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# The Evolution of Student Debt in the United States 



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# Student Loans and the Dynamics of Debt 

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# The Evolution of Student Debt in the United States 

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The conversation about student debt in the United States has descended into an alarmist focus on the aggregate amount of education debt (over $\$ 1$ trillion by some estimates); on stories about individual students who borrowed excessively and are struggling to repay in a weak labor market; on a comparison between credit card debt (which has fallen quite a bit in recent years) and education debt (which has not); and on fears of a "student loan bubble" that might follow the path of the housing bubble. Secretary of Education Arne Duncan said recently that the student loan "crisis" has grown so large that it poses "a threat to the American dream" (Porter 2013).

It's time to take a step back to examine the role of debt in financing postsecondary education, the path over time in postsecondary participation and the accompanying student borrowing, and the basic arguments underlying debt financing of postsecondary education and the government's role in the system. The sections that follow examine some of the perspectives on student loan data that can alter the picture that emerges. Is outstanding debt or annual borrowing more meaningful? Should nonborrowers be included in average debt figures? Does the path of total borrowing tell the same story as the path of borrowing per student? Should we focus on all postsecondary students or only on undergraduates? The goal is not to choose the optimal data on which to rely, but to elucidate the different information emerging from different choices about what to measure.

## OUTSTANDING DEBT

Perhaps the most commonly cited student debt figures are those from the Federal Reserve Bank of New York. Table 2.1 reports outstanding household debt of various types from the third quarter of 2003 to the third quarter of 2013. Education debt grew from $\$ 250$ billion in 2003 to $\$ 610$ billion in 2008 and to $\$ 1.03$ trillion in 2013. There is no doubt that this represents rapid growth worthy of attention, but several other facts from these data are also relevant.

- Education debt increased from 3 percent to 9 percent of outstanding household debt over the decade. This is a significant change, but mortgage debt is 70 percent of the total, and home equity revolving credit is another 5 percent. Widespread default on student loans could be a real problem, but even if the government did not hold the vast majority of this debt, the economic impact would obviously be on a different scale from the collapse of the housing market.
- Credit card debt increased by 24 percent between 2003 and 2008 but fell by 22 percent over the following five years, ending the decade $\$ 21$ billion ( 3 percent) below its 2003 level. (See Table 2.2.)
- Outstanding education debt increased by 68 percent between 2008 and 2013-less than half the rate of growth between 2003 and 2008. (See Table 2.2)

Perhaps more fundamental is the question of whether the new focus on outstanding student loan debt is the best way to understand the risks facing credit markets; the economy; or past, current, and future students.

Outstanding debt per borrower has not grown nearly as much as total outstanding debt. Enrollment in postsecondary education has increased rapidly in recent years, and the number of borrowers retiring their debt each year is significantly smaller than the number incurring debt for the first time.

Figure 2.1 shows the real growth in total outstanding education debt relative to the growth in the number of borrowers with debt and the growth in average balances from the first quarter of 2005 through the

Table 2.1 Outstanding Household Debt, 2003:Q3 to 2013:Q3 (in billions of dollars and as a percentage of total household debt)

|  | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mortgage (\$) | 5.18 | 6.21 | 6.91 | 8.05 | 8.93 | 9.29 | 8.94 | 8.61 | 8.40 | 8.03 | 7.90 |
| Home equity <br> $\quad$ revolving (\$) | 0.27 | 0.43 | 0.54 | 0.60 | 0.63 | 0.69 | 0.71 | 0.67 | 0.64 | 0.57 | 0.54 |
| Auto (\$) | 0.68 | 0.75 | 0.83 | 0.82 | 0.82 | 0.81 | 0.74 | 0.71 | 0.73 | 0.77 | 0.85 |
| Credit card (\$) | 0.69 | 0.71 | 0.73 | 0.75 | 0.82 | 0.86 | 0.81 | 0.73 | 0.69 | 0.67 | 0.67 |
| Student (\$) | 0.25 | 0.33 | 0.38 | 0.45 | 0.53 | 0.61 | 0.69 | 0.78 | 0.87 | 0.96 | 1.03 |
| Other (\$) | 0.48 | 0.41 | 0.41 | 0.44 | 0.41 | 0.41 | 0.38 | 0.34 | 0.33 | 0.31 | 0.30 |
| Total (\$) | 7.56 | 8.83 | 9.79 | 11.11 | 12.13 | 12.68 | 12.28 | 11.84 | 11.66 | 11.31 | 11.28 |
|  | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| Mortgage (\%) | 69 | 70 | 71 | 72 | 74 | 73 | 73 | 73 | 72 | 71 | 70 |
| Home equity | 4 | 5 | 6 | 5 | 5 | 5 | 6 | 6 | 5 | 5 | 5 |
| $\quad$ revolving (\%) |  |  |  |  |  |  |  |  |  |  |  |
| Auto (\%) | 9 | 9 | 8 | 7 | 7 | 6 | 6 | 6 | 6 | 7 | 7 |
| Credit card (\%) | 9 | 8 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 |
| Student (\%) | 3 | 4 | 4 | 4 | 4 | 5 | 6 | 7 | 7 | 8 | 9 |
| Other (\%) | 6 | 5 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

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Table 2.2 Percentage Changes in Outstanding Household Debt, 2003-2013

|  | 2003-2008 | 2008-2013 |
| :--- | :---: | :---: |
| Mortgage | 79 | -15 |
| Home equity revolving | 157 | -23 |
| Auto loan | 18 | 4 |
| Credit card | 24 | -22 |
| Student loan | 146 | 68 |
| Other | -14 | -26 |
| Total | 68 | -11 |

SOURCE: Federal Reserve Bank of New York (2013b).

