A primer on higher education student loan debt.

OVERVIEW

Student loans play a crucial role in ensuring access to an affordable higher education for millions of American students. In fact, more than half of 2011-12 undergraduate students borrowed from the federal government to finance their education.

Currently, the U.S. Department of Education offers students and their families student loans through the federal government. These loans include Stafford Loans through the Direct Loan program, Perkins Loans and PLUS Loans. The College Board estimates that undergraduate and graduate students and their families borrowed $95.8 billion in federal loans for the 2015-16 school year.

The amount that students may borrow from the federal government is limited. Undergraduate students may borrow Stafford Loans up to statutorily-established 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 the cost of attendance (minus other aid) through the Grad PLUS loan program.[i]

In addition, nonfederal sources, such as states and private lenders, allow students and their families to take out loans for school. Borrowers took out $10.9 billion in nonfederal student loans in the 2015-16 school year.

In total, U.S. households owe about $12.3 trillion in outstanding debt according to the Federal Reserve's August 2016 report. Mortgage debt represents the largest component of household debt ($8.4 trillion), followed by student loan debt ($1.3 trillion). Notably, U.S. households have more student loan debt than auto loan ($1.1 trillion) and credit card ($729 billion) debt.
Of course, nearly $1.3 trillion in outstanding student loan debt has piqued the interest of economists, policymakers and others. This paper examines trends in student debt, what impacts repayment, perceptions of student debt, whether there is a student debt crisis and the federal role.

TRENDS IN STUDENT DEBT

How has the amount of student loan debt held by recent college graduates changed over time? How does it vary by sector? How does it vary by demographics and educational level? Answers to these questions are presented below.

