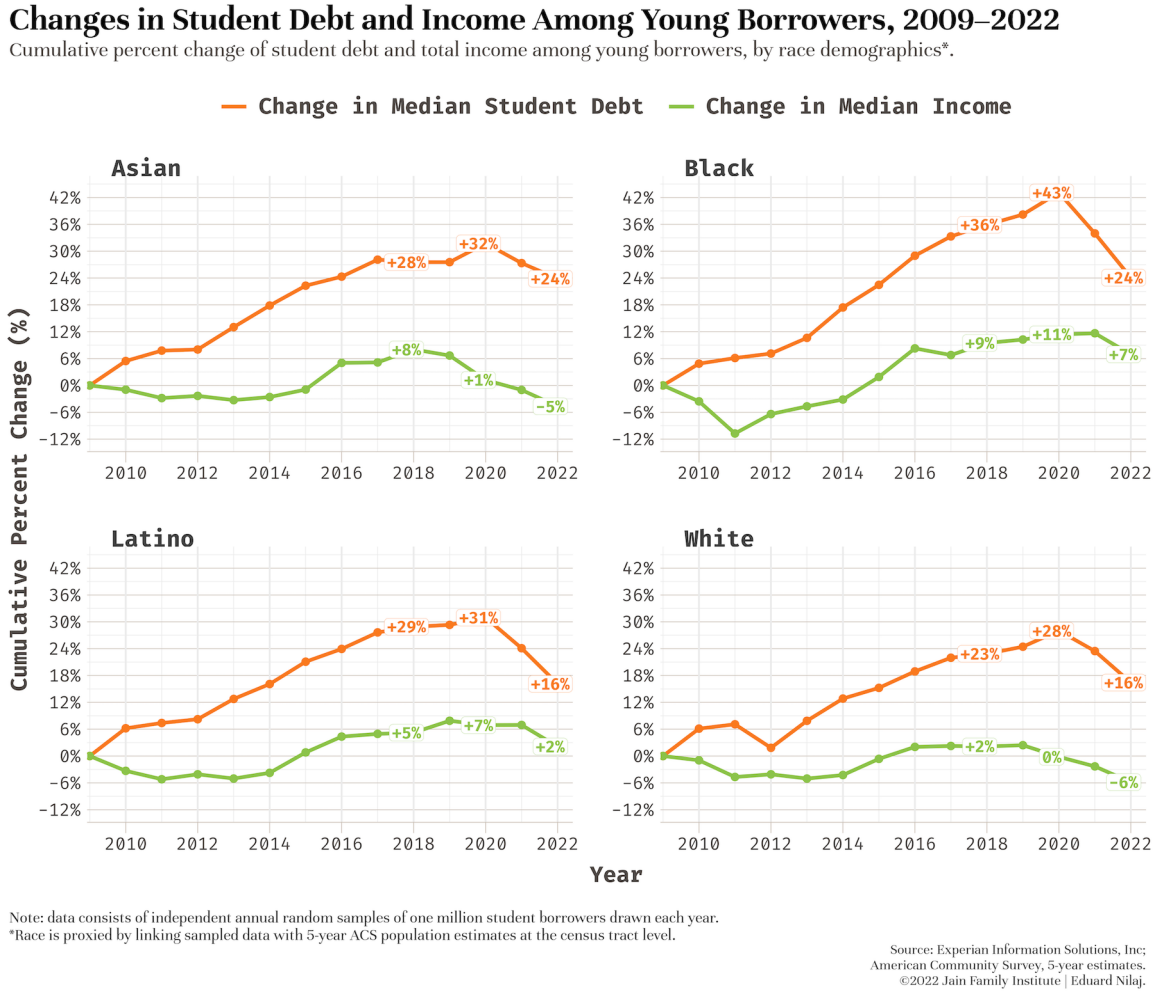
Appendix Figure 2: The cumulative percent change of median student debt and borrower median income of young student debtors, categorized by race plurality at the census tract level, from 2009 to 2022.



