

RESEARCH REPORT

Federal Undergraduate Loan Limits and Inflation

What Borrowing Patterns and Evidence Reveal about Current Policy

Jason Delisle

Kristin Blagg

June 2022



ABOUT THE URBAN INSTITUTE

The Urban Institute is a nonprofit research organization that provides data and evidence to help advance upward mobility and equity. We are a trusted source for changemakers who seek to strengthen decisionmaking, create inclusive economic growth, and improve the well-being of families and communities. For more than 50 years, Urban has delivered facts that inspire solutions—and this remains our charge today.

Contents

Acknowledgments	IV
Executive Summary	V
Loan Limits and Inflation	1
Current Policy on Student Loan Limits	2
History of Undergraduate Loan Limits: 1990s to Present	3
Understanding How Institutions and Students Respond to Increased Loan Access	7
Statistics on Students Borrowing the Annual Maximum	9
Budget Cost of Raising Loan Limits	20
Policy Reforms	21
Conclusion	23
Appendix	25
Notes	29
References	31
About the Authors	34
Statement of Independence	35

Acknowledgments

This report was funded by the Bill & Melinda Gates Foundation. We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute’s funding principles is available at urban.org/fundingprinciples.

The authors wish to thank Sandy Baum, Bryan Cook, and Michele Streeter for their helpful feedback on earlier versions of this paper. We also thank Jason Cohn for checking our data analysis.

Executive Summary

Federal student loans to undergraduates are subject to annual limits that range from \$5,500 to \$12,500. Because the limits are not linked to inflation and lawmakers have not increased them since 2008, their real value today has declined by 22 percent. High consumer price inflation threatens to erode the value of the loan limits faster and could limit the program's success in increasing college access and completion. The declining value of the loan limits could also push some students toward the most costly and risky forms of debt to pay for rising expenses.

To help policymakers weigh the pros and cons of raising student loan limits, we look at data on the students who are currently constrained by borrowing limits and the evidence on how prior loan limit increases affected students and institutions. When students have access to higher loan limits, some tend to borrow more. In doing so, students may turn away from higher-interest forms of debt. Increased access to credit can improve student persistence and completion, echoing similar findings on the effects of grant aid. But the benefits of extending additional credit must be balanced against evidence on the burden that higher levels of student debt could have on borrowers, such as affecting career decisions and hindering wealth accumulation.

Discussions about raising loan limits are often dominated by concerns that higher limits may encourage price increases or contribute to unaffordable debt burdens, but data on undergraduate borrowing suggest that most students do not take full advantage of current loan limits. Only 20.3 percent of dependent students and 11.5 percent of independent students borrowed at the maximum in 2017–18.

Although inflation has eroded the purchasing power of loan limits, this trend has not yet coincided with more students reaching their annual loan limit. The share of all undergraduates borrowing the maximum has been roughly constant for well over a decade. But that trend occurred during a period of very low inflation and could soon change.

Certain students are more likely to borrow the maximum loan, and these students may be most affected by the declining purchasing power of the limits. Specifically, dependent students pursuing bachelor's degrees most often borrow at the limit, with 28.9 percent taking on the maximum annual loan. But the share of these students who borrow the maximum has not increased in more than a decade. Dependent Black students are more likely to borrow the maximum loan (31.8 percent) than are their white (21.8 percent) or Hispanic peers (13.1 percent). Although only a small share of

undergraduates borrow at the federal maximum, a larger group of these students may be constrained by loan limits as costs rise further.

Dependent students who borrow the maximum are most likely to turn to the federal Parent PLUS program and private loans for additional credit. Although the share of students taking on private and other nonfederal loans declined sharply in the 2010s, the share taking on Parent PLUS has risen in recent years, as has the average amount of a Parent PLUS Loan.

Policymakers have several options to increase undergraduate loan limits. One approach would simply restore the real, inflation-adjusted value of the 2007–08 loan limits. Policymakers could also link the loans to consumer price inflation so they automatically maintain their purchasing power, especially during times of high inflation. Policymakers have historically raised loan limits across the board and not differentiated between degree programs, but they could consider more limited increases for students most constrained by the current limits and most likely to take on more risky supplemental loans, such as dependent students pursuing bachelor’s degrees.

Loan Limits and Inflation

The federal government makes about \$37 billion in Stafford Loans to undergraduates annually (CBO 2021). The loans carry more favorable terms and benefits than what private lenders would offer, such as lower interest rates and access to income-driven repayment with loan forgiveness, and they have no credit checks or cosigner requirements. Since the early 1990s, the loans have been available to all students and families, regardless of income and financial situation.

Congress sets the annual and aggregate amounts that undergraduates can borrow in Stafford Loans on an ad hoc basis. There is no routine process or formula for updating these limits, and they do not increase automatically with inflation. Lawmakers have increased the annual and aggregate undergraduate limits for Stafford Loans infrequently. The most recent increase was in 2008, which was the first across-the-board increase since the early 1990s. Lawmakers enacted a more limited increase in annual limits for first-year and second-year students in 2006.

The current annual Stafford limits for undergraduates range from \$5,500 to \$12,500 per academic year, depending on which year of education the student is in and whether they are a dependent of their parents or are an independent student. (Throughout this report, we refer to the overall loan limits for Stafford Loans, though within this overall limit, students may borrow unsubsidized or subsidized Stafford Loans, depending on their income, assets, or cost of attendance.)

The purchasing power of Stafford Loans declines over time because of inflation unless lawmakers raise borrowing limits. Declining purchasing power could erode the loans' effectiveness to increase access to higher education and may push some students to take on more costly and risky forms of debt, such as private loans or credit card debt, to pay for college expenses. These issues are salient now, as consumer price inflation recently reached a 40-year high, raising the cost of attending college. Students are already incurring higher living expenses while enrolled because of inflation, and inflation may feed through to higher tuition prices if institutions incur higher expenses that they must pass on to students.

Some organizations have pushed for an increase in federal loan limits for undergraduates. The National Association of Student Financial Aid Administrators (NASFAA) released a brief citing the need for increasing and simplifying federal student loan limits, especially at schools where default rates are low (NASFAA 2017). The brief argues that the loan limits "have not kept pace with the cost of college...forcing [students] to work more or to borrow private loans that lack the consumer protections of federal loans" (NASFAA 2017, 2). Similarly, the Higher Education Loan Coalition, an association of

financial aid administrators, argues that “current limits for undergraduates have lost purchasing power at many higher education institutions” (HELC 2016).

The PROSPER Act, a proposed reauthorization of the Higher Education Act advanced by the Republican majority of the House Committee on Education and the Workforce in 2017, would have increased annual loan limits for undergraduates by \$2,000 while imposing limits on total graduate and Parent PLUS debt. (The full House did not take up the bill.) To our knowledge, no lawmaker has introduced a bill to raise loan limits in the current Congress.

Current Policy on Student Loan Limits

The limits on Stafford Loans for undergraduates vary depending on borrowers’ circumstances. The most important distinction is that dependent students—typically those younger than 24—are subject to substantially lower limits than independent students (table 1).¹ The rationale for this policy is that independent students have fewer financial resources to pay for college than dependent students whose parents could help cover the costs (Smole 2013).

TABLE 1

Current Undergraduate Borrowing Limits for Federal Student Loans

	Dependent student	Independent student
First year	\$5,500	\$9,500
Second year	\$6,500	\$10,500
Third year or later	\$7,500	\$12,500
Aggregate	\$31,000	\$57,500

Source: “Subsidized and Unsubsidized Loans,” US Department of Education, Office of Federal Student Aid, accessed June 7, 2022, <https://studentaid.gov/understand-aid/types/loans/subsidized-unsubsidized>.

Under the current loan limit policy, dependent and independent students may borrow incrementally more for subsequent years of education. The first-year loan limits are the lowest and increase in the second and third years. The rationale for this policy is to minimize the risk of taking on too much debt when students first enroll in college and to allow students who are close to completing a bachelor’s degree to borrow more under the logic that they will be most able to afford those higher debts.

Dependent and independent students are also subject to aggregate borrowing limits: \$31,000 and \$57,500, respectively. Under the aggregate limits, a dependent student could borrow at the annual maximum for over four full-time years but could borrow only \$4,000 in their fifth year. For independent

students, the aggregate loan limit aligns exactly with borrowing at the limit for five years of enrollment with standard grade level progression.

Annual and aggregate loan limits do not vary by attendance intensity (except students must enroll at least half time to borrow) or by institution type. For example, limits are the same for a part-time student enrolled at a community college pursuing an associate's degree and a student attending a private college pursuing a bachelor's degree full time. The one exception is that loan limits are prorated for programs that are shorter than an academic year or when the remaining period of study is less than a year. There is no differentiation for low-price and high-price institutions except that a student cannot borrow more than the total cost of attendance net of any other financial aid. Colleges typically include the full federal loan amount in a student's financial aid offer letter, but the student can borrow less. Institutions may not, however, prevent students from borrowing the maximum so long as it does not exceed the student's cost of attendance, less grant aid.²

Though dependent undergraduates are subject to loan limits, their parents may also borrow federal Parent PLUS Loans if they meet certain creditworthiness criteria (FSA 2015). These loans are not subject to limits in statute like Stafford Loans, and parents can borrow them for the full cost of attendance set by the institution, less any grant aid. The loans carry higher fees and interest rates than Stafford Loans and are eligible for the most limited version of income-driven repayment (with payments at 20 percent of discretionary income).³ If a parent is denied a PLUS Loan by failing the creditworthiness check, the student may borrow at the higher independent student loan limits.

Undergraduate Loan Limits from the 1990s to the Present

Since the early 1990s, lawmakers have increased annual limits on Stafford Loans only twice, and they have increased aggregate loan limits only once. (Appendix table A.1 shows the loan limits in actual dollars the first year the limits took effect.) We limit our analysis to the period from the 1990s to the present, because income eligibility rules before the 1990s make the program less comparable with the system in place since.

The loan limits Congress put in place for the 1993–94 academic year remained unchanged until 2006, when lawmakers raised borrowing limits for only first-year and second-year students (both dependent and independent students). The impetus to raise loan limits came largely from the White

House. The George W. Bush administration proposed a loan limit increase in 2004 and again in 2005 in its budget request to Congress, stating that,

Limits on student borrowing have remained essentially unchanged since the mid-1970s, even as college costs have more than tripled. To help students meet rising college costs, the Administration is proposing to increase annual subsidized loan limits to \$3,500 for first-year students, \$4,500 for second-year students.⁴

Congress enacted those exact terms in early 2006, which raised the loan limits by \$875 for first-year students and \$1,000 for second-year students.⁵ The increase took effect in the 2007–08 academic year and applied to both dependent and independent student loan limits. Lawmakers did not, however, increase the aggregate loan limit, even though the administration had requested such a change.