Figure 2.1 Total Outstanding Student Debt, Number of Borrowers with Outstanding Debt, and Average Balance, Relative to 2005 Fourth Quarter, 2005-2012


SOURCE: Federal Reserve Bank of New York (2013b).
fourth quarter of 2012. Total outstanding debt was 124 percent higher in constant dollars at the end of 2012 than it had been eight years earlier. In contrast, average balances increased by 33 percent (in 2012 dollars), while the number of borrowers rose by 66 percent. The number of borrowers increased much more rapidly than the average amount borrowed from 2007 through 2010 but did not increase between 2010 and 2011, when average balances continued to grow.

Outstanding balances include debt that was incurred many years ago as well as recent borrowing, borrowing by both students and parents, and borrowing by both undergraduate and graduate students. The accrual of unpaid interest, penalties, and other charges also add to the total outstanding debt.

Solutions for relieving the strains of student debt should certainly include borrowers with old debts who are struggling, and many policy proposals ignore these people. However, developing strategies for the future requires a focus on recent student borrowing patterns. Striking a balance between concern about overdependence on debt for financing postsecondary education and welcoming increases in borrowing as a sign of increased participation by students with limited resources requires more information about borrowing patterns across students on different educational paths, from different socioeconomic backgrounds, and of different ages.

## ANNUAL BORROWING

The year-by-year data on federal student loans are more accurate than either estimates of outstanding debt or the data on the total debt levels of students who graduate with different credentials or who leave school without credentials. Those data are based either on samples of students from surveys conducted every four years or on surveys with disappointing response rates completed every year by colleges and universities.

Total annual borrowing, detailed in Table 2.3, has increased dramatically since 1970-1971, when students borrowed $\$ 7.6$ billion (in 2012 dollars) through education loan programs. Thirty years later, in 2000-2001, total borrowing through these programs had reached

Table 2.3 Total Federal and Nonfederal Loans to Undergraduates, Graduate Students, and Parents of Undergraduate Students, 1970-1971 to 2012-2013, Selected Years (in millions of 2012 dollars)

|  | Federal loans (\$) | Nonfederal loans (\$) | Total (\$) | Postsecondary enrollment (FTEs) | Total borrowing per FTE student (\$) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1970-71 | 7,622 |  | 7,622 | 7,148,575 | 1,066 |
| 1975-76 | 7,490 | 0 | 7,490 | 8,479,688 | 883 |
| 1980-81 | 19,276 | 0 | 19,276 | 8,819,013 | 2,186 |
| 1985-86 | 21,071 | 0 | 21,071 | 8,943,433 | 2,356 |
| 1990-91 | 24,403 | 0 | 24,403 | 9,820,205 | 2,485 |
| 1995-96 | 39,364 | 2,000 | 41,364 | 10,172,987 | 4,066 |
| 2000-01 | 45,664 | 6,750 | 52,414 | 11,427,001 | 4,587 |
| 2005-06 | 67,984 | 20,860 | 88,844 | 13,408,264 | 6,626 |
| 2006-07 | 69,083 | 23,750 | 92,833 | 13,612,494 | 6,820 |
| 2007-08 | 75,638 | 25,530 | 101,168 | 13,960,922 | 7,247 |
| 2008-09 | 90,144 | 12,390 | 102,534 | 14,608,127 | 7,019 |
| 2009-10 | 106,648 | 9,040 | 115,688 | 15,764,432 | 7,339 |
| 2010-11 | 112,037 | 8,110 | 120,147 | 16,220,701 | 7,407 |
| 2011-12 | 109,814 | 8,130 | 117,944 | 16,143,133 | 7,306 |
| 2012-13 | 101,469 | 8,810 | 110,279 | 15,918,548 | 6,928 |

NOTE: FTE = full-time equivalent.
SOURCE: College Board (2013).
$\$ 52.4$ billion, and it more than doubled, to $\$ 120.1$ billion, over the next decade. As of 2012-2013, however, annual borrowing had fallen from its 2010-2011 peak.

Some of the borrowing changes are due to policy changes. For example, the increase from $\$ 24$ billion in 1990-1991 to $\$ 41$ billion in 1995-1996 was to a significant extent the result of the introduction of the unsubsidized Stafford Loan program, which expanded the federal program from one designed only for students with documented financial need to one including all students.

