STATS IN BRIEF

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The Debt Burden of Bachelor's Degree Recipients

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Statistics in Brief publications present descriptive data in tabular formats to provide useful information to a broad audience, including members of the general public. They address simple and topical issues and questions. They do not investigate more complex hypotheses, account for inter-relationships among variables, or support causal inferences. We encourage readers who are interested in more complex questions and in-depth analysis to explore other NCES resources, including publications, online data tools, and public- and restricted-use datasets. See nces.ed.gov and references noted in the body of this document for more information.

As of May 2013, total outstanding student loan debt in the United States had reached $1.2 trillion, up from $1 trillion fewer than 18 months before (Chopra 2013b). The growth in debt is due primarily to increases in both the rate of borrowing and the average amount borrowed, especially among graduates of 4-year institutions.[1] In 1989–90, about half (51 percent) of college seniors had taken out federal student loans; 60 percent of 1999–2000 seniors had done so, as had 68 percent of 2011–12 college seniors (Snyder, de Brey, and Dillow 2016). Adjusting for inflation to 2013–14 dollars, the average cumulative amount taken out in federal loans by borrowers in their senior year of college also increased over this time period, from $15,200 in 1989–90, to $22,100 in 1999–2000, and $26,300 in 2011–12.

Despite rising student debt levels, the average increase in lifetime earnings from a bachelor's degree relative to a high school diploma still exceeds average student loan debt (Akers and Chingos 2014). Recent research has found a lifetime earnings premium for those with bachelor's degrees, relative to those with

[1] The other factor dominating total outstanding student loan debt is the interest accrued, which is influenced by the rate of repayment, including delinquency, default, and income-driven repayment plans.

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only a high school diploma, of just under 70 percent (Abel and Deitz 2014). Other work has also found a clear financial advantage to earning a bachelor's degree (Carnevale, Rose, and Cheah 2011; Goldin and Katz 2008; Oreopoulos and Petronijevic 2013).[2]

Nevertheless, there is concern about such negative effects of student loan debt for both individual borrowers and the economy as a reduction of home or auto purchases, net worth, and intergenerational financial security (Addo, Houle, and Simon 2016; Brown and Caldwell 2013; Chopra 2013a; Elliott, Lewis, and Johnson 2014). There is evidence that bachelor's degree recipients with high student debt are less likely than their low-debt peers to work in such sectors as government, nonprofit organizations, or education (Field 2009; Rothstein and Rouse 2011). Additionally, compared to those without student debt, graduates with debt also have lower rates of attending graduate school (Millett 2003; Monks 2001), owning a home, and having savings or investments (Luong 2010).

Bachelor's degree recipients who graduated in 2007–08 may experience particular difficulties in repaying student loan debt. These graduates entered the labor market just as the economy was contracting and therefore faced poor employment conditions after they had already decided to incur student debt in a prerecession economy. Building on a previous study of these graduates' debt burden 1 year after they had received their degrees (Woo 2013), this Statistics in Brief examines their loan repayment over a longer repayment window, 4 years after graduation, almost midway through the standard 10-year loan repayment period. The report examines debt accumulated for all postsecondary education, including any debt incurred for education programs in which graduates enrolled after completing the 2007–08 bachelor's degree.

Additionally, this study utilizes a recent cohort of students, providing an update to older longitudinal studies of debt burden (Choy and Li 2006).

Since this report examines a cohort of students who received bachelor's, and in some cases graduate, degrees, these estimates should not be compared with the debt and repayment experiences of students who earned certificates or associate's degrees or did not complete a postsecondary credential (Gladieux and Perna 2005; Looney and Yannelis 2015; Nguyen 2012; Wei and Horn 2013).

DATA

The data used in this Statistics in Brief are drawn from the most recent administration of the Baccalaureate and Beyond Longitudinal Study (B&B:08/12), a nationally representative, longitudinal survey of students who completed the requirements for a bachelor's degree during the 2007–08 academic year. The first follow-up study, conducted 1 year after graduation, explored the cohort's undergraduate education experiences, early postbaccalaureate employment, additional enrollment in postsecondary education, and undergraduate education debt. The second follow-up, conducted in 2012, continued to

[2] A growing body of evidence suggests that although some students who earn 2-year degrees or certificates or who attend college without completing borrow considerable amounts, the returns to their education are not as robust as the returns to a bachelor's degree (Bahr et al. 2015; Dadgar and Weiss 2012; Jepsen and Mueser 2015; Jepsen, Troske, and Coomes 2014; Liu, Belfield, and Trimble 2015; Paslov and Skomsvold 2014; Wei and Horn 2013). This report focuses on borrowing and debt among bachelor's degree recipients, excluding other students whose borrowing and debt patterns may differ.

examine their labor market experiences, postbaccalaureate enrollment, and debt burden and repayment through the fourth year after graduation. All information pertaining to federal student loans, including federally guaranteed loans and loans directly from the U.S. government, was obtained from the National Student Loan Database System, the administrative financial aid database of the U.S. Department of Education. Information on private student loans, i.e., those from commercial banks without federal guarantee, came from the student survey. More information about the data can be found at http://nces.ed.gov/surveys/b&b.

This Statistics in Brief examines all the debt held by borrowers in the 2007–08 cohort. It includes debt incurred through Stafford Subsidized, Stafford Unsubsidized, and Graduate PLUS loans, from both the Direct Loan and Federal Family Education Loan programs, and Perkins loans, but does not include PLUS Loans for Parents. It also includes private student loans that students obtain from commercial banks. Information on any kind of temporary deferment of payments or missed payments that would be equivalent to deferment, forbearance, or delinquency was not available for private loans.

All comparisons of estimates were tested for statistical significance using the Student's statistic, and all differences cited are statistically significant at the $p < .05$ level.[3] Readers are cautioned not to draw conclusions regarding causality based on the descriptive findings presented in this report.

[3] No adjustments for multiple comparisons were made. The standard errors for the estimates can be found in appendix B.

STUDY QUESTIONS

1. Among 2007–08 bachelor's degree recipients who had borrowed for their postsecondary education, what was their outstanding education debt 4 years after graduation, and how did this amount vary among groups of graduates?
2. Among bachelor's degree recipients who had borrowed for their undergraduate education and had no additional enrollment, what was the repayment status of their education debt 4 years after graduation, and what percentage of these graduates experienced repayment difficulties during that time?
3. Among bachelor's degree recipients who had borrowed for their postsecondary education, what was their average education debt burden (i.e., their monthly loan payment as a percentage of their monthly salary) 4 years after graduation?

KEY FINDINGS

- Some 4 years after completing their degrees, 72 percent of 2007–08 bachelor's degree recipients had borrowed for postsecondary education (as undergraduates or graduate students) and 63 percent of bachelor's degree recipients still had student loan debt (figure 1). Borrowers who had no postsecondary enrollment after completing the 2007–08 bachelor's degree owed an average of $24,200 (figure 2). Those who had borrowed for additional postsecondary education owed an average of $61,300.
- Among borrowers with no additional enrollment, 69 percent were repaying their loans, 17 percent had paid off their loans, 9 percent were not paying but still owed, and 5 percent had defaulted (figure 7). Among federal borrowers with no further enrollment, about one-quarter (24 percent) had at least one delinquent loan (figure 9).
- Among federal borrowers with bachelor's degrees but no further enrollment, those who had borrowed the most had higher rates of deferment for reasons of economic difficulty, forbearance, delinquency, and default (figure 10).
- Among borrowers who were in repayment, employed, and did not enroll in further education, the average debt burden (i.e., their monthly loan payment as a percentage of their monthly salary) was 10 percent (table 2). About 22 percent of employed graduates who had not enrolled in additional postsecondary education after receiving their bachelor's degree and were repaying their student loans carried a debt burden over 12 percent, a level that is considered burdensome (Baum and O'Malley 2003; Baum and Schwartz 2006; Clark 2009; Greiner 1996; Hopkins 2012).

GLOSSARY OF TERMS

Amount borrowed—The average cumulative amount borrowed in both federal and private loans.

Amount owed—The average cumulative outstanding balance in both federal and private loans, including principal and interest.

Debt burden—The ratio of monthly loan payments for all student loans to monthly salary.

Default—The status of a federal loan when a borrower fails to make a payment for 270 days. For private loans there is no standard definition.

Deferment—A temporary cessation of payments on a federal loan that is allowed under certain conditions. If the loan is not subsidized, interest payments still accrue and may be added to the payments or capitalized into principal. The most common reason for deferment is further enrollment in higher education, but deferments can also be given for such other reasons as economic hardship or unemployment.

Delinquency—Missing at least one federal loan payment in a past due period, which can range from 31 to 269 days.

Forbearance—A temporary cessation of federal loan payments with the agreement of the loan servicer. This is usually granted for financial hardship and interest continues to accrue.

Not paying but owe—The status of borrowers in the grace period between when they leave school and when the first payment is due and of borrowers who have received deferments, forbearances, or other temporary reprieves from repayment.

Paid off—A loan that was never in default and for which no principal or interest is owed.

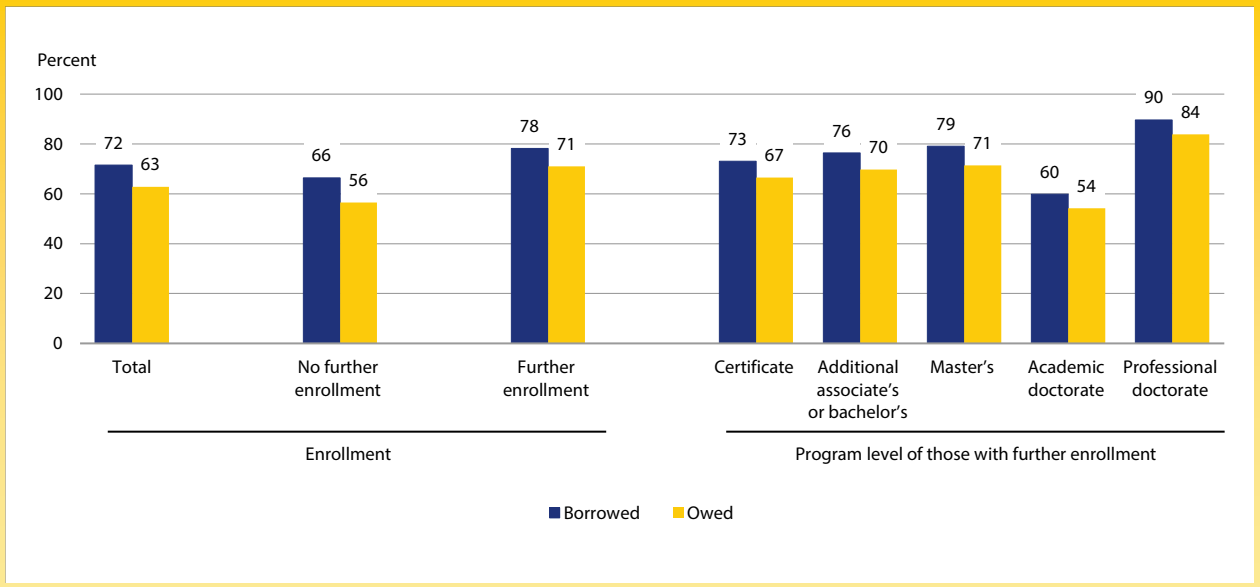
Repaying—Making regular, on-time loan payments.