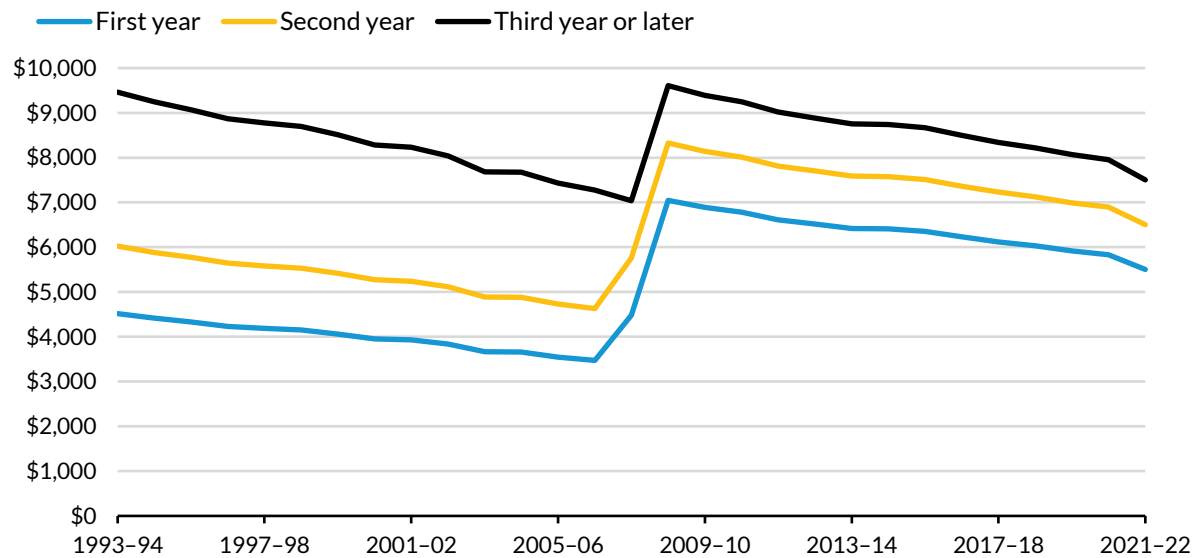
Two years later, lawmakers raised loan limits more broadly. Lawmakers worried that the banking and financial crisis unfolding in 2008 would prevent students from securing private student loans, which had become a major source of college financing (Smole 2009). The Ensuring Continued Access to Student Loans Act of 2008 raised borrowing limits by \$2,000 per year for dependent and independent students, and raised aggregate loan limits.⁶ That was the last time lawmakers increased loan limits.

Inflation Erodes Loan Limits

Because lawmakers have increased the limits infrequently, the inflation-adjusted value of the limits for undergraduates has declined. We use a consumer price index (the Personal Consumption Expenditures Price Index) to measure the inflation-adjusted value of figures in this analysis.⁷ In real dollars, the peak for most undergraduate loans was the 2008–09 academic year with the last round of loan limit increases. Adjusting for inflation, loan limits have lost 22 percent of their value from 2008–09 to 2021–22. Most of the limits, however, remain above the low reached in 2006–07 in inflation-adjusted terms (figure 1). For example, limits for first-year and second-year dependent students have lost more than \$1,500 in real dollar value since the last increase in 2008, but they are still roughly \$1,900 above their 2006–07 low. Current inflation rates threaten to bring the purchasing power of the loan limits back to these lows in just a few years if lawmakers do not approve an increase.

FIGURE 1A

Annual Federal Student Loan Limits for Dependent Students, in 2022 Dollars

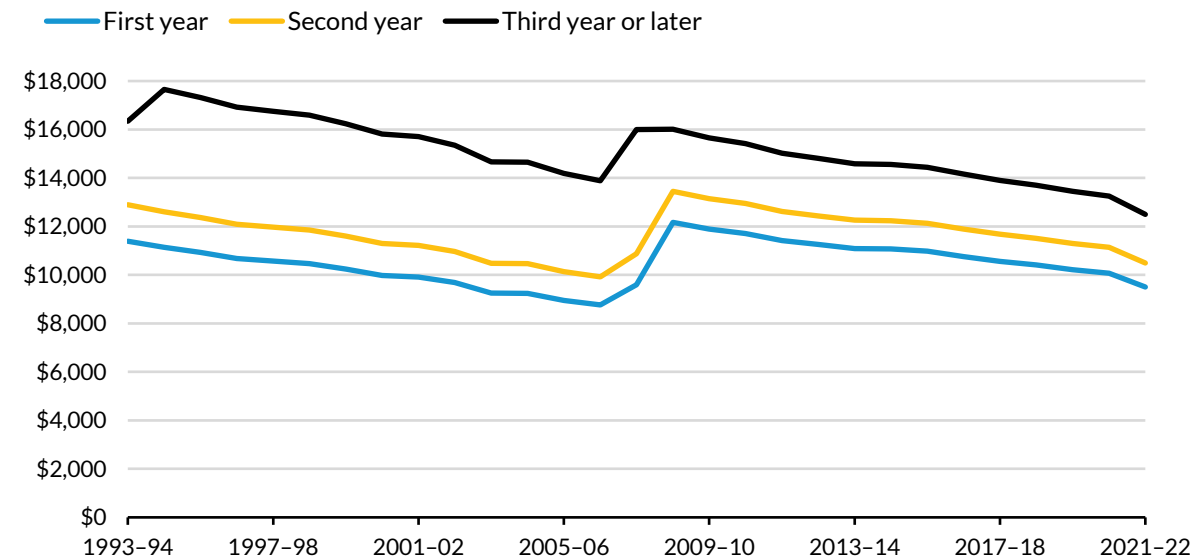


URBAN INSTITUTE

Source: Urban Institute analysis of student loan limits.

FIGURE 1B

Annual Federal Student Loan Limits for Independent Students, in 2022 Dollars



URBAN INSTITUTE

Source: Urban Institute analysis of student loan limits.

Notably, the period following the last increases in loan limits was a period of very low inflation, with the real value of the loans declining by about 2 percent or less a year. With inflation now running much

higher (more than 6 percent annually in early 2022), the loan limits' values are set to erode faster.⁸ To put this in perspective, at current inflation rates, the loan limits will lose as much purchasing power in one year as they did in about four years during the 2010s.

Of course, college prices have increased faster than consumer price inflation, which further erodes federal loans' purchasing power under these limits. The average cost of attendance (after factoring in grant aid) for a student pursuing a bachelor's degree full time has more than doubled since the mid-1990s, from about \$9,000 in 1995–96 to about \$22,000 in 2017–18, after adjusting for inflation.⁹

Measuring loan limits relative to unmet need (expenses not covered out of pocket or with grant aid) offers a more accurate assessment of their purchasing power. If families can pay the rising prices out of pocket with income, savings, and grant aid, then the declining value of the loan limits is less of a concern. But if the cost of attendance rises faster than the nonloan resources families can put toward those costs, then the declining value of the loan limits represents a more significant constraint on their ability to finance the education.

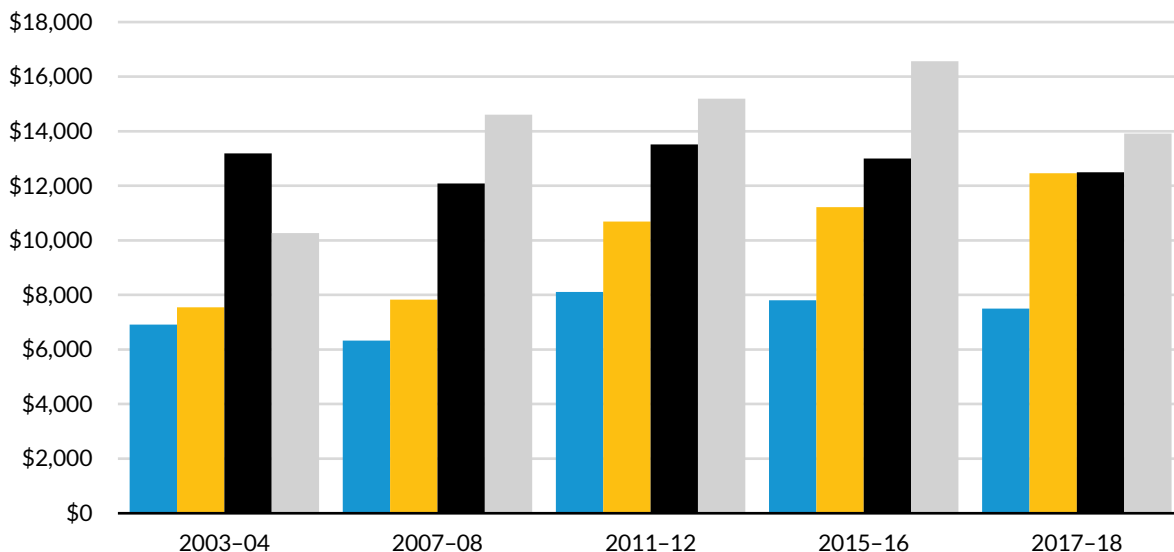
Figure 2 shows average unmet need for those enrolled full time in a bachelor's degree program. Unmet need is the remaining cost of attendance after subtracting all grant aid and the student or family's financial resources as measured by the federal expected family contribution formula. Figure 2 also shows the highest loan limits (third year or later) for each corresponding year. All values are adjusted for inflation.

In 2003–04, student loan limits roughly matched average unmet need for full-time dependent bachelor's degree students and exceeded unmet need for similar independent students. Over time, student loan limits have not kept pace with the typical unmet need, especially for dependent students. In 2017–18, the average full-time dependent bachelor's degree student had more than \$12,000 in unmet need but would have access to only \$7,500 in federal loans in their third year.¹⁰ Students and their families would likely have to cover this amount with earnings from part-time work or with other forms of credit.

FIGURE 2

Annual Federal Student Loan Limits and Average Cost of Attendance Net of Grants and EFC for Bachelor’s Degree Students, in 2018 Dollars

- Loan limit for the third year or later (dependent students)
- Average cost of attendance net of grant aid and EFC (dependent students)
- Loan limit for the third year or later (independent students)
- Average cost of attendance net of grant aid and EFC (independent students)



URBAN INSTITUTE

Source: Urban Institute analysis using National Postsecondary Student Aid Study data from 2003-04 through 2015-16 (PowerStats [table vukgnj](#)) and 2017-18 (PowerStats [table cqkqgs](#)).

Notes: EFC = expected family contribution. Cost of attendance averages are for full-time students only and exclude international students studying in the US. Numbers are inflated to 2018 dollars using the Personal Consumption Expenditures Price Index. Data include only Stafford Loans.

Understanding How Institutions and Students Respond to Increased Loan Access

Increases in Stafford Loan limits could affect the behavior of both students and institutions. Students may borrow more when loan limits increase, which could allow for more time to study and lower the likelihood of relying on more expensive forms of debt but could also increase overall loan burden, affecting postcollege decisions. Further, some argue that institutions may raise their prices to capture the additional federal aid students have access to. A review of the literature on the effects of raising loan limits shows that students who have access to additional federal loans are more likely to borrow

more and tend to have better academic and postcollege earnings outcomes. Of course, the benefit of these increases must be weighed against the increased debt students will need to repay.