Enrollment growth is another issue. While total borrowing between 2000-2001 and 2012-2013 increased by 110 percent in real terms, from $\$ 52.4$ billion to $\$ 110.3$ billion, borrowing per full-time equivalent
(FTE) student increased by 51 percent, from $\$ 4,587$ (in 2012 dollars) to $\$ 6,928$.

The decline in both total borrowing and borrowing per student over the last two years may or may not signal a longer-term trend. But these data should serve as a caution to those who have a tendency to predict that when a trend is unfavorable it is likely to continue to be more and more unfavorable. Predictions of doom based on temporary circumstances generate attention-grabbing headlines. But as the economy rises from the depths of the Great Recession, fewer people will enroll in college as the labor market recovers, and students may borrow less as state tax revenues, incomes, and savings rise. Both the upward pressure on tuition prices and the financing strains on families and students are also likely to diminish to some extent.

## DEBT PER STUDENT VERSUS DEBT PER BORROWER

Most discussions of average debt levels focus on debt per borrower, setting aside the significant number of college students who do not borrow at all, or at least do not rely on education loans. In 2011-2012, 31 percent of bachelor's degree recipients, 50 percent of associate's degree recipients, and 34 percent of those who earned postsecondary certificates did not have education debt. Including these students may obscure some of the potential problems facing borrowers, but it paints a clearer picture of how students finance their education. For example, in 2011-2012, median debt for bachelor's degree recipients who borrowed was $\$ 26,500$, and 10 percent borrowed more than $\$ 54,900$. The median for all bachelor's degree recipients was $\$ 16,900$, and the 90th percentile was $\$ 44,500$ (National Center for Education Statistics 2012).

## UNDERGRADUATE AND GRADUATE STUDENTS

About 87 percent of all postsecondary students are undergraduate students, while the other 13 percent are graduate students who have
already completed bachelor's degrees. Both undergraduate and graduate students are eligible for federal student loans. First-year dependent undergraduate students with documented financial need may be eligible for up to $\$ 3,500$ in subsidized loans, on which the government pays the interest while the student is in school. These students frequently also take unsubsidized loans, because the total federal student loan borrowing limit is $\$ 2,000$ higher than the limit for the subsidized program. ${ }^{1}$ Since July 1, 2012, graduate students have been eligible only for unsubsidized federal student loans.

Federal loan repayment options are the same for undergraduate and graduate debt. While most students take the default option of making fixed payments every year for 10 years, there are also graduated repayment plans under which payments increase over time, extended repayment plans that allow smaller payments over more years and, of particular importance, income-dependent repayment plans. These plans make the amount owed dependent on the borrower's income, limiting required payments to a manageable portion of discretionary income and forgiving remaining debt after a period of years.

As indicated in Table 2.4 and Figure 2.2, in 2012-2013, federal loans per postsecondary student were $\$ 6,374$. But focusing only on undergraduate students yields an average of $\$ 4,897$, while graduate students borrowed over three times as much.

Graduate student debt may be an increasing problem as the gap in earnings between individuals with bachelor's degrees and those with advanced degrees grows, leading more students to continue their stud-

Table 2.4 Average Federal Loans per FTE Student, FTE Undergraduate Student, and FTE Graduate Student, 1992-1993 to 2012-2013

|  | Federal loans per <br> FTE postsecondary <br> student (\$) | Federal loans <br> per FTE UG <br> student (\$) | Federal loans per <br> FTE graduate <br> student (\$) |
| :--- | :---: | :---: | :---: |
| $1992-93$ | 2,574 | 1,959 | 6,968 |
| $1997-98$ | 4,007 | 3,216 | 9,465 |
| $2002-03$ | 4,364 | 3,406 | 10,940 |
| $2007-08$ | 5,418 | 3,978 | 14,937 |
| $2012-13$ | 6,374 | 4,897 | 16,239 |

NOTE: FTE = full-time equivalent.
SOURCE: College Board (2013).

Figure 2.2 Average Federal Loans per FTE Undergraduate and per FTE Graduate Student 1992-1993 to 2012-2013 (in 2012 dollars)


NOTE: FTE = full-time equivalent.
SOURCE: College Board (2013, Figure 3B).
ies. ${ }^{2}$ But policy responses to this issue should likely be quite different from those to the undergraduate debt issue. Subsidies for undergraduate students are critical from the perspectives of both equity and efficiency. Some postsecondary education is a virtual necessity for earnings that support a secure lifestyle. There is broad consensus that accidents of birth should not prevent people from having the opportunity to access this education. Failing to provide access also leads to a less productive labor force and to greater reliance on publicly funded income support programs.

The role of public subsidies for graduate education is less clear-cut. Certainly there are social benefits to increased educational attainment at this level, but anyone undertaking graduate study is already a four-year college graduate, and public subsidies come largely from taxpayers with lower incomes at the time students are enrolling, and even more so after they have completed their advanced degrees. Arguments for investing in education only if the financial returns are likely to be high
enough to justify the expenditure are stronger in the case of graduate education than in the case of undergraduate education.

