Student Aid Policy Analysis

# Growth in Cumulative Education Debt at College Graduation

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## EXECUTIVE SUMMARY

The number of college students graduating with debt and the average cumulative debt continues to grow, especially among students demonstrating financial need. Significantly more Pell Grant recipients graduate with student loans than non-recipients and with much higher cumulative debt.

The key findings of this report are as follows:

- Two-thirds of Bachelor's degree recipients graduated with student loans in 2007-08, with an average of $23,186 in cumulative debt. Cumulative debt at the 90$^{th}$ percentile is $44,668. The cumulative debt at graduation is increasing by $1,139 (5.6%) per year. If Parent PLUS loans are included, the average cumulative education debt is $27,803. Of those who applied for federal student aid, nearly seven-eighths graduated with student loans and a cumulative student loan debt of $24,651.
- Nearly half of Associate's degree recipients graduated with student loans in 2007-08, with an average of $13,289 in cumulative debt. The cumulative debt at graduation is increasing by $701 (6.7%) per year. Of those who applied for federal student aid, two-thirds graduated with student loans and a cumulative student loan debt of $14,350.
- 86.8% of Bachelor's degree recipients who applied for federal student aid with a family adjusted gross income less than $25,000 graduated with student loans and an average of $24,951 in cumulative education debt in 2007-08.
- More Pell Grant recipients graduate with student loans than non-recipients, and their cumulative debt is higher. Closing the debt gap among those who apply for financial aid would require increasing the maximum Pell Grant by $330 to $5,680 in 2009-10.
- Eliminating all debt at graduation among Pell Grant recipients at all 4-year colleges would require doubling the maximum Pell Grant to $11,700 in 2009-10.
- Three-fifths of Bachelor's degree recipients at 4-year public colleges, nearly three-quarters of Bachelor's degree recipients at 4-year nonprofit colleges and virtually all Bachelor's degree recipients at 4-year for-profit colleges graduate with student loans, with cumulative debt of about $20,000, $27,500 and $33,000, respectively.
- Almost two-fifths of Associate's degree recipients at 2-year public colleges, two thirds of Associate's degree recipients at 2-year nonprofit colleges and virtually all Associate's degree recipients at 2-year for-profit colleges graduate with student loans, with cumulative debt of about $10,000, $15,000 and $20,000, respectively.

[1] This update adds tables for cumulative debt at graduation for students who applied for federal student aid. It also adds a Masters of Education or Teaching row to two tables.

- The percentage of Bachelor's degree recipients graduating with student loans and the cumulative debt increases with increasing cost of attendance.
- About a quarter of undergraduate students and about a third of graduate and professional students (and about half of law and medical school students) graduate with both federal and non-federal education loans. More than a sixth of undergraduate students at public colleges, more than a third of undergraduate students at nonprofit colleges and more than half of undergraduate students at proprietary colleges graduate with both federal and private student loans. Among students graduating with both types of debt, the split is roughly 60% federal and 40% non-federal except for doctoral degree recipients where the split is 50/50 and professional degree recipients where the split is roughly 40/60.
- Debt is unavoidable for students pursuing degrees in law, medicine or business who need to apply for federal student aid, with almost all graduating with debt.
- Bachelor's degree recipients who graduate with no debt are 1.7 times more likely to enroll in graduate and professional school than Bachelor's degree recipients who graduate with some debt.
- Recommendation: Establish a $2,500 challenge grant for zero-EFC Pell Grant recipients provided that the recipient's college agrees to replace all loans with grants in the financial aid packages of challenge grant recipients.

## METHODOLOGY

The analysis was performed using the data analysis systems for the 2003-04 and 2007-08 National Postsecondary Student Aid Study (NPSAS). The NPSAS is a large survey conducted every four years by the National Center for Education Statistics at the US Department of Education. The 2003-04 NPSAS surveyed 80,000 undergraduate students and 11,000 graduate and professional students and the 2007-08 NPSAS surveyed 114,000 undergraduate students and 14,000 graduate and professional students.

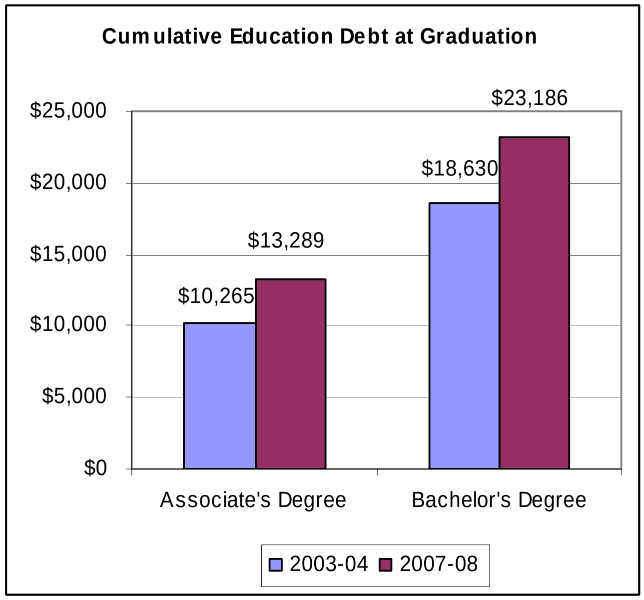
## CUMULATIVE DEBT AT GRADUATION

About two-thirds of Bachelor's degree recipients and nearly half of Associate's degree recipients graduated with education debt in 2007-08. The average cumulative debt at graduation was more than $23,000 and $13,000, respectively, and is increasing faster than the consumer price index. Of students who applied for federal student aid, nearly seven-eighths of Bachelor's degree recipients and two-thirds of Associate's degree recipients graduated with education debt.