Research indicates that undergraduates borrow more in federal loans after loan limits are increased (Black et al. 2020; Denning and Jones 2019). In borrowing more federal loans, students may turn away from other options with less favorable terms, such as private loans and Parent PLUS Loans (Goenner and Tan 2015; Lee et al. 2020).

Recent evidence on the impact of student loan increases on in-school outcomes is generally positive. Students who borrowed more because of increases in the federal loan limit had increased educational attainment and higher earnings (Black et al. 2020). Students with access to higher borrowing limits are more likely to graduate earlier than those without higher limits (Denning 2018). More broadly, increases in student borrowing appear to increase grade point averages and transfers from community colleges to four-year colleges (Marx and Turner 2018).

Research on loan limits also looks at the impact of decreasing or eliminating student borrowing. Reducing access to federal student loans reduces course taking (Wiederspan 2016), lowers academic performance, and increases the probability of student loan default (Barr, Bird, and Castleman 2019). And students who are credit constrained may be more likely to leave school (Stinebrickner and Stinebrickner 2008). But small (less than 5 percent) reductions in borrowing—induced by presenting a default “decline loans” option—did not affect students’ academic outcomes at a four-year public university (Kramer, Lamb, and Page 2021).

Changes in loan limits induce other changes in student behavior. Students with access to higher loan limits are more likely to live away from their parents (Neill 2008) and have higher homeownership and family formation rates (Goodman, Isen, and Yannelis 2021).

Increases in access to federal student loan credit may improve program completion rates, but increases could also produce harm. Student loans may facilitate enrollment and persistence in college, but grants and other aid could play the same role without burdening students with additional dollars to repay.¹¹ Some independent undergraduate students may acquire large amounts of debt, and repayment rates, particularly among high-debt borrowers, are slowing (Looney and Yannelis 2019). Some evidence suggests that taking student loans is associated with a decrease in persistence in community college (McKinney and Burrige 2015) and that higher student debt is associated with lower completion rates for low-income and Black students (Kim 2007). Students who have loan debt may be less likely to enter lower-paid “public interest” careers (Rothstein and Rouse 2011). And student debt can reduce wealth-

building capacity (Zhan, Xiang, and Elliott 2016) and exacerbate the racial wealth gap (Addo, Houle, and Simon 2016).

Students are not the only actors who may change their behavior when given access to higher federal loan limits. The oft-cited Bennett Hypothesis posits that institutions will increase tuition when the amount of financial aid that students have access to increases.

Evidence for a Bennett-like response to increases in student loan limits is limited. Whether institutions will raise their prices in response to increased loan limits seems dependent on such factors as institutional sector and the size of the loan limit increase. When limits were raised in 2007–08, colleges did not increase their prices at a rate different than in prior years.¹² And when limits on Grad PLUS Loans were substantially increased in 2006, there was only a modest increase in law school tuition rates (Kelchen 2019). Lucca, Nadauld, and Shen (2015) find evidence that part of the increase in subsidized loan limits gets passed through to institutions via the sticker price. Using a quantitative model, Gordon and Hedlund (2016) find that changes to the federal student loan program could account for a substantial share of the tuition increase. And for-profit institutions that have students who access Title IV grant and loan aid have higher tuitions than similar institutions that do not access this aid (Cellini and Goldin 2012).

Statistics on Students Borrowing the Annual Maximum

The question of increasing federal student loan limits hinges in part on the extent to which students currently borrow up to the limit. If very few students borrow the maximum, changes to the limit are unlikely to substantially change overall borrower behavior, and the declining purchasing power may have only a limited effect on constraining college access. In contrast, if a large share of students borrow all they are eligible for, the declining purchasing power of the loans may be affecting access, and increasing the limit will affect aggregate borrower behavior. We must also understand which students borrow at the federal limit to gauge who might take advantage of increased loan limits. And knowing the extent to which students and their families access other forms of credit (e.g., private loans or Parent PLUS Loans) after reaching the loan limits can inform how much students might benefit from a loan limit increase if they substituted high-cost loans for more favorable Stafford Loans.

How Many Students Borrow the Maximum?

If federal loan limits were a constraint, we would expect that the share of borrowers taking the maximum would increase over time from the enactment of the loan limit increase, as purchasing power declines. To examine this, we look at the share of undergraduates who take out the maximum loans they are eligible for in a given year.

Data from the National Postsecondary Student Aid Study, a representative sample of the undergraduate population, show that a small share of undergraduate students borrowed the maximum Stafford Loan they were eligible for: 16.4 percent in 2017–18, with another 23.6 percent taking out a loan but borrowing less than the maximum (appendix figure A.3). Though most college students do not borrow, 41 percent of those who do use federal loans borrow at their individual limit in a given year. The overall share of students borrowing the maximum has been roughly flat since the mid-2000s.¹³

Breaking the data out by students' dependency status shows similar patterns across time, but the likelihood of borrowing, and borrowing at the maximum, varied by dependency status. Twenty percent of dependent undergraduates across all types of programs (certificates, associate's degrees, and bachelor's degrees) borrowed the maximum annual Stafford Loan in 2017–18 (figure 3).¹⁴ Another 21.1 percent of dependent students borrowed a Stafford Loan but less than the maximum, meaning about half of dependent students who take out a Stafford Loan borrow the maximum.

The share of dependent students borrowing the maximum loan amount peaked around 2003–04 at 25.5 percent of students (before limits were raised in 2007 and 2008) but has slowly fallen since then. The share of dependent undergraduate students borrowing any Stafford Loans increased until around 2011–12 but has also leveled off in recent years.¹⁵ These patterns are similar for each degree type (certificates, associate's degrees, and bachelor's degrees).

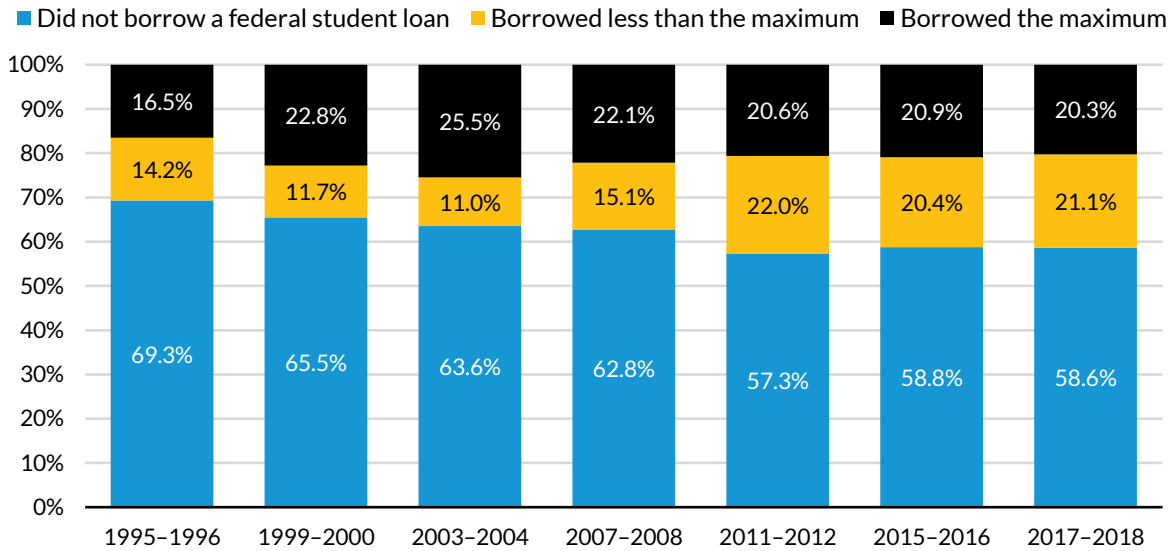
Independent students are only slightly less likely than dependent students to take on a Stafford Loan of any amount, but when they do borrow, they are less likely than their dependent peers to take out the maximum. Only 11.5 percent of independent students borrowed the maximum, with another 26.9 percent taking out a Stafford Loan but less than the maximum. That means only about one-third of independent students who borrow do so at the maximum. Although the higher loan limit surely contributes to this pattern, independent students also attend lower-cost institutions (e.g., public community colleges) at higher rates, and they more often work while attending part time, all of which may reduce their need for student loans.

Similar to dependent students, the share of independent students borrowing the maximum has been flat since 2007–08, ranging from 9.4 to 11.5 percent of students. Also like dependent students, the share of independent students borrowing any federal loans increased up until 2011–12. These patterns hold for each degree type.¹⁶

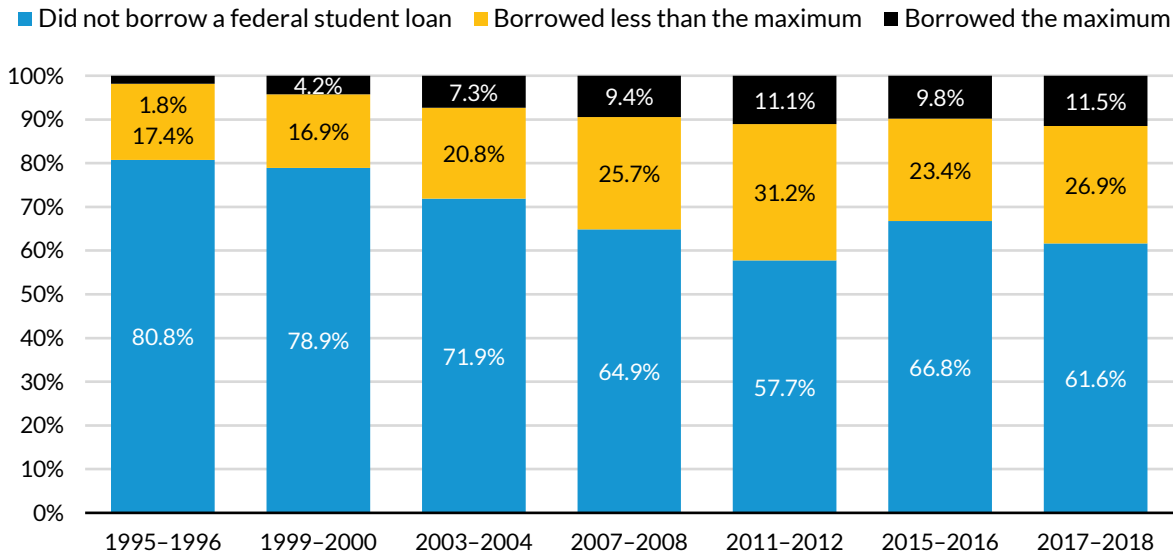
FIGURE 3

Share of Undergraduate Students Borrowing Federal Student Loans

Dependent students



Independent students



URBAN INSTITUTE

Source: Urban Institute analysis using National Postsecondary Student Aid Study data from 1995-96 through 2015-16 (PowerStats table ffbzua) and 2017-18 (PowerStats table evssqk).