There are certainly exceptions and sound arguments for some level of subsidy. However, the argument that graduate student debt, which is held by individuals who have the highest earnings potential of any segment of the population, should be addressed by public policy is much weaker than similar arguments about undergraduate debt.

## NONFEDERAL LOANS

Nonfederal loans, from banks and other private lenders and to a lesser extent from states and from colleges and universities, may be a particular concern because they do not come with the repayment protections attached to federal loans. It is not easy to arrange for lower or postponed payments when borrowers hit difficult financial times, and private loans are not eligible for the federal income-dependent repayment plans. Moreover, while the interest rates on federal student loans are limited by law, private loans frequently carry variable interest rates that can reach very high levels.

Figure 2.3 shows that nonfederal borrowing almost doubled, from about $\$ 10.5$ billion (in 2012 dollars) in 2002-2003 to $\$ 25.5$ billion in 2007-2008. As was the case in other credit markets, lending standards were less than rigorous. Many of the loans made during this period have not yet been repaid, and concerns over this outstanding debt are probably well placed. But the market collapsed in 2008-2009, and total nonfederal borrowing has been in the $\$ 8-\$ 9$ billion range since 2009-2010.

In 2007-2008, 14 percent of undergraduates and 11 percent of graduate students relied on the private loan market. By 2011-2012, as shown in Table 2.5, those percentages had declined to 6 percent and 4 percent, respectively (National Center for Education Statistics 2008, 2012). Both supply and demand forces contributed to this change. The tightening of credit markets is evidenced in the decline from 39 percent to 12 percent in the share of undergraduates and from 29 percent to 5 percent in the share of graduate students in for-profit postsecondary institutions taking private loans (National Center for Education Statistics 2008, 2012). But at the same time, federal loan limits for under-

Figure 2.3 Total Nonfederal Education Loans, 1997-1998 to 2012-2013 (in 2012 dollars)


SOURCE: College Board (2013, Table 1).

Table 2.5 Percentages of Undergraduate and Graduate Students Taking Private Loans, 2007-2008 and 2011-2012, by Sector

|  | $2007-08$ | $2011-12$ |
| :--- | :---: | :---: |
| Undergraduate students |  |  |
| Private for-profit | 39 | 12 |
| Private nonprofit four-year | 25 | 12 |
| Public four-year | 14 | 7 |
| Public two-year | 4 | 2 |
| Total | 14 | 6 |
| Graduate students | 29 | 5 |
| Private for-profit | 12 | 5 |
| Private nonprofit four-year | 6 | 3 |
| Public four-year | 11 | 4 |
| Total |  |  |

SOURCE: National Center for Education Statistics (2008, 2012).
graduates have increased, and federal GradPLUS Loans have become available to graduate students.

## EVALUATING EDUCATION BORROWING

People tend to compare individuals with student loan obligations to those with similar earnings who do not have the same debt. It is not a surprise that the consumption options of former students who borrowed are more limited than those whose parents paid their way. But what if those students had not borrowed? Chances are they would not have had the same education, job, or earnings. The more important comparison is between the students' opportunities with a college education and some debt and their opportunities if they did not attend college at all.

The fact that students borrow to fund postsecondary education is not in and of itself a problem. The arguments for debt financing for investments with high expected rates of return are straightforward. Between 2008 and 2011, the gap between the median earnings of high school graduates aged 25-34 and those in the same age range with a bachelor's degree or higher declined from 74 percent to 69 percent for men and from 79 percent to 70 percent for women, but the long-term trend is upward. The earnings premium for men rose from 25 percent in 1971 to 56 percent in 1991 and to 69 percent in 2011. For women it rose from 43 percent in 1971 to 56 percent in 1991 and to 70 percent in 2011 (Baum, Ma, and Payea 2013, Figure 1.6). Moreover, the earnings gap is larger for workers at older ages (Baum, Kurose, and Ma 2013, Section 6).

Average debt levels are not alarming. The popular press notwithstanding, the typical bachelor's degree recipient entering the labor market with as much as $\$ 30,000$ or $\$ 40,000$ in debt will not have undue difficulty repaying that debt out of the earnings premium from his or her education. But the growing number of borrowers with higher debt levels may struggle, even if they are reasonably successful in the labor market. And labor market outcomes are uncertain. Earnings levels vary quite a bit among people with similar levels of education, and some borrowers with average debt levels might face difficulties, especially if
they are attempting to repay their student loans over a relatively short 10 -year time period.

The existence of income-dependent repayment options for federal student loans effectively changes the risk of student debt. Many of those with very high debt levels have at least some nonfederal student debt, but the new federal repayment plans shift much of the risk from students to taxpayers, since borrowers are not expected to repay if their earnings are inadequate.

