



Higher Education Student Loan Debt

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The Postsecondary National Policy Institute (PNPI) provides current and prospective policymakers with a substantive and collegial foundation on which to build federal higher education policies that drive positive outcomes for students and their families.

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Summary

Student loans play a crucial role in ensuring access to affordable higher education for millions of Americans. The cumulative amount borrowed for federal and non-federal student loans has increased steadily since data has been recorded until the Great Recession, when we started to see a decline. This primer examines who borrows and how much, who retains debt after higher education, and who repays or defaults, all of which often vary by institutional sector and demographics.

A Brief History of Federal Student Loans

The precursor to today's federal student loan program started under the Higher Education Act of 1965's Guaranteed Student Loan program, also known as the Federal Family Education Loan (FFEL) program. Under the FFEL program, ED encouraged private lenders to participate in the program by offering subsidies to those who participated. In addition to these subsidies, the government guaranteed that lenders would be compensated for a portion of their losses if a borrower defaulted. In 1993, Congress implemented the Direct Loan program, which allows students and their families to borrow directly from the federal government through ED with U.S. Treasury funds. With no lender subsidies to pay, this program reduced the [government's cost](#) of making a student loan.

For nearly 20 years, the Direct Loan and FFEL programs coexisted, with schools selecting which program to participate in and borrowers receiving nearly identical loan terms that were set in statute. In 2008, largely due to the credit crisis, several private lenders no longer found it feasible to participate in the FFEL program. To ensure the stability of the student loan market, ED offered to repurchase FFEL program loans from private lenders and absorb these loans into the Direct Loan program as part of the Ensuring Continued Access to Student Loans Act (ECASLA). These repurchased loans are referred to as "Department-held FFEL." In 2010, the Student Aid and Fiscal Responsibility Act (SAFRA) halted the availability of new FFEL program loans and mandated a complete switch to direct lending by June 30, 2010.¹ By December 2023, remaining FFEL program loans represented only 12% (\$185.4 billion) of the \$1.6 trillion in outstanding federal student loans. The remaining loan volume consisted of almost all Direct Loans (\$1.41 trillion).²

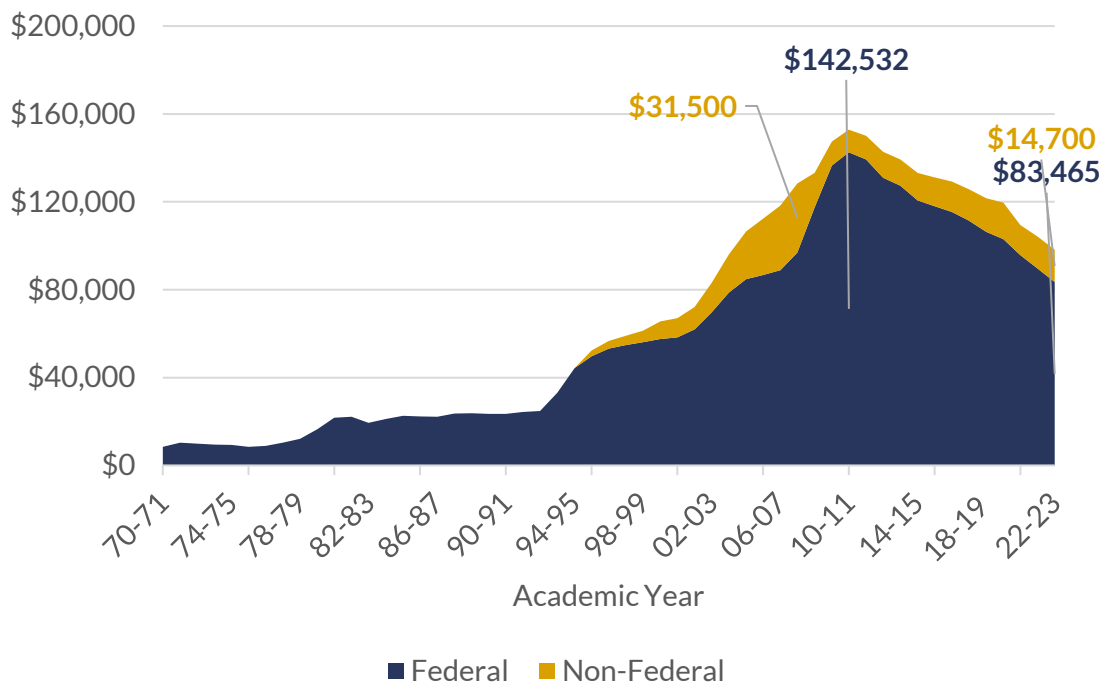
¹ SAFRA was passed as part of the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152), which President Obama signed into law on March 30, 2010. It terminated the authority to make loans under the Federal Family Education Loan (FFEL) program after June 2010. For more information, see the Congressional Research Service [report](#).