Note: The data exclude international students attending school in the US, include students who are ineligible for federal student loans because they are attending less than half time, and include only Stafford Loans.

Aside from changes in student loan limits, changes in student demographics—particularly, financial need—may also explain some of why the share of borrowers using the maximum varies across time.

Changes in students' overall financial circumstances, or other factors, could conceal the effects of the loan limit constraint.

Who Borrows the Maximum?

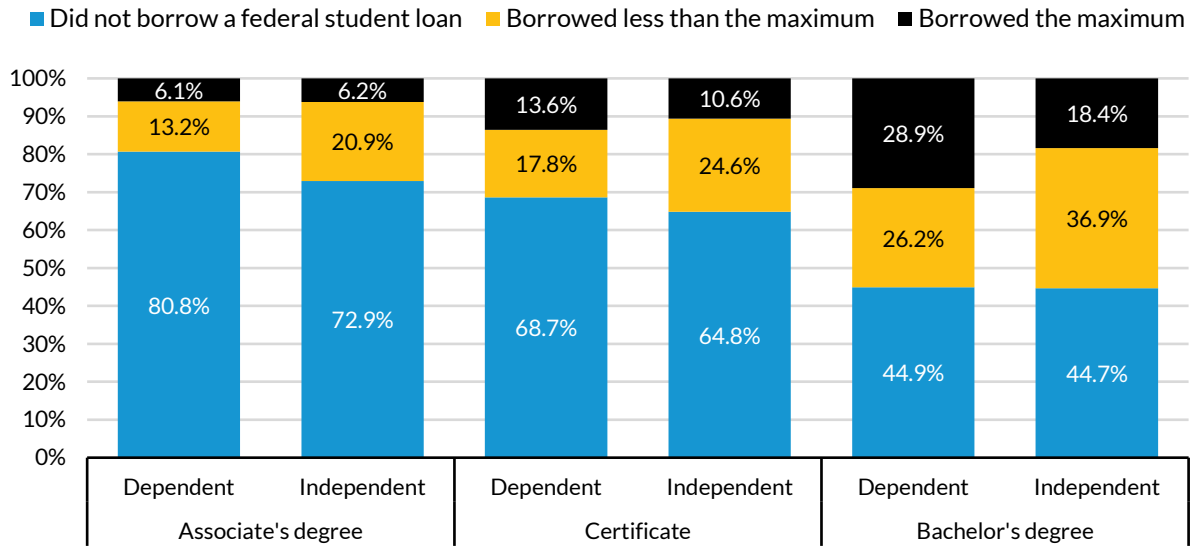
So far, we have examined borrowing patterns among all undergraduates, which can obscure major differences in borrowing patterns based on the types of degrees students pursue. Looking closer at degree programs, we find that loan limits mostly affect students pursuing bachelor's degrees, while most students pursuing certificates and associate's degrees never reach the borrowing limit.

Among students pursuing bachelor's degrees, 28.9 percent of dependent students and 18.4 percent of independent students borrowed the maximum (figure 4).¹⁷ Among dependent students in bachelor's degree programs who took out a federal loan, 52 percent took the maximum they were eligible for. No other group has such a large share of borrowers using their full eligibility. Students pursuing associate's degrees are least likely to borrow the maximum, with just 6 percent of both dependent and independent students borrowing the maximum in 2017–18.¹⁸

These patterns reflect the fact that prices tend to be highest for bachelor's degrees and lowest for associate's degrees, which are largely offered at public two-year institutions. Moreover, the relatively low prices at public two-year institutions (\$12,461 average full-time cost of attendance for an associate's degree), when offset by state and federal grant aid, can prevent students from qualifying for the maximum annual loan.¹⁹ The costs students must pay after grants are applied are less than the annual loan limit, and students cannot borrow more than the cost of attendance after grant aid is applied.

FIGURE 4

Share of Students Borrowing Federal Student Loans, by Degree Program and Dependency Status in 2017–18



URBAN INSTITUTE

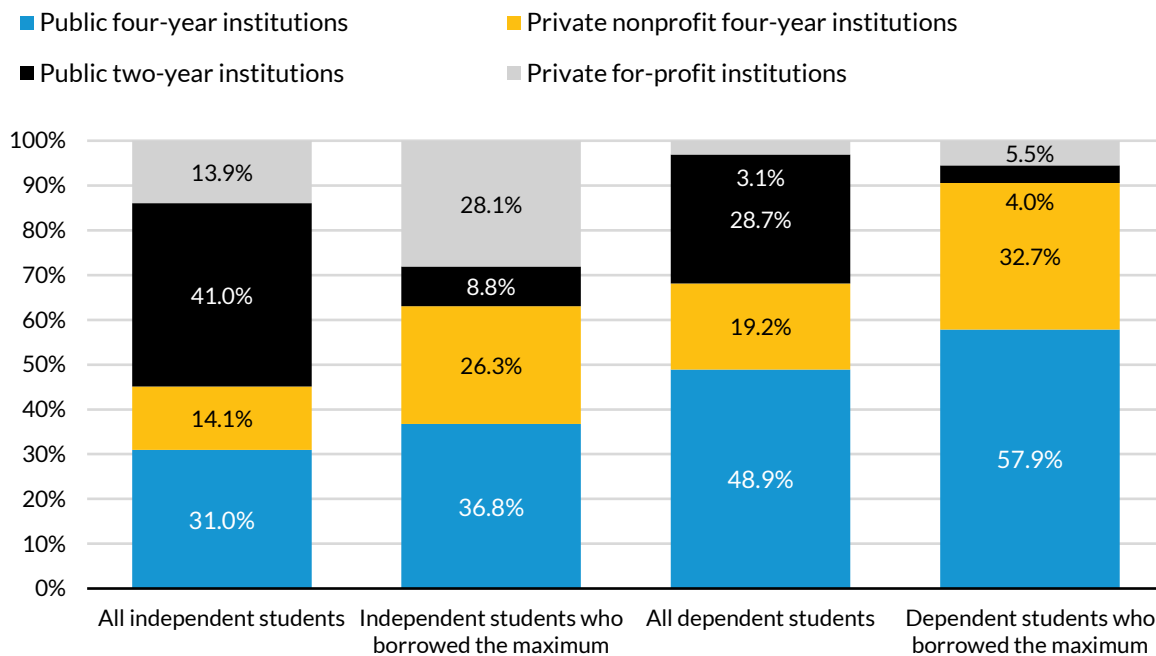
Source: Urban Institute analysis using National Postsecondary Student Aid Study data (PowerStats table infpjy).

Note: The data exclude international students attending school in the US, include students who are ineligible for federal student loans because they are attending less than half time, and include only Stafford Loans.

The distribution of students who borrow the maximum across higher education sectors offers an additional perspective. A small share of students who borrow the maximum are enrolled in public two-year institutions, which aligns with the earlier point that a small share of students who are pursuing associate's degrees borrow the maximum. Students who borrow the maximum are concentrated at public and private nonprofit four-year institutions, particularly among dependent students (figure 5). Independent students are more evenly disbursed among the sectors, with the exception of public two-year institutions. Notably, independent students who borrow the maximum are more likely to attend a private for-profit institution than are dependent students.

FIGURE 5

Distribution of Students Borrowing the Maximum Federal Loan, by Sector in 2017–18



URBAN INSTITUTE

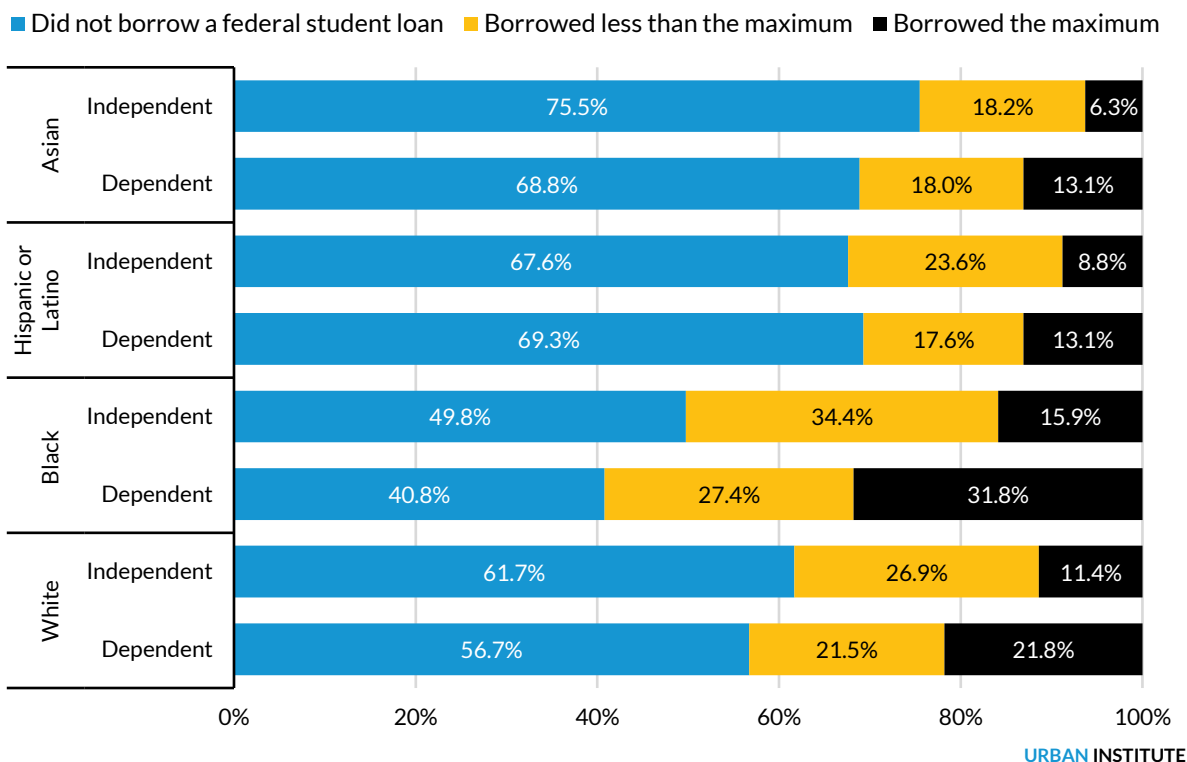
Source: Urban Institute analysis using National Postsecondary Student Aid Study data from 2017–18 (PowerStats table ttwrl).

Note: The data exclude international students attending school in the US, include students who are ineligible for federal student loans because they are attending less than half time, and include only Stafford Loans.

In line with other analyses that find disproportionate levels of student loan debt for Black borrowers, we find that Black students have the highest incidence of maximum borrowing. Among dependent Black students, 31.8 percent borrowed the limit in 2017–18, and 15.9 percent of independent Black students had a maximum Stafford Loan.²⁰ The next-highest group is dependent white students (21.8 percent). Hispanic and Asian students are less likely than white students to borrow the maximum loan (figure 6).

FIGURE 6

Share of Students Borrowing Federal Student Loans, by Race or Ethnicity



Source: Urban Institute analysis using National Postsecondary Student Aid Study data (PowerStats table veizif).