## THE FEDERAL ROLE

The logic of education debt and the manageability of average debt levels for typical college graduates do not diminish the very real problems facing a minority of students because they made unwise decisions about their investments in education; because they were, for whatever reason, unable to succeed in meeting their educational goals; or because their labor market outcomes have been less favorable than anticipated. As long as there is a public interest in promoting educational opportunities and attainment, and as long as the federal government is, as it should be, the primary source of student loans, public policy must address these issues constructively.

Some of the concerns about levels of student debt are voiced in the form of recommendations to scale back federal student loan programs. One argument is that the availability of easy credit gives colleges and universities more leeway to raise their prices. This position also reflects the idea that the federal government is inappropriately encouraging students to overborrow.

But in the absence of ample federal credit, many students are likely to turn to the private loan market, which is apt to offer reasonable terms to students enrolled in bachelor's degree programs at selective colleges who have financially secure cosigners. It is less likely to provide favorable terms to the students from low-income, first-generation families borrowing to finance enrollment in community colleges, or to low-income adults seeking credentials that will, for the first time, make them eligible for jobs that pay a living wage. Federal education policy
is (or should be) designed to provide opportunities to those students who would otherwise fall through the cracks.

The challenges presented by the prevalence of private student loans between 2002-2003 and 2007-2008 provide a reminder about why the federal government is involved in this market. The private market relies on credit histories and collateral in determining its lending terms. Students tend to have limited credit histories, low incomes, and minimal assets. Many students, including those with weak future prospects, took private loans with high interest rates. When sufficient federal loans were not available to meet their needs, or when they didn't understand their options, they looked elsewhere.

In the current belt-tightening environment, suggestions about risk rating of federal student loans have become surprisingly common. The National Association of Student Financial Aid Administrators (2013) floated the idea in a recent report. Other observers have promoted programs that would modify loan terms based on either the institutions in which students enroll or the characteristics of the students themselves. Some of the suggestions are designed to protect the federal budget (Simkovic 2011), but others are designed to protect students against overborrowing.

It is unrealistic to believe that offering high-risk students loans with higher interest rates is the best public policy for helping them make wise decisions about their educational paths. The national priority on assuring that students with limited means can participate in postsecondary education requires that we make reasonable financing options available to them. Suggestions about incorporating risk rating into the federal loan system generally rely on the assumption that students will respond to market signals and either forgo college or choose alternative programs and institutions when presented with unfavorable loan terms. Both history and the insights of behavioral economics make this seem unlikely. ${ }^{3}$ And while there are surely students who would be better off not pursuing further education than attending the institutions in which they enroll, dismantling the system that allows students with limited financial means and uncertain academic futures the chance to improve their prospects is not a prescription for a healthy economy or an equitable society.

## WHO IS BORROWING TOO MUCH?

There are two central questions: 1) Who are the students with the highest debt levels, and 2) who are the students with the least manageable debt burdens? These questions are not the same, since students who are in school for a longer time and earn higher degrees are likely to accumulate the most debt-and to have the earnings to repay that debt. Those who enroll for short periods of time and never earn credentials borrow relatively small amounts but also have weak labor market outcomes.

The most recent available data on aggregate debt by demographic and educational characteristics are for 2011-2012. That year, 23 percent of bachelor's degree recipients with debt had borrowed more than $\$ 40,000$. The percentage with no education debt at all was 31 percent. But 44 percent of bachelor's degree recipients from for-profit institutions graduated with $\$ 40,000$ or more in debt, compared to 18 percent of those from the private nonprofit sector and 10 percent from public institutions. Student loan default patterns also direct attention to the for-profit sector, with 43 percent of FY2011 defaulters coming from these institutions (U.S. Department of Education 2013). The for-profit sector is, and should be, a particular focus of concerns about student borrowing.

Comparisons of the debt levels of bachelor's degree recipients with different demographic characteristics give additional indication of where the problems lie. Independent students borrow more than dependent students. Federal loan limits are higher for independent students, who can now borrow up to $\$ 57,500$ in Direct Loans for undergraduate study, compared to $\$ 31,000$ for dependent students whose parents qualify for PLUS Loans. Independent students are also more likely to have responsibilities for supporting families and less likely to have parental support on which to fall back.

As Table 2.6 indicates, among 2011-12 bachelor's degree recipients, 9 percent of dependent students and 24 percent of independent students accumulated more than $\$ 40,000$ in education debt, with single independent students and those with dependents more likely to fall into this category than those who were married without dependents.