65.6% of Bachelor's degree recipients at 4-year colleges graduated with student loans in 2007-08, up from 64.5% in 2003-04. The average cumulative debt[2] among these students was $23,186 in 2007-08, up from $18,630 in 2003-04. This represents an annual increase in education debt of $1,139 (5.6%). Cumulative debt for Bachelor's degree recipients increased at an annual rate of $805 (4.5%) at 4-year public colleges, from $16,874 in 2003-04 to $20,092 in 2007-08, and at an annual rate of $1,565 (6.7%) at 4-year private non-profit colleges, from $21,281 in 2003-04 to $27,542 in 2007-08. The median cumulative debt in 2007-08 was $19,999, with the 75th

[2] Except where noted, the term "cumulative education debt" excludes the Parent PLUS loan but includes Stafford, Perkins, state, college and private student loans. It is based on the BORAMT1 NPSAS variable.

percentile at $30,526 and the 90th percentile at $44,668. If Parent PLUS loans are included in the total, overall 66.0% of Bachelor's degree recipients at 4-year colleges graduated with debt and the cumulative debt at graduation was $27,803. (Roughly 2 out of 15 parents (13.5%) borrowed from the Parent PLUS loan program, with an average cumulative PLUS loan debt of $23,298.)

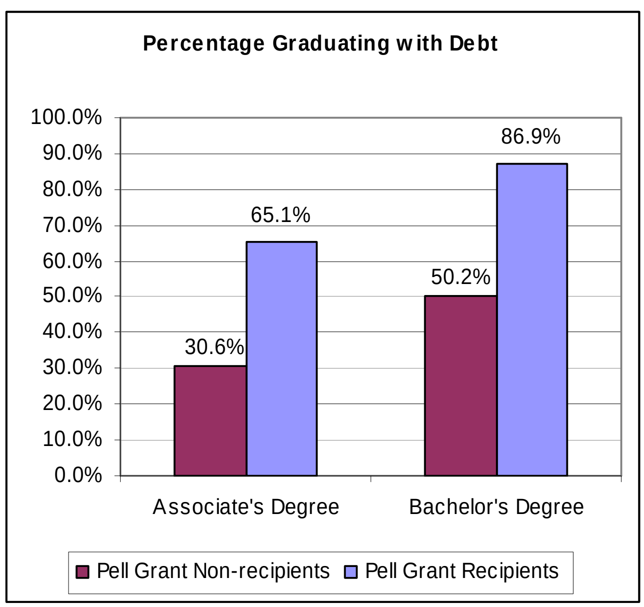



47.1% of Associate's degree recipients at 2-year colleges graduated with student loans in 2007-08, up from 36.4% in 2003-04. The average cumulative debt among these students was $13,289 in 2007-08, up from $10,265 in 2003-04. This represents an annual increase in cumulative education debt of $756 (6.7%). The median cumulative debt in 2007-08 was $8,988, with the 75th percentile at $17,333 and the 90th percentile at $26,613.

A much greater percentage of students who applied for federal student aid graduated with education debt. 86.3% of Bachelor's degree recipients who applied for federal student aid graduated with an average of $24,651 in cumulative education debt in 2007-08, compared with 86.2% and $19,521 in 2003-04. This represents an annual increase in education debt of $1,282 (6.0%). 65.4% of Associate's degree recipients who applied for federal student aid graduated with an average of $14,350 in cumulative education debt in 2007-08, compared with 54.3% and $10,436 in 2003-04. This represents an annual increase in education debt of $979 (8.3%).

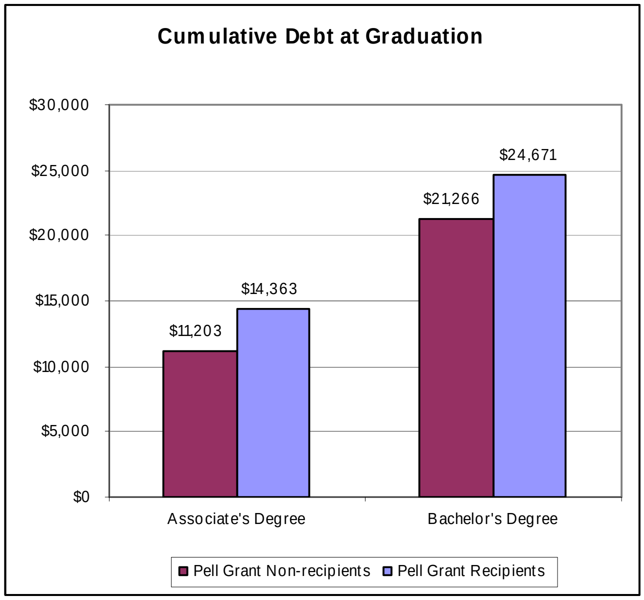
## PELL GRANT RECIPIENTS GRADUATE WITH MORE EDUCATION DEBT

Pell Grant recipients are forced to borrow more for their education than non-recipients even though low income students have a greater aversion to debt. Moderate and upper income families don't like debt, but it doesn't prevent them from enrolling in college. Among low income families, however, the prospect of debt can have a chilling effect on enrollment. Low income students may intellectually appreciate that a college education leads to higher-paying employment and that they'll be able to repay the debt, but on an emotional level they fear debt. Low income families often have very little experience with debt, and when they do have some experience with debt, it is usually negative. The current student aid system does not adequately improve access to higher education by low



income students because it provides insufficient need-based grant aid. As a result, low income students are burdened with more education debt than moderate and upper income students.