Note: The data exclude international students attending school in the US and include students who are ineligible for federal student loans because they are attending less than half time.

Low-Income Students and Maximum Loan Borrowing

Students use loans when family contributions and grant aid cannot meet their full need. It seems possible, therefore, that students who are most constrained by loan limits may be more likely to be low income. But this not the case.

Among dependent students, those from families with incomes below \$30,000 (in 2015–16 dollars) were slightly less likely to borrow the maximum federal student loan than other dependent students. About 18 percent of dependent students from low-income families borrowed the maximum, while about 22 percent of all other dependent students borrowed the maximum (appendix figure A.1A).²¹ The difference, however, is largely a reflection of low-income students pursuing credentials and institutions with lower prices. When we look at dependent students pursuing bachelor’s degrees, we find that students from low-income families are about as likely to borrow the maximum loan as students from families with incomes above that amount (appendix figure A.1B).²²

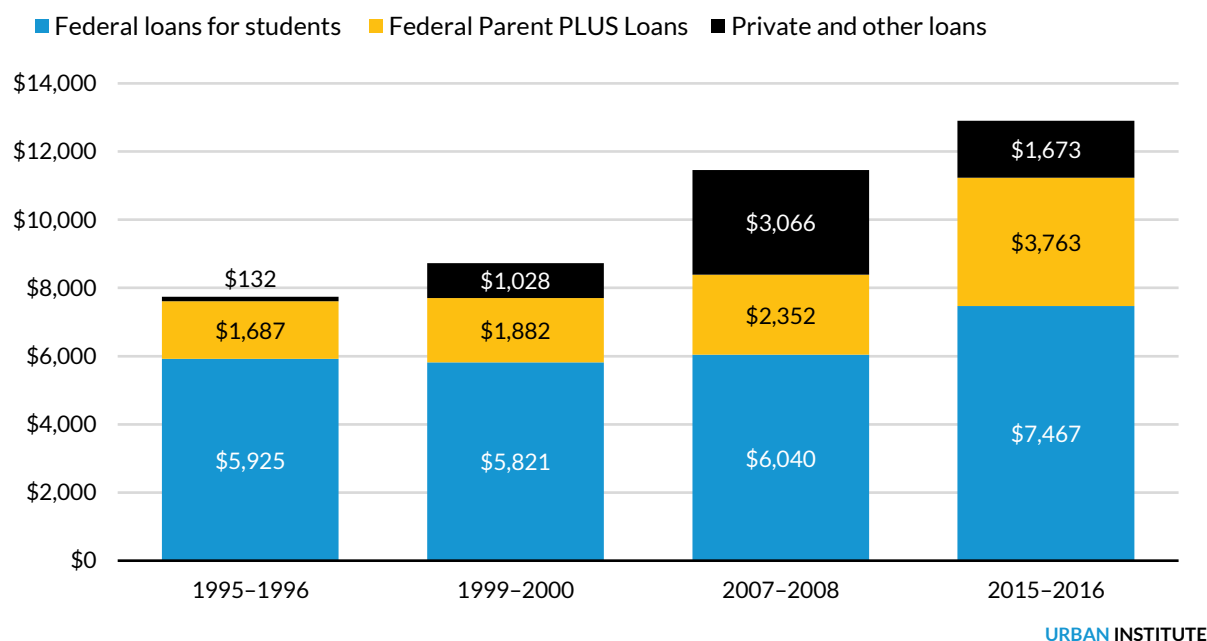
Additional Sources of Debt

Part of the rationale for loan limits is to help ensure students do not take on unmanageable debt. But borrowers may have access to other forms of debt, including the federal Parent PLUS Loans and private student loans. These programs do not provide the same safety net as Stafford Loans and are typically offered at higher interest rates. If students are increasingly using these options in addition to their maximum Stafford eligibility, it could be an indication that the loan limits are set below what is optimal for increasing college access and affordability.²³ Students (and their families) may also be taking Parent PLUS Loans because these loans are packaged by their institution (Baum, Blagg, and Fishman 2019) or may be using private loans to cover costs they could not afford otherwise.

Among dependent students who borrowed the maximum, we find that the average additional debt these students took on increased sharply from 1995–96 to 2007–08, and remained at that level—about \$5,400 in 2015–16 dollars—even after federal loan limit increases were implemented (figure 7). The sources of additional debt have fluctuated over time. Generally, Parent PLUS Loans have been the dominant source of additional debt among students who borrow the maximum Stafford Loan. In 2007–08, private and other loans briefly eclipsed Parent PLUS Loans in the average balances among this group. Average private and other loan balances declined sharply by 2015–16 and were fully replaced by an increase in average Parent PLUS Loan balances among this group of borrowers.

FIGURE 7

Average Additional Debt, by Source, for Dependent Students Who Borrowed the Annual Maximum Federal Student Loan, in 2016 dollars



Source: Urban Institute analysis using National Postsecondary Student Aid Study data from 1995-96 (PowerStats table zokjgs), 1999-2000 (PowerStats table zqlyua), 2007-08 (PowerStats table qatpcf), and 2015-16 (PowerStats table roscnn).

Note: Averages include \$0 amounts for Parent PLUS and private and other loans.

Among students who borrow the maximum Stafford Loan, the share who took on Parent PLUS Loans held steady at about 19 percent between 1995-96 and 2007-08, but that figure increased to 25.5 percent by 2015-16. The share who took on other forms of nonfederal debt, such as private loans, reached a peak of 35.5 percent in 2007-08 and then declined sharply to 16.7 percent in 2015-16 (appendix figure A.2).

Total Loan Disbursements

Much of our analysis so far has examined data on students who borrow at the maximum federal loan limit and how they may use other sources of credit to fully finance their education. Another way to understand loan limits is to look at data on the total annual volume of federal student loans.

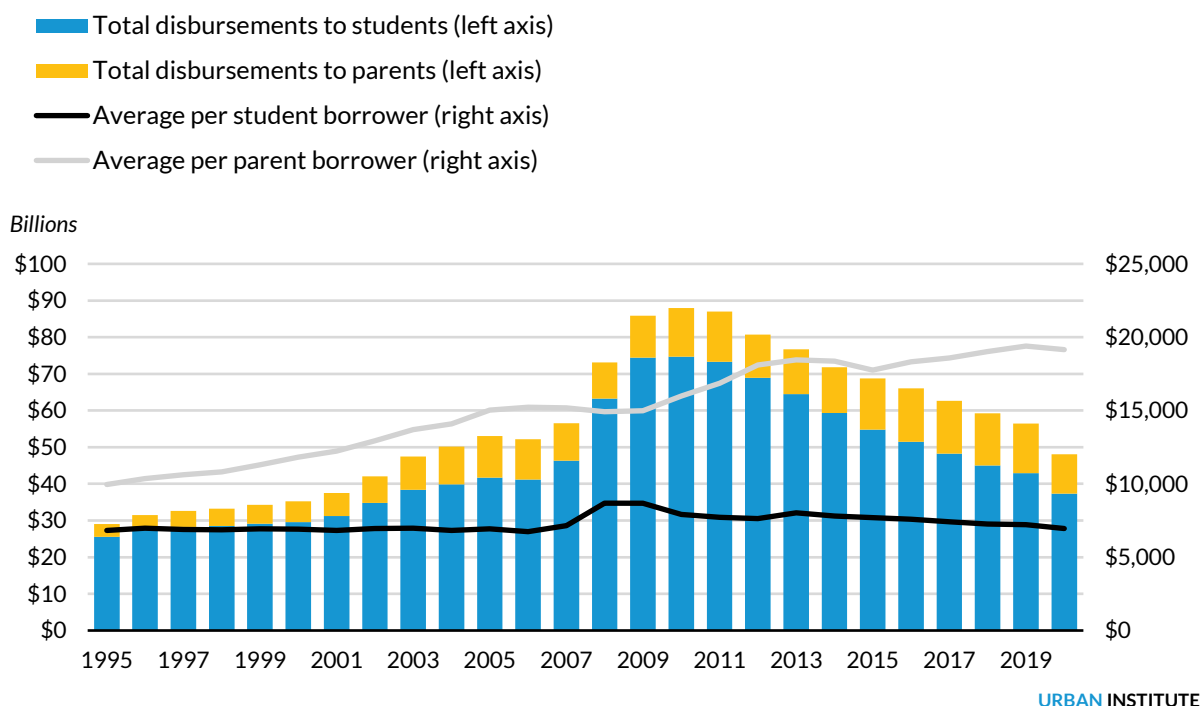
Policymakers may want to know whether past loan increases have been accompanied by rising loan volume, which would suggest the policy could have broad effects on the higher education system. Loan volume data also show the average loan per borrower that the government makes and how that has changed.

The average loan disbursement per undergraduate borrower clearly increased in 2007 and 2008 in line with the loan limit increases enacted at that point (figure 8).²⁴ Disbursements per borrower averaged about \$6,800 from 1995–96 to 2006–07 and then jumped about \$2,000 in 2008–09, after adjusting for inflation. But since then, average per borrower disbursements have trended down and are now about what they were before the increase in loan limits in 2006 and 2007. As with our other data, it is difficult to untangle whether this increase was caused by loan limit changes or changes in the underlying borrowers. Though the increase in loan limits could have contributed to the increase in total disbursements, a large influx of independent students—who can borrow more than dependent students—enrolling in postsecondary education during the Great Recession was likely also a major factor.

Although average per borrower Stafford Loan disbursements have been relatively flat, in real dollars over time, Parent PLUS disbursements follow a different pattern. Average disbursements have trended steadily higher, reaching nearly \$20,000 per Parent PLUS borrower in recent years, about double the average disbursement in the 1990s. Only about 9 percent of dependent undergraduates (and their families) use Parent PLUS Loans.²⁵

FIGURE 8

Total Disbursements for Federal Student Loans to Undergraduates and Average Annual Per Borrower Disbursement, in 2022 Dollars



URBAN INSTITUTE

Source: Jennifer Ma and Matea Pender, *Trends in College Pricing and Student Aid 2021* (New York: College Board, 2021).

Note: Years indicate fall semesters (e.g., 1995 is the 1995–96 academic year). The authors adjusted the data to align with the inflation adjustments used throughout this report. Data for the 2020–21 school year are preliminary data.

Budget Cost of Raising Loan Limits

Policymakers will want to consider the budgetary costs that would result from an increase in loan limits. Estimates provided by the Congressional Budget Office (CBO) for past increases in loan limits provide a general sense of how much such changes cost.

Draft legislation to reauthorize the Higher Education Act that was passed at the committee level in the House (but not enacted) in 2017 included a \$2,000 increase in all undergraduate loan limits.²⁶ CBO estimated that the \$2,000 would increase the total dollars issued in undergraduate loans by about 19 percent and reduce Parent PLUS Loan volume by about 3 percent. CBO estimated the cost of the increased loan limits to be about \$100 million annually.²⁷ CBO estimated that the loan limit increase enacted in 2008 would cost about \$24 million annually, but the loan program has changed considerably since then, making the two estimates difficult to compare (Kalcevic and Humphrey 2008).