² Perkins Loans totaled \$3.6 billion. Institutions of Higher Education (IHEs) technically handle the servicing of Perkins Loans. However, some IHEs contract with outside entities.

Historical Trends in Loan Volume

Historical loan volume data compiled by the College Board dates back to 1970–71, with non-federal loan volumes first reported in 1995–96. Adjusting for inflation (in 2022 dollars), the total loan volume from both federal and non-federal sources grew consistently from their program creation until the Great Recession. Figure 1 shows the growth since the 1970–71 academic year, with non-federal loans peaking in 2007–08 at \$31.5 billion and federal loans peaking in 2010–11 at \$142.5 billion. In 2022–23, federal loan volumes were at \$83.5 billion and non-federal loan volumes were at \$14.7 billion. Though federal loans make up most of the total loan volume borrowed over time (85% in 2022–23), non-federal loans are still a sizable share of the total potential debt students take on to finance their education.

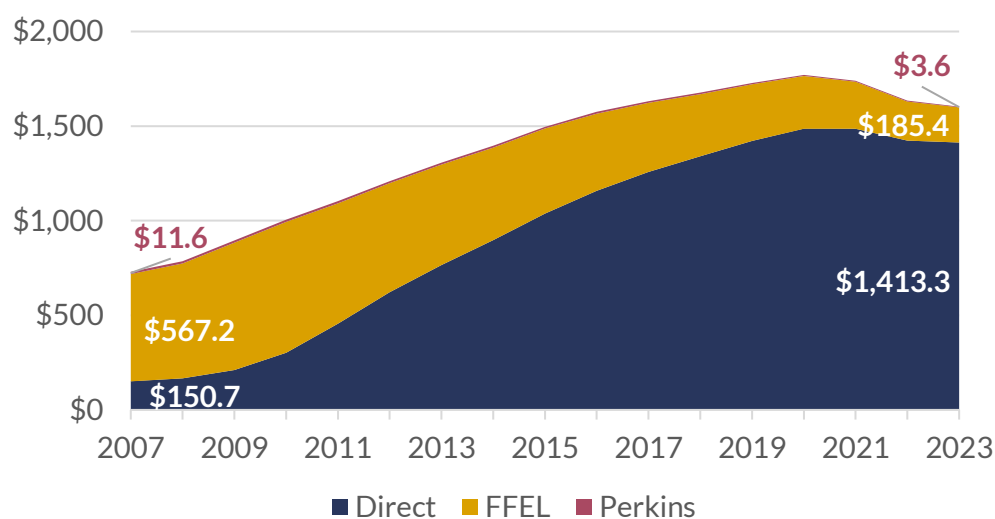
Figure 1: Total Loan Volume (in Millions) Over Time, Federal and Non-Federal



Source: [College Board](#), Trends in Student Aid (2023) [Online, Table 1](#).
Adjusted to current dollars using the Consumer Price Index.

When discussing debt, it is important to look at total loan volume borrowed *and* examine outstanding balances that include principal and interest. The Federal Student Loan Portfolio tracks total outstanding dollar amounts for the Direct, FFEL, and Perkins Loan programs through the National Student Loan Data System (NSLDS). Figure 2 shows that outstanding federal student loan debt balances (principal and interest) have increased since 2007. Adjusting for inflation (in 2022 dollars), the total outstanding federal student loan debt in 2007 was \$728.2 billion compared to \$1.6 trillion in 2023. As a result of the initial Direct Loan implementation in the 1990s and the discontinuation of FFEL in 2010, we also see the shares of federal student loan balances shift to Direct Loans, which are exclusively administered by the federal government.

Figure 2: Outstanding Federal Student Loan Debt Balances (in Billions) Over Time



Source: [Federal Student Aid, Federal Student Loan Portfolio \(2023\)](#).
Adjusted to current dollars using the Consumer Price Index.