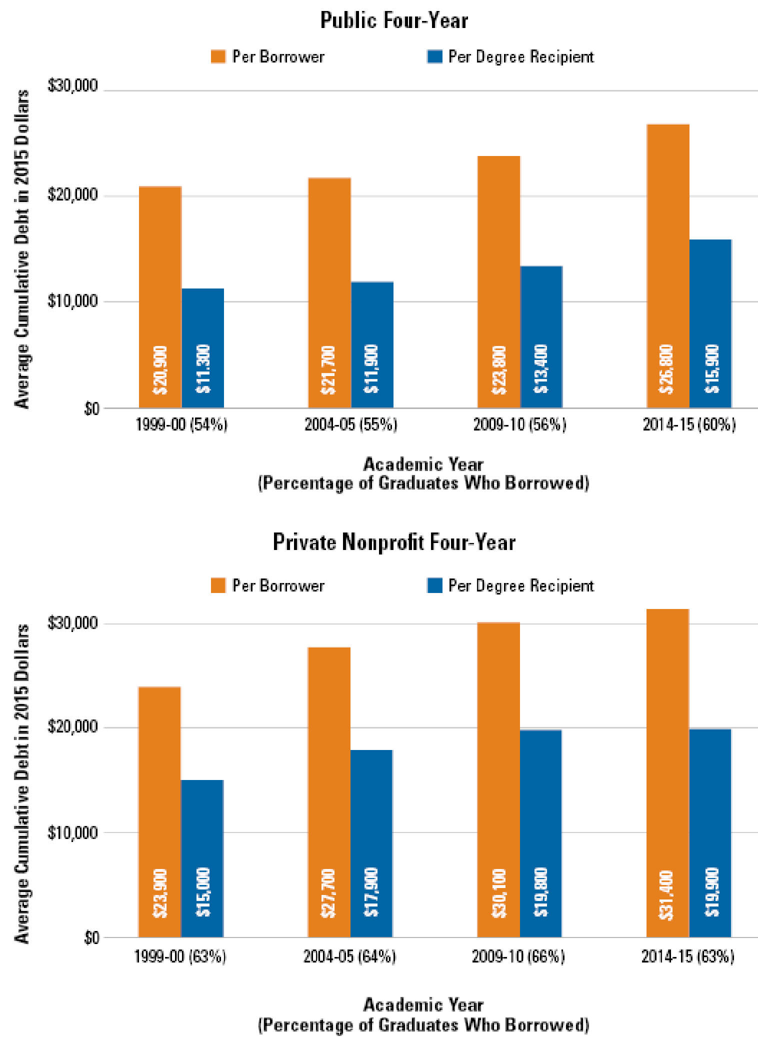
Changes in Student Loan Debt Over Time

Most four-year college graduates have student loan debt. According to data voluntarily self-reported by colleges, one in six (61%) bachelor's degree recipients from public and private nonprofit colleges graduated with student loan debt in 2014-15.[ii] Analysis of federal data shows an even higher percentage of students with debt than what is voluntarily reported by colleges. The most recent National Postsecondary Student Aid Study (NPSAS) shows that 68 percent of students graduating from four-year colleges in 2011-12 took out student loans.[iii] This represents a significant increase from 1992-93 when about half (49%) of college graduates had student loan debt.

The average amount of student loan debt per college graduate has steadily increased. According to data voluntarily reported by colleges, student loan debt levels have increased over time at both public and private four-year institutions, from $13,800 in 2004-05 to $17,000 in 2014-15 (as shown in Figure 1). NPSAS data show consistently higher levels of debt. According to their data, bachelor's degree recipients at public and nonprofit four-year colleges who graduated with loans in 2011-12 had an average of $27,850 in debt. The Institute for College Success and Access estimates the average student debt for graduates from 2014-15 is $30,100, a four percent increase from their calculation of the estimated average debt of 2013-14 graduates.

Most borrowers do not have high levels of debt. In 2014, only four percent of borrowers had debt balances of more than $100,000 and 14 percent had balances over $50,000.

Figure 1. Average Cumulative Debt Levels in 2015 Dollars: Bachelor's Degree Recipients at Four-Year Institutions, 1999-2000 to 2014-15, Selected Years



Average Cumulative Debt in 2015 Dollars: Bachelor's Degree Recipients at Public and Private Nonprofit Four-Year Institutions, 2004-05, 2009-10, and 2014-15

	Percentage with Debt	Average Debt per Borrower	Average Debt per Graduate
2004-05	58%	$23,800	$13,800
2009-10	59%	$25,800	$15,200
2014-15	61%	$28,100	$17,000

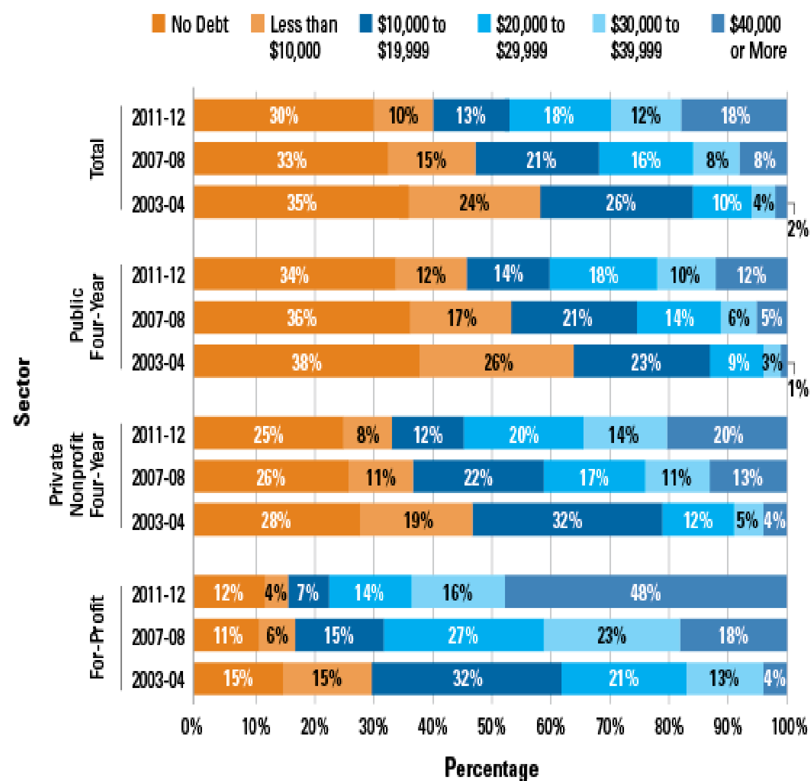
Source: College Board 2016.