Both estimates show that the cost of raising loan limits on unsubsidized Stafford Loans is low relative to the \$31 billion in loans made annually (CBO 2021). And the cost of increasing loan limits would be even lower than these estimates if lawmakers restricted any increase in loan limits to certain borrowers, such as those in later years of their education, dependent students, or those pursuing bachelor's degrees, because there would be less of an increase in overall loan volume.

Importantly, the estimates cited here are lower than under an alternative accounting approach (fair-value accounting), which CBO says is more a comprehensive measure of costs but is not the approach stipulated in law (Lucas 2012). The two estimates cited here do not include fair-value alternatives, but such estimates would likely be 10 to 20 times larger than estimates produced under the official approach (CBO 2022).

Policy Reforms

Recent increases in inflation have made the cost of living and the cost of attending college more expensive. Low-income households, in particular, have experienced larger increases in inflation during the pandemic (Weber, Gorodnichenko, and Coibion 2022). Although only a small share of undergraduates borrow at the federal maximum, more students may feel the pinch of student loan limits as costs go up.

What actions can policymakers take? One option would be to expand federal need-based grant aid or promote increased state investment in public institutions, which would provide additional resources to students without additional debt burden. Need-based Pell grants have generally kept pace with inflation (though not necessarily with published college prices), and Congress recently passed a \$400 increase to the Pell grant (\$6,896 maximum grant), effective in 2022–23, representing about a 6 percent increase for the maximum Pell grant, which is roughly equivalent to the rate of inflation over the past year.²⁸ But a Pell grant increase may not be the most effective response to the declining purchasing power of the loan limits because they affect different groups of students. Many middle- and high-income students are not eligible for Pell grants but receive loans.

Absent additional grant aid, lawmakers may want to consider increases to student loan limits. The primary purpose would be to ensure that students and their families do not have to rely on other sources of debt, such as private loans or Parent PLUS Loans, to fund college. Since loan limits were last raised in 2008–09, the real dollar value of loans available to undergraduate students has declined by 22 percent because of inflation. Policymakers could implement an adjustment for inflation, either as a

single-time increase to match 2008–09 levels or by stipulating that loan limits should automatically rise with inflation. To restore the purchasing power of the 2008–09 loan limits, lawmakers would need to set the limits for dependent students at \$7,045, \$8,326, and \$9,607 for first-year, second-year, and third-year students, respectively. For independent students, the limits would need to be \$12,169, \$13,450, and \$16,012 for first-year, second-year, and third-year students, respectively.

Because not many students are constrained by the lending limits—only 16 percent of undergraduate students borrow the maximum federal loan annually—increasing the limits is unlikely to have widespread effects on the higher education system or average debt burdens. Therefore, policymakers could consider using loan limits to extend additional credit to students who are most likely to hit the lending limit, reducing reliance on private lending or Parent PLUS Loans.²⁹ Though our analysis suggests only a small share of undergraduates would take advantage of the higher loan limits, policymakers could adopt measures to restrict access to higher loan limits that go beyond those already in place. A more granular policy could address loan limits along one or more of the following dimensions:

Enrollment status. Undergraduate loan limits are the same, within level and dependency status, whether a student is enrolled for 6 credits or for 15 credits. We find that students who are enrolled full time are more likely to hit the maximum loan limit for their year. Policymakers could increase limits for full-time students, acknowledging that increased time in school leaves less time for earning money through work.

Degree level. Bachelor’s degree students—particularly, dependent students—are the most likely to borrow for a degree and are also the most likely to borrow the full amount for which they are eligible. Current policy already allows more credit for students who will be enrolled in school longer (because limits increase with every year of enrollment). Policymakers could consider increases that allow more credit only for those who are pursuing a bachelor’s degree, as they are the most constrained by current limits.

Local cost of living. Most undergraduate students borrow money to cover the cost of living while attending school. Living costs vary substantially by region, but student loan limits are not tied to geography. And institutions, which may implicitly set loan limits for some through cost of attendance, show substantial variation in setting room and board costs, even in the same region (Kelchen, Hosch, and Goldrick-Rab 2014). Policymakers could tie loan limits to regional cost-of-living estimates to lend more in places where basic needs are more costly. Although intuitively appealing, this option may be more difficult to implement and administer than other options (e.g., does an online student receive the limit where their institution is located or where they live?).

Student outcomes. Another option would be to expand student lending for institutions or programs where students have strong outcomes (e.g., a high graduation rate or high median earnings for those who enrolled). A lending expansion based on student outcomes could help more students persist in and complete these programs without more expensive or risky loans, and a higher loan limit could send a strong signal about institution or program quality.

Conclusion

Federal student loans are an important college access policy. They provide easy access to limited amounts of credit at favorable terms and include safety net features like income-driven repayment plans. They also cost the government less than grants and therefore can be a cost-effective tool to increase college access and completion.

Consumer price inflation, however, is eroding the purchasing power of these loans, potentially reducing their effectiveness in helping students finance their educations. Lawmakers last increased the annual and aggregate limits on loans for undergraduates in the 2008–09 academic year. Since then, the real value of the annual loan limit has declined by more than 20 percent. With inflation surging and now at a 40-year high, this trend is set to accelerate.

Dependent students enrolled in bachelor’s degree programs are likely to be the most affected by the declining value of student loan limits, as they tend to be the most constrained by federal loan limits. When these students must finance costs that exceed the annual loan limit, they often take on more costly and risky forms of debt, such as Parent PLUS Loans or private loans.

In a time of record inflation, policymakers have several options for addressing the declining purchasing power of federal student loans for undergraduates. Policymakers could maintain the current limits and let their value decline further while increasing federal grant aid to accommodate the recent increases in living costs.

Of course, increasing grant aid can be costly while the budgetary costs of increasing student loan limits is relatively low—and far fewer students are eligible for Pell grants than loans. But there are risks associated with raising loan limits, as it will increase the amount that students will have to pay back. The data in this report suggest that a small share of students would take advantage of the higher loan limits. Moreover, if policymakers raised limits, instead of implementing an across-the-board increase, they could raise loan limits in a more strategic and limited way that mitigates risks. For example, they could provide additional borrowing capacity only for students who are most likely to use costlier forms of

credit, such as dependent students enrolled full time in bachelor's degree programs. Or they could raise loan limits only for students who are enrolled in programs or institutions that have strong loan repayment outcomes.

Although much of the attention regarding student loans today focuses on forgiving student debt, today's students still need access to sufficient credit to meet basic needs and succeed in higher education. Lawmakers will therefore need to carefully consider the effects inflation is having on the program's ability to deliver on its college access goals.

Appendix

TABLE A.1

Annual and Aggregate Federal Student Loan Limits, by Year New Limits Took Effect

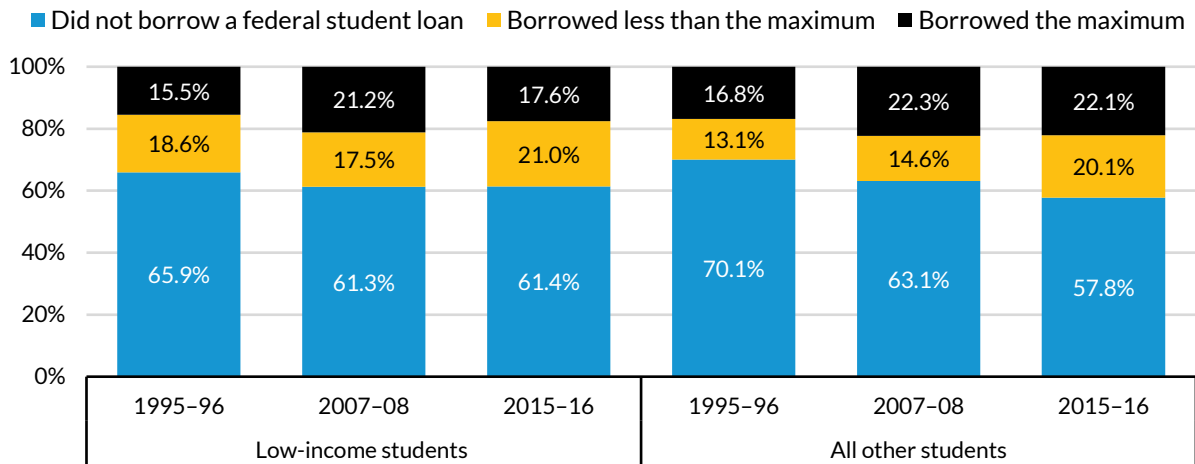
	Dependent students	Independent students
1993–94 (actual dollars)		
First year	\$2,625	\$6,625
Second year	\$3,500	\$7,500
Third year or later	\$5,500	\$9,500
Aggregate	\$23,000	\$46,000
2007–08 (actual dollars)		
First year	\$3,500	\$7,500
Second year	\$4,500	\$8,500
Third year or later ^a	\$5,500	\$10,500
Aggregate	\$23,000	\$46,000
2008–09 (actual dollars)		
First year	\$5,500	\$9,500
Second year	\$6,500	\$10,500
Third year or later	\$7,500	\$12,500
Aggregate	\$31,000	\$57,500

Sources: Higher Education Amendments of 1992, Pub. L. No. 102-325, 106 Stat. 448 (1992); Deficit Reduction Act of 2005, Pub. L. No. 109-171, 120 Stat. 4 (2006); and Ensuring Continued Access to Student Loans Act of 2008, Pub. L. No. 110-227, 122 Stat. 740 (2008).

^aThe third-year independent student loan limit increased to \$10,500 starting in the 1994–95 academic year, but that change is shown here first in 2007–08.

FIGURE A.1A

Share of Low-Income and All Other Dependent Undergraduates Borrowing Federal Student Loans



URBAN INSTITUTE

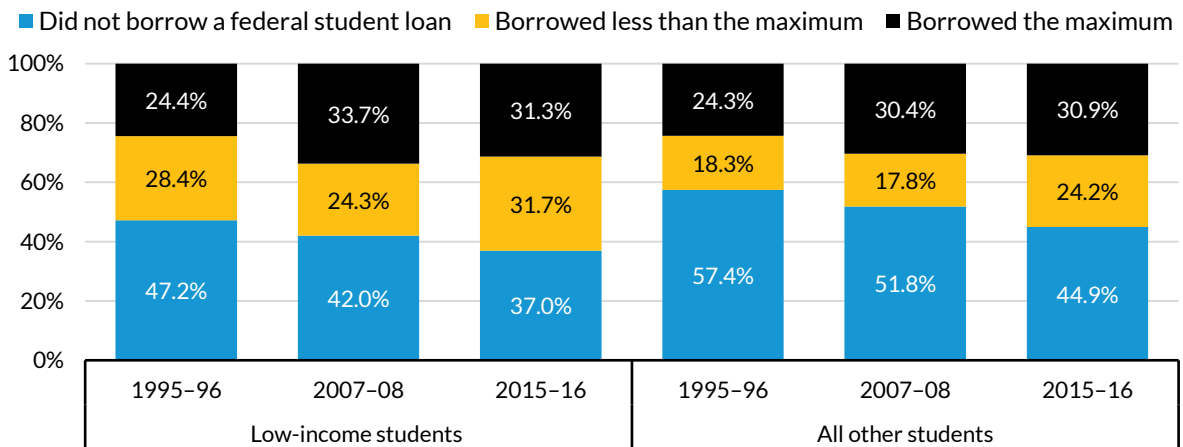
Source: Urban Institute analysis using National Postsecondary Student Aid Study data from 1995-96 and 2007-08 (PowerStats table aarmzh) and 2015-16 (PowerStats table vnntsm).