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Methodology

Millennial Student Debt Dataset: Two random, anonymized credit bureau datasets, purchased annually by Jain Family Institute, are: 1.) the cross-sectional dataset: one million 18-35 year old student debtors pulled each year from 2009 through 2022, and; 2.) the panel dataset: one million 17-34 year old student debtors in 2009, followed through annual credit archives to 2022. All charts and statistics in this report used the cross-sectional dataset sourced from Experian Credit Solutions, unless otherwise specified in the accompanying footnote. For more information on how we calculated specific statistics for each chart, reference the below information. If you're interested in downloading an aggregate dataset, please see the "Download Data" section on the interactive map's web page.

Tables and figures are explained in order of appearance:

- **Figure 1.1: Average & Median Student Debt in Real and Nominal Dollars, 2009-2022**
  The average and median student loan balances in nominal dollars were calculated and plotted for each year in the cross-section, 2009 - 2022 (dashed line). For each of these yearly statistics, the amount was converted into 2022 USD and plotted (solid line).

- **Table 1.2: Origination Amounts for Student Loans, 2019 & 2022**
  Column 1: The sample year of interest from the cross-sectional dataset.
  Column 2: Calculate the average origination amount for student loans that originated up to one year before our Q2-end (last business day of June) sampling date for 2019 and 2022.
  Column 3: Calculate the median origination amount for student loans that originated up to one year before our Q2-end (last business day of June) sampling date for 2019 and 2022.
  Column 4: Record which student loans originated up to two years before our Q2-end (last business day of June) sampling date for 2019 and 2022. We report the percentage this group of student loans represents out of the entire 2019 and 2022 sample.
  Column 5: Confine the loans in the analysis to no older than 17 years before our Q2-end (last business day of June) sampling date for 2019 and 2022. 17 years represents a proxy for the earliest loan in our database, when a sampled 35 year

old would have originated a loan at 18 years old. We then calculate the average age of all loans for the 2019 and 2022 sample.

- **Figure 2.1: Average Student Loan Debt by Race, 2009-2022**
  The census tract data for sampled borrowers in each year's cross-sectional sample was linked to census tract data from American Community Survey's 5-Year estimates (2010, 2015, and 2020) on proportion of population attributable to each racial group. The individual was then categorized into a racial category depending on which racial group held a plurality of the population proportion. After categorization, lines and points were plotted for each major racial group to chart the yearly average student loan debt from 2009 to 2022.

- **Figure 2.2: Median Student Loan Debt by Race, 2009-2022**
  The census tract data for sampled borrowers in each year's cross-sectional sample was linked to census tract data from American Community Survey's 5-Year estimates (2010, 2015, and 2020) on proportion of population attributable to each racial group. The individual was then categorized into a racial category depending on which racial group held a plurality of the population proportion. After categorization, lines and points were plotted for each major racial group to chart the yearly median student loan debt from 2009 to 2022.

- **Figure 2.3: Median Total Income Among Young Borrowers by Race, 2009-2022**
  The census tract data for sampled borrowers in each year's cross-sectional sample was linked to census tract data from American Community Survey's 5-Year estimates (2010, 2015, and 2020) on proportion of population attributable to each racial group. The individual was then categorized into a racial category depending on which racial group held a plurality of the population proportion. Using individual estimated income from the yearly cross-sectional samples, the median total income was calculated and plotted for each major racial group from 2009 to 2022. Additionally, the dashed black line shows the yearly median total income for all individuals with outstanding student debt in the Millennial Student Debt Dataset.

- **Figure 2.4: Share of Loans where Current Debt Exceeds Origination Balance**
  The census tract data for sampled borrowers in each year's cross-sectional sample was linked to census tract data from American Community Survey's 5-Year estimates (2010, 2015, and 2020) on proportion of population attributable to each racial group. The individual was then categorized into a racial category depending on which racial group held a plurality of the population proportion. After

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categorization, lines were plotted for each major racial category to chart the percentage of loans within each annual random sample that have a higher outstanding balance at the sampling date than at origination. Over 40 million unique student loans from our loan-level cross-section sample were observed and joined to census tract data from American Community Survey's 5-Year estimates on proportion of population attributable to each racial group. Loans with a balance of $0 were included in the calculations.