1 Among 2007–08 bachelor's degree recipients who had borrowed for their postsecondary education, what was their outstanding education debt 4 years after graduation, and how did this amount vary among groups of graduates?

As of 2012, about three-quarters (72 percent) of 2007–08 bachelor's degree recipients had taken out federal or private student loans to finance their undergraduate and subsequent education (figure 1). These students borrowed an average of $45,800 and owed $41,900 in principal and interest in 2012 (figure 2). Although some borrowers had paid off their loans, about 63 percent of 2007–08 bachelor's degree recipients had some postsecondary education debt in 2012.

FIGURE 1.

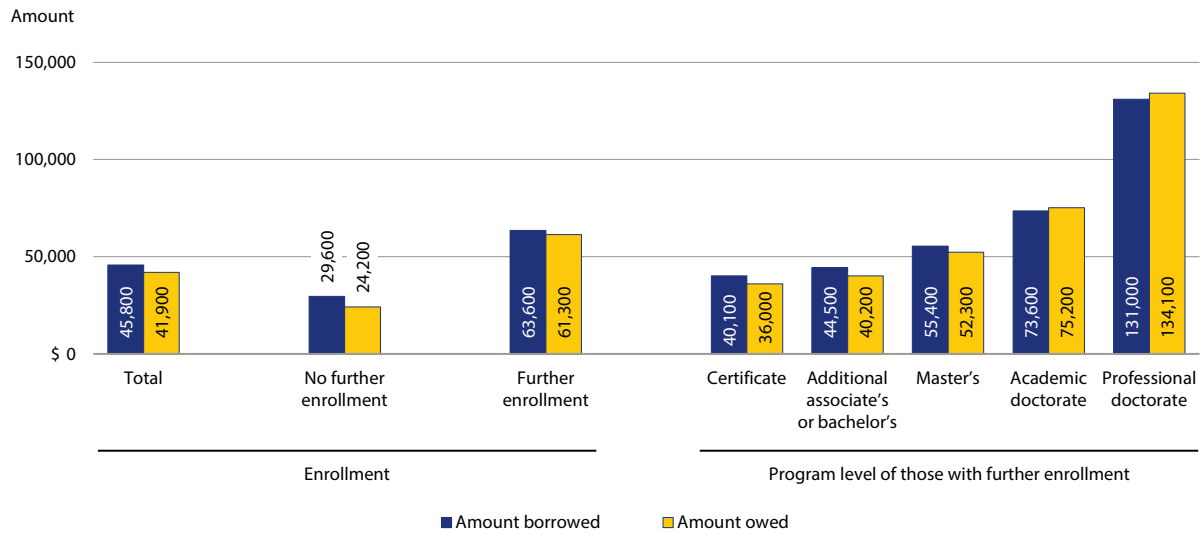
BORROWING AND OWING BY POSTBACCALAUREATE ENROLLMENT
Percentage of 2007–08 bachelor's degree recipients who borrowed for their postsecondary education and percentage who owed, by highest level of program attended: 2012



SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

FIGURE 2.

AMOUNTS BORROWED AND OWED BY POSTBACCALAUREATE ENROLLMENT
Among 2007–08 bachelor's degree recipients who borrowed for postsecondary education, average cumulative amount borrowed and average cumulative outstanding balance, by highest level of program attended: 2012



NOTE: Outstanding balance includes both principal and interest for federal loans and private loans combined.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Debt levels varied by whether students enrolled in postsecondary education after completing the 2007–08 bachelor's degree. About 56 percent of all bachelor's degree recipients had no further enrollment after earning the 2007–08 degree (table 1). Of those graduates, 66 percent had borrowed for their undergraduate education (figure 1), borrowing an average of $29,600 (figure 2). Bachelor's degree recipients who borrowed and had no further enrollment, including those who had paid off their debt, owed an average of $24,200 in principal and interest in 2012. Fifty-six percent of all 2007–08 bachelor's degree recipients with no further enrollment had debt 4 years later (figure 1).

Of those who enrolled in further education—the other 44 percent of the cohort (table 1)—71 percent (figure 1) owed an average of $61,300 (figure 2), although the amount owed varied with the highest level of post-baccalaureate education in which they had enrolled. Twenty-seven percent of the cohort went on to pursue a master's degree, the most frequently pursued post-bachelor's degree (table 1). Among the master's degree students, 71 percent had loans to repay in 2012 (figure 1), averaging $52,300 in outstanding principal and interest (figure 2).

TABLE 1.

ENROLLMENT AFTER BACHELOR'S DEGREE BY DEGREE LEVEL
Percentage distribution of 2007–08 bachelor's degree recipients, by highest postbachelor's enrollment as of 2012

Highest postbachelor's enrollment	Percent
No further enrollment	56.5
Further enrollment	43.5
Certificates	6.2
Additional associate's or bachelor's	2.6
Master's	27.2
Professional doctorate	5.1
Academic doctorate	2.5

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Doctoral students finance their degrees differently depending on the type of doctoral degree they pursue: those enrolled for professional doctoral degrees (e.g., J.D., M.D.) tend to borrow higher amounts and at higher rates than do students seeking such academic doctorates as Ph.D.s (Woo 2014, 2015). Among 2007–08 bachelor's degree recipients enrolled in professional doctoral programs, 84 percent had outstanding student loan debt in 2012 (figure 1). They owed an average of $134,100 in principal and interest, more than students who pursued any other credential after the 2007–08 bachelor's degree (figure 2). About three-fifths (58 percent) of 2007–08 bachelor's degree recipients who enrolled in professional doctoral programs had earned these degrees as of 2012.[4]

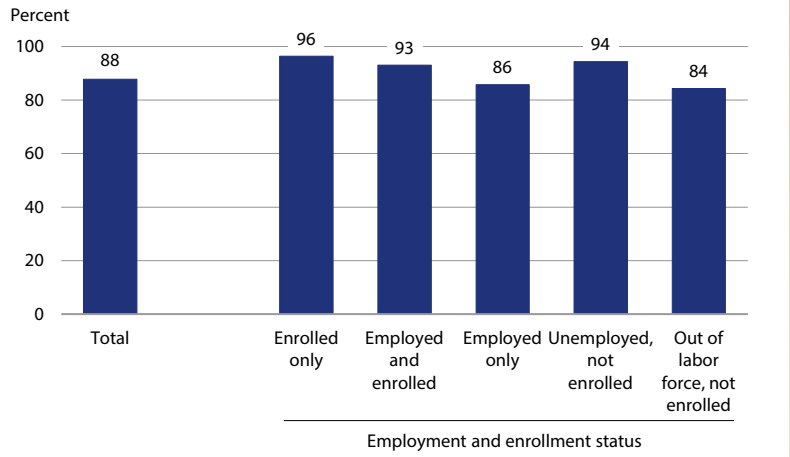
Among 2007–08 bachelor's degree recipients enrolled in academic or other nonprofessional doctoral programs, 60 percent had borrowed for postsecondary education as of 2012, and 54 percent had outstanding education debt (figure 1). Among all these students who had borrowed, the average outstanding education debt totaled $75,200 (figure 2). Most of the students who enrolled in an academic or other nonprofessional doctoral program (93 percent) had not yet attained a doctoral degree.[4]

[4] See table 11654, "Among 2007–08 bachelor's degree recipients who enrolled in subsequent education, percentage distribution of highest award attained since bachelor's degree, by degree program of highest post-baccalaureate enrollment: 2012," available in the College and Career Tables Library at https://nces.ed.gov/datalab/tableslibrary/viewtable.aspx?tableid=11654.

Among bachelor's degree recipients who had borrowed to finance either their undergraduate or graduate education, 88 percent owed money 4 years later (figure 3). The amount of debt outstanding varied with their 2012 employment status. Of those borrowers who were employed and not attending school, 86 percent owed on their student loans in 2012. The average outstanding debt among all borrowers who were employed but not enrolled was $33,700 (figure 4). In contrast, 94 percent of borrowers who were unemployed had education debt in 2012 (figure 3), and the average debt among all unemployed borrowers was $52,200.[5]

FIGURE 3.

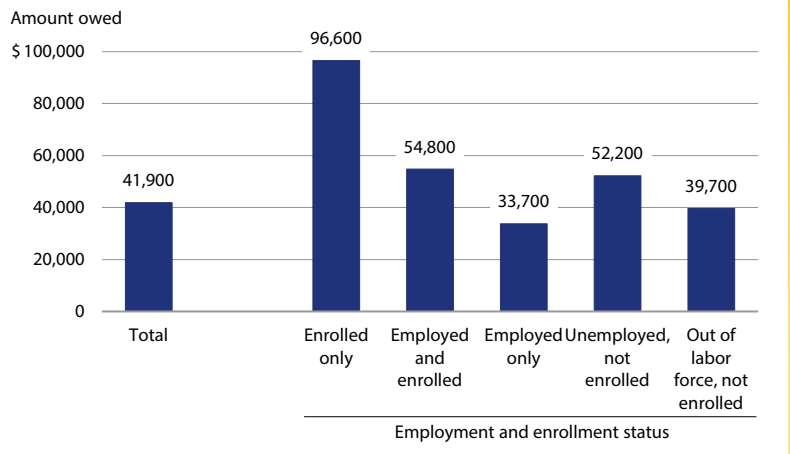
OWING BY EMPLOYMENT AND ENROLLMENT STATUS
Among 2007–08 bachelor's degree recipients who borrowed for their postsecondary education, percentage who had outstanding debt, by employment and enrollment status: 2012



NOTE: Graduates who were not working but looking for work are defined as unemployed, and those who were not working and not looking for work are defined as out of the labor force.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

FIGURE 4.

OUTSTANDING BALANCE BY EMPLOYMENT AND ENROLLMENT STATUS
Among 2007–08 bachelor's degree recipients who borrowed for their postsecondary education, average amount owed, by employment and enrollment status: 2012



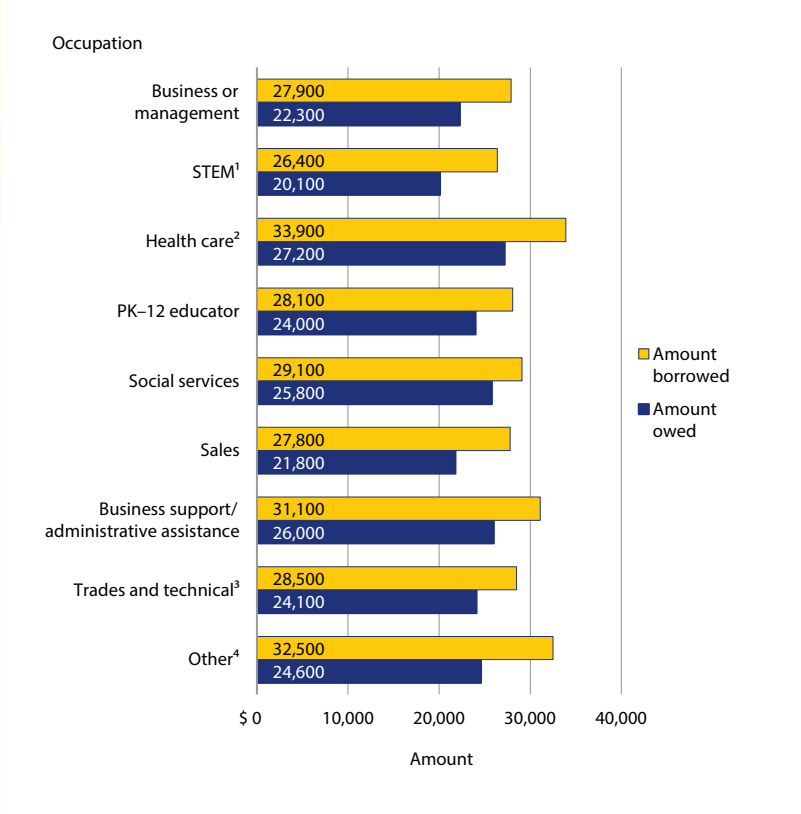
NOTE: Graduates who were not working but looking for work are defined as unemployed, and those who were not working and not looking for work are defined as out of the labor force.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

[5] Graduates who were not working but looking for work are defined as unemployed, and those who were not working and not looking for work are defined as out of the labor force.