Notes: The data exclude international students attending school in the US and include students who are ineligible for federal student loans because they are attending less than half time. Low income is defined as students from families earning less than \$30,000 in 2015-16 dollars.

FIGURE A.1B

Share of Low-Income and All Other Dependent Undergraduates Borrowing Federal Student Loans

Bachelor's degree students only



URBAN INSTITUTE

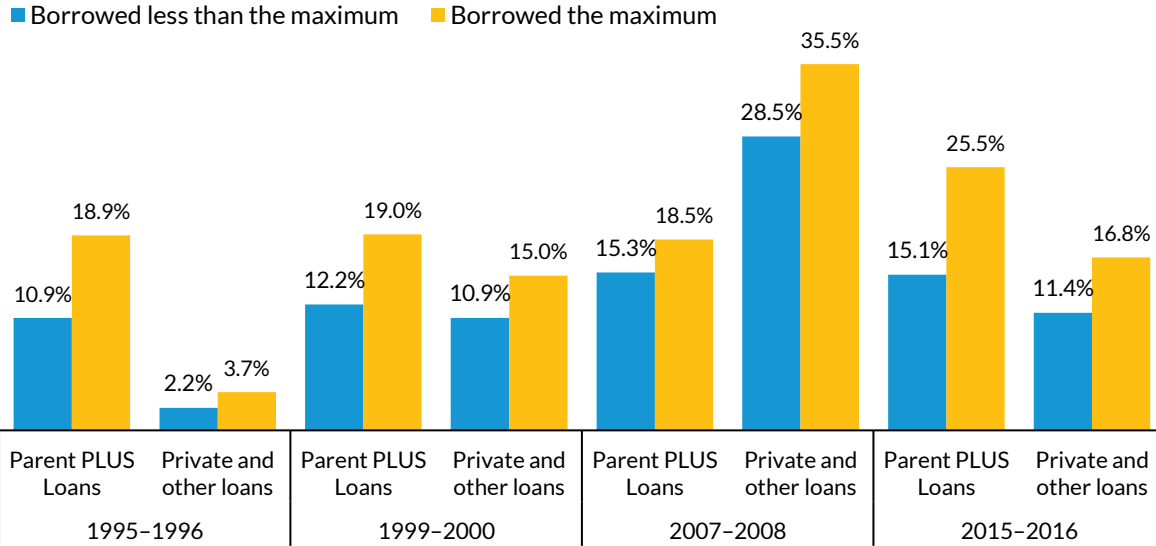
Source: Urban Institute analysis using National Postsecondary Student Aid Study data from 1995-96 (PowerStats table kflvpi), 2007-08 (PowerStats table gjfvzq), and 2015-16 (PowerStats table sothgg).

Notes: The data exclude international students attending school in the US and include students who are ineligible for federal student loans because they are attending less than half time. Low income is defined as students from families earning less than \$30,000 in 2015-16 dollars.

FIGURE A.2

Share of Undergraduates Borrowing Additional Loans among Those Who Borrowed the Maximum Annual Federal Loan

Dependent students only



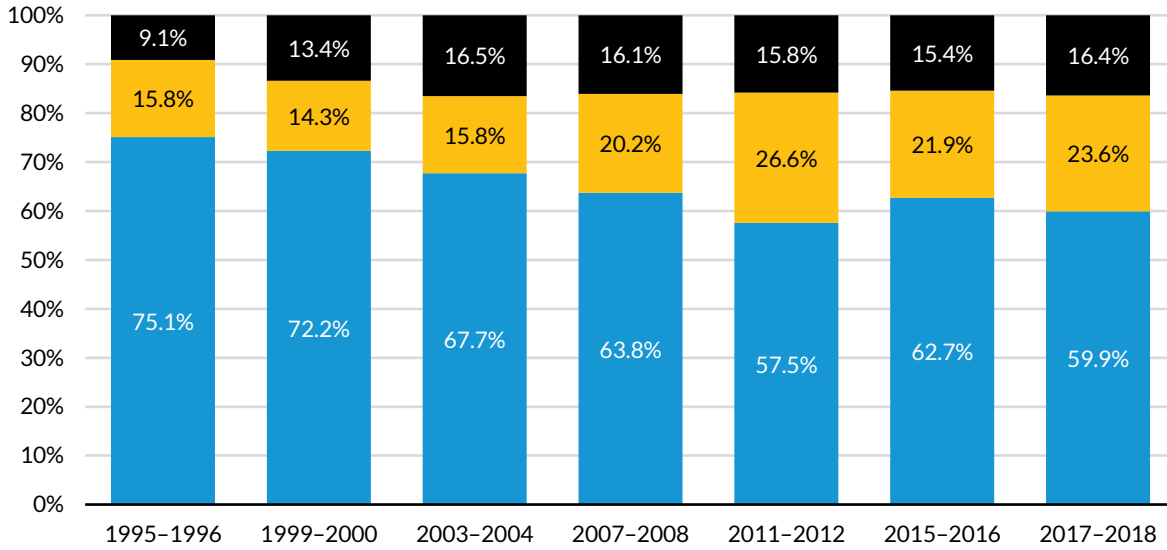
URBAN INSTITUTE

Source: Urban Institute analysis using National Postsecondary Student Aid Study data from 1995-96 (PowerStats table yuinwn), 1999-2000 (PowerStats table keeaql), 2007-08 (PowerStats table sgchom), and 2015-16 (PowerStats table arauxl).

FIGURE A.3

Share of Students Borrowing Federal Student Loans, Dependent Students and Independent Students Combined

■ Did not borrow a federal student loan ■ Borrowed less than the maximum ■ Borrowed the maximum



URBAN INSTITUTE

Source: Urban Institute analysis using National Postsecondary Student Aid Study data from 1995-96 through 2015-16 (PowerStats table ffbxua) and 2017-18 (PowerStats table evssqk).

Note: The data exclude international students attending school in the US and include students who are ineligible for federal student loans because they are attending less than half time.

Notes

- ¹ Students younger than 24 who meet other criteria, such as being married or having dependents of their own, are classified as independent.
- ² A proposed bill on student loan limits would allow institutions to establish additional annual limits on borrowing in the federal loan program but does not raise student loan limits. See [Responsible Borrowing Act of 2021](#), H.R. 4600, 117th Cong. (2021).
- ³ “Interest Rates and Fees for Federal Student Loans,” US Department of Education, Office of Federal Student Aid, accessed June 6, 2022, <https://studentaid.gov/understand-aid/types/loans/interest-rates>.
- ⁴ “Fiscal Year 2006 Budget Summary—February 7, 2005, Section II. D. Student Financial Assistance,” US Department of Education, last updated February 7, 2005, <https://www2.ed.gov/about/overview/budget/budget06/summary/edlite-section2d.html>.
- ⁵ [Debt Reduction Act of 2005](#), Pub. L. No. 109-171, 120 Stat. 4 (2006).
- ⁶ [Ensuring Continued Access to Student Loans Act of 2008](#), Pub. L. No. 110-227, 122 Stat. 740 (2008).
- ⁷ “Personal Consumption Expenditures,” Federal Reserve Bank of St. Louis, accessed June 6, 2022, <https://fred.stlouisfed.org/series/PCE>.
- ⁸ “Personal Consumption Expenditures Price Index,” Bureau of Economic Analysis, last updated May 27, 2022, <https://www.bea.gov/data/personal-consumption-expenditures-price-index>.
- ⁹ Authors’ calculations using National Postsecondary Student Aid Study data from 1995–96 (PowerStats [table wtecwp](#)) and 2017–18 (PowerStats [table uvzbmj](#)). Estimate is for students pursuing a bachelor’s degree at all types of institutions.
- ¹⁰ National Postsecondary Student Aid Study data from 2017–18. Estimate is for students pursuing bachelor’s degrees at all types of institutions.
- ¹¹ Susan Dynarski, “Taking Out a Student Loan Is Better Than Dropping Out,” *New York Times*, September 6, 2019, <https://www.nytimes.com/2019/09/06/business/student-loans-needed-community-colleges.html>.
- ¹² George A. Scott, “Federal Student Loans: Patterns in Tuition, Enrollment, and Federal Stafford Loan Borrowing up to the 2007–08 Loan Limit Increase,” letter to the Senate Committee on Health, Education, Labor, and Pensions and the House Committee on Education and the Workforce, May 25, 2011, <https://www.gao.gov/assets/gao-11-470r.pdf>.
- ¹³ Authors’ calculations using National Postsecondary Student Aid Study data. We exclude international students studying in the US because they are ineligible for federal student loans. Although students who are studying exclusively less than half time are also ineligible for federal student loans, we include them in the denominator for these statistics to provide a comprehensive assessment of the share of all undergraduates taking on federal student debt. Excluding those students from our analysis would increase the share of students taking out the maximum by between 1 and 2 percentage points in the earlier years of the analysis, but the difference is smaller in later years. See National Postsecondary Student Aid Study data from 1995–96 through 2015–16 (PowerStats [table ffbzua](#)) and from 2017–18 (PowerStats [table evssqk](#)).
- ¹⁴ Authors’ calculations using National Postsecondary Student Aid Study data (PowerStats [table evssqk](#)).
- ¹⁵ Authors’ calculations using National Postsecondary Student Aid Study data from 1995–96 through 2015–16 (PowerStats [table ffbzua](#)) and from 2017–18 (PowerStats [table evssqk](#)).