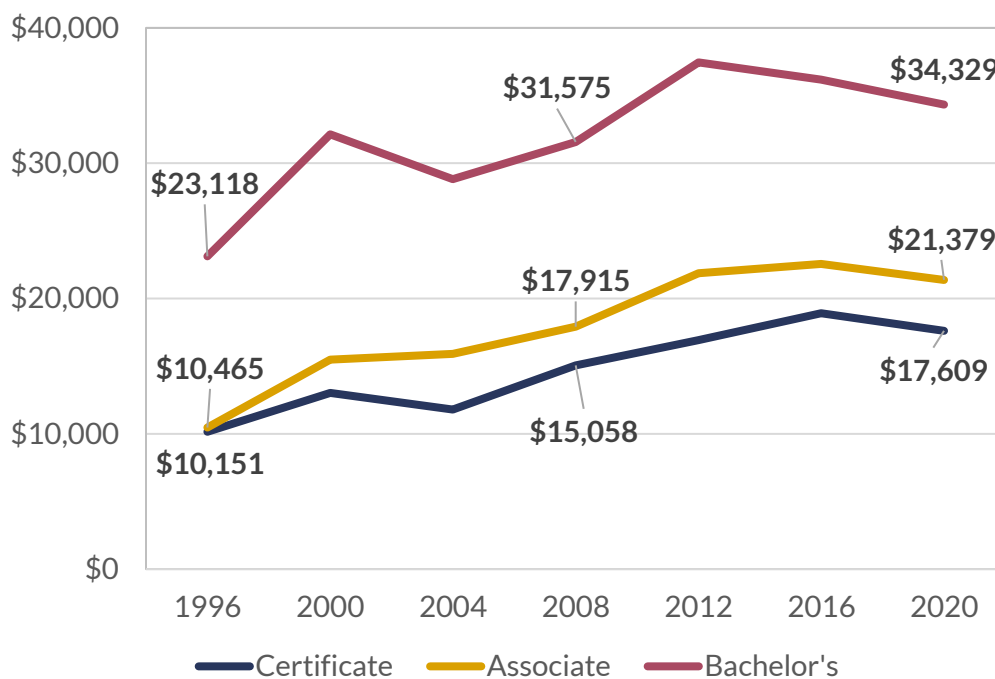
While overall loan debt and borrowing have been growing, there are important and persistent differences by degree type. Most four-year college graduates borrowed student loans. According to the National Postsecondary Student Aid Study (NPSAS), 61% of students graduating with a bachelor’s degree in 2019–20 took out student loans,³ similar to 1999–2000 when 62% of students graduating from a bachelor’s degree program took out student loans. Most undergraduate certificate recipients have student loan debt. Sixty-four percent of certificate recipients in 2019–2020 took out student loans, up from 44% in 1999–2000. Fewer associate degree recipients have student loan debt than bachelor’s degree recipients. Thirty-nine percent of associate degree recipients in 2019–20 had student loan debt, similar to the 40% of associate degree recipients in 1999–2000.⁴

³ The [NPSAS](#) is a cross-sectional survey of college students conducted every four years. The most recent [NPSAS data](#) that can be tracked longitudinally was released in 2023 (covering the 2019–20 school year). Though most detailed loan volume data comes from the Federal Student Aid Data Center, and thus excludes non-federal loans, analyses in this primer using data from NPSAS include all federal and non-federal loans unless otherwise noted. Non-federal loans include loans from sources such as banks, states, and institutions.

⁴ According to the [Digest of Education Statistics, Table 331.95](#).

Student loan borrowing per college graduate with debt has also steadily increased. Figure 3 shows the average cumulative amount borrowed by degree type over time between 1996 and 2020. Certificate recipients and associate degree recipients increased their cumulative borrowing by 73% and 104%, respectively, in constant 2022 dollars between 1995–96 and 2019–20. Certificate recipients’ cumulative debt increased from an average of \$10,151 in 1995–96 to \$17,609 in 2019–20. The average cumulative debt of associate degree recipients increased from \$10,465 in 1995–96 to \$21,379 in 2019–20. Bachelor’s degree recipients’ cumulative debt increased from \$23,118 in 1995–96 to \$34,329 in 2019–20. Figure 3 details the cumulative debt of certificate, associate degree, and bachelor’s degree recipients over time.

Figure 3: Average Cumulative Amount Borrowed by Certificate, Associate Degree, and Bachelor’s Degree Recipients Over Time



Source: [NPSAS:96-20](#). Table IDs: [vhqfda](#), [kagvlh](#)
Adjusted to 2022 dollars using the Consumer Price Index.

Current Loan Debt in the U.S.

According to the NPSAS:20, 53.3% of students who graduated in the 2019–20 academic year borrowed from the federal government at some point during their postsecondary experience to finance their education.⁵ Currently, the U.S. Department of Education offers federal loans to students and their families to help them meet their postsecondary education expenses. These loans include Subsidized and Unsubsidized Loans through the Direct Loan program, Stafford Loans, Perkins Loans, and PLUS Loans. The College Board estimates that undergraduate and graduate students and their families borrowed \$84 billion in federal loans for the 2022–23 academic year.⁶

The amount that students may borrow from the federal government is limited. At present, undergraduate students may borrow Direct Loans up to [statutorily established annual loan limits](#) (e.g., \$5,500 for a first-year dependent student or \$9,500 for a first-year independent student). Graduate students may borrow up to \$20,500 in Direct Unsubsidized Loans and up to the cost of attendance (minus other aid) through the Grad PLUS Loan program.⁷ In addition, non-federal sources, such as states and private lenders, allow students and their families to take out loans for school. Borrowers took out \$14.7 billion in non-federal student loans in the 2022–23 school year.⁸

In total, U.S. households owe nearly \$17.3 trillion in outstanding debt according to the Federal Reserve Bank of New York.⁹ Mortgage debt represents the largest component of household debt (\$12.49 trillion), followed by student loan debt (\$1.6 trillion). As one might imagine, \$1.6 trillion in outstanding student loan debt has piqued the interest of economists, policymakers, and others. Despite the alarming total sum of outstanding student loan debt, most borrowers do not owe as much as one might believe. As of December, 2023, 7.2% of borrowers had debt balances of more than \$100,000 and 15.1% had balances over \$60,000. Fifty-three percent of borrowers had less than \$20,000 in student debt.¹⁰

⁵ According to the [Digest of Education Statistics, Table 331.95](#).