Among Bachelor's degree recipients, 86.9% of those who received at least one Pell Grant during their undergraduate education graduated with an average cumulative student loan debt of $24,671 in 2007-08, compared with 50.2% and $21,266 for graduating seniors who never received a Pell Grant.[3] Pell Grant recipients were 73% more likely to graduate with debt, and the average debt was $3,405 higher. Statistics in 2003-04 were similar, with 88.0% of Pell Grant recipients graduating with an average of $19,750 in cumulative education debt. They were 80% more likely to graduate with debt and accumulated $2,473 more debt than students who never received a Pell Grant, for whom 48.8% graduated with an average of $17,277 in cumulative education debt.




Among Associate's degree recipients, 65.1% of those who received a Pell Grant during their education graduated with an average cumulative debt of $14,363 in 2007-08, compared with 30.6% and $11,203 for graduating students who never received a Pell Grant. Pell grant recipients were more than twice as likely (113%) to graduate with debt, and the average debt was $3,159 higher.

The disparity between Pell Grant recipients and non-recipients is more muted when the analysis is limited to students who applied for federal student aid. 88.7% of Bachelor's degree recipients who applied for federal student aid and received a Pell Grant during their undergraduate education graduated with student loans and an average of $25,262 in cumulative student loan debt in 2007-08, compared with 82.9% and $23,730 among non-recipients. Among students who applied for federal student aid, Pell Grant recipients were 7% more likely to graduate with debt and the average cumulative debt was $1,532 higher.

Similar results occur with Associate's degree recipients who applied for federal student aid and received a Pell Grant during their education, with 67.5% graduating with student loans and an average of $14,848 in cumulative education debt in 2007-08, compared with 60.1% and $12,975 among non-recipients. Pell grant recipients were 12% more likely to graduate with debt and the average cumulative debt was $1,873 higher.

It is unclear whether Pell Grant recipients have a greater cumulative debt at graduation because the Pell Grant is facilitating choice in addition to access. As the following table demonstrates, the average cost of attendance was lower for Pell Grant recipients than non-recipients among first year undergraduate students who applied for federal student aid in 2007-08. However, the

[3] Among Bachelor's degree recipients with a zero expected family contribution (EFC) in their graduation year, 86.0% graduated with student loans and an average cumulative student loan debt of $24,466. Zero EFC students have exceptional financial need yet are graduating with roughly the same debt as other Pell Grant recipients.

average cost of attendance was higher for Pell Grant recipients pursuing a certificate or Associate's degree or attending a 2-year or less than 2-year institution. Most of the difference, though, was due to a higher cost of attendance for Pell Grant recipients at public 2-year and for-profit less than 2-year institutions. Pell Grant recipients are also less likely to pursue a Bachelor's degree than non-recipients. This suggests that Pell Grant recipients are generally not trading up to a more expensive institution. However, it is also possible that non-recipients are using their greater financial strength, institutional merit aid and/or other resources to facilitate choice to a greater extent than recipients. When AGI is limited to $50,000 or less, Pell Grant recipients have a higher average cost of attendance than non-recipients overall, mainly because the average cost of attendance for non-recipients drops from $15,023 to $11,004 while the average cost of attendance for Pell Grant recipients decreases only slightly from $14,108 to $14,029.

| 2007-08 | Pell Grant Recipients | | Pell Grant Non-recipients | |
|---|---|---|---|---|
| Program | Average Cost of Attendance | Distribution | Average Cost of Attendance | Distribution |
| Certificate | $15,304 | 19.1% | $13,730 | 9.5% |
| Associate's Degree | $11,274 | 54.0% | $9,308 | 49.4% |
| Bachelor's Degree | $19,040 | 26.8% | $22,377 | 41.2% |
| Overall | $14,108 | | $15,023 | |
| 4-Year | $18,999 | 37.0% | $22,064 | 45.4% |
| 2-Year | $10,226 | 51.9% | $8,537 | 50.8% |
| < 2-Year | $16,012 | 11.2% | $15,793 | 3.9% |
| Public | $10,301 | 58.8% | $10,487 | 71.5% |
| Public 4-Year | $14,895 | 16.5% | $16,148 | 24.5% |
| Public 2-Year | $8,428 | 41.2% | $7,447 | 46.5% |
| Public < 2-Year | $11,958 | 1.1% | $12,141 | 0.5% |
| Nonprofit | $24,193 | 8.4% | $31,410 | 14.3% |
| Nonprofit 4-Year | $25,621 | 7.5% | $32,120 | 13.6% |
| Nonprofit 2-Year | $12,838 | 0.5% | $16,272 | 0.5% |
| Nonprofit < 2-Year | $13,967 | 0.4% | $18,655 | 0.2% |
| For-profit | $18,186 | 32.9% | $20,487 | 14.3% |
| For-profit 4-Year | $20,304 | 13.0% | $22,719 | 7.3% |
| For-profit 2-Year | $17,187 | 10.2% | $19,873 | 3.8% |
| For-profit < 2-Year | $16,560 | 9.7% | $16,193 | 3.2% |