Among undergraduate borrowers who did not pursue further education and who had ever worked since completing their 2007–08 bachelor's degree, the average amount borrowed and owed varied with the occupation in which they were employed most recently as of 2012. Those whose most recent employment was in business or management; science, technology, engineering, and mathematics (STEM); sales; or trades and technical occupations had borrowed lower amounts, on average, than did those whose most recent employment was in a health care occupation (figure 5).[6] Among all borrowers in a given occupation category, the average outstanding debt amounts 4 years after bachelor's degree completion ranged from $20,100 (STEM occupations) to $27,200 (health care occupations).

FIGURE 5.

OUTSTANDING BALANCE BY OCCUPATION
Among 2007–08 bachelor's degree recipients who borrowed for their undergraduate education and had no additional enrollment, average amount borrowed and owed, by most recent occupation: 2012



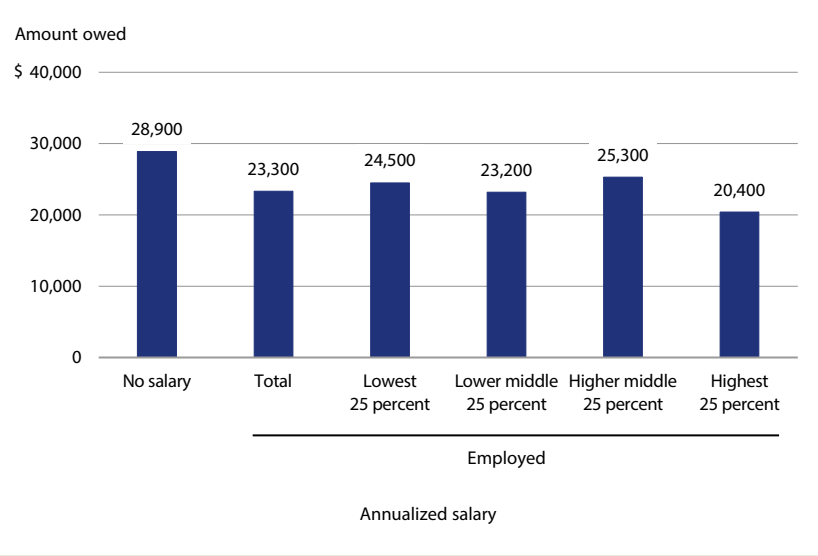
[1] Includes computer/information systems occupations, engineers, life scientists, math-related occupations, and physical scientists.
[2] Includes nursing occupation.
[3] Includes agricultural occupations; construction and mining occupations; engineering technicians; fitters, tradesmen, and mechanics; food service occupations; military occupations; personal care occupations; protective service occupations; supports occupations; and transport support occupations.
[4] Includes the occupations of air transportation professionals; artists and designers; communication professionals; information professionals; legal professionals; other educators; postsecondary educators; and social scientists.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

[6] Other apparent differences were not statistically significant.

Among those who were employed in 2012, those who earned the most had lower average outstanding debt amounts than those who earned the least, while there were no significant differences among the other salary levels (figure 6). Those whose earnings were in the top 25 percent of the salary distribution owed an average of $20,400, compared with those whose earnings were in the bottom 25 percent, who owed $24,500.

FIGURE 6.

OUTSTANDING DEBT BY SALARY
Among 2007–08 bachelor's degree recipients who borrowed for their undergraduate education and had no additional enrollment, average amount owed, by annualized salary: 2012



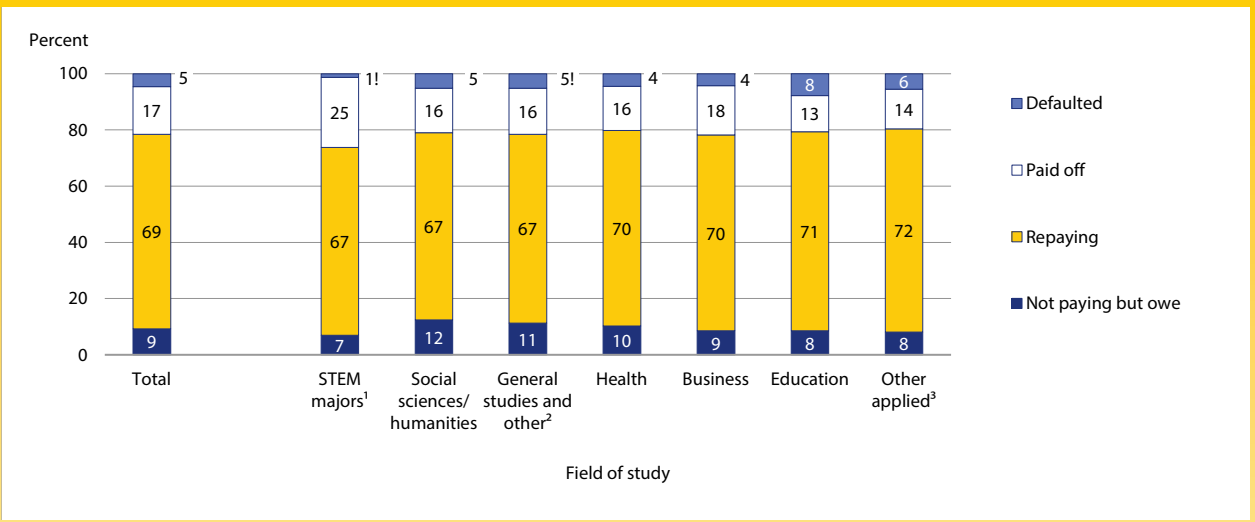
NOTE: Those who earned $1–$31,199 were the 25 percent of bachelor's degree recipients with the lowest annualized salary; those who earned $31,200–$42,999 were the 25 percent of bachelor's degree recipients with lower middle annualized salary; those who earned $43,000–$59,999 were the 25 percent of bachelor's degree recipients with higher middle annualized salary; and those who earned $60,000 or more were the 25 percent of bachelor's degree recipients with the highest annualized salary.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

2 Among bachelor's degree recipients who had borrowed for their undergraduate education and had no additional enrollment, what was the repayment status of their education debt 4 years after graduation, and what percentage of these graduates experienced repayment difficulties during that time?

Among all borrowers who had not enrolled in additional postsecondary education after completing their 2007–08 bachelor's degree, 69 percent were repaying their federal or private loans 4 years after completing their degree. Another 17 percent had paid off their loans; 9 percent were not making payments but still owed on their loans; and 5 percent were in default (figure 7).[7]

FIGURE 7.

REPAYMENT STATUS BY MAJOR
Among 2007–08 bachelor's degree recipients who borrowed for their undergraduate education and had no additional enrollment, percentage distribution of repayment status of loans, by undergraduate field of study: 2012



! Interpret data with caution.
[1] STEM majors: Includes computer and information sciences; engineering and engineering technology; and biological and physical science, science technology, mathematics, and agriculture.
[2] General studies and other: Includes basic skills and citizenship activities; leisure and recreational activities; personal awareness and self-improvement; high school and secondary diplomas and certificate programs; and interpersonal and social skills.
[3] Other applied: Includes personal and consumer services; manufacturing, construction, repair, and transportation; military technology and protective services; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations.
NOTE: Detail may not sum to totals because of rounding. "Paid off" includes loans that are discharged or forgiven. Less than 1 percent of bachelor's recipients who took federal loans had their loans discharged or forgiven. A loan amount may be discharged or forgiven due to bankruptcy, disability, death, closed school, fraud, or false certification or due to a loan forgiveness program. Borrowers who are "not paying but owe" include those in their grace period and those who have received deferments or forbearances. The grace period is the time between when a student leaves school and when their first payment is due. For federal loans, a deferment is a temporary cessation of loan principal that is allowed under certain conditions. During a deferment, interest still accrues for unsubsidized loans. A forbearance is a temporary cessation of loan principal payments under agreement with the loan servicer, usually for financial hardship, and interest continues to accrue. For private loans the terms are determined under negotiation with the lender.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

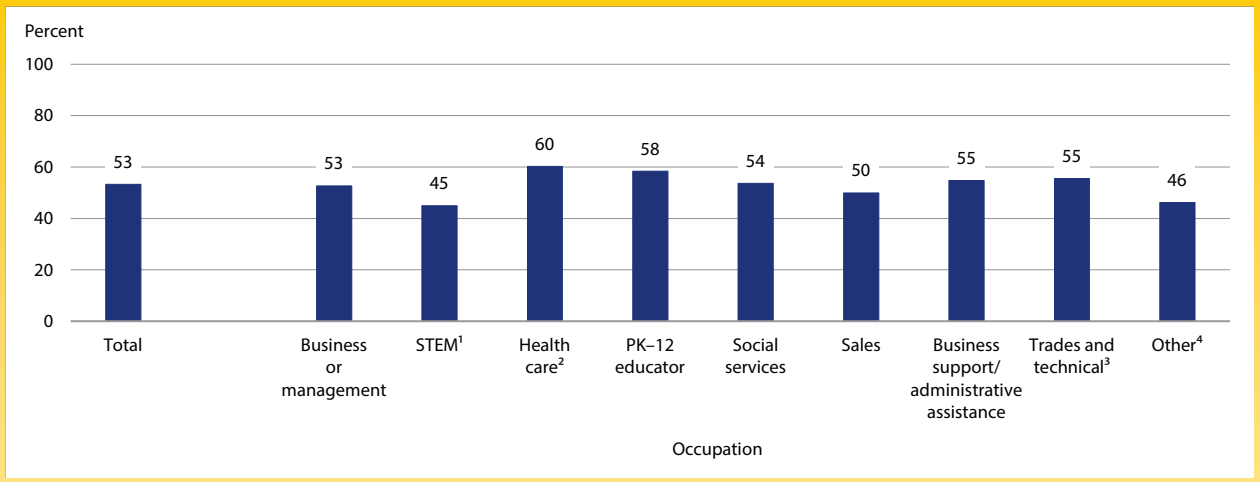
[7] Borrowers with student loan debt who were not making payments but owed on their loans may have been in the grace period between leaving school and when repayment is required or postponing payments through deferments or forbearances for federal loans or in agreements with private lenders for private loans.