⁶ See Table SA-1 in the College Board's [Trends in Student Aid \(2023\)](#).

⁷ For additional background information on federal student aid, see PNPI's [primer](#).

⁸ See Table SA-1 in the College Board's [Trends in Student Aid \(2023\)](#).

⁹ See their interactive Debt Tool, most recent data from [FY2023 Q3](#).

¹⁰ See the [Federal Student Loan Portfolio](#) by Debt Size for [FY23 Q4](#).

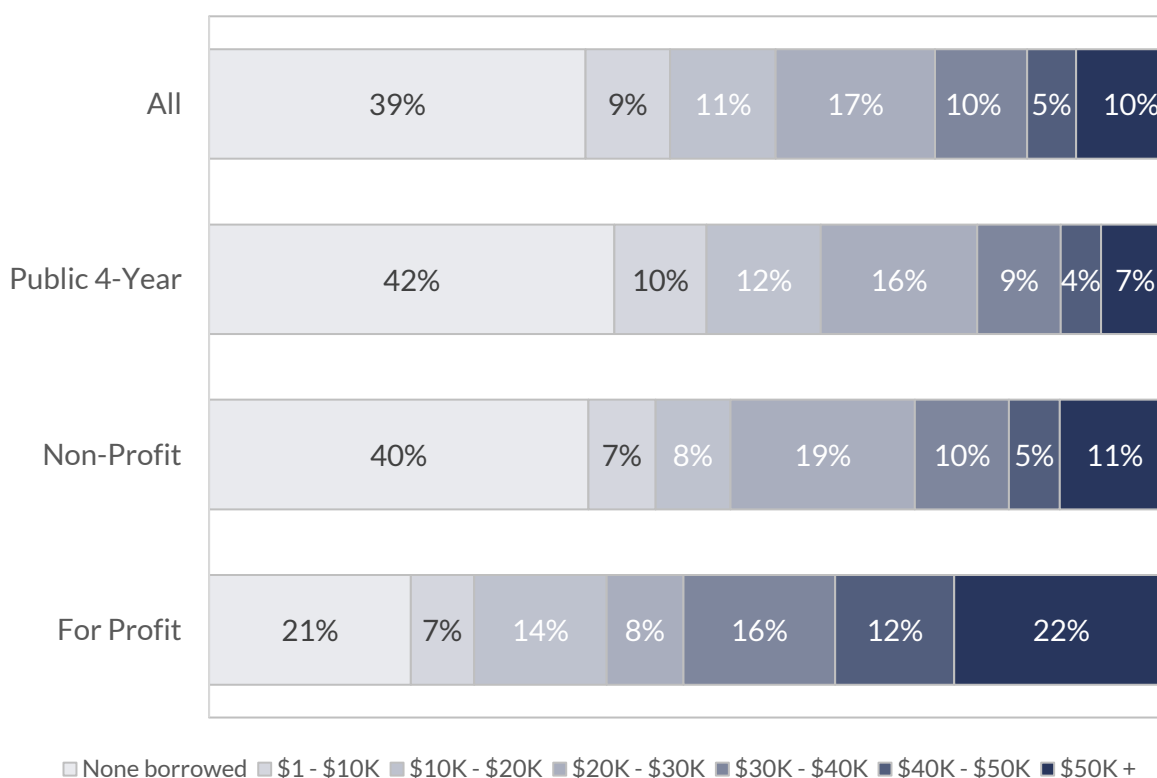
Variation in Undergraduate Debt

Variation in Debt by Sector

Whether a college graduate has student loans varies by sector (the type of college or university attended). NPSAS data shows that students attending for-profit institutions are most likely to borrow student loans, and those attending public two-year institutions are least likely to take on student loans. Analysis of the NPSAS:20 shows that more college graduates who attended for-profit institutions (82.7%) borrowed federal student loans than those who attended private non-profit institutions (58.6%) or public four-year institutions (53%).¹¹

The cumulative student loan debt levels of college graduates also vary by sector. Forty-four percent of 2015–16 bachelor’s degree recipients from for-profit institutions borrowed \$40,000 or more; however, only 19% of those from private non-profit institutions and 13% of those from public institutions borrowed as much. The distribution of cumulative amounts borrowed are shown in Figure 4.