Variation in Debt by Sector

Whether a college graduate has student loans varies by sector (the type of college or university attended). Analysis of 2012 NPSAS data shows that more college graduates who attended for-profit institutions (88%) had student loans than those who attended private nonprofit institutions (75%) or public institutions (66%).

The cumulative debt levels of college graduates also vary by sector. Forty-eight percent of 2011-12 bachelor's degree recipients from for-profit institutions borrowed $40,000 or more; however, only 20 percent of those from private nonprofit institutions and 12 percent of those from public institutions had this much debt. Additional cumulative debt levels are shown in Figure 2.

Figure 2. Cumulative Debt of Bachelor's Degree Recipients in 2012 Dollars by Sector, 2003-04, 2007-08, and 2011-12



Source: College Board 2016.

Variation in Debt by Demographic Factors

In addition to varying by sector, student debt levels also vary by demographic factors, such as dependency status, age, race and income level.

Dependency Status

Data show that independent students are more likely to borrow and have more student loan debt than dependent students. Thirty-four percent of dependent 2011-12 college graduates did not have any debt, compared to 24 percent of independent students. About 40 percent of independent students borrowed more than $30,000, compared to about 20 percent of dependent students who did.[iv]

Age

Analyzing data by age at college graduation shows a pattern similar to dependency status. Students who earned their bachelor's degree at age 24 or older were more likely to borrow and have higher debt levels than their younger peers. Thirty-four percent of graduates aged 23 and younger did not borrow, compared to 21 percent of those aged 24-29. Almost 40 percent of graduates aged 24-29 had more than $30,000 in student debt, compared to 22 percent of graduates younger than age 23.[v]

Income Level

While it may seem counterinitiative, high-income households hold more student debt than low-income households. The explanation: People from high-income households are more likely than those from low-income households to attend college. Federal Reserve data for 2013 show that households in the top income quartile (income greater than $90,000 per year) held 47 percent of outstanding education debt, compared to 11 percent held by households in the lowest income quartile (income less than $25,000 per year).[vi]

College graduates who received Pell Grants, indicating a family income of under $40,000, borrowed at a higher rate and volume than their peers who did not receive Pell Grants. Specifically, 88 percent of college completers who had ever received a Pell Grant had student loans in 2012, compared to 53 percent of non-Pell Grant college completers. Pell Grant recipients had an average of $31,200 in debt, compared to $26,450 in debt for non-Pell Grant recipients.

Race and Ethnicity

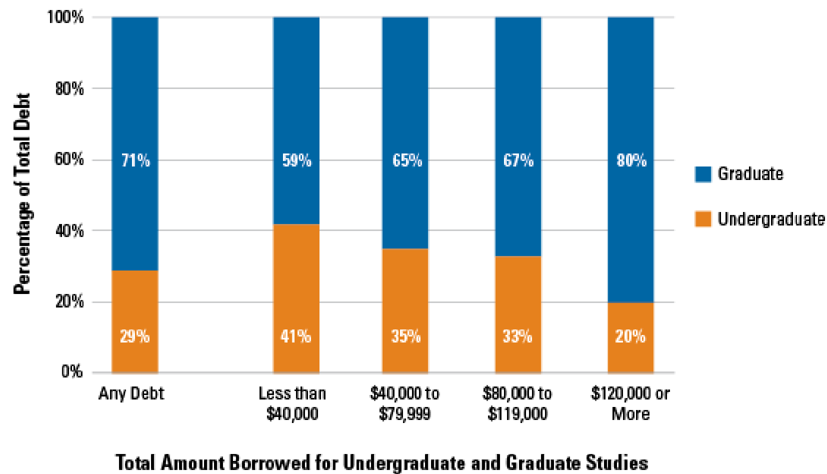
With regard to race, black college graduates had more student debt than graduates from other racial and ethnic group. While 30 percent of all 2011-12 college graduates had no debt, only 14 percent of black graduates did not take out student loans. In addition, while only 18 percent of all graduates had $40,000 or more in student debt, 32 percent of black students did.[vii]

Graduate 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. The median federal student loan debt was $45,890 for students who only borrowed for graduate school and who entered repayment in 2013-14.