The strongest predictors of a Pell Grant recipient graduating with no debt include attendance at a public college, attendance at a low-cost college and pursuit of an Associate's degree or certificate. Roughly one in five (22%) students who received a Pell Grant during their undergraduate education graduated from college without debt in 2007-08. Of these students, 86.2% attend public colleges, with 60.0% attending public 2-year institutions and 23.5% attending public 4-year institutions. That compares with 55.1% of those graduating with debt attending public colleges. Nearly three-quarters (72.3%) received either an Associate's degree or a certificate, compared with almost half (48.1%) among those who graduated with debt. The average cost of attendance was $10,323, with more than half (56.7%) attending colleges with a cost of attendance of $10,000 or less and four fifths (80.3%) attending colleges with a cost of attendance of $15,000 or less. The average net cost of attendance after subtracting all aid was $6,887 ($7,215 after subtracting just grants). Since the average family AGI was $27,609, the net cost represented about a quarter (24.9%) of family income. (More than three-fifths (60.7%) had family AGI under $25,000 and 87.1% had family AGI under $50,000, similar to the distribution for the students who graduated with some debt.) Curiously, one third (33.3%) were male and two thirds (66.7%) were female. A quarter (25.2%) of Pell Grant recipients graduating with no debt had institutional grants, greater than the percentage (15.5%) of non-recipients graduating with no debt, but the average grant was lower at $2,698 vs. $4,615. More than a quarter (26.6%) of recipients had state grants, averaging $2,073, compared with about a quarter (7.9%) of non-recipients, averaging $2,564. Pell Grant recipients who graduated with no education debt were more likely to be independent than non-recipients (64.6% vs. 44.7%), with 36.6% of recipients independent with dependents other than a spouse compared with 20.6% of non-recipients. Pell Grant recipients with no education debt were more likely to have Federal Work Study (FWS) than non-recipients, 6.4% vs. 2.9%, but the average awards were less at $2,512 vs. $3,527.

Closing the debt gap between Pell Grant recipients and non-recipients who apply for federal student aid would require increasing the maximum Pell Grant by $330 to $5,680 in 2009-10. While this would equalize the amount of debt at graduation, it still would not address the chilling effect that the prospect of education debt has on enrollment by low income students. For example, 86.8% of Bachelor's degree recipients who applied for federal student aid and who have family AGI less than $25,000 graduated with an average of $24,951 in cumulative education debt in 2007-08. In other words, the current federal student aid system expects low income students with exceptional financial need to assume more cumulative education debt for their education than their parents earn in a year.

The following table illustrates the percentage of graduating Pell Grant recipients at 4-year institutions who graduate at each class level, as well as the cumulative debt. The weighted average of the debt divided by the number of years in school is $6,529, yielding a reasonable estimate of the increase in the maximum Pell Grant necessary to eliminate debt from the financial aid packages of low income students.[4] That would yield a maximum Pell Grant of $10,839 in 2007-08. If we assume that the average Pell Grant increases by 3% each year and adjust accordingly, then the maximum Pell Grant would have to have been $6,800 higher in 2007-08 to eliminate debt at graduation, yielding a maximum Pell Grant of $11,110 in 2007-08. That suggests that the maximum Pell Grant would have to be around $11,700 in 2009-10 to eliminate debt from the financial aid packages of low income students, 2.2 times higher than the current maximum Pell Grant of $5,350.

| 2007-08 Class Level (All 4-Year Colleges) | Percent of Graduates | Cumulative Debt at Graduation |
|---|---|---|
| 1st Year Undergraduate | 2.0% | $15,952 |
| 2nd Year Undergraduate | 2.8% | $16,347 |
| 3rd Year Undergraduate | 12.6% | $24,053 |
| 4th Year Undergraduate | 66.6% | $24,242 |
| 5th Year Undergraduate | 15.9% | $29,408 |

The following table illustrates a similar result, but restricted to 4-year public colleges. The weighted average of the debt per number of years in school is $5,646. Adjusted for an annual

[4] Because the cumulative debt figures are averages, some Pell Grant recipients would still graduate with debt. But increasing the maximum Pell Grant as indicated would make it possible for all Pell Grant recipients to graduate without debt, and this message would have a big impact on college enrollment by low income students.

increase in the average Pell Grant of 3% per year would yield $5,889 instead, yielding a maximum Pell Grant of $10,199 in 2007-08. The corresponding figure for 2009-10 would be around $10,600, almost twice the actual maximum Pell Grant.

| 2007-08 Class Level (4-Year Public Colleges) | Percent of Graduates | Cumulative Debt at Graduation |
|---|---|---|
| 1st Year Undergraduate | 1.7% | $10,996 |
| 2nd Year Undergraduate | 2.3% | $15,200 |
| 3rd Year Undergraduate | 10.4% | $19,433 |
| 4th Year Undergraduate | 69.2% | $21,374 |
| 5th Year Undergraduate | 16.4% | $27,847 |

Increasing the maximum Pell Grant by $5,000 would cost approximately $35 billion a year, and Congress lacks the political will to pursue such a change. But there are a variety of less expensive approaches that would still increase Bachelor's degree attainment by a subset of Pell Grant recipients, namely the zero-EFC students.

- The current need analysis methodology does not allow the EFC to go negative, setting the EFC to zero. In 2008 Senator Kennedy proposed allowing the EFC to go negative and increasing the amount of the Pell Grant by the absolute value of the negative EFC, capped at $750. About two-fifths of Pell Grant recipients have a zero EFC, so this could cost up to $5 billion a year. Allowing the EFC to go negative would help differentiate among students with exceptional financial need.