Figure 4: Cumulative Amount Borrowed by Bachelor’s Degree Recipients in 2020 Dollars by Sector



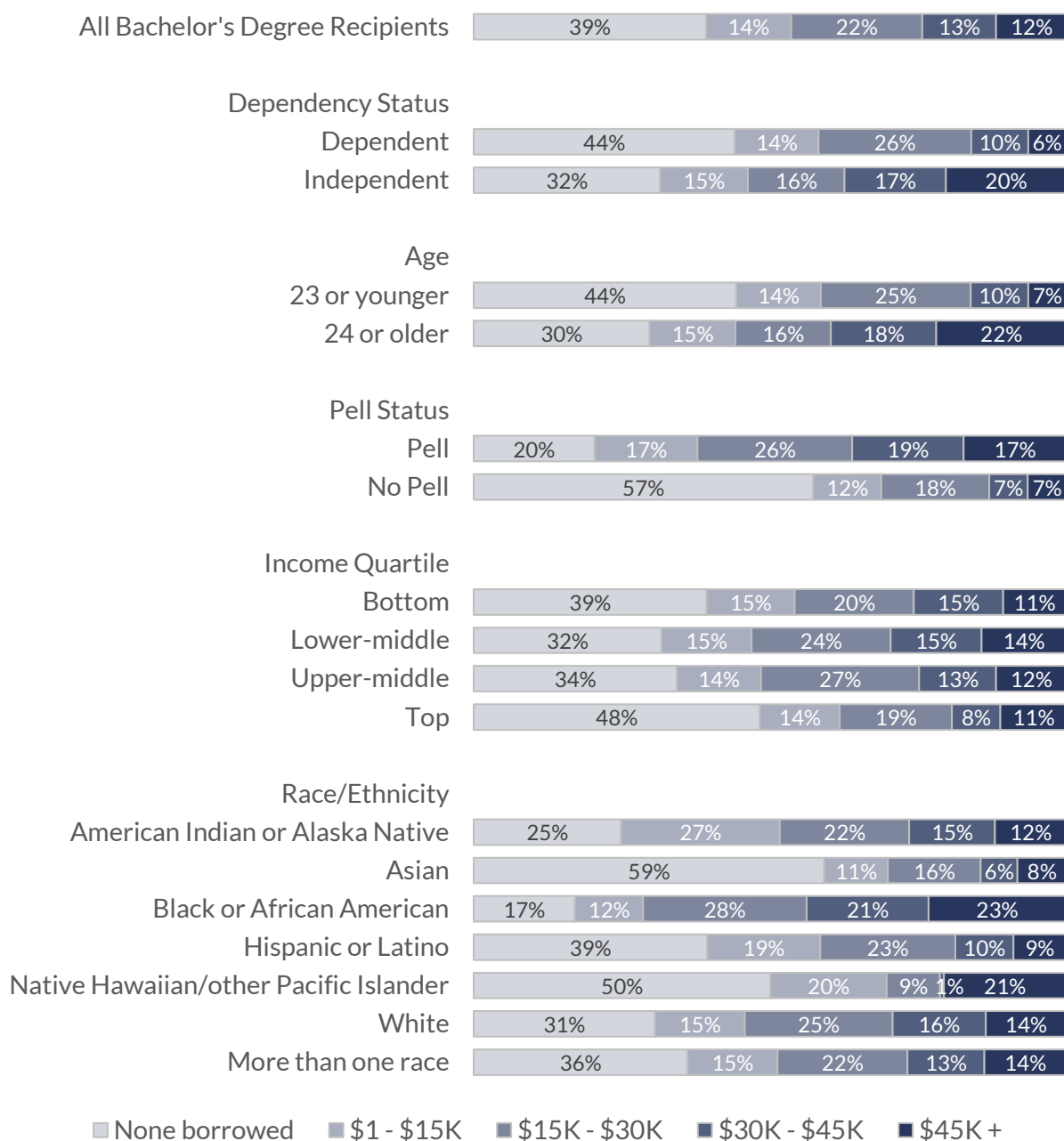
Source: [NPSAS:20](#), Table ID: [ojbdym](#).

¹¹ According to [NPSAS:20](#), Table ID: [pjggic](#)

Variation in Debt by Demographic Factors

In addition to varying by sector, student loan debt levels also vary by demographic factors, such as dependency status, age, race, and income level. Figure 5 uses NPSAS data from 2020 to show the distribution of cumulative borrowing of bachelor's degree graduates by several demographic factors.

Figure 5: Cumulative Loan Amount Borrowed by Bachelor's Degree Recipients by Demographic Factors



Source: [NPSAS:20](#), Table ID: [nxqnm1](#).

Note: Due to small sample sizes, Native Hawaiian/Pacific Islander and American Indian or Alaska Native estimates should be treated with caution.

Figure 5 shows that independent students are more likely to borrow and have more student loan debt than dependent students, in part because they are [eligible for higher loan limits](#). Forty-four percent of dependent bachelor's degree graduates did not borrow student loans, compared with 32% of independent students. Among 2019–20 bachelor's degree recipients, 37% of independent students borrowed more than \$30,000, compared with 16% of dependent students who did.