As Figure 3 shows, 11 percent of graduate degree recipients had $120,000 or more in student loan debt. However, the vast majority of their debt (80%) was related to graduate study only. Graduate students with this high level of debt are likely pursing professional degrees, allowing these borrowers to pay back their student debt with their relatively high expected earnings.

Figure 3: Composition of Cumulative Undergraduate and Graduate Debt of 2011-12 Graduate Degree Recipients

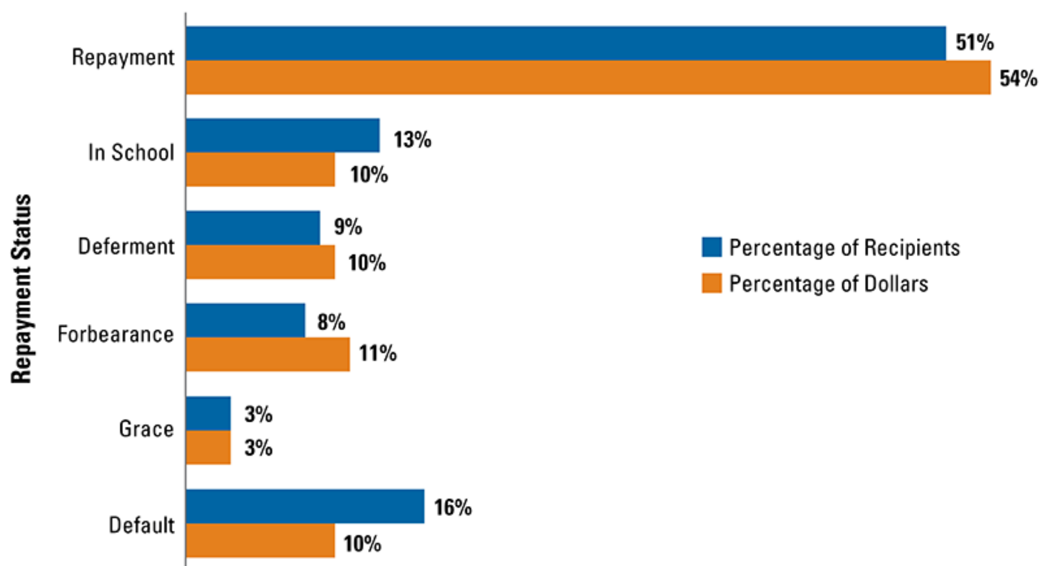


Source: College Board 2016.

Factors that Impact Repayment & Default

More than half of borrowers with federal student loans are in repayment, while about one in six borrowers are in default (as shown in Figure 4). This section examines 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.

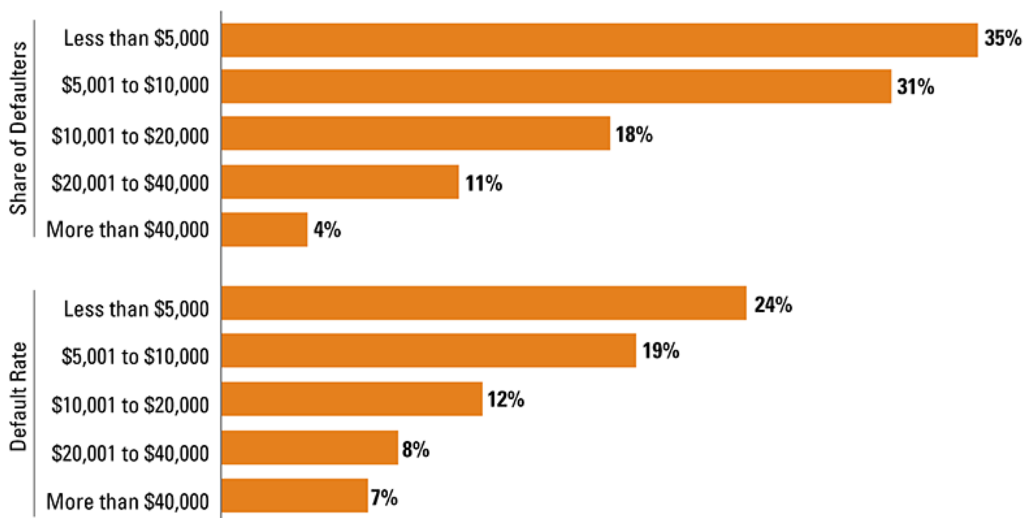
Figure 4. Repayment Status of Federal Student Loan Portfolio (3rd Quarter 2016)