- **Figure 2.5: Changes in Student Debt to Income Ratio by Income Decile**
  Using the 2012 and 2022 MSD cross-sectional samples, individuals were grouped into income deciles based on their estimated total income. We then calculated and displayed the median student debt-to-income ratio for each year and decile.

- **Figure 2.6: Distribution of Student Debt and Median Income by Income Decile**
  Using the 2022 MSD cross-sectional sample, individuals were grouped into income deciles based on their estimated total income. We then calculated and displayed the 25th, 50th(median), and 75th student loan debt percentiles for each decile. Additionally, the dashed green line shows the median total income of all young borrowers in each decile.

- **Figure 2.7: Total Student Debt by Income & Wealth**
  Household observations in 2019's Survey of Consumer Finances data each have replicate weights (WGT). Education loan amounts were multiplied by the weights for each household in the dataset. Households were then grouped together by the intersections of net worth category (NWCAT) and income quartile category (INCQRTCAT). Educational loan data (USD 2019) was summed within each income-wealth category and plotted.

- **Figure 2.8: Average Student Debt by Income & Wealth**
  Household observations in 2019's Survey of Consumer Finances data each have replicate weights (WGT). Households were grouped together by the intersections of net worth category (NWCAT) and income quartile category (INCQRTCAT). Educational loan data (USD 2019) was averaged within each income-wealth category (and included households with $0 in education loans) using WGT as the weight. The data was then plotted.

- **Table 3.1: States With Highest and Lowest Borrower Homeownership Rates**
  We calculated the homeownership rate among student borrowers, measured as the share of individuals who have an outstanding mortgage debt balance, for each

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state (including DC) using the 2020, 2021 and 2022 MSD cross-sectional samples. We show these rates for the states who have the five highest and the five lowest rates in 2022. In taking the presence of a positive mortgage debt balance to indicate homeownership, we fail to include individuals who own their homes outright as homeowners. But given that the median age of first-time home buyers continues to increase and that only about a third of homeowners fully own their homes, we believe that this represents a very small share of our sample and does not have any significant effects on our findings.

- **Figure 3.2: Credit Scores of Young Student Debtors & National Homebuyers**
  For each year from 2009 to 2022, we calculated 10th, 25th, and 50th(median) consumer credit score percentiles for all young borrowers in the MSD cross-sectional sample with outstanding student debt. For comparison, we plotted these credit scores alongside the annualized 10th and 50th credit score percentiles of all individuals who purchased a home in a given year.

- **Table 3.3: Probit Regression Results of Homeownership Predictors**
  Using the 2022 MSD cross-sectional sample, we ran a multivariate probit regression model with homeownership as the dependent variable. Our three independent variables were outstanding student debt balance, estimated income, and age. For easier comparisons, we standardized the student debt balance and estimated income variables. The regression coefficients are shown in the second column while the third column displays the average marginal effects, which indicate the change in probability of homeownership for young borrowers when the independent variable is increased by one unit.

- **Figure 4.1: Preview of the map depicting average debt relief across the United States**
  A screened preview of the interactive map released alongside this report. This map was created using a variety of mapping software and the data on the map using a combination of sources: U.S. Department of Education, National Center for Education Statistics. Integrated Postsecondary Education Data System (IPEDS), Census Bureau's American Community Survey, and Experian Information Solutions.

- **Figure 4.2: Average Relief and Median Income For Student Debtors in 2022**
  Sampled individuals in the 2022 cross-section were sorted by state or territory and the median borrower income was found for each state. This state-level dataset was merged into a state-level dataset with columns for: 1) weighted average debt

relief estimate across all borrowers, both eligible and ineligible for President Biden's policy; 2) share of cancellation-eligible borrowers who are Pell Grant recipients as reported by the U.S. Dept of Education, and; 3) a median student debt balance after all eligible borrowers in that state have received full debt cancellation. Markers for each state and territory in the resulting dataset were plotted for median borrower income (X-axis) and average debt relief (Y-axis). Marker sizes fluctuate depending on the share of cancellation-eligible borrowers who are Pell Grant recipients. Markers were outlined in black if the states or territories had a post-relief median student debt balance that fell below $1,000.