Borrowers' repayment status varied with undergraduate field of study. Among borrowers who had not enrolled in additional postsecondary education and who had majored in the social sciences/humanities, 12 percent still owed but were not paying on their loans, compared with 7 percent among those who had majored in STEM or other applied fields. In addition, 25 percent of STEM majors had paid off their loans, proportionally more than the 13–18 percent of graduates in all other fields, except general studies, who had paid off their loans.[8]

Among borrowers who had no additional enrollment after receiving their 2007–08 bachelor's degree and had borrowed through a federal loan program, their 2012 loan repayment status varied with their current or most recent occupation. Borrowers who worked in STEM occupations had significantly lower rates of ever receiving deferments or forbearances on federal loans than did those in all other fields except for those in social service professions, sales, or other occupations, where the difference was not statistically significant (figure 8).[9]

FIGURE 8.

DEFERMENTS OR FORBEARANCES
Among 2007–08 bachelor's degree recipients who took out federal loans for their undergraduate education and had no additional enrollment, percentage who ever had a loan deferment or forbearance on a federal loan, by most recent occupation: 2012



[1] Includes computer/information systems occupations, engineers, life scientists, math-related occupations, and physical scientists.
[2] Includes nursing occupations.
[3] Includes agricultural occupations; construction and mining occupations; engineering technicians; fitters, tradesmen, and mechanics; food service occupations; military occupations; personal care occupations; protective service occupations; supports occupations; and transport support occupations.
[4] Includes the occupations of air transportation professionals; artists and designers; communication professionals; information professionals; legal professionals; other educators; postsecondary educators; and social scientists.
NOTE: This figure is limited to borrowers of federal student loans because information on deferments and forbearances is only available for federal loan borrowers. A deferment is a temporary cessation of loan principal that is allowed under certain conditions. During a deferment, interest still accrues for unsubsidized loans. A forbearance is a temporary cessation of loan principal payments under agreement with the loan servicer, usually for financial hardship, and interest continues to accrue. Many borrowers have used both kinds of payment postponements at different times. About 61 percent of borrowers who had ever received a deferment also had received a forbearance.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

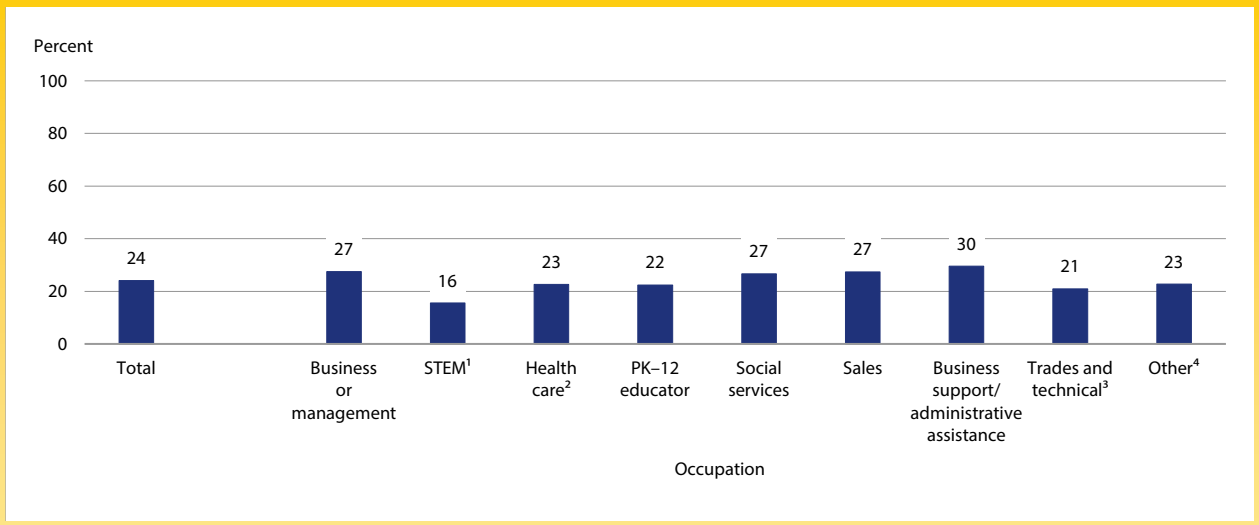
[8] The difference between general studies and STEM was not statistically significant.

[9] Unlike figure 7, figures 8–10 examine if a borrower ever had one of the following specific loan statuses on any federal loan: a forbearance, deferment, delinquency, or default. Because information on these specific loan statuses is only available for federal loans, federal loans are the only loans included in figures 8–10. The deferment variable measures if the borrower's most common type of deferment was for economic hardship or unemployment. The two measures are not mutually exclusive in that borrowers can have multiple loans with different statuses, or a single loan could go through more than one of these statuses in the 4 years since repayment began.

A direct measure of repayment difficulty is delinquency (i.e., missing at least one loan payment). As of 2012, about one-quarter (24 percent) of federal borrowers who had not enrolled in further education after receiving a bachelor's degree had been delinquent on at least one federal loan since graduation (figure 9). Those who worked in STEM had significantly lower rates of loan delinquency on federal loans than did those in business or management, social services, sales, or business support/administrative assistance occupations.

FIGURE 9.

DELINQUENCIES
Among 2007–08 bachelor's degree recipients who took out federal loans for their undergraduate education and had no additional enrollment, percentage who had a delinquent federal loan since graduation, by most recent occupation: 2012

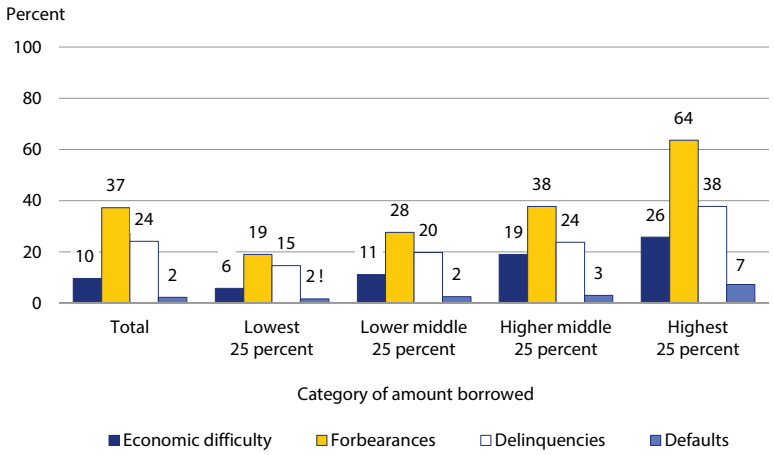


[1] Includes computer/information systems occupations, engineers, life scientists, math-related occupations, and physical scientists.
[2] Includes nursing occupations.
[3] Includes agricultural occupations; construction and mining occupations; engineering technicians; fitters, tradesmen, and mechanics; food service occupations; military occupations; personal care occupations; protective service occupations; supports occupations and transport support occupations.
[4] Includes the occupations of air transportation professionals; artists and designers; communication professionals; information professionals; legal professionals; other educators; postsecondary educators; and social scientists.
NOTE: This figure is limited to borrowers of federal student loans because information on delinquencies is only available for federal loan borrowers. For federal loans, a delinquency is one or more missed payments. The past due period can range from 31 to 269 days. If a loan is 270 days or more past due, it is considered in default. This figure does not include defaulted loans.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

The amount graduates had borrowed was also related to their 2012 loan status. Among federal borrowers without additional enrollment, those who had borrowed the most (i.e., those whose amount borrowed fell in the highest 25 percent among borrowers) had higher rates of deferment for reasons of economic difficulty, and higher rates of forbearance, delinquency, and default than did other federal borrowers (figure 10).[10] This is similar to the pattern found among a previous cohort 10 years after earning bachelor's degrees (Choy and Li 2006). That study found that among bachelor's degree recipients with Stafford undergraduate loans and no further enrollment, higher amounts borrowed were associated with higher default rates. In contrast, among all kinds of undergraduates, including those who obtained associate's degrees or certificates or who dropped out before completing, students who borrowed less had the highest default rates (Akers and Chingos 2016; Baum 2016; Hillman 2014). In addition, deferment rates on federal loans for reasons of economic difficulty increased at each higher level of federal borrowing. For example, among those who had borrowed the least, 6 percent had deferments on federal loans for reasons of economic difficulty, and among those who borrowed the most, 26 percent received such deferments.

FIGURE 10.

REPAYMENT ADVERSITY
Among 2007–08 bachelor's degree recipients who took out federal loans for their undergraduate education and had no additional enrollment, percentage with economic difficulty deferment, forbearance, and delinquency on any federal loan or default on their most recent federal loan, by amount of federal loans borrowed: 2012



! Interpret data with caution.
NOTE: This figure is limited to borrowers of federal student loans because information on deferment, forbearance, delinquency, and default is only available for federal loan borrowers. Those who borrowed $1–$10,999 were the 25 percent of federal loan borrowing bachelor's degree recipients with the lowest cumulative amount borrowed; those who borrowed $11,000–$17,124 were the 25 percent of federal loan borrowing bachelor's degree recipients with lower middle cumulative amount borrowed; those who borrowed $17,125–$25,499 were the 25 percent of federal loan borrowing bachelor's degree recipients with higher middle cumulative amount borrowed; and those who borrowed $25,500 or more were the 25 percent of federal loan borrowing bachelor's degree recipients with the highest cumulative amount borrowed. These categories are not mutually exclusive. Economic difficulty means the borrower received a deferment or temporary cessation of payments due to economic hardship or unemployment. A forbearance is a temporary cessation of loan principal payments under agreement with the loan servicer, usually for financial hardship, and interest continues to accrue. Delinquency is one or more missed payments. The past due period can range from 31 to 269 days. If a loan is 270 days or more past due, it is considered in default.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

[10] The difference in the percentage of graduates who defaulted between the highest 25 percent and lowest 25 percent was not statistically significant.

3 Among bachelor's degree recipients who had borrowed for their postsecondary education, what was their average education debt burden (i.e., their monthly loan payment as a percentage of their monthly salary) 4 years after graduation?

Overall, the average education debt burden—a graduate's monthly student loan payment on federal or private loans as a percentage of his/her monthly salary—among currently employed bachelor's degree recipients who borrowed for their education was 9 percent (table 2). The average debt burden among currently employed borrowers *in repayment* was 12 percent. Among currently employed borrowers in repayment who had additional postsecondary enrollment, the average debt burden was 14 percent, whereas among their counterparts who had no further enrollment, it was 10 percent. Finally, some 22 percent of currently employed borrowers in repayment without further enrollment faced a debt burden of more than 12 percent. Analysts who have examined this issue using consumption data and surveys measuring borrowers' perceptions of burden agree that 8 to 10 percent is a manageable percentage of income that a borrower can be expected to devote to loan repayment (Baum and O'Malley 2003; Baum and Schwartz 2006; Clark 2009; Greiner 1996; Hopkins 2012). This cutoff for a manageable debt burden is also used in the rules for federal income-driven repayment plans.[11] A ratio higher than 12 percent of total income, therefore, is considered burdensome.[12]

TABLE 2.