- Congress could establish a supplemental annual $2,500 grant for zero-EFC Pell Grant recipients (call it a Simon Grant) which would be contingent on the college agreeing to replace all loans with grants in the financial aid packages of students who received this grant. This would challenge colleges to increase need-based grant aid to students with exceptional financial need. The availability of the Simon Grant would encourage zero-EFC students to enroll at colleges that adopted no loans policies, putting pressure on colleges with less generous financial aid policies. It would also encourage colleges with no loans policies to increase the number of Pell Grant recipients they enroll. This is similar to the idea of providing colleges with a graduation bounty for Pell Grant recipients, [5] but would provide an intermediate benefit for improvements in the retention of Pell Grant recipients, would focus aid on the neediest of the needy, and would stimulate increases in institutional need-based grants. Depending on the number of colleges that adopted such no loans policies, this would cost $1.8 billion to $7.0 billion per year.

## CUMULATIVE DEBT BY INSTITUTIONAL CHARACTERISTICS

The following table shows the percentage of Bachelor's degree recipients graduating with debt at undergraduate 4-year institutions and the average cumulative debt at graduation among these borrowers by control of institution in 2003-04 and 2007-08. It demonstrates that the percentage

[5] See Robert Shireman, *What Would Higher Education Do With $6 Billion a Year?*, Chronicle of Higher Education 50(41):B17, June 18, 2004. http://chronicle.com/weekly/v50/i41/41b01701.htm

borrowing and the cumulative debt at graduation is higher at for-profit colleges than at non-profit colleges, and likewise higher at non-profit colleges than at public colleges.

| Bachelor's Degree and 4-Year by Control of Institution | Percentage Graduating with Debt 2007-08 | Cumulative Debt at Graduation 2007-08 | Percentage Graduating with Debt 2003-04 | Cumulative Debt at Graduation 2003-04 | Annual Increase |
|---|---|---|---|---|---|
| Overall | 65.6% | $23,186 | 64.5% | $18,630 | $1,139 (5.6%) |
| Public | 61.7% | $20,092 | 61.0% | $16,874 | $805 (4.5%) |
| Private Not-for-Profit | 70.5% | $27,542 | 70.8% | $21,281 | $1,565 (6.7%) |
| Private For-Profit | 96.1% | $32,906 | 83.8% | $26,849 | $1,514 (5.2%) |

The following table shows the percentage of Associate's degree recipients graduating with debt at undergraduate 2-year institutions and the average cumulative debt at graduation among these borrowers by control of institution in 2003-04 and 2007-08. The percentage borrowing and the cumulative debt at graduation, as well as the increase in cumulative education debt, is higher at for-profit colleges than at non-profit colleges, and likewise higher at non-profit colleges than at public colleges.

| Associate's Degree and 2-Year by Control of Institution | Percentage Graduating with Debt 2007-08 | Cumulative Debt at Graduation 2007-08 | Percentage Graduating with Debt 2003-04 | Cumulative Debt at Graduation 2003-04 | Annual Increase |
|---|---|---|---|---|---|
| Overall | 43.4% | $12,206 | 33.5% | $9,404 | $701 (6.7%) |
| Public | 38.2% | $10,329 | 30.2% | $8,662 | $417 (4.5%) |
| Private Not-for-Profit | 67.8% | $15,035 | 61.9% | $11,459 | $894 (7.0%) |
| Private For-Profit | 98.2% | $20,188 | 91.2% | $13,799 | $1,597 (10.0%) |

The following table illustrates a strong correlation between an institution's cost of attendance and cumulative debt at graduation for Bachelor's degree recipients.

| 2007-08 Cost of Attendance | Percentage Graduating with Debt | Cumulative Debt at Graduation |
|---|---|---|
| ≤ $10,000 | 56.8% | $19,494 |
| $10,000 to $20,000 | 65.8% | $21,010 |
| $20,000 to $30,000 | 69.5% | $24,624 |
| > $30,000 | 70.8% | $30,446 |

The following table shows the percentage of graduating undergraduate students who graduated with debt and the average cumulative debt at graduation according to level and control of institution.[6] Compared with 2003-04, there was significant growth in the cumulative debt at private for-profit colleges, mostly due to the growth in cumulative debt at 2-year private for-profit colleges. There was also significant growth in both the percentage borrowing and

[6] This table focuses on level and control of institution, not degree received. The previous tables focus on degree received. The overall total for private for-profit colleges is lower because of a greater mix of 2-year institutions in the overall total. The overall total for 4-year private for-profit institutions is lower than for Bachelor's degree recipients because for-profit 4-year institutions are more likely to also award Associate's degrees than non-profit and public 4-year institutions.

cumulative debt at private non-profit less-than-2-year institutions, bringing the cumulative debt into the same ballpark as for public and proprietary institutions.