Table 2.6 Percentage Distribution of Aggregate Debt Levels of Bachelor's Degree Recipients by Dependency Status and Dependent Student Family Income, 2011-2012

|  | No debt | $\$ 1-\$ 20,000$ | $\$ 20,001-$ <br> $\$ 40,000$ | $\$ 40,001$ or <br> more |
| :--- | :---: | :---: | :---: | :---: |
| All bachelor's <br> degree recipients | 31 | 24 | 29 | 16 |
| Dependent | 35 | 27 | 29 | 9 |
| Less than $\$ 30,000$ | 23 | 37 | 31 | 9 |
| $\$ 30,000-\$ 64,999$ | 22 | 30 | 39 | 9 |
| $\$ 65,000-\$ 105,999$ | 40 | 23 | 26 | 12 |
| $\$ 106,000$ or more | 46 | 23 | 25 | 7 |
| Independent | 26 | 21 | 29 | 24 |
| No dependents, | 25 | 22 | 29 | 24 |
| $\quad$ unmarried |  | 20 | 2 | 18 |
| No dependents, <br> $\quad$ married | 34 | 2 | 30 | 27 |
| With dependents | 24 | 2 |  |  |

NOTE: Includes all loans ever borrowed for undergraduate education in 2011-12 and prior years. Does not include loans to parents of undergraduate students.
SOURCE: National Center for Education Statistics (2012).

Among dependent students, the patterns by family income level are not so clear. Students from higher-income families were more likely not to borrow at all. But among those who borrowed, those from the lowest-income families were most likely to borrow $\$ 20,000$ or less. Those from families with incomes between $\$ 65,000$ and $\$ 106,000$ were most likely to accumulate debts exceeding $\$ 40,000$, both overall and among those who borrowed.

As Table 2.7 shows, the breakdown of graduates by sector highlights the reality that the students who earn their degrees from for-profit institutions are most likely to have high levels of debt. Within each sector, independent students are more likely than dependent students to be in this situation, and among dependent students, it is middle- or upper-middle-income students who are most likely to borrow more than $\$ 40,000$ to finance their bachelor's degrees.

It is also notable that, as indicated in Table 2.8, within income groups, there are differences in debt levels by racial/ethnic groups.

Table 2.7 Percentage Distribution of Aggregate Debt Levels of Bachelor's Degree Recipients, by Dependency Status, Dependent Student Family Income, and Sector, 2011-2012

|  | No debt | \$1-\$20,000 | $\$ 20,001-$ <br> $\$ 40,000$ | $\$ 40,001$ or <br> more |
| :--- | :---: | :---: | :---: | :---: |
| Public four-year <br> Dependent | 36 | 27 | 27 | 10 |
| Less than $\$ 30,000$ |  |  |  |  |
| $\$ 30,000-\$ 64,999$ | 27 | 39 | 27 | 7 |
| $\$ 65,000-\$ 105,999$ | 47 | 35 | 33 | 7 |
| $\$ 106,000$ or more | 48 | 24 | 23 | 6 |
| Independent | 31 | 25 | 25 | 4 |
| Private nonprofit four-year | 27 | 23 | 28 | 16 |
| Dependent |  |  | 32 | 18 |
| Less than $\$ 30,000$ | 12 | 37 | 41 | 10 |
| $\$ 30,000-\$ 64,999$ | 14 | 23 | 51 | 13 |
| $\$ 65,000-\$ 105,999$ | 27 | 21 | 31 | 21 |
| $\$ 106,000$ or more | 42 | 23 | 26 | 10 |
| Independent | 25 | 20 | 29 | 26 |
| For-profit | 13 | 12 | 32 | 44 |
| Dependent |  |  |  |  |
| Less than $\$ 30,000$ | 0 | 20 | 35 | 45 |
| $\$ 30,000-\$ 64,999$ | 9 | 10 | 50 | 31 |
| $\$ 65,000-\$ 105,999$ | 26 | 20 | 24 | 30 |
| $\$ 106,000$ or more | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |
| Independent | 13 | 11 | 31 | 45 |

SOURCE: National Center for Education Statistics (2012).

Small sample sizes make it difficult to include breakdowns by sector, race, and income, but black students are disproportionately likely to enroll in the for-profit sector, while Hispanic students are overrepresented in community colleges. ${ }^{4}$ Among 2011-12 black bachelor's degree recipients, 28 percent had at least $\$ 40,000$ in debt. This compares to 14 percent of white graduates, 16 percent of Hispanic graduates, and 6 percent of Asian graduates. Percentages with high debt were higher for independent students, with 35 percent of independent black bachelor's degree recipients borrowing more than $\$ 40,000$.

Table 2.8 Percentage Distribution of Aggregate Debt Levels of Bachelor's Degree Recipients, by Dependency Status, Dependent Student Family Income, and Race/Ethnicity, 2011-2012