- **Figure 4.3: Student Debt Balances versus Average Debt Relief, 2022**
  Column 1: The geographic level of interest—a state, territory, or nation as whole.
  Column 2: How many federal student loan borrowers are eligible for President Biden's debt cancellation policy as reported by the U.S. Dept of Education.
  Column 3: The average student loan balance across the 2022 cross-sectional sample.
  Column 4: The rank associated with column 3.
  Column 5: The weighted average debt relief among cancellation-eligible borrowers if every eligible borrower received the maximum $10,000 or $20,000 student loan cancellation.
  Column 6: The rank associated with column 5.
  Column 7: The weighted average debt relief among cancellation-eligible and ineligible borrowers if every eligible borrower received the maximum $10,000 or $20,000 student loan cancellation.
  Column 8: The rank associated with column 7.

- **Figure 4.4: Share of Loans where Current Debt Exceeds Origination Balance**
  This chart is a carbon copy of Figure 2.4. See methodology for Figure 2.4.

- **Appendix Figure 1: Distribution of Student Debt Among Young Borrowers by Age, 2009-2022**
  Using every MSD cross-sectional sample from 2009 to 2022, we visualize the distribution of student debt among borrowers with outstanding debt for two age groups. For each year and each age group, we calculated and plotted the student debt range for the following debt percentile groups, 0–25th, 26–50th, 51–75th, and 76–90th.

- **Appendix Figure 2: Changes in Student Debt and Income Among Young Borrowers, 2009-2022**
  The census tract data for sampled borrowers in each year's cross-sectional sample was linked to census tract data from American Community Survey's 5-Year estimates (2010, 2015, and 2020) on proportion of population attributable to each racial group. The individual was then categorized into a racial category depending on which racial group held a plurality of the population proportion. After categorization, two lines were plotted for each of the four major racial groups. The "Change in Median Student Debt" line shows the cumulative percent change of the median total student loan balance from 2009 to 2022. The "Change in Median Income" line shows the cumulative percent change of median total income since 2009 for all young borrowers with outstanding student debt and who resided in tracts with a distinct racial majority.

Works Cited

- © OpenStreetMap contributors. 2019. ODbL 1.0 - http://www.openstreetmap.org/copyright. © OpenStreetMap contributors 2020.
- © 2022 Experian Information Solutions, Inc. 2009 - 2022 random samples drawn from Experian credit report data.
- Geocodio. 2022. Accessed November 4, 2022. www.geocod.io.
- Natural Earth. 2022. Free vector and raster map data @ naturalearthdata.com. “Lakes and Reservoirs.” Accessed August 16, 2022. https://www.naturalearthdata.com/downloads/10m-physical-vectors/.
- Natural Earth. 2022. Free vector and raster map data @ naturalearthdata.com. “Admin 0 - Countries.” Accessed August 16, 2022. https://www.naturalearthdata.com/downloads/10m-cultural-vectors/10m-admin-0-countries/.
- Survey of Consumer Finances. Board of Governors of the Federal Reserve System. 2019 Summary Extract Public Data file. Accessed August 9, 2022. https://www.federalreserve.gov/econres/scfindex.htm.
- U.S. Census Bureau. 2022. "Cartographic Boundary Files - 2021 - Counties - 1 : 500,000 (national) shapefile." Accessed August 16, 2022. https://www.census.gov/geographies/mapping-files/time-series/geo/cartographic-boundary.html
- U.S. Census Bureau. 2022. "Cartographic Boundary Files - 2021 - States - 1 : 500,000 (national) shapefile." Accessed August 16, 2022. https://www.census.gov/geographies/mapping-files/time-series/geo/cartographic-boundary.html
- U.S. Census Bureau. 2022. "Cartographic Boundary Files - 2020 - ZIP Code Tabulation Areas (ZCTAs) - 1 : 500,000 (national) shapefile." Accessed August 16, 2022. https://www.census.gov/geographies/mapping-files/time-series/geo/cartographic-boundary.2020.html
- U.S. Census Bureau. 2022. American Community Survey 5-year estimates (2006–2010), Total census tract population by race/ethnicity. Accessed May 3, 2022. Drawn, using the tidycensus R package, from https://www.census.gov/data/developers/data-sets/acs-5year.html.
- U.S. Census Bureau. 2022. American Community Survey 5-year estimates (2011–2015), Total census tract population by race/ethnicity. Accessed May 3, 2022. Drawn, using the tidycensus R package, from https://www.census.gov/data/developers/data-sets/acs-5year.html.