| 2007-08 (All Students) | Undergraduate Education Debt | |
|---|---|---|
| Institution Level & Control | Percent Borrowing | Cumulative Debt |
| Overall Total (4, 2 and < 2 year) | 58.8% | $18,625 |
| Public | 49.4% | $16,369 |
| Private Non-Profit | 69.7% | $26,683 |
| Private For-Profit | 93.1% | $17,162 |
| 4-year Total | 66.5% | $22,656 |
| 4-year Public | 61.1% | $19,839 |
| 4-year Private Non-Profit | 70.6% | $27,349 |
| 4-year Private For-Profit | 97.0% | $24,635 |
| 2-year Total | 44.8% | $12,307 |
| 2-year Public | 37.2% | $10,444 |
| 2-year Private Non-Profit | 64.0% | $14,790 |
| 2-year Private For-Profit | 97.6% | $17,310 |
| Less than 2-year Total | 74.7% | $10,172 |
| Less than 2-year Public | 36.1% | $10,321 |
| Less than 2-year Private Non-Profit | 45.0% | $10,990 |
| Less than 2-year Private For-Profit | 86.0% | $10,123 |

The following table shows the same data but restricted to students who submitted the FAFSA.

| 2007-08 (Submitted FAFSA) | Undergraduate Education Debt | |
|---|---|---|
| Institution Level & Control | Percent Borrowing | Cumulative Debt |
| Overall Total (4, 2 and < 2 year) | 79.0% | $19,891 |
| Public | 70.2% | $17,868 |
| Private Non-Profit | 87.4% | $27,684 |
| Private For-Profit | 96.2% | $17,436 |
| 4-year Total | 86.9% | $24,012 |
| 4-year Public | 83.3% | $21,289 |
| 4-year Private Non-Profit | 89.1% | $28,420 |
| 4-year Private For-Profit | 98.9% | $24,702 |
| 2-year Total | 63.7% | $13,236 |
| 2-year Public | 53.2% | $10,889 |
| 2-year Private Non-Profit | 71.7% | $15,175 |
| 2-year Private For-Profit | 98.3% | $17,362 |
| Less than 2-year Total | 84.5% | $10,201 |
| Less than 2-year Public | 51.0% | $9,898 |
| Less than 2-year Private Non-Profit | 53.2% | $9,999 |
| Less than 2-year Private For-Profit | 91.5% | $10,233 |

## CUMULATIVE DEBT BY BORROWER CHARACTERISTICS

The following table shows the percentage of Bachelor's degree recipients at 4-year undergraduate institutions who graduated with debt and the average cumulative debt at graduation according to race. These trends persist even when controlled for differences in adjusted gross income or Pell Grant recipient status, although the percentage graduating with debt increases in all races for lower-income students and Pell Grant recipients.

| 2007-08<br>Race | Percentage Graduating with Debt | Cumulative Debt at Graduation |
|---|---|---|
| White | 64.1% | $23,440 |
| Black or African American | 81.2% | $25,634 |
| Hispanic or Latino | 66.4% | $20,806 |
| Asian | 54.4% | $19,235 |
| American Indian or Alaska Native | 79.6% | $25,763 |
| Native Hawaiian or Pacific Islander | 67.5% | $21,284 |
| Other | 87.2% | $26,157 |
| More than one race | 70.4% | $23,618 |

The following table shows the percentage of Bachelor's degree recipients at 4-year undergraduate institutions who graduated with debt and the average cumulative debt at graduation according to gender. Women are somewhat more likely to graduate with debt and to have higher cumulative debt at graduation.

| 2007-08<br>Gender | Percentage Graduating with Debt | Cumulative Debt at Graduation |
|---|---|---|
| Male | 62.5% | $22,431 |
| Female | 67.9% | $23,718 |

The following table shows the percentage of Bachelor's degree recipients at 4-year undergraduate institutions who graduated with debt and the average cumulative debt at graduation according to various patterns of borrowing federal and private student loans during their undergraduate education.

| 2007-08<br>Borrowing Pattern During Undergraduate Education | Percentage of Student Population | Percentage Graduating with Debt | Cumulative Debt at Graduation |
|---|---|---|---|
| Did not borrow private | 66.8% | 48.5% | $17,579 |
| Borrowed private | 33.2% | 100.0% | $28,661 |
| Did not borrow federal | 38.4% | 10.4% | $15,557 |
| Borrowed federal | 61.6% | 100.0% | $23,683 |
| Borrowed both federal and private | 29.2% | 100.0% | $30,460 |

Overall, 61.6% of Bachelor's degree recipients at 4-year undergraduate institutions graduated with federal education debt and the cumulative federal education debt was $17,878. 33.2% graduated with private student loan debt and the average cumulative private student loan debt was $12,649. This compares with the 65.6% and $23,186 figures for total education debt.

## PERCENTAGE GRADUATING WITH BOTH FEDERAL AND PRIVATE LOANS

About a quarter of undergraduate students and about a third of graduate and professional students (and about half of law and medical school students) have both federal and private[7] (non-federal) student loans when they graduate.[8] More than a sixth of undergraduate students at public colleges, more than a third of undergraduate students at nonprofit colleges and more than half of undergraduate students at proprietary colleges graduate with both federal and private student loans. Since federal and private student loans cannot be consolidated together, this means that these students will have at least two monthly loan payments. The following tables illustrate the percentage of students graduating with both federal and private student loans according to various characteristics.