|  | No debt | \$1-\$20,000 | $\begin{gathered} \$ 20,001- \\ \$ 40,000 \end{gathered}$ | $\begin{gathered} \$ 40,001 \text { or } \\ \text { more } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| White | 33 | 24 | 30 | 14 |
| Dependent |  |  |  |  |
| Less than \$30,000 | 20 | 40 | 31 | 9 |
| \$30,000-\$64,999 | 21 | 30 | 41 | 7 |
| \$65,000-\$105,999 | 39 | 24 | 26 | 12 |
| \$106,000 or more | 48 | 21 | 25 | 7 |
| Independent | 26 | 21 | 31 | 23 |
| Black | 16 | 24 | 32 | 28 |
| Dependent |  |  |  |  |
| Less than \$30,000 | 5 | 36 | 43 | 16 |
| \$30,000-\$64,999 | 9 | 25 | 42 | 24 |
| \$65,000-\$105,999 | 25 | 30 | 28 | 17 |
| \$106,000 or more | 23 | 38 | 31 | 8 |
| Independent | 18 | 18 | 29 | 35 |
| Hispanic | 28 | 27 | 29 | 16 |
| Dependent |  |  |  |  |
| Less than \$30,000 | 25 | 39 | 31 | 6 |
| \$30,000-\$64,999 | 26 | 35 | 28 | 12 |
| \$65,000-\$105,999 | 36 | 23 | 31 | 10 |
| \$106,000 or more | 28 | 27 | 34 | 11 |
| Independent | 28 | 23 | 28 | 22 |
| Asian | 53 | 23 | 18 | 6 |
| Dependent |  |  |  |  |
| Less than \$30,000 | 51 | 27 | 19 | 3 |
| \$30,000-\$64,999 | 39 | 27 | 34 | 0 |
| \$65,000-\$105,999 | 65 | 18 | 14 | 4 |
| \$106,000 or more | 56 | 32 | 11 | 1 |
| Independent | 55 | 19 | 13 | 14 |

SOURCE: National Center for Education Statistics (2012).

Both differences in enrollment patterns and the reality that black families tend to have lower asset levels than other families with similar incomes make it unsurprising that even within income categories, black bachelor's degree recipients have higher debt levels than members of other racial/ethnic groups (Shapiro, Meschede, and Orsoro 2013). Among dependent students, within racial/ethnic groups, it is middleincome students rather than lower-income students who are most likely to accumulate high levels of debt.

High debt levels don't tell the whole story of at-risk borrowers, because for students who don't earn bachelor's degrees - those who leave school either with associate's degrees or certificates or with no postsecondary credentials - earnings tend to be lower, and lower levels of debt can lead to unmanageable payment requirements. The 84 percent of 2011-12 bachelor's degree recipients who borrowed $\$ 40,000$ or less are not likely to be at risk, except under unusual circumstances, and as Table 2.9 indicates, very few certificate holders and students who left school without a credential accumulated this much debt. But we know that those who do not complete their credentials are disproportionately likely to default. This pattern may be a function of factors other than debt to earnings ratios, including a reluctance to prioritize the repayment of loans that did not serve their intended purpose. But targeted efforts to diminish student debt problems should certainly include a focus on students with debt levels that do not exceed the overall average.

## ENROLLMENT PATTERNS

Tuition and fees, as well as living costs for college students, have risen relative to family incomes over time, even after taking into consideration the role of financial aid in reducing the net price that students actually pay. It is not surprising that students are relying more heavily on borrowing than they did a generation ago. Student loans have become more easily available, and parents seem more willing to shift the responsibility for paying for college onto their children, but the increase in postsecondary participation rates across the population also plays a role.

Table 2.9 Total Student Debt Levels of 2003-04 Beginning Postsecondary Students, by Credentials Earned by 2009 (\%)

|  | No debt | $\$ 1-\$ 10,000$ | $\$ 10,001-$ | $\$ 20,000$ | $\$ 0,001-$ | $\$ 30,001-$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 50,001$ or |  |  |  |  |  |  |
| Total | 43 | 25 | 16 | 8 | 5 | 2 |
| Bachelor's degree (31\%) | 36 | 12 | 22 | 14 | 1 | 5 |
| Associate's degree (9\%) | 42 | 24 | 18 | 9 | 7 | 1 |
| Certificate (9\%) | 39 | 45 | 12 | 2 | 1 | 0 |
| No degree, still enrolled (15\%) | 39 | 27 | 18 | 9 | 5 | 2 |
| No degree, not enrolled (35\%) | 52 | 30 | 11 | 4 | 2 | 0 |

SOURCE: College Board (2013, Figure 11C).

Between 2001 and 2011, the total number of postsecondary students grew by 32 percent, from 15.9 million to 21 million. Each student is borrowing more on average, but the growth in debt per student has been slower than the growth in the number of students borrowing. In recent years, because of rapid enrollment growth, total federal loans have grown about twice as fast as federal loans per student. In other words, it isn't so much that students are borrowing more, it's that more students are enrolling and borrowing.

Over the decade from 1983 to 1992, about 30 percent of recent high school graduates enrolling immediately in college were from families in the bottom 40 percent of the income distribution. This percentage increased to an average of about 32 percent from 1993 to 2002 and to 34 percent from 2003 to 2012. The percentage of the new college students whose families were in the highest fifth of the income distribution fell from about 28 percent between 1983 and 1992 to 25 percent from 1993 to 2002 , and to 24 percent over the most recent decade. ${ }^{5}$ More analysis is necessary to determine the role of the changing economic circumstances of college students, but it seems clear that in order to understand borrowing patterns over time, one should consider the demographic characteristics of students.