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New York, NY, 10012

- U.S. Census Bureau. 2022. American Community Survey 5-year estimates (2016–2020), Total census tract population by race/ethnicity. Accessed May 3, 2022. Drawn, using the tidycensus R package, from https://www.census.gov/data/developers/data-sets/acs-5year.html.
- U.S. Department of Education. June 30, 2022. Federal Student Aid. "Portfolio by Location." Accessed November 3, 2022. https://studentaid.gov/data-center/student/portfolio.
- U.S. Department of Education. 2022. National Center for Education Statistics. Integrated Postsecondary Education Data System (IPEDS). 12-Month Enrollment, "12-month unduplicated headcount by race/ethnicity, gender and level of student: 2020-21," "EFFY2021." Accessed October 2, 2022. https://nces.ed.gov/ipeds/datacenter/DataFiles.aspx?gotoReportId=7&fromIpeds=true&
- U.S. Department of Education. 2022. National Center for Education Statistics. Integrated Postsecondary Education Data System (IPEDS). 12-Month Enrollment, "12-month unduplicated headcount by distance education status and student level: 2020-21," "EFFY2021_DIST." Accessed October 2, 2022. https://nces.ed.gov/ipeds/datacenter/DataFiles.aspx?gotoReportId=7&fromIpeds=true&
- U.S. Department of Education. 2022. National Center for Education Statistics. Integrated Postsecondary Education Data System (IPEDS). Institutional Characteristics, "Directory Information," "HD2021." Accessed October 2, 2022. https://nces.ed.gov/ipeds/datacenter/DataFiles.aspx?gotoReportId=7&fromIpeds=true&
- U.S. Department of Education. 2022. National Center for Education Statistics. Integrated Postsecondary Education Data System (IPEDS). Institutional Characteristics, "Student charges for academic year programs," "IC2021_AY." Accessed October 2, 2022. https://nces.ed.gov/ipeds/datacenter/DataFiles.aspx?gotoReportId=7&fromIpeds=true&.
- U.S. Department of Education. 2022. National Center for Education Statistics. Integrated Postsecondary Education Data System (IPEDS). Institutional Characteristics, "Student charges by program (vocational programs)," "IC2021_PY." Accessed October 2, 2022. https://nces.ed.gov/ipeds/datacenter/DataFiles.aspx?gotoReportId=7&fromIpeds=true&.
- U.S. Department of Education. September 20, 2022. "WHITE HOUSE FACT SHEET: The Biden Administration's Plan for Student Debt Relief Could Benefit

Tens of Millions of Borrowers in All Fifty States." Accessed October 12, 2022. https://content.govdelivery.com/accounts/USED/bulletins/32dfbda.

- Student Loan Hero. July 29, 2022. "A Look at the Shocking Student Loan Debt Statistics for 2022." Accessed November 12, 2022. https://studentloanhero.com/student-loan-debt-statistics/.
- Walker K, Herman M (2022). *tidycensus: Load US Census Boundary and Attribute Data as 'tidyverse' and 'sf'-Ready Data Frames.* R package version 1.3, https://walker-data.com/tidycensus/.