Source: College Board 2016.

High student 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 5 shows, more than one-third (35%) of defaulters had a loan balance of less than $5,000. Another 31 percent of defaulters had a balance of between $5,001 to $10,000. Thus, data indicate that two-thirds of defaulters had a balance of less than $10,000. Only 4 percent of defaulting borrowers had a balance of more than $40,000.

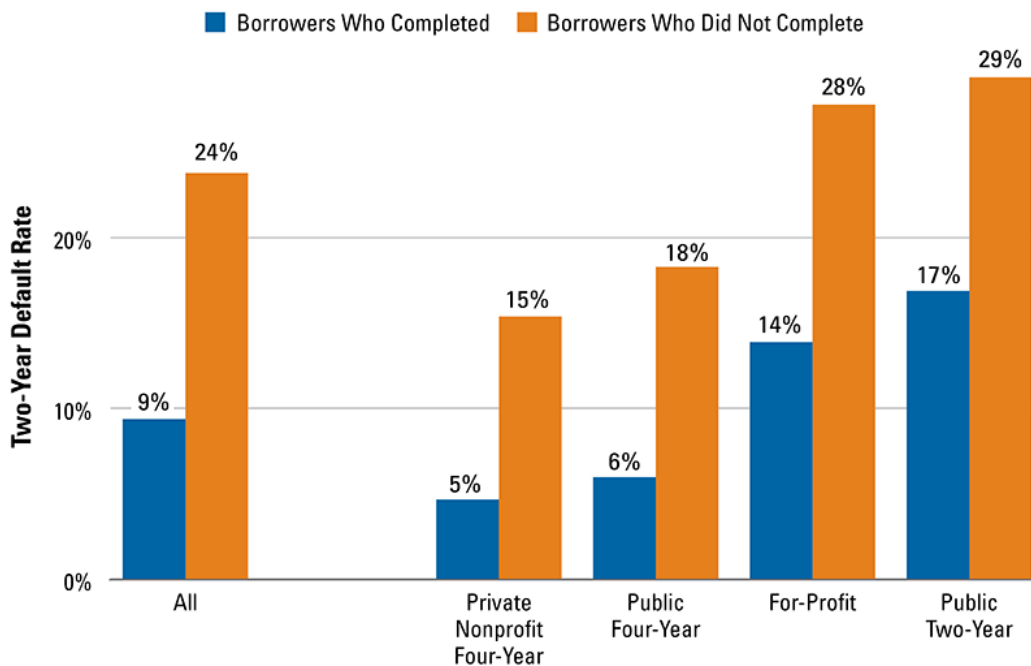
Figure 5: Share of Defaulters and Three-Year Federal Student Loan Default Rate Among Borrowers Entering Repayment in 2010-11, by Loan Balance



Source: College Board 2016.

Whether a college student graduated or dropped out also impacts that borrower's repayment status. As Figure 6 shows, 9 percent of borrowers who completed college defaulted, compared to 24 percent of borrowers who dropped out of college.

Figure 6. Two-Year Federal Student Loan Default Rate Among Borrowers Entering Repayment in 2011-12, by Sector and Completion Status



Source: College Board 2016.