DEBT BURDEN
Among currently employed 2007–08 bachelor's degree recipients who borrowed for their undergraduate education, average debt burden (monthly loan payment as a percentage of monthly salary) and percentage with debt burdens greater than 12 percent, by repayment and further enrollment status: 2012

Student grouping	Average ratio	Percent with ratio greater than 12 percent
All borrowers	9.0	21.2
Borrowers in repayment	11.9	28.0
Borrowers in repayment with further enrollment	14.1	36.5
Borrowers in repayment without further enrollment	10.4	22.1

NOTE: Estimates exclude borrowers without any salary. Monthly salary is calculated by dividing annualized salary across all jobs by 12.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

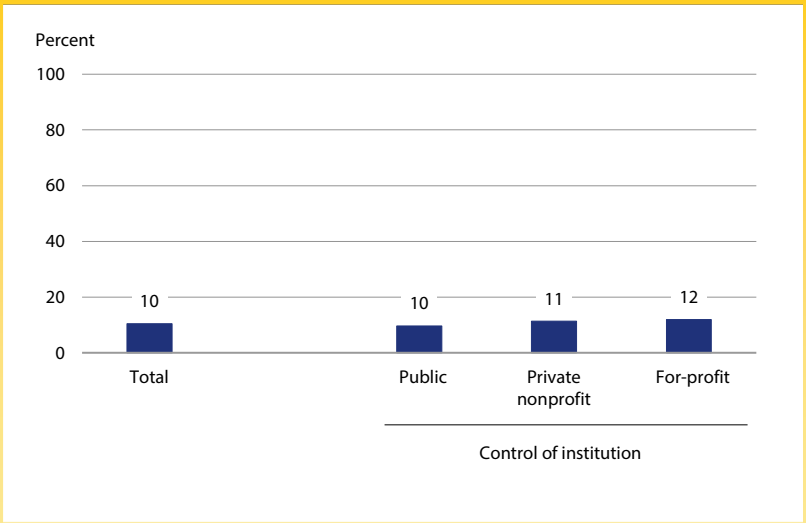
[11] See a description of income-driven repayment plans: https://studentaid.ed.gov/sa/repay-loans/understand/plans/income-driven.

[12] For example, the gainful employment regulations of the U.S. Department of Education specify that programs whose graduates have annual loan payments greater than 12 percent of total earnings would fail an accountability metric for receiving federal aid. See http://www2.ed.gov/policy/highered/reg/hearulemaking/2012/gainful-employment-fact-sheet-10302014.pdf.

Focusing on currently employed graduates who did not enroll in further education and were repaying their debt, figure 11 presents the average debt burden by the control of bachelor's degree institution. Among the three categories, one difference was statistically significant: those who had graduated from public institutions had a lower average debt burden (10 percent) than did those who had graduated from private nonprofit institutions (11 percent).

FIGURE 11.

DEBT BURDEN BY BACCALAUREATE SECTOR
Average debt burden among currently employed 2007–08 bachelor's degree recipients who borrowed for their undergraduate education, did not enroll further, and were repaying their undergraduate debt, by control of bachelor's degree institution: 2012

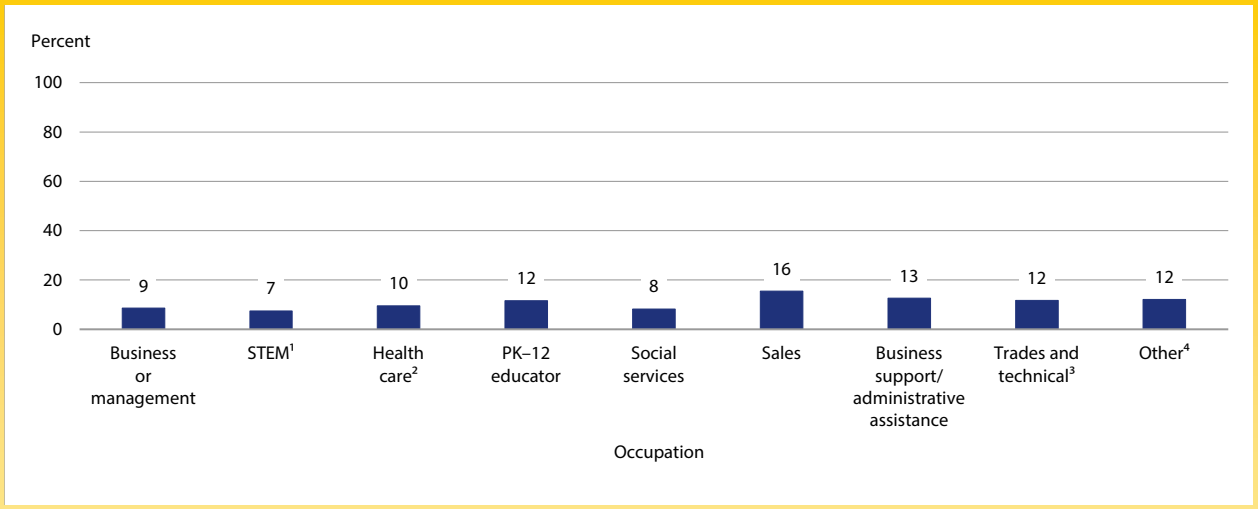


NOTE: Estimates exclude borrowers without any salary. Debt burden is the monthly student loan payment as a percentage of monthly salary. Monthly salary is calculated by dividing annualized salary across all jobs by 12.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Figure 12 presents average debt burden by current occupation. Among borrowers who had not enrolled further after receiving the 2007–08 degree, were working, and were repaying their debt, those who worked in STEM occupations had a lower debt burden than those working in health care, PK–12 education, business support, trades and technical, and other occupations.[13]

FIGURE 12.

DEBT BURDEN BY OCCUPATION
Average debt burden among currently employed 2007–08 bachelor's degree recipients who borrowed for their undergraduate education, did not enroll further, and were repaying their undergraduate debt, by occupation: 2012



[1] Includes computer/information systems occupations, engineers, life scientists, math-related occupations, and physical scientists.
[2] Includes nursing occupation.
[3] Includes agricultural occupations; construction and mining occupations; engineering technicians; fitters, tradesmen, and mechanics; food service occupations; military occupations; personal care occupations; protective service occupations; supports occupations; and transport support occupations.
[4] Includes the occupations of air transportation professionals; artists and designers; communication professionals; information professionals; legal professionals; other educators; postsecondary educators; and social scientists.
NOTE: Estimates exclude borrowers without any salary. Debt burden is the monthly student loan payment as a percentage of monthly salary. Monthly salary is calculated by dividing annualized salary across all jobs by 12.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

[13] Other apparent differences were not statistically significant.

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http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2017436

More detailed information on 2007–08 bachelor's degree recipients in 2012 can be found in Web Tables produced by the National Center for Education Statistics (NCES) using the B&B:08/12 data. Included are estimates of college graduates' demographic, enrollment, and employment characteristics. A First Look that examines employment experiences among these college graduates is also available. An earlier set of Web Tables looks at this cohort 1 year after graduating and compares their characteristics with those of two earlier cohorts also 1 year out.

Baccalaureate and Beyond: A First Look at the Employment Experiences and Lives of College Graduates, 4 Years On (B&B:08/12) (NCES 2014-141). http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2014141

Degrees of Debt: Student Borrowing and Loan Repayment of Bachelor's Degree Recipients 1 Year After Graduating: 1994, 2001, and 2009 (NCES 2014-011). http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2014011

TECHNICAL NOTES

Survey Methodology

The estimates provided in this Statistics in Brief are based on data collected through the second follow-up of the 2008 Baccalaureate and Beyond Longitudinal Study (B&B:08/12), which describes the enrollment and employment experiences of a national sample of 2007–08 bachelor's degree recipients 4 years after graduation. The second follow-up study explores graduates' postbaccalaureate employment and enrollment as well as their student loan debt and repayment. B&B:08 is the third in a series of studies of bachelor's degree recipients that have previously covered 1992–93 graduates through 2003 (B&B:93/03) and 1999–2000 graduates through 2001 (B&B:2000/01). The B&B studies allow researchers to address questions regarding the experiences of bachelor's degree recipients, including their participation in various undergraduate financial aid programs, undergraduate debt, and repayment of that debt; entrance into and progress through degree programs after the bachelor's degree; and postbaccalaureate employment, particularly for graduates who became elementary/secondary teachers.

In the 2008 base-year study as well as the follow-up studies in 2009 and 2012, students provided data through instruments administered over the Internet or by telephone. In addition to student responses, data were collected from the institutions that sampled students attended and other relevant databases, including U.S. Department of Education records on student loan and grant programs and student financial aid applications. Students' transcripts through the 2008–09 academic year were collected in 2009 as part of the Postsecondary Education Transcript Study, creating a record of academic enrollment including coursetaking, credit accumulation, academic performance, and degree receipt prior to and including the 2007–08 bachelor's degree.

Among the approximately 137,800 undergraduate students who were sampled for the 2007–08 National Postsecondary Student Aid Study (NPSAS:08), approximately 17,110 students were determined to be eligible for B&B:08/09 (exhibit 1). Eligible students were those who had enrolled at an institution that was eligible to participate in Title IV federal student aid programs and was located in one of the 50 states, the District of Columbia, or Puerto Rico; had completed requirements for a bachelor's degree between July 1, 2007, and June 30, 2008; and were awarded a baccalaureate degree by the institution from which they were sampled no later than June 30, 2009.

Exhibit 1. Selected statistics on the 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12) data collections

Statistic	B&B:08/12
Target population	Bachelor's degree recipients in 2007–08
Target population size	1.6 million
Sampling frame (institutions)	2004–05 and 2005–06 IPEDS IC,[1] Fall Enrollment, and Completion files
Number of sampled institutions (NPSAS:08)[2]	1,960
Number of eligible institutions (NPSAS:08)	1,940
Number of participating institutions (NPSAS:08)	1,730
Percentage of eligible institutions that provided student enrollment lists (unweighted)	89.0
Percentage of eligible institutions that provided student enrollment lists (weighted)	90.1
Number of sampled students (B&B:08/12)	17,160
Number of eligible students (B&B:08/12)	17,110
B&B:08/12 interview response rate (unweighted)	85.1
B&B:08/12 interview response rate (bookend weighted)	77.1
B&B:08/12 interview response rate (panel weighted)	68.2

[1] The 2004–05 and 2005–06 Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics, Fall Enrollment, and Completion files were used to construct the institution sampling frame.
[2] The 2007–08 National Postsecondary Student Aid Study (NPSAS:08) was the base-year study for B&B:08/12.
NOTE: The bookend weight includes NPSAS:08 study respondents who completed a B&B:08/12 interview. The panel weight includes NPSAS:08 study respondents who completed both a B&B:08/09 and a B&B:08/12 interview.
SOURCE: Cominole, M., Shepherd, B., and Siegel, P. (2015). *2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12) Data File Documentation* (NCES 2015-141). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

Of those students, about 17,110 were deemed eligible for B&B:08/12. These students represent approximately 1.6 million students who completed the requirements for a baccalaureate degree between July 1, 2007, and June 30, 2008. Exhibit 1 provides detailed information about the B&B:08/12 data collection.