**Percentage of Undergraduate Students Graduating with both Federal and Private Student Loans**

| Undergraduate Student Characteristics at Graduation, 2007-08 NPSAS | Percentage with both Federal and Private Loans |
|---|---|
| Overall | 24.9% |
| Degree: Certificate | 28.3% |
| Degree: Associate's | 17.2% |
| Degree: Bachelor's | 28.9% |
| Level: 4-year | 30.4% |
| Level: 2-year | 15.4% |
| Level: Less than 2-year | 32.9% |
| Control: Public | 16.6% |
| Control: Private Not-for-Profit | 36.8% |
| Control: Private For-Profit | 52.3% |
| Sector: Public 4-year | 23.2% |
| Sector: Public 2-year | 9.7% |
| Sector: Public Less than 2-year | 8.6% |
| Sector: Nonprofit 4-year | 37.6% |
| Sector: Nonprofit 2-year | 26.8% |
| Sector: Nonprofit Less than 2-year | 20.0% |
| Sector: For-profit 4-year | 64.2% |
| Sector: For-profit 2-year | 55.7% |
| Sector: For-profit Less than 2-year | 39.6% |

[7] In this section the term "private student loan" refers to non-federal education loans, including loans from college, state government and non-profit lenders in addition to alternative loans from for-profit lenders. The 2007-08 NPSAS doesn't include a variable for cumulative private student loan debt, but does include the NFEDCUM1 variable corresponding to cumulative non-federal education loan debt.

[8] This analysis predates the increases in the unsubsidized Stafford loan for undergraduate students as enacted by the Ensuring Continued Access to Student Loans Act of 2008 (ECASLA). These increases will likely shift borrowing from private and other non-federal loans to federal loans and may reduce the percentage of students graduating with both federal and private student loans.

| Percentage of Graduate Students Graduating with both Federal and Private Student Loans | | |
|---|---|---|
| **Graduate Student Characteristics at Graduation, 2007-08 NPSAS** | **Percentage with both Federal and Private Loans (Graduate Only)** | **Percentage with both Federal and Private Loans (Graduate + Undergraduate)** |
| Overall | 17.8% | 32.2% |
| Master's Degree | 15.3% | 30.6% |
| Doctoral Degree | 14.6% | 26.3% |
| Professional Degree | 43.7% | 52.0% |
| Master of Science (MS) | 11.5% | 24.3% |
| Master of Arts (MA) | 18.9% | 34.7% |
| Master of Business Administration (MBA) | 16.9% | 30.1% |
| Master of Social Work (MSW) | 31.0% | 47.5% |
| PhD | 9.3% | 20.7% |
| Law (LLB or JD) | 50.0% | 55.5% |
| Medicine or Osteopathic Medicine | 36.5% | 46.6% |

Of the undergraduate students graduating with both federal and non-federal loans, about three-fifths (60.3%) of the debt is federal and two-fifths (39.7%) is non-federal. A similar split occurs regardless of degree or level and control of institution. The range is from 53.3% federal at nonprofit 4-year colleges to 66.5% federal at private for-profit 4-year colleges.

The split for graduate and professional students who graduate with both types of debt is 54.0% federal and 46.0% non-federal. Master's degree recipients who graduate with both federal and non-federal debt have 55.7% federal and 44.3% non-federal. (A major exception is MBA recipients which 60.0% of the debt at graduation is federal and 40.0% is non-federal.) Doctoral degree recipients who graduate with both types of debt have a nearly even split with 50.8% federal and 49.2% non-federal. With professional degree programs the split is 44.3% federal and 55.7% non-federal. Professional degree recipients may tilt more toward private student loans because there is no federal equivalent of bar study and residency loans.

## CUMULATIVE DEBT FOR GRADUATE AND PROFESSIONAL STUDENTS

The following table shows the percentage of graduating students at graduate and professional institutions who graduated with debt and the average cumulative debt at graduation according to degree program.

| 2007-08 (All Students) | Education Debt (Graduate Only) | | All Education Debt (Grad + Undergrad) | |
|---|---|---|---|---|
| **Graduate & Professional Degree Programs** | **Percent Borrowing** | **Cumulative Debt** | **Percent Borrowing** | **Cumulative Debt** |
| Total | 56.4% | $40,297 | 69.6% | $47,503 |
| Master's Degree | 55.2% | $31,031 | 69.4% | $40,208 |
| Doctoral Degree | 45.8% | $57,860 | 56.3% | $58,967 |
| Professional Degree | 86.2% | $87,308 | 87.9% | $98,711 |
| Master of Business Administration (MBA) | 55.5% | $31,927 | 68.9% | $41,676 |
| Master of Social Work (MSW) | 72.3% | $35,516 | 77.7% | $49,017 |
| Master of Science (MS) | 49.8% | $30,684 | 63.5% | $40,362 |
| Master of Arts (MA) | 60.8% | $29,975 | 73.7% | $40,500 |
| Master of Education or Teaching | 55.9% | $26,487 | 74.5% | $35,946 |
| PhD | 35.4% | $44,995 | 48.0% | $45,455 |
| EdD | 65.1% | $43,812 | 73.3% | $44,880 |
| Law (LLB or JD) | 88.6% | $80,081 | 88.6% | $92,937 |
| Medicine or Osteopathic Medicine | 81.9% | $119,424 | 83.2% | $127,272 |
| Pharmacy (PharmD) | 82.2% | $63,412 | 85.0% | $81,838 |

The following table shows the percentage of graduating students at graduate and professional institutions who applied for federal student aid and graduated with debt and the average cumulative debt at graduation according to degree program. This demonstrates that graduating with debt is unavoidable for students pursuing degrees in law, medicine or business who need to apply for federal student aid.