Students who earned their bachelor's degree at age 24 or older (all of whom are considered independent students) were more likely to borrow and have higher student loan debt levels than their younger peers. Forty-four percent of graduates aged 23 and younger did not borrow at all, compared to 30% of those aged 24 or older. Forty percent of graduates aged 24 or older had more than \$30,000 in student debt, compared with 17% of graduates aged 23 or younger.

While it may seem counterintuitive, high-income households hold more student loan debt than low-income households. People from high-income households are more likely than those from low-income households to attend college, and more likely to attend more expensive institutions. They are also more likely to attend graduate school, where loan balances tend to be higher. According to the Survey of Consumer Finances (SCF), households in the top income quartile (income greater than \$97,000 per year) held 34% of outstanding student loan debt, compared to 12% held by households in the lowest income quartile (income less than \$27,000 per year).¹²

College graduates who ever received Pell Grants, typically indicating a family income of under \$40,000, borrowed at a higher rate and in greater amounts than their peers who never received Pell Grants. Specifically, 80% of bachelor's degree completers who had received a Pell Grant had student loans, compared with 43% of non-Pell Grant bachelor's degree completers. Pell Grant recipients with student loans borrowed nearly \$31,300 on average, compared with \$28,700 for all non-Pell Grant recipients with student loans.¹³

Regarding race, Black college graduates had more student loan debt than graduates from other racial and ethnic groups. While 39% of all 2019–20 bachelor's degree recipients had not taken out student loans, only 17% of Black bachelor's degree recipients did not take out student loans. In addition, while the average debt per bachelor's degree graduate who borrowed was \$30,400, the average debt per graduated Black borrower was nearly \$34,000.¹⁴ One study found that among bachelor's degree recipients, Black borrowers had \$7,400 more in student loan debt at graduation than white graduates. Four years later, Black borrowers had \$25,000 more in student loan debt than white borrowers.¹⁵ Of borrowers who began in 2003–04, the median student loan debt Black borrowers owed after 12 years was 113% of their original loan balance. No other racial group owed more than 83% of their original loan balance, and the overall median was 80%.¹⁶

¹² See [Baum et al. \(2019\)](#).

¹³ According to [NPSAS:20](#), Table ID: [mmcbyo](#)

¹⁴ According to [NPSAS:20](#), Table ID: [jvqrzy](#)

¹⁵ See [Scott-Clayton & Li \(2016\)](#).

¹⁶ See [Miller \(2017\)](#).

Graduate Student Loan Debt

Graduate students tend to borrow more than undergraduate students since current law allows graduate students to borrow up to the cost of attendance (minus other financial aid) for as long as they are in school. Given that graduate students are in school longer, they also are borrowing over longer periods of time. The average cumulative federal student loan amount borrowed for graduate education was \$84,750 (in 2021–22 dollars) for students who completed a graduate degree and who graduated in 2019–20, while the combined undergraduate and graduate loan amount borrowed for graduate degree recipients was \$96,730. Data shows that graduate students with high levels of debt are more likely to be pursuing professional degrees with high expected earnings.¹⁷ Grad PLUS Loans, first implemented in the Higher Education Reconciliation Act of 2005, have grown in terms of outstanding debt. They represented 3.6% of all outstanding federal student loan debt in 2014 and 6.5% in 2023.¹⁸

Factors Impacting Repayment & Default

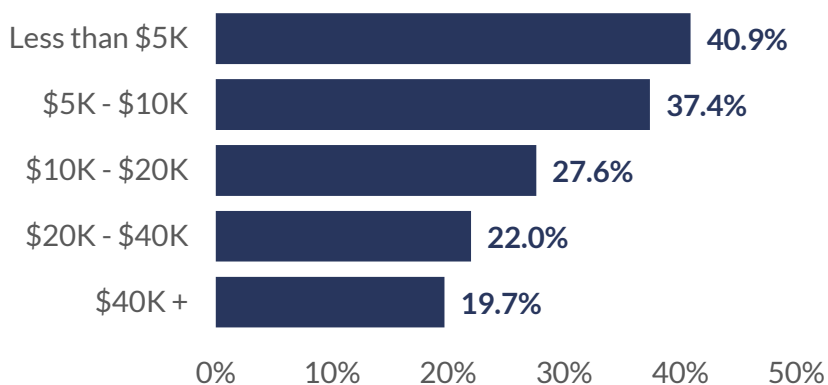
This section examines some of the factors that influence whether a borrower remains in repayment or enters default. These factors include the amount of the original loan balance and a student's completion status, income level, and institution attended.