The institution sampling frame for NPSAS:08 was constructed from the 2004–05 and 2005–06 Institutional Characteristics, Fall Enrollment, and Completions files of the Integrated Postsecondary Education Data System, which includes all U.S. postsecondary institutions that are eligible to participate in federal financial aid programs under Title IV of the Higher Education Act. The sampling design consisted of first selecting institutions and then selecting students from those eligible institutions that provided enrollment lists (participating institutions). Institutions were selected with probabilities proportional to a composite measure of size based on expected 2007–08 enrollment. With approximately 1,700 institutions participating in the study, the weighted institution response rate was 90 percent. Eligible sampled students were defined as study respondents if at least 11 key data elements were available from any data source. Approximately 114,000 undergraduates and 14,000 graduate students were study respondents, and the weighted student response rates for both levels were 96 percent.[14] Estimates were weighted to adjust for the unequal probability of selection into the sample and for nonresponse.

Two broad categories of error occur in estimates generated from surveys: sampling and nonsampling errors.

VARIABLES USED

The variables used in this Statistics in Brief are listed below. Visit the NCES DataLab website http://nces.ed.gov/datalab to view detailed information on question wording for variables coming directly from an interview, how variables were constructed, and their sources. The program files that generated the statistics presented in this Statistics in Brief can be found at http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2017436.

Label	Name
Average number of delinquencies per federal loan as of 2012	B2DLQ_AVG
Cumulative amount borrowed for education through 2012	B2BORAT
Cumulative amount borrowed in federal loans for undergraduate education through 2012	B2FEDCUM1
Cumulative amount owed for education loans as of 2012	B2TOTDUE3
Cumulative loan amount borrowed for undergraduate education through 2007–08	B1BORAT
Defaults as of 2012	B2LNSTAT
Employment and enrollment status in 2012	B2LFP12
Enrolled in additional degree program since bachelor's degree as of 2012	B2CPSTGRD
Ever had any loans in forbearance as of 2012	B2FORBAR
Ever had loans in deferment or forbearance as of 2012	B2EVERDAFB
Highest degree program enrollment after bachelor's degree, as of 2012	B2HIENR
Institution control in 2007–08	CONTROL
Monthly loan repayment as percent of monthly salary in 2012	B2EDPCT
Monthly payment on student loans in 2012	B2LNPMT
Most common deferment reason for borrower as of 2012	B2DFR_REAS
Primary occupation in 2012	B2CJOCC33
Repayment status for any loans in 2012	B2PAYSTAT
Total annual salary for all jobs in 2012	B2INC12
Undergraduate major	MAJORS4Y

[14] Data on graduate students from NPSAS:08 are not included in this study.

Sampling errors occur when observations are based on samples rather than on entire populations. The standard error of a sample statistic is a measure of the variation due to sampling and indicates the precision of the statistic. The complex sampling design used in NPSAS:08 must be taken into account when calculating such variance estimates as standard errors. NCES's online PowerStats, which generated the estimates in this Statistics in Brief, uses the balanced repeated replication method to estimate variance while taking the complex sample design into account (Kaufman 2004; Wolter 1985).

Nonsampling errors can be attributed to several sources: incomplete information about all respondents (e.g., some students or institutions refused to participate, or students participated but answered only certain items); differences among respondents in question interpretation; inability or unwillingness to give correct information; mistakes in recording or coding data; and other errors of collecting, processing, and imputing missing data.

For more information on B&B:08/12 and NPSAS:08 methodology, see the following publications:

- *2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12): Data File Documentation* (NCES 2015-141). http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2015141
- *2007–08 National Postsecondary Student Aid Study (NPSAS:08) Full-scale Methodology Report* (NCES 2011-188). http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2011188

Response Rates

NCES Statistical Standard 4-4-1 states that "[a]ny survey stage of data collection with a unit or item response rate less than 85 percent must be evaluated for the potential magnitude of nonresponse bias before the data or any analysis using the data may be released" (U.S. Department of Education 2012). In the case of B&B:08/12, this means that nonresponse bias analysis could be required at any of three levels: institutions, study respondents, or items. The institution response rate for NPSAS:08 was 90 percent, and therefore nonresponse bias analysis was not required at that level.

As shown in exhibit 1, of 17,110 eligible sample members, the weighted interview response rates for B&B:08/12 were below 85 percent. Therefore, nonresponse bias analyses were conducted at the interview level to estimate the level of bias due to nonresponse between that observed with the base weight and that observed after nonresponse adjustments were made in each of the three weights developed for the study. Details concerning these analyses are available in Cataldi et al. (2014) and Cominole, Shepherd, and Siegel (2015). The following summarizes findings from nonresponse bias analyses of estimates with and without application of the bookend weight, WTD000, which was used to generate the estimates in this Statistics in Brief. The bookend weight, WTD000, was chosen because the variables used in this report are from both the base-year data collection in 2007–08 and from the second follow-up in 2012.

Exhibit 2 presents estimates of relative bias and the percentage of variable categories with statistically significant bias before and after the panel weight was adjusted for nonresponse. These results indicate that adjusting the panel weight for nonresponse reduced some of the bias due to nonresponse but did not eliminate it. Exhibit 2 also presents pre- and post-stratification differences between estimates that were already adjusted for nonresponse.

In this report, four variables required nonresponse bias analysis: monthly payment on student loans in 2012 (63 percent), monthly loan repayment as a percentage of monthly salary in 2012 (69 percent), cumulative amount owed for education loans as of 2012 (80 percent), and repayment status for any loans in 2012 (67 percent). For each of these variables, nonresponse bias analyses were conducted to determine whether respondents and nonrespondents differed on the following characteristics: institution control, region, and total enrollment; whether the student was a federal aid recipient, was a state aid recipient, was a recipient of any aid, was a Pell Grant recipient, or had taken out a Direct Loan; and the amount, if any, of a student's Pell Grant, Direct Loan, or PLUS loan. Differences between respondents and nonrespondents on this variable were tested for statistical significance at the 5 percent level.

Exhibit 2. Summary of nonresponse bias analysis results and differences between pre- and post-stratification estimates using bookend weight, by type of institution: 2012

Nonresponse bias statistics	Overall	Public	Private nonprofit	For-profit
Before nonresponse weight adjustments				
Average estimated relative bias	4.31	3.64	5.80	9.64
Median estimated relative bias	3.35	3.05	4.63	6.46
Percent of variable categories significantly biased	41.38	41.67	42.22	6.90
After nonresponse weight adjustments				
Average estimated relative bias	1.20	2.20	3.30	11.58
Median estimated relative bias	#	1.31	2.44	6.73
Percent of variable categories significantly biased	5.17	4.17	#	13.79
Differences between estimates before and after poststratification adjustment[1]				
Average absolute difference across characteristics	1.32	1.38	1.91	4.80
Median absolute difference across characteristics	0.77	0.99	1.12	4.49
Differences between estimates of full sample and respondents after poststratification adjustment[2]				
Average absolute difference across characteristics	1.32	1.43	1.81	3.80
Median absolute difference across characteristics	0.77	0.80	1.45	3.92

Rounds to zero.

[1] Respondents before poststratification adjustment are weighted using the base weight, adjusted for nonresponse. Respondents after poststratification adjustment are weighted using the base weight, adjusted for nonresponse and poststratification.

[2] Full sample is weighted using the base weight. Respondents after poststratification adjustment are weighted using the base weight, adjusted for nonresponse and poststratification.

NOTE: Relative bias and significance calculated on respondents versus full sample. Relative bias is defined as the ratio of estimated bias to the weighted average of the full sample. Variable categories with fewer than 30 nonrespondents were suppressed for calculations in this table.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Nonresponse bias analyses of the variables in this report with response rates less than 85 percent indicated that respondents differed from nonrespondents on 29 to 42 percent of the characteristics analyzed, indicating that there may be bias in these estimates (exhibit 3). Any bias due to nonresponse, however, is based upon responses prior to stochastic imputation in which missing data were replaced with valid data from the records of donor cases that matched the recipients on selected variables related to demographic, enrollment, institution, and financial aid characteristics (Krotki, Black, and Creel 2005). The potential for bias in the estimate may be reduced by imputation.

Because imputation procedures are designed specifically to identify donors with similar characteristics to those with missing data, the imputation is assumed to reduce bias. While the level of item-level bias before imputation is measurable, the same measurement cannot be made after imputation. Although the magnitude of any change in item-level bias cannot be determined, the item estimates before and after imputation were compared to determine whether the imputation changed the biased estimate as an indication of a possible reduction in bias.

For continuous variables, the difference between the average before imputation and the average after imputation was estimated. For categorical variables, the estimated difference was computed for each of the categories as the percentage of students in that category before imputation minus the percentage of students in that category after imputation. These estimated differences were tested for statistical significance at the 5 percent level. A significant difference in the item means after imputation implies a reduction in bias due to imputation. A nonsignificant difference suggests that imputation may not have reduced bias, that the sample size was too small to detect a significant difference, or that there was little bias to be reduced. Statistical tests of the differences between the averages before and after imputation for these four variables were significant, indicating that the nonresponse bias was reduced through imputation.

For more detailed information on nonresponse bias analysis and an overview of the survey methodology for B&B:08/12, see *2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12) Data File Documentation* (NCES 2015-141) http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2015141.

Exhibit 3. Bias analysis results

	Pre-imputation				
Variable	Weighted response rate	Median percent relative bias across characteristics	Percentage of characteristics with significant bias	Characteristics with greatest significant absolute bias	Percent difference in means or average percent difference across all categories pre- and post-imputation
B2LNPMT	62.97	8.70	42.11	Whether had any financial aid	0.13*
B2EDPCT	69.13	5.77	36.84	Received PLUS loan of $5,000 or less	0.35*
B2TOTDUE3	80.34	3.86	28.95	Received PLUS loan of $5,000 or less	0.02*
B2PAYSTAT	80.96	4.13	28.95	Received PLUS loan of $5,000 or less	0.12*

* Indicates statistically significant difference at $p < .05$.
NOTE: Relative bias is computed by dividing a variable's estimated bias for a given characteristic by the variable's mean. Relative bias is defined as significant if its difference from zero is statistically significant at $p < .05$. B2LNPMT is monthly loan payment on all student loans in 2012 (federal and private). B2EDPCT is monthly loan payment as a percentage of monthly income in 2012. B2TOTDUE3 is cumulative amount owed for education loans as of 2012 (federal and private, principal and interest). B2PAYSTAT is repayment status for any loans (federal or private) in 2012.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Statistical Procedures

Statistics in Brief publications present descriptive data in tabular formats to provide useful information to a broad audience, including members of the general public. They address simple and topical issues and questions. They do not investigate more complex hypotheses, account for inter-relationships among variables, or support causal inferences.

Comparisons of averages and proportions were tested using Student's *t* statistic. Differences between estimates were tested against the probability of a Type I error[15] or significance level. The statistical significance of each comparison was determined by calculating the Student's *t* value for the difference between each pair of averages or proportions and comparing the *t* value with published tables of significance levels for two-tailed hypothesis testing. Student's *t* values were computed to test differences between independent estimates using the following formula:

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2}}$$

where E_1 and E_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors.

There are hazards in reporting statistical tests for each comparison. First, comparisons based on large *t* statistics may appear to merit special attention. This can be misleading because the magnitude of the *t* statistic is related not only to the observed differences in averages or percentages but also to the number of respondents in the specific categories used for comparison. Hence, a small difference compared across a large number of respondents would produce a large (and thus possibly statistically significant) *t* statistic.