- ¹⁶ Authors' calculations using National Postsecondary Student Aid Study data from 1995–96 through 2015–16 (PowerStats [table ffbzua](#)) and from 2017–18 (PowerStats [table evssqk](#)).
- ¹⁷ Authors' calculations using National Postsecondary Student Aid Study data from 2017–18 (PowerStats [table infpjy](#)).
- ¹⁸ Authors' calculations using National Postsecondary Student Aid Study data from 2017–18 (PowerStats [table infpjy](#)).
- ¹⁹ Authors' calculations using National Postsecondary Student Aid Study data from 2017–18.
- ²⁰ Authors' calculations using National Postsecondary Student Aid Study data from 2017–18 (PowerStats [table veizif](#)).
- ²¹ Authors' calculations using National Postsecondary Student Aid Study data from 1995–96 and 2007–08 (PowerStats [table aarmzh](#)) and from 2015–16 (PowerStats [table vnntsm](#)).
- ²² Authors' calculations using National Postsecondary Student Aid Study data from 1995–96 (PowerStats [table kflvpi](#)), 2007–08 (PowerStats [table gjfvzq](#)), and 2015–16 (PowerStats [table sothgg](#)).
- ²³ We note, however, that other factors besides loan limits may affect the share of students who use these alternative loan sources. For example, eligibility for Parent PLUS has changed over time, and private student lenders may offer interest rates that are more appealing or less appealing, relative to federal rates, over time.
- ²⁴ We adjusted the data to align with the inflation adjustments used throughout this report. See Ma and Pender (2021, table 6) and College Board (2021).
- ²⁵ National Postsecondary Student Aid Study data from 2017–18 (PowerStats [table cgnddo](#)).
- ²⁶ [PROSPER Act](#), H.R. 4508, 115th Cong. (2017).
- ²⁷ The legislation also included a provision to allow financial aid offices to limit how much students may borrow below the federal limits. The effects of that provision are included in these cost estimates. See Humphrey, Koestner, and Byrum (2018).
- ²⁸ [Consolidated Appropriations Act of 2022](#), H.R. 2471, 117th Cong. (2021).
- ²⁹ Authors' calculations using National Postsecondary Student Aid Study data from 2017–18.

References

- Addo, Fenaba R., Jason N. Houle, and Daniel H. Simon. 2016. "Young, Black, and (Still) in the Red: Parental Wealth, Race, and Student Loan Debt." *Race and Social Problems* 8 (1): 64–76. <https://doi.org/10.1007/s12552-016-9162-0>.
- Barr, Andrew, Kelli A. Bird, and Benjamin L. Castleman. 2019. *The Effect of Reduced Student Loan Borrowing on Academic Performance and Default: Evidence from a Loan Counseling Experiment*. Working Paper 19-89. Providence, RI: Annenberg Institute for School Reform at Brown University.
- Baum, Sandy, Kristin Blagg, and Rachel Fishman. 2019. *Reshaping Parent PLUS Loans: Recommendations for Reforming the Parent PLUS Program*. Washington, DC: Urban Institute.
- Black, Sandra E., Jeffrey T. Denning, Lisa J. Dettling, Sarena Goodman, and Lesley J. Turner. 2020. *Taking It to the Limit: Effects of Increased Student Loan Availability on Attainment, Earnings, and Financial Well-Being*. Working Paper 27658. Cambridge, MA: National Bureau of Economic Research.
- CBO (Congressional Budget Office). 2021. "Federal Student Loan Programs." Washington, DC: CBO.
- . 2022. "Federal Student Loan Programs." Washington, DC: CBO.
- Cellini, Stephanie Riegg, and Claudia Goldin. 2012. *Does Federal Student Aid Raise Tuition? New Evidence on For-Profit Colleges*. Working Paper 17827. Cambridge, MA: National Bureau of Economic Research.
- College Board. 2021. *Trends in Student Aid 2021 Figures and Tables*. New York: College Board.
- Denning, Jeffrey T. 2018. "Born under a Lucky Star: Financial Aid, College Completion, Labor Supply, and Credit Constraints." *Journal of Human Resources* 54 (3): 760–84. <https://doi.org/10.3368/jhr.54.3.1116.8359R1>.
- Denning, Jeffrey T., and Todd R. Jones. 2019. "Maxed Out? The Effect of Larger Student Loan Limits on Borrowing and Education Outcomes." *Journal of Human Resources* 56 (4): 1113–40. <https://doi.org/10.3368/jhr.56.4.0419-10167R1>.
- FSA (Office of Federal Student Aid). 2015. "Direct PLUS Loans and Adverse Credit." Washington, DC: US Department of Education, FSA.
- Goenner, Cullen F., and Chih Ming Tan. 2015. "More Credit, More Problems? Federal Student Loan Limits and Education Outcomes." New York: SSRN.
- Goodman, Sarena, Adam Isen, and Constantine Yannelis. 2021. "A Day Late and a Dollar Short: Liquidity and Household Formation among Student Borrowers." *Journal of Financial Economics* 142 (3): 1301–23. <https://doi.org/10.1016/j.jfineco.2021.04.033>.
- Gordon, Grey, and Aaron Hedlund. 2016. *Accounting for the Rise in College Tuition*. Working Paper 21967. Cambridge, MA: National Bureau of Economic Research.
- HELC (Higher Education Loan Commission). 2016. "Reinventing Federal Student Loans: A Beginning-to-End Blueprint of Student Loan Best Practices." Washington, DC: HELC.
- Humphrey, Justin, Leah Koestner, and Zachary Byrum. 2018. *H.R. 4508, Promoting Real Opportunity, Success, and Prosperity through Education Reform Act: Congressional Budget Office Cost Estimate*. Washington, DC: Congressional Budget Office.
- Kalcevic, Deborah, and Justin Humphrey. 2008. "H.R. 5715, Ensuring Continued Access to Student Loans Act of 2008: Congressional Budget Office Cost Estimate." Washington, DC: Congressional Budget Office.
- Kelchen, Robert. 2019. "An Empirical Examination of the Bennett Hypothesis in Law School Prices." *Economics of Education Review* 73 (December): 101915. <https://doi.org/10.1016/j.econedurev.2019.101915>.

- Kelchen, Robert, Braden J. Hosch, and Sara Goldrick-Rab. 2014. *The Costs of College Attendance: Trends, Variation, and Accuracy in Institutional Living Cost Allowances*. Paper presented at the Association of Public Policy and Management annual meeting, Albuquerque, NM, November 6–8.
- Kim, Dongbin. 2007. “The Effect of Loans on Students’ Degree Attainment: Differences by Student and Institutional Characteristics.” *Harvard Educational Review* 77 (1): 64–97. <https://doi.org/10.17763/haer.77.1.n14t69l0q8292784>.
- Kramer, Dennis A., Christina Lamb, and Lindsay C. Page. 2021. “The Effects of Default Choice on Student Loan Borrowing: Experimental Evidence from a Public Research University.” *Journal of Economic Behavior and Organization* 198 (September): 470–89. <https://doi.org/10.1016/j.jebo.2021.04.023>.
- Lee, Jason C., Erin B. Ciarimboli, Paul G. Rubin, and Manuel S. González Canché. 2020. “Borrowing Smarter or Borrowing More? Investigating the Effects of a Change in Federal Loan Policy.” *Journal of Higher Education* 91 (4): 483–513. <https://doi.org/10.1080/00221546.2019.1650583>.
- Looney, Adam, and Constantine Yannelis. 2019. “How Useful Are Default Rates? Borrowers with Large Balances and Student Loan Repayment.” *Economics of Education Review* 71 (August): 135–45. <https://doi.org/10.1016/j.econedurev.2018.10.004>.
- Lucas, Deborah. 2012. “Fair-Value Accounting for Federal Credit Programs.” Washington, DC: Congressional Budget Office.
- Lucca, David O., Taylor Nadauld, and Karen Shen. 2015. *Credit Supply and the Rise in College Tuition: Evidence from the Expansion in Federal Student Aid Programs*. New York: Federal Reserve Bank of New York.
- Ma, Jennifer, and Matea Pender. 2021. *Trends in College Pricing and Student Aid 2021*. New York: College Board.
- Marx, Benjamin M., and Lesley J. Turner. 2018. *Student Loan Nudges: Experimental Evidence on Borrowing and Educational Attainment*. Working paper. College Park: University of Maryland.
- McKinney, Lyle, and Andrea Backscheider Burrige. 2015. “Helping or Hinder? The Effects of Loans on Community College Student Persistence.” *Research in Higher Education* 56 (4): 299–324.
- NASFAA (National Association of Student Financial Aid Administrators). 2017. “Loan Limits.” Washington, DC: NASFAA.
- Neill, Christine. 2008. *The Effect of Student Loan Limits on University Enrollments*. Working Paper 4. Canadian Labour Market and Skills Researcher Network.
- Rothstein, Jesse, and Cecilia Elena Rouse. 2011. “Constrained after College: Student Loans and Early-Career Occupational Choices.” *Journal of Public Economics* 95 (1–2): 149–63. <https://doi.org/10.1016/j.jpubeco.2010.09.015>.
- Smole, David P. 2009. “The Ensuring Continued Access to Student Loans Act of 2008.” Washington, DC: Congressional Research Service.
- . 2013. *Federal Student Loans Made under the Federal Family Education Loan Program and the William D. Ford Federal Direct Loan Program: Terms and Conditions for Borrowers*. Washington, DC: Congressional Research Service.
- Stinebrickner, Ralph, and Todd Stinebrickner. 2008. “The Effect of Credit Constraints on the College Drop-Out Decision: A Direct Approach Using a New Panel Study.” *American Economic Review* 98 (5): 2163–84.
- Weber, Michael, Yuriy Gorodnichenko, and Olivier Coibion. 2022. *The Expected, Perceived, and Realized Inflation of U.S. Households before and during the COVID-19 Pandemic*. Working Paper 29640. Cambridge, MA: National Bureau of Economic Research.

- Wiederspan, Mark. 2016. "Denying Loan Access: The Student-Level Consequences When Community Colleges Opt Out of the Stafford Loan Program." *Economics of Education Review* 51:79–96. <https://doi.org/10.1016/j.econedurev.2015.06.007>.
- Zhan, Min, Xiaoling Xiang, and William Elliott III. 2016. "Education Loans and Wealth Building among Young Adults." *Children and Youth Services Review* 66 (July): 67–75. <https://doi.org/10.1016/j.childyouth.2016.04.024>.

About the Authors

Jason Delisle is a senior policy fellow in the Center on Education Data and Policy at the Urban Institute. His work focuses on higher education finance and regulation. Delisle has published papers and articles on student debt, college enrollment, the for-profit higher education sector, and international higher education. Delisle holds a BA in government from Lawrence University and an MPP from the George Washington University.

Kristin Blagg is a senior research associate in the Center on Education Data and Policy. Her research focuses on K-12 and postsecondary education. Blagg has conducted studies on student transportation and school choice, student loans, and the role of information in higher education. In addition to her work at Urban, she is pursuing a PhD in public policy and public administration at the George Washington University. Blagg holds a BA in government from Harvard University, an MEd from Hunter College, and an MPP from Georgetown University.

STATEMENT OF INDEPENDENCE

The Urban Institute strives to meet the highest standards of integrity and quality in its research and analyses and in the evidence-based policy recommendations offered by its researchers and experts. We believe that operating consistent with the values of independence, rigor, and transparency is essential to maintaining those standards. As an organization, the Urban Institute does not take positions on issues, but it does empower and support its experts in sharing their own evidence-based views and policy recommendations that have been shaped by scholarship. Funders do not determine our research findings or the insights and recommendations of our experts. Urban scholars and experts are expected to be objective and follow the evidence wherever it may lead.



500 L'Enfant Plaza SW
Washington, DC 20024

www.urban.org