| 2007-08 (Submitted FAFSA) | Education Debt (Graduate Only) | | All Education Debt (Grad + Undergrad) | |
|---|---|---|---|---|
| **Graduate & Professional Degree Programs** | **Percent Borrowing** | **Cumulative Debt** | **Percent Borrowing** | **Cumulative Debt** |
| Total | 94.3% | $46,865 | 96.9% | $62,285 |
| Master's Degree | 94.5% | $34,741 | 97.7% | $51,223 |
| Doctoral Degree | 82.8% | $73,885 | 85.0% | $85,366 |
| Professional Degree | 99.4% | $92,575 | 99.9% | $105,705 |
| Master of Business Administration (MBA) | 98.2% | $34,691 | 98.9% | $53,779 |
| Master of Social Work (MSW) | 91.9% | $36,924 | 91.9% | $54,020 |
| Master of Science (MS) | 95.2% | $34,824 | 98.3% | $52,102 |
| Master of Arts (MA) | 94.0% | $34,357 | 97.4% | $50,102 |
| Master of Education or Teaching | 92.6% | $31,540 | 96.8% | $49,286 |
| PhD | 67.5% | $58,353 | 72.0% | $69,754 |
| EdD | 94.5% | $51,695 | 94.5% | $61,121 |
| Law (LLB or JD) | 99.9% | $82,601 | 99.9% | $95,914 |
| Medicine or Osteopathic Medicine | 100.0% | $126,152 | 100.0% | $136,474 |
| Pharmacy (PharmD) | 100.0% | $66,319 | 100.0% | $88,648 |

The adjusted gross income (AGI) among graduate and professional students who applied for federal student aid was lower among those who applied for federal student aid than among those who did not, with medians of $26,219 and $41,422 and averages of $35,384 and $49,779, respectively. This suggests that students who have greater financial strength are less likely to apply for federal student aid or to borrow to pay for their graduate and professional education.

The following tables show the percentile distribution of cumulative debt for graduating students at graduate and professional institutions among students graduating with debt. The first table shows just debt incurred during graduate school while the second table also includes undergraduate debt. As a general rule, debt levels at the 90th percentile should be considered excessive unless there is a strong financial justification, such as pursuing a degree in a specialty which is likely to yield a debt to income ratio of 1.0 or less.

| | Cumulative Debt at Graduation (Graduate Only) | | |
|---|---|---|---|
| **Graduate & Professional Degree Programs, 2007-08** | **Median** | **75th Percentile** | **90th Percentile** |
| Total | $29,576 | $53,415 | $82,044 |
| Master's Degree | $25,000 | $42,898 | $59,869 |
| Doctoral Degree | $52,000 | $75,712 | $123,650 |
| Professional Degree | $79,836 | $118,500 | $159,750 |
| Master of Business Administration (MBA) | $24,516 | $42,000 | $66,707 |
| Master of Social Work (MSW) | $30,639 | $45,658 | $57,500 |
| Master of Science (MS) | $24,698 | $49,000 | $58,000 |
| Master of Arts (MA) | $24,670 | $39,594 | $58,907 |
| Masters of Education or Teaching | $21,276 | $37,484 | $50,000 |
| PhD | $34,410 | $62,000 | $96,000 |
| EdD | $40,000 | $65,906 | $80,416 |
| Law (LLB or JD) | $77,190 | $107,005 | $135,000 |
| Medicine or Osteopathic Medicine | $128,643 | $173,797 | $197,175 |
| Pharmacy (PharmD) | $58,000 | $100,000 | $110,000 |

| | Cumulative Debt at Graduation (Graduate + Undergraduate) | | |
|---|---|---|---|
| **Graduate & Professional Degree Programs, 2007-08** | **Median** | **75th Percentile** | **90th Percentile** |
| Total | $38,500 | $65,732 | $96,887 |
| Master's Degree | $35,427 | $56,500 | $78,088 |
| Doctoral Degree | $46,789 | $79,932 | $130,000 |
| Professional Degree | $88,984 | $136,436 | $180,000 |
| Master of Business Administration (MBA) | $36,634 | $58,750 | $78,006 |
| Master of Social Work (MSW) | $49,457 | $62,072 | $86,444 |
| Master of Science (MS) | $35,538 | $59,157 | $78,088 |
| Master of Arts (MA) | $35,938 | $54,053 | $87,295 |
| Masters of Education or Teaching | $28,472 | $49,987 | $75,631 |
| PhD | $33,457 | $71,028 | $95,500 |
| EdD | $39,615 | $66,959 | $82,893 |
| Law (LLB or JD) | $85,000 | $127,750 | $160,500 |
| Medicine or Osteopathic Medicine | $128,774 | $179,000 | $216,270 |
| Pharmacy (PharmD) | $69,250 | $112,715 | $140,000 |

## IMPACT OF EDUCATION DEBT ON FURTHER EDUCATION

Undergraduate debt has a significant impact on further education plans. 47.5% of undergraduate Bachelor's degree recipients who graduate with debt go to graduate school, compared with 81.1% of undergraduate Bachelor's degree recipients who graduated with no debt.[9] Overall 59.2% of undergraduate Bachelor's degree recipients go to graduate school, including Master's, doctoral and professional degree programs. Thus Bachelor's degree recipients who graduate with no debt are 1.7 times (70.6%) more likely to go to graduate and professional school that Bachelor's degree recipients who graduate with some debt.

[9] These percentages are calculated by comparing the number of undergraduate Bachelor's degree recipients graduating with and without debt in 2007-08 with the number of first-year graduate students with and without undergraduate debt in 2007-08. These figures are not based on a longitudinal study and do not correspond to the same cohort of students.