## CONCLUSION

More students today are borrowing to finance their education than did a generation ago or even a decade ago, and more students are borrowing amounts of money that have the potential to cause them longterm financial difficulties. But this reality does not define a broad "crisis." In order to address the very real problems of students with unmanageable levels of education debt, it is important to focus on the students who are struggling, rather than on students in general. And it is necessary to put education debt into the context of the investment it is financing and the payoff of that investment.

Among bachelor's degree recipients, it is not students from lowincome families who accumulate the highest levels of debt. Rather, independent students, most of whom are older than traditional college age, students who attend for-profit institutions, and African American
students are more likely than others to accumulate high levels of education debt. These groups of students are also those least likely to earn four-year degrees. Instead, many earn associate's degrees or certificates, or leave school without a credential. Focusing on these students and helping them to make decisions that will more likely lead to positive outcomes is more constructive than generalized panic about student debt.

Much of the hand wringing about student debt stops short of proposing solutions. Viable policy solutions for these particular problems are much more feasible than attempts to have taxpayers cover the entire cost of postsecondary education, or scenarios in which the cost of providing quality education plummets.

Income-dependent repayment programs shift a significant portion of the risk of education debt from the student to the taxpayer, protecting students against unforeseen circumstances. This is critical, given the uncertainty involved in postsecondary investments. The recent focus on potential improvements to these repayment programs is welcome, but care must be taken to balance protecting students with misdirecting subsidies and creating perverse incentives. For example, lowering the percentage of discretionary income required from 15 percent to 10 percent of income exceeding 150 percent of the poverty line provides significant savings only to borrowers with incomes high enough for 5 percent of discretionary income to be a measurable amount. Furthermore, limiting required payments in this way and forgiving outstanding debt after 20 years, when combined with the availability of federal loans for graduate students up to the cost of attendance, creates an unintended windfall for graduate students with very high debt levels, even if their earnings are far above the average for the taxpayers providing the subsidies (see Delisle and Hope [2012]).

Making income-dependent repayment the default option, so that students would not have to have an unusual amount of information, complete a complicated application process, or overcome a series of bureaucratic hurdles in order to benefit, could solve much of the student loan problem. Extending eligibility to students with longstanding debts and limiting the amount of unpaid interest allowed to accrue are also important components of a policy solution.

But such a system will not be feasible if the goal is to prevent students from bearing a reasonable share of the costs of their own educa-
tion. The system must be carefully designed to target subsidies at students for whom unforeseen outcomes create unmanageable difficulties. It must also be combined with more effective information and guidance in advance of student enrollment and borrowing.

Shifting the burden of repaying loans from students to taxpayers does not diminish the importance of the choices students make about postsecondary study or the support they get to help attain their goals. Many of the problems students face with overborrowing could be prevented if they had more effective guidance about their options and their chances of success. Strategies for diminishing the problems facing future students should include improved support for students-both academic support and assistance with complex decisions. In addition, reforms of the student loan system, both in terms of regulation of the private market and redesign of repayment systems for federal loans, must ameliorate the difficulties facing those who are already in untenable situations as well as protecting future students.

Headline-grabbing statements about high aggregate loan debt do not help the students who need our attention. We should focus on the debt levels of individual students, improve the policies in place to protect them against circumstances beyond their control that lead to repayment problems, and provide incoming students with better information and advice so they don't make poor education and career decisions or borrow excessive amounts.

## Notes

1. The limit on subsidized loans for dependent students is $\$ 4,500$ in the second year and $\$ 5,500$ in the third year and beyond. The total annual borrowing limit is, in each case, $\$ 2,000$ higher. Total borrowing for dependent undergraduates may not exceed $\$ 23,000$ in subsidized loans and $\$ 31,000$ overall. Independent students (and dependent students whose parents are not eligible for federal parent loans) have the same subsidized loan limits but higher overall limits (studentaid.ed.gov/ types/loans/subsidized-unsubsidized).
2. Between 2001 and 2011, the gap in median earnings between full-time working males aged 25-34 whose highest degree was a bachelor's degree and those with only a high school diploma fell from 57 percent to 56 percent. For those with a master's degree or higher, the gap grew from 94 percent to 112 percent (U.S. Census Bureau 2014).
3. For a discussion of the implications of the insights from behavioral economics for the design of the student aid system, see Baum and Schwartz (2013).
4. Hispanic students constitute 18 percent of the students at community colleges but only 13 percent of all students at degree-granting institutions. In 2010, almost half of all Hispanic students across the country were enrolled at community colleges. Black students enroll in disproportionate numbers at for-profit institutions. The share of black students in total enrollment at for-profit institutions ( 29 percent) was nearly twice as high as the share of black students in total postsecondary enrollment ( 14 percent) in 2010 (Baum and Kurose 2013).
5. Calculations by the author based on the National Center for Education Statistics (2012).

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[^0]:    Chapter 2 (pp. 11-36) in:
    Student Loans and the Dynamics of Debt
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    DOI: 10.17848/9780880994873.ch2

[^1]:    SOURCE: Federal Reserve Bank of New York (2013a).