High student loan debt is often falsely equated with a high likelihood of default. Counterintuitively, most borrowers who default on their federal student loans have relatively low balances. As Figure 6 shows, borrowers with lower amounts borrowed were much more likely to default on their loans, with 40.9% of borrowers who borrowed less than \$5,000 defaulting at least once 12 years after entering postsecondary education. Figure 7 shows that more than half of defaulters borrowed less than \$10,000, with 25.8% of defaulters borrowing less than \$5,000. Only 6.2% of defaulters borrowed more than \$40,000. Borrowers with low loan balances are more likely to have dropped out without completing a credential, leaving them with debt but without the means to a higher income.

¹⁷ [Digest of Education Statistics, 2022, Table 332.45.](#)

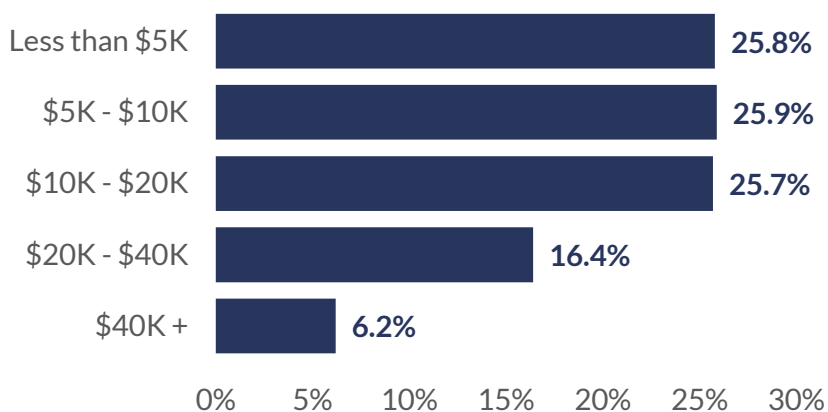
¹⁸ According to the [Federal Student Loan Portfolio \(2023\)](#), [Portfolio by Loan Type.](#)

Figure 6: Default Rate on Any Federal Loan 12-Years After Entering Postsecondary Education, by Cumulative Amount Borrowed



Source: Beginning Postsecondary Students Longitudinal Study (BPS) 2004/09 – 12-Year Follow-Up. Table ID: [gkvlrq](#).

Figure 7: Share of Defaulters 12-Years After Entering Postsecondary Education, by Cumulative Amount Borrowed



Source: Beginning Postsecondary Students Longitudinal Study (BPS) 2004/09 – 12-Year Follow-Up. Table ID: [bbaxeo](#).

Income is also a factor in default rates. In 2019, [Federal Reserve Bank of New York](#) researchers looked at the average income in the ZIP code where borrowers lived when they first originated their student loan and found that borrowers in the lowest-income ZIP codes were more likely to be delinquent and default on student loans than borrowers from areas with the highest average income, despite similar borrowing rates and debt loads.

A 2015 [study](#) showed a 30% default rate among non-traditional borrowers.¹⁹ In comparison, 13% of traditional undergraduate borrowers and 3% of traditional graduate borrowers defaulted. Analysis showed that the background of students, their labor market outcomes (e.g., attaining employment or higher wages), and the schools they attended explained between 50–66% of the increase in default rates from 2000 to 2011. The rest of the increase in default rates is not explained by observable factors in the data and may depend on the quality of education received, students’ satisfaction with their institutions, or students’ employment prospects or financial situations.

Historical trend data from 2009–10 through 2015–16 shows that loan repayment rates are consistently lower for borrowers who attended two-year public and for-profit institutions compared to other sectors. In FY 2015–16, repayment rates for two-year public and for-profit institutions were 37.8% and 30.8%, respectively, compared to 60% at both public four-year and non-profit institutions.²⁰

Following the end of the repayment pause put into place during the COVID-19 pandemic, there were several policymakers and higher education experts concerned about restarting the payment system, with particular worry about student loan servicers’ capacity to resume.²¹ These fears appear to be warranted, based on new survey data from the Federal Reserve Bank of Philadelphia’s Consumer Finance Institute. The researchers at the Federal Reserve surveyed 2000 student loan borrowers in November 2023 to ask them about their repayment actions and patterns after the pause ended on October 1, 2023. During October, 64.1% of borrowers reported paying their full amount owed, 21.2% reported paying a partial amount, while 14.7% of borrowers reported not paying any amount they owed for the month.²² When those borrowers who did not pay their full amount were asked why, 56.3% reported that they could not afford the resumption of payments, 18.1% reported that they were unable to contact their servicer, and 15% reported that their payment was not complete due to servicer error.²³

Perceptions of Student Loan Debt

With nearly 11% of student loan borrowers in default,²⁴ it is worth considering students’ perceptions of their debt. In 2014, [New America](#) commissioned a survey to examine students’ perceptions of financing a college education with loans and found that the borrowing levels that students deemed reasonable did not match their expected borrowing level. For example, students deemed \$10,000 as the median amount reasonable to borrow over four years of college. However, when students were asked how much they expected to borrow, the median amount was \$15,000 over four years.