Looking at default rates by sector shows that a higher percentage of two-year public (29%) and for-profit (28%) college dropouts default than their peers at public four-year (18%) and private nonprofit (15%) colleges. Historical trend data from 1995-96 until 2011-12 show that loan default rates are consistently higher for borrowers who attended two-year public and for-profit institutions. As *The Atlantic* pointed out in September 2016, "even though roughly a tenth of college students in the U.S. are in for-profit schools, they account for nearly 40 percent of all college-related defaults".[viii]

Income is also a factor in default rates. Federal Reserve researchers looked at the average income in the ZIP code where the borrower lived when they first originated their student loan and found that the "default rates for borrowers from the lowest-income ZIP codes are almost three times those of borrowers from areas with the highest average income".

Further, a 2015 study showed a 30 percent default rate among nontraditional borrowers[ix]. In comparison, 13 percent of traditional undergraduate borrowers and 3 percent of graduate borrowers defaulted. Analysis showed that the background of students, their labor market outcomes and schools attended explained about 50-66 percent of the increase in default rates from 2000 to 2011. The rest of the increase in default rates cannot be explained by observable factors and may depend on the quality of education received, students' satisfaction with their institutions or other financial difficulties specific to nontraditional borrowers.

PERCEPTIONS OF STUDENT DEBT

With about 16 percent of student loan borrowers in default, it is worth considering students' perceptions of 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.

This gap between reasonable and expected borrowing varied by age, race and gender. For example, white students believed that a higher amount of debt was reasonable ($19,862 on average) than African American[x] students ($12,459) and Hispanic students ($16,845). White students also expected to borrow more on average ($27,450) compared to African American students ($16,902) or Hispanic students ($23,934).

The New America survey also found that 55 percent 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.

Countering this perception, the Brookings Institution found that 50 percent of households paid less than $160 per month in student loan payments. Seventy-five percent of households devoted less than seven percent of their monthly income to repaying student loan debt, equivalent to a $242 average monthly payment on student loans. Moreover, the Brookings analysis also found the typical household spends 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 health care ($296) track more closely to the typical household's average monthly student loan repayments.[xi] In fact, the median monthly loan payment has not changed over the past 20 years, ranging from about three to four percent of monthly earnings from 1992 to 2013.[xii]

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

ARE WE FACING A STUDENT LOAN CRISIS?

With $1.3 trillion in outstanding student loans and minimal understanding of student 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,* 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 distributing trends in student loan borrowing and repayment that may impact the 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." [xiii]

On the individual level, the return on an investment in college may vary for borrowers. Akers and Chingos cite work from the Hamilton Project at Brookings, which found that average lifetime earnings by college major vary from $800,000 to $2 million. Additional research has shown that wealthier students benefit more from a college degree than poor students: An extra $10,000 in student loans causes borrowers, such as low-income students and students of color, to "achieve the nation's median net worth 26% slower than a college graduate without that debt".

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 studied about 2,800 college graduates who had been paying off student loan debt for at least seven years and found that college debt had effects similar to income levels on financial worry and life satisfaction. Other research has shown that student debt creates obstacles for

home ownership. For example, borrowers with high monthly payments face difficulty saving for a down payment and may not qualify for a mortgage based on their debt-to-income ratio.

THE FEDERAL ROLE

There are several ways that federal policymakers can impact student debt. These policy levers include providing loan counseling, collecting and sharing additional data related to debt, holding institutions accountable for the amount of their students' debt and preventing default, simplifying repayment plans and improving loan servicing, among others.

First, borrowers may not have the financial education needed to understand their debt, their available repayment plans and the consequences of loan default, so the U.S. Department of Education (ED) requires schools that participate in the Direct Loan program to provide borrowers with entrance and exit loan counseling. To improve upon the impact of current counseling, some have suggested that ED require schools expand the entrance and exit counseling they provide. Counseling could occur more frequently or a specific strategy, the ED's Financial Awareness Counseling Tool, could be required. In August 2016, the Department announced a pilot program where schools may provide additional loan counseling for borrowers.