A second hazard in reporting statistical tests is the possibility that one can report a "false positive" or Type I error. Statistical tests are designed to limit the risk of this type of error using a value denoted by alpha. The alpha level of .05 was selected for findings in this Statistics in Brief and ensures that a difference of a certain magnitude or larger would be produced when there was no actual difference between the quantities in the underlying population no more than one time out of 20.[16] When analysts test hypotheses that show alpha values at the .05 level or smaller, they reject the null hypothesis that there is no difference between the two quantities. Failing to reject a null hypothesis (i.e., detect a difference), however, does not imply the values are the same or equivalent.

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[15] A Type I error occurs when one concludes that a difference observed in a sample reflects a true difference in the population from which the sample was drawn, when no such difference is present.

[16] No adjustments were made for multiple comparisons.

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APPENDIX A. DATA TABLES

Table A-1. Estimates for figure 1: BORROWING AND OWING BY POSTBACCALAUREATE ENROLLMENT Percentage of 2007–08 bachelor's degree recipients who borrowed for their postsecondary education and percentage who owed, by highest level of program attended: 2012

Enrollment and program level	Borrowed	Owed
Total	**71.6**	**62.8**
No further enrollment	66.4	56.5
Further enrollment	78.2	71.1
Program level of those with further enrollment		
Certificate	73.1	66.5
Additional associate's or bachelor's	76.4	69.8
Master's	79.1	71.4
Academic doctorate	59.9	54.2
Professional doctorate	89.7	83.9

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table A-2. Estimates for figure 2: AMOUNTS BORROWED AND OWED BY POSTBACCALAUREATE ENROLLMENT Among 2007–08 bachelor's degree recipients who borrowed for postsecondary education, average cumulative amount borrowed and average cumulative outstanding balance, by highest level of program attended: 2012

Enrollment and program level	Amount borrowed	Amount owed
Total	**$45,800**	**$41,900**
No further enrollment	29,600	24,200
Further enrollment	63,600	61,300
Program level of those with further enrollment		
Certificate	40,100	36,000
Additional associate's or bachelor's	44,500	40,200
Master's	55,400	52,300
Academic doctorate	73,600	75,200
Professional doctorate	131,000	134,100

NOTE: Outstanding balance includes both principal and interest for federal loans and private loans combined.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table A-3. Estimates for figure 3: OWING BY EMPLOYMENT AND ENROLLMENT STATUS
Among 2007–08 bachelor's degree recipients who borrowed for their postsecondary education, percentage who had outstanding debt, by employment and enrollment status: 2012

Employment and enrollment status	Percentage with outstanding debt
Total	**87.8**
Enrolled only	96.4
Employed and enrolled	93.1
Employed only	85.8
Unemployed, not enrolled	94.4
Out of labor force, not enrolled	84.3

NOTE: Graduates who were not working but looking for work are defined as unemployed, and those who were not working and not looking for work are defined as out of the labor force.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table A-4. Estimates for figure 4: OUTSTANDING BALANCE BY EMPLOYMENT AND ENROLLMENT STATUS
Among 2007–08 bachelor's degree recipients who borrowed for their postsecondary education, average amount owed, by employment and enrollment status: 2012

Employment and enrollment status	Average amount owed
Total	**$41,900**
Enrolled only	96,600
Employed and enrolled	54,800
Employed only	33,700
Unemployed, not enrolled	52,200
Out of labor force, not enrolled	39,700

NOTE: Graduates who were not working but looking for work are defined as unemployed, and those who were not working and not looking for work are defined as out of the labor force.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table A-5. Estimates for figure 5: OUTSTANDING BALANCE BY OCCUPATION
Among 2007–08 bachelor's degree recipients who borrowed for their undergraduate education and had no additional enrollment, average amount borrowed and owed, by most recent occupation: 2012

Occupation	Amount borrowed	Amount owed
Business or management	$27,900	$22,300
STEM[1]	26,400	20,100
Health care[2]	33,900	27,200
PK–12 educator	28,100	24,000
Social services	29,100	25,800
Sales	27,800	21,800
Business support/administrative assistance	31,100	26,000
Trades and technical[3]	28,500	24,100
Other[4]	32,500	24,600

[1] 1 Includes computer/information systems occupations, engineers, life scientists, math-related occupations, and physical scientists.
[2] Includes nursing occupation.
[3] Includes agricultural occupations; construction and mining occupations; engineering technicians; fitters, tradesmen, and mechanics; food service occupations; military occupations; personal care occupations; protective service occupations; supports occupations; and transport support occupations.
[4] Includes the occupations of air transportation professionals; artists and designers; communication professionals; information professionals; legal professionals; other educators; postsecondary educators; and social scientists.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table A-6. Estimates for figure 6: OUTSTANDING DEBT BY SALARY
Among 2007–08 bachelor's degree recipients who borrowed for their undergraduate education and had no additional enrollment, average amount owed, by annualized salary: 2012

Annualized salary	Amount owed
No salary	$28,900
Total	23,300
Lowest 25 percent	24,500
Lower middle 25 percent	23,200
Higher middle 25 percent	25,300
Highest 25 percent	20,400

NOTE: Those who earned $1–$31,199 were the 25 percent of bachelor's degree recipients with the lowest annualized salary; those who earned $31,200–$42,999 were the 25 percent of bachelor's degree recipients with lower middle annualized salary; those who earned $43,000–$59,999 were the 25 percent of bachelor's degree recipients with higher middle annualized salary; and those who earned $60,000 or more were the 25 percent of bachelor's degree recipients with the highest annualized salary.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table A-7. Estimates for figure 7: REPAYMENT STATUS BY MAJOR
Among 2007–08 bachelor's degree recipients who borrowed for their undergraduate education and had no additional enrollment, percentage distribution of repayment status of loans, by undergraduate field of study: 2012

Field of study	Not paying but owe	Repaying	Paid off	Defaulted
Total	**9.3**	**69.2**	**17.0**	**4.6**
STEM majors[1]	7.0	66.8	25.0	1.3 !
Social sciences/humanities	12.4	66.5	15.8	5.2
General studies and other[2]	11.3	67.2	16.3	5.2 !
Health	10.3	69.5	15.8	4.5
Business	8.5	69.7	17.5	4.2
Education	8.5	70.9	12.9	7.8
Other applied[3]	8.1	72.3	14.1	5.5

! Interpret data with caution.
[1] STEM majors: Includes computer and information sciences; engineering and engineering technology; and biological and physical science, science technology, mathematics, and agriculture.
[2] General studies and other: Includes basic skills and citizenship activities; leisure and recreational activities; personal awareness and self-improvement; high school and secondary diplomas and certificate programs; and interpersonal and social skills.
[3] Other applied: Includes personal and consumer services; manufacturing, construction, repair, and transportation; military technology and protective services; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations.
NOTE: Detail may not sum to totals because of rounding. "Paid off" includes loans that are discharged or forgiven. Less than 1 percent of bachelor's recipients who took federal loans had their loans discharged or forgiven. A loan amount may be discharged or forgiven due to bankruptcy, disability, death, closed school, fraud, or false certification or due to a loan forgiveness program. Borrowers who are "not paying but owe" include those in their grace period and those who have received deferments or forbearances. The grace period is the time between when a student leaves school and when their first payment is due. For federal loans, a deferment is a temporary cessation of loan principal that is allowed under certain conditions. During a deferment, interest still accrues for unsubsidized loans. A forbearance is a temporary cessation of loan principal payments under agreement with the loan servicer, usually for financial hardship, and interest continues to accrue. For private loans the terms are determined under negotiation with the lender.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table A-8. Estimates for figure 8: DEFERMENTS OR FORBEARANCES
Among 2007–08 bachelor's degree recipients who took out federal loans for their undergraduate education and had no additional enrollment, percentage who ever had a loan deferment or forbearance on a federal loan, by most recent occupation: 2012

Occupation	Percentage who ever had a loan deferment or forbearance
Total	**53.3**
Business or management	52.7
STEM[1]	44.9
Health care[2]	60.3
PK–12 educator	58.3
Social services	53.6
Sales	49.9
Business support/administrative assistance	54.8
Trades and technical[3]	55.5
Other[4]	46.1

[1] Includes computer/information systems occupations, engineers, life scientists, math-related occupations, and physical scientists.
[2] Includes nursing occupations.
[3] Includes agricultural occupations; construction and mining occupations; engineering technicians; fitters, tradesmen, and mechanics; food service occupations; military occupations; personal care occupations; protective service occupations; supports occupations; and transport support occupations.
[4] Includes the occupations of air transportation professionals; artists and designers; communication professionals; information professionals; legal professionals; other educators; postsecondary educators; and social scientists.
NOTE: This figure is limited to borrowers of federal student loans because information on deferments and forbearances is only available for federal loan borrowers. A deferment is a temporary cessation of loan principal that is allowed under certain conditions. During a deferment, interest still accrues for unsubsidized loans. A forbearance is a temporary cessation of loan principal payments under agreement with the loan servicer, usually for financial hardship, and interest continues to accrue. Many borrowers have used both kinds of payment postponements at different times. About 61 percent of borrowers who had ever received a deferment also had received a forbearance.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table A-9. Estimates for figure 9: DELINQUENCIES
Among 2007–08 bachelor's degree recipients who took out federal loans for their undergraduate education and had no additional enrollment, percentage who had a delinquent federal loan since graduation, by most recent occupation: 2012

Occupation	Percentage who had a delinquent loan
Total	**24.1**
Business or management	27.4
STEM[1]	15.5
Health care[2]	22.7
PK–12 educator	22.4
Social services	26.7
Sales	27.4
Business support/administrative assistance	29.6
Trades and technical[3]	21.0
Other[4]	22.7

[1] Includes computer/information systems occupations, engineers, life scientists, math-related occupations, and physical scientists.
[2] Includes nursing occupations.
[3] Includes agricultural occupations; construction and mining occupations; engineering technicians; fitters, tradesmen, and mechanics; food service occupations; military occupations; personal care occupations; protective service occupations; supports occupations and transport support occupations.
[4] Includes the occupations of air transportation professionals; artists and designers; communication professionals; information professionals; legal professionals; other educators; postsecondary educators; and social scientists.
NOTE: This figure is limited to borrowers of federal student loans because information on delinquencies is only available for federal loan borrowers. For federal loans, a delinquency is one or more missed payments. The past due period can range from 31 to 269 days. If a loan is 270 days or more past due, it is considered in default. This figure does not include defaulted loans.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table A-10. Estimates for figure 10: REPAYMENT ADVERSITY
Among 2007–08 bachelor's degree recipients who took out federal loans for their undergraduate education and had no additional enrollment, percentage with economic difficulty deferment, forbearance, and delinquency on any federal loan or default on their most recent federal loan, by amount of federal loans borrowed: 2012

Category of amount borrowed	Economic difficulty	Forbearances	Delinquencies	Defaults
Total	**9.6**	**37.2**	**24.1**	**2.2**
Lowest 25 percent	5.6	18.9	14.6	1.6 !
Lower middle 25 percent	11.1	27.6	19.7	2.4
Higher middle 25 percent	18.9	37.7	23.7	3.0
Highest 25 percent	25.7	63.6	37.8	7.2