¹⁹ This study used a unique data set that matched four million U.S. Department of Education student borrower records to de-identified tax records from the U.S. Department of Treasury. “Non-traditional borrower” refers to older, independent students who often enroll less than full time.

²⁰ College Board, [Trends in Student Aid \(2020\)](#), Figure SA-13B.

²¹ See this [news story](#) from July, 2023 about policymaker concerns with servicers.

²² See figure 3 in the Federal Reserve’s [report](#).

²³ See figure 6 in the Federal Reserve’s [report](#).

²⁴ As of December, 2023, 10.5% of Direct Loan borrowers were in default. In March 2020, the Department of Education moved all Direct Loan accounts into a temporary administrative forbearance, in which payments were suspended through August, 2023, and interest rates were set to 0%. Because borrowers were not required to make payments on their accounts, no new accounts defaulted while the administrative forbearance was in place.

This gap between reasonable and expected borrowing varied by age, race, and gender. For example, white students believed that a higher amount of student loan debt was reasonable (\$19,862 on average) than Black students (\$12,459) and Hispanic students (\$16,845). White students also expected to borrow more on average (\$27,450) compared to Black students (\$16,902) and Hispanic students (\$23,934). The survey also found that 55% of students were concerned that they would have difficulty repaying their student loans. Forty-seven percent of those who anticipated borrowing thought that their monthly payment would be \$250 or higher.

In contrast to this perception, the [Brookings Institution](#) found that in 2010, 50% of households paid less than \$160 per month in student loan payments and 75% of households devoted less than 7% of their monthly income to repaying student loan debt. The average monthly student loan payment was \$242, suggesting some outliers in the distribution paying considerably higher than most households. The typical household spent more per month on housing (\$1,407), transportation (\$750), and food (\$588) than on monthly student loan payments. Monthly spending on entertainment (\$217), apparel (\$145), and healthcare (\$296) track more closely to the typical household's average monthly student loan repayment. In fact, the median monthly loan payment did not change from 1992 to 2013, ranging from between 3% to 4% of monthly earnings.

It is also worth examining borrowers' understanding of their own debt. Surprisingly, [research](#) from the Brookings Institution has shown that first-year college students who took out federal student loans did not know how much they borrowed (even within months of signing the promissory note for their loans).²⁵ Only 24% of students reported their total amount borrowed within a 10% range of the correct amount. More than half (51%) thought they had less debt and the remaining 25% overestimated their borrowing. The same survey found that 42% of first-year students with federal loans reported not having any federal debt or student loan debt at all.

The Student Debt Crisis Debate

With \$1.6 trillion in outstanding student loans and minimal understanding of student loan debt by some borrowers, it has been suggested that the U.S. faces a student loan crisis, similar to the housing crisis that began in 2007. In "Game of Loans,"²⁶ economists Beth Akers and Matthew M. Chingos make the case that student loans are "too small of a market and too isolated from the private sector... to take down the U.S. economy."

Even if we are not facing a student loan crisis, some have observed that there are alarming trends in student loan borrowing and repayment that could impact the greater U.S. economy. A September 2016 Federal Reserve study found that:

"The trends in the student debt market we observed and the default rate patterns we have described paint a sobering picture of trends in higher education loans. If these outcomes do not improve substantially over the near future as the economy continues to recover, these may serve as a drag on the financial well-being of the nation."²⁷

²⁵ See [Akers, B. & Chingos, M. M. \(2014\)](#).

²⁶ See [Akers, B. & Chingos, M. M. \(2016\)](#).

²⁷ See [Chakrabarti et al. \(2016\)](#).

On the individual level, the return on an investment in college can vary by borrower. Akers and Chingos cite work from the Hamilton Project at Brookings that found average lifetime earnings by college major vary from \$800,000 to \$2 million. Additional research has shown that each additional [\\$10,000 in student loans](#) held by a borrower causes the borrower to “achieve the nation’s median net worth 26% slower than a college graduate without that debt.” Given the differences in student loan borrowing patterns across income levels and race, these findings indicate further negative impact on borrowers from certain backgrounds. In addition, the financial future and personal well-being of borrowers who experience a low return on their college investment may be significant. A paper on “[Debt and Subjective Well-being](#)” found that student loan debt had effects similar to income levels on financial worry and life satisfaction for college graduates who had been paying off their student loan debt for at least seven years.

Conclusion

Student loans are an integral and controversial part of the U.S. higher education system. They are key factors in helping students pay for college and also the subject of persistent criticism, both in terms of federal government expense and the debt burdens placed on borrowers. Student borrowing, debt, repayment, and default are not distributed equally in the population, but instead vary by institutional sector and borrower demographics. Since 1958, the federal government has played a major role in financing higher education through student loans, either through subsidizing private lenders or the Direct Loan program. With the current outstanding student loan debt amount at \$1.6 trillion, the impacts of debt on wealth gaps and economic success, and potential federal student loan forgiveness in the political air, student debt will continue to be a major policy discussion for the foreseeable future.

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