Another key lever is having federal agencies provide data on student debt. Researchers have called attention to the need for better data to understand the impact of student debt, second only to mortgage debt as the largest source of household debt in the United States. In a 2015 New York Times article, economist Susan Dynarski stated "the frightening reality, however, is that we are remarkably ignorant about student debt." Publicly available data are high-level summary statistics. In some cases, researchers do not have access to data at all (e.g. delinquency rates for all loans). Better data could enable servicers to target at-risk borrowers, potentially preventing defaults. In October 2016, more than 100 researchers and policy organizations called for ED to release better data on student loan borrowing.

On a related note, ED's College Scorecard, which contains annual college costs, graduation rates and post-attendance earnings for more than 3,500 institutions, could be modified. Researchers have called for its transparency to be enhanced with data "forecasts of students' debt payments relative to earnings".

In addition, the current Higher Education Act contains institutional accountability measures that could potentially be amended, such as the Cohort Default Rate (CDR). Under current law, colleges are evaluated on whether their graduates with federal student loans default. Colleges that have a default rate of 30 percent or more for three consecutive years or 40 percent in one-year risk losing access to federal student loans. Some have suggested that the current CDR should be changed to more accurately reflect college graduates who are in repayment.

Improving the servicing of federal student loans may be another way to reduce student loan debt and prevent default. ED relies upon private companies and nonprofit organizations to collect borrowers' loan payments and to inform borrowers of their repayment plan options, among other activities. In April 2016, ED took a step in that direction when it released its solicitation for a new loan servicing contract where a single platform would connect borrowers with customer service providers. In addition, in July, the Undersecretary sent Federal Student Aid's Chief Operating Officer a 56-page policy memorandum. It stated that the "policy direction described in this document is intended to be reflected in the new state-of the-art loan servicing ecosystem that FSA has begun to procure".[xiv]

Federal policymakers can also improve income-driven repayment plans. Consumer groups have documented numerous paperwork and logistical problems borrowers encounter in moving out of default and signing up for income-based repayment plans. For example, under the income-based repayment programs, borrowers are required to certify their income upon applying and then annually re-certify their incomes. A 2015 ED study found that nearly 60 percent of borrowers failed to re-certify on time, causing their monthly loan payments to skyrocket.

CONCLUSION

Student debt will remain a significant part of many borrowers' lives and the U.S. economy over the coming year. It certainly warrants further research and a review of federal policy options.

Updated December 2016

[i] For additional background information on federal student aid, see PNPI's primer.
[ii] The College Board's Annual Survey of Colleges relies upon voluntarily self-reported data. For more information, see https://professionals.collegeboard.org/higher-ed/recruitment/annual-survey.
[iii]The Institute for College Access & Success provided this analysis in its report, *Student Debt and the Class of 2015*. The NPSAS is a survey conducted every four years and its data only include college graduates (not drop-outs). The most recent NPSAS data was released in 2013 (covering the 2011-12 school year). New NPSAS data is expected to be available in 2017. More information is available at http://nces.ed.gov/surveys/npsas/about.asp.
[iv] See this College Board chart.

[v] See this College Board chart.
[vi] See this College Board chart.
[vii] See this College Board chart.
[viii] See Zinshteyn, M. (2016, September 27). Understanding the many crises of student loans. *The Atlantic*. Retrieved from http://www.theatlantic.com/education/archive/2016/09/understanding-the-many-crises-of-student-loans/501878/.
[ix]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.
[x] This primer identifies racial groups as they appear in the cited original research. For example, the New America report uses the term "African American" and reports from the College Board use the term "Black".
[xi] Brookings analyzed the 2010 Survey of Consumer Finances, a nationally representative survey administered by the Federal Reserve Board.
[xii] See Akers, B. and Chingos, M. (2016). *Game of Loans: The Rhetoric and Reality of Student Debt*. Princeton, NJ: Princeton University Press.
[xiii] See Chakrabarti, R., Lovenheim, M. and Morris, K. (2016, September 9). *Who Falters at Student Loan Payback Time?* [Blog Post]. New York, NY: Federal Reserve Bank. Retrieved from http://libertystreeteconomics.newyorkfed.org/2016/09/who-falters-at-student-loan-payback-time.html
[xiv] For more information, see PNPI's primer Issue Brief and or listen to PNPI's podcast on loan servicing.