! Interpret data with caution.
NOTE: This figure is limited to borrowers of federal student loans because information on deferment, forbearance, delinquency, and default is only available for federal loan borrowers. Those who borrowed $1–$10,999 were the 25 percent of federal loan borrowing bachelor's degree recipients with the lowest cumulative amount borrowed; those who borrowed $11,000–$17,124 were the 25 percent of federal loan borrowing bachelor's degree recipients with lower middle cumulative amount borrowed; those who borrowed $17,125–$25,499 were the 25 percent of federal loan borrowing bachelor's degree recipients with higher middle cumulative amount borrowed; and those who borrowed $25,500 or more were the 25 percent of federal loan borrowing bachelor's degree recipients with the highest cumulative amount borrowed. These categories are not mutually exclusive. Economic difficulty means the borrower received a deferment or temporary cessation of payments due to economic hardship or unemployment. A forbearance is a temporary cessation of loan principal payments under agreement with the loan servicer, usually for financial hardship, and interest continues to accrue. Delinquency is one or more missed payments. The past due period can range from 31 to 269 days. If a loan is 270 days or more past due, it is considered in default.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table A-11. Estimates for figure 11: DEBT BURDEN BY BACCALAUREATE SECTOR
Average debt burden among currently employed 2007–08 bachelor's degree recipients who borrowed for their undergraduate education, did not enroll further, and were repaying their undergraduate debt, by control of bachelor's degree institution: 2012

Control of institution	Average ratio
Total	**10.4**
Public	9.7
Private nonprofit	11.3
For-profit	11.9

NOTE: Estimates exclude borrowers without any salary. Debt burden is the monthly student loan payment as a percentage of monthly salary. Monthly salary is calculated by dividing annualized salary across all jobs by 12.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table A-12. Estimates for figure 12: DEBT BURDEN BY OCCUPATION
Average debt burden among currently employed 2007–08 bachelor's degree recipients who borrowed for their undergraduate education, did not enroll further, and were repaying their undergraduate debt, by occupation: 2012

Occupation	Average ratio
Business or management	8.6
STEM[1]	7.5
Health care[2]	9.6
PK–12 educator	11.6
Social services	8.3
Sales	15.5
Business support/administrative assistance	12.6
Trades and technical[3]	11.8
Other[4]	12.1

[1] Includes computer/information systems occupations, engineers, life scientists, math-related occupations, and physical scientists.
[2] Includes nursing occupation.
[3] Includes agricultural occupations; construction and mining occupations; engineering technicians; fitters, tradesmen, and mechanics; food service occupations; military occupations; personal care occupations; protective service occupations; supports occupations; and transport support occupations.
[4] Includes the occupations of air transportation professionals; artists and designers; communication professionals; information professionals; legal professionals; other educators; postsecondary educators; and social scientists.
NOTE: Estimates exclude borrowers without any salary. Debt burden is the monthly student loan payment as a percentage of monthly salary. Monthly salary is calculated by dividing annualized salary across all jobs by 12.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

APPENDIX B. STANDARD ERROR TABLES

Table B-1. Standard errors for table A-1 and figure 1: BORROWING AND OWING BY POSTBACCALAUREATE ENROLLMENT
Percentage of 2007–08 bachelor's degree recipients who borrowed for their postsecondary education and percentage who owed, by highest level of program attended: 2012

Enrollment and program level	Borrowed	Owed
Total	**0.53**	**0.58**
No further enrollment	0.78	0.78
Further enrollment	0.93	1.04
Program level of those with further enrollment		
Certificate	2.23	2.36
Additional associate's or bachelor's	3.74	3.73
Master's	0.94	1.13
Academic doctorate	3.92	3.87
Professional doctorate	1.67	2.16

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table B-2. Standard errors for table A-2 and figure 2: AMOUNTS BORROWED AND OWED BY POSTBACCALAUREATE ENROLLMENT
Among 2007–08 bachelor's degree recipients who borrowed for postsecondary education, average cumulative amount borrowed and average cumulative outstanding balance, by highest level of program attended: 2012

Enrollment and program level	Amount borrowed	Amount owed
Total	**$710**	**$820**
No further enrollment	530	620
Further enrollment	1,280	1,460
Program level of those with further enrollment		
Certificate	1,820	1,960
Additional associate's or bachelor's	2,540	2,700
Master's	1,080	1,260
Academic doctorate	7,430	8,030
Professional doctorate	4,810	5,680

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table B-3. Standard errors for table 1: ENROLLMENT AFTER BACHELOR'S DEGREE BY DEGREE LEVEL
Percentage distribution of 2007–08 bachelor's degree recipients, by highest postbachelor's enrollment as of 2012

Highest postbachelor's enrollment	Percent
No further enrollment	0.60
Further enrollment	0.60
Certificates	0.30
Additional associate's or bachelor's	0.19
Master's	0.53
Professional doctorate	0.25
Academic doctorate	0.19

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table B-4. Standard errors for table A-3 and figure 3: OWING BY EMPLOYMENT AND ENROLLMENT STATUS
Among 2007–08 bachelor's degree recipients who borrowed for their postsecondary education, percentage who had outstanding debt, by employment and enrollment status: 2012

Employment and enrollment status	Percentage with outstanding debt
Total	**0.55**
Enrolled only	0.92
Employed and enrolled	1.11
Employed only	0.75
Unemployed, not enrolled	1.26
Out of labor force, not enrolled	2.01

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table B-5. Standard errors for table A-4 and figure 4: OUTSTANDING BALANCE BY EMPLOYMENT AND ENROLLMENT STATUS
Among 2007–08 bachelor's degree recipients who borrowed for their postsecondary education, average amount owed, by employment and enrollment status: 2012

Employment and enrollment status	Average amount owed
Total	**$820**
Enrolled only	4,600
Employed and enrolled	2,540
Employed only	830
Unemployed, not enrolled	2,980
Out of labor force, not enrolled	2,140

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table B-6. Standard errors for table A-5 and figure 5: OUTSTANDING BALANCE BY OCCUPATION Among 2007–08 bachelor's degree recipients who borrowed for their undergraduate education and had no additional enrollment, average amount borrowed and owed, by most recent occupation: 2012

Occupation	Amount borrowed	Amount owed
Business or management	$1,010	$1,010
STEM	1,430	1,540
Health care	1,780	2,020
PK–12 educator	1,840	2,050
Social services	2,550	2,860
Sales	2,010	1,890
Business support/administrative assistance	1,290	1,440
Trades and technical	1,450	1,590
Other	1,890	1,920

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table B-7. Standard errors for table A-6 and figure 6: OUTSTANDING DEBT BY SALARY Among 2007–08 bachelor's degree recipients who borrowed for their undergraduate education and had no additional enrollment, average amount owed, by annualized salary: 2012

Annualized salary	Amount owed
No salary	$1,880
Total	590
Lowest 25 percent	1,090
Lower middle 25 percent	1,110
Higher middle 25 percent	1,180
Highest 25 percent	1,140

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table B-8. Standard errors for table A-7 and figure 7: REPAYMENT STATUS BY MAJOR Among 2007–08 bachelor's degree recipients who borrowed for their undergraduate education and had no additional enrollment, percentage distribution of repayment status of loans, by undergraduate field of study: 2012

Field of study	Not paying but owe	Repaying	Paid off	Defaulted
Total	**0.70**	**1.01**	**0.81**	**0.38**
STEM majors	1.16	2.46	2.34	0.48
Social sciences/humanities	1.46	2.19	1.68	0.89
General studies and other	3.08	4.97	3.88	1.99
Health	1.90	3.09	2.54	1.21
Business	1.31	2.10	1.73	0.75
Education	1.98	3.02	2.13	1.94
Other applied	1.25	1.76	1.56	0.97

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table B-9. Standard errors for table A-8 and figure 8: DEFERMENTS OR FORBEARANCES Among 2007–08 bachelor's degree recipients who took out federal loans for their undergraduate education and had no additional enrollment, percentage who ever had a loan deferment or forbearance on a federal loan, by most recent occupation: 2012

Occupation	Percentage who ever had a loan deferment or forbearance
Total	**0.99**
Business or management	2.26
STEM	3.09
Health care	3.21
PK–12 educator	3.42
Social services	4.62
Sales	4.68
Business support/administrative assistance	2.95
Trades and technical	3.12
Other	3.32

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table B-10. Standard errors for table A-9 and figure 9: DELINQUENCIES Among 2007–08 bachelor's degree recipients who took out federal loans for their undergraduate education and had no additional enrollment, percentage who had a delinquent federal loan since graduation, by most recent occupation: 2012

Occupation	Percentage who had a delinquent loan
Total	**1.03**
Business or management	2.14
STEM	2.21
Health care	2.91
PK–12 educator	3.21
Social services	3.99
Sales	4.27
Business support/administrative assistance	2.80
Trades and technical	2.57
Other	2.55

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table B-11. Standard errors for table A-10 and figure 10: REPAYMENT ADVERSITY
Among 2007–08 bachelor's degree recipients who took out federal loans for their undergraduate education and had no additional enrollment, percentage with economic difficulty deferment, forbearance, and delinquency on any federal loan or default on their most recent federal loan, by amount of federal loans borrowed: 2012

Category of amount borrowed	Economic difficulty	Forbearances	Delinquencies	Defaults
Total	**0.48**	**0.96**	**1.03**	**0.20**
Lowest 25 percent	1.15	1.88	1.63	0.66
Lower middle 25 percent	1.53	1.92	1.97	0.70
Higher middle 25 percent	1.43	1.77	1.64	0.61
Highest 25 percent	1.88	1.94	1.97	0.93

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table B-12. Standard errors for table 2: DEBT BURDEN
Among currently employed 2007–08 bachelor's degree recipients who borrowed for their undergraduate education, average debt burden (monthly loan payment as a percentage of monthly salary) and percentage with debt burdens greater than 12 percent, by repayment and further enrollment status: 2012

Student grouping	Average ratio	Percent with ratio greater than 12 percent
All borrowers	0.26	0.61
Borrowers in repayment	0.32	0.78
Borrowers in repayment with further enrollment	0.52	1.47
Borrowers in repayment without further enrollment	0.41	0.97

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table B-13. Standard errors for table A-11 and figure 11: DEBT BURDEN BY BACCALAUREATE SECTOR
Average debt burden among currently employed 2007–08 bachelor's degree recipients who borrowed for their undergraduate education, did not enroll further, and were repaying their undergraduate debt, by control of bachelor's degree institution: 2012

Control of institution	Average ratio
Total	**0.41**
Public	0.54
Private nonprofit	0.55
For-profit	2.21

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

Table B-14. Standard errors for table A-12 and figure 12: DEBT BURDEN BY OCCUPATION
Average debt burden among currently employed 2007–08 bachelor's degree recipients who borrowed for their undergraduate education, did not enroll further, and were repaying their undergraduate debt, by occupation: 2012

Occupation	Average ratio
Business or management	0.76
STEM	0.62
Health care	0.58
PK–12 educator	1.08
Social services	0.95
Sales	4.34
Business support/administrative assistance	1.25
Trades and technical	1.27
Other	1.17

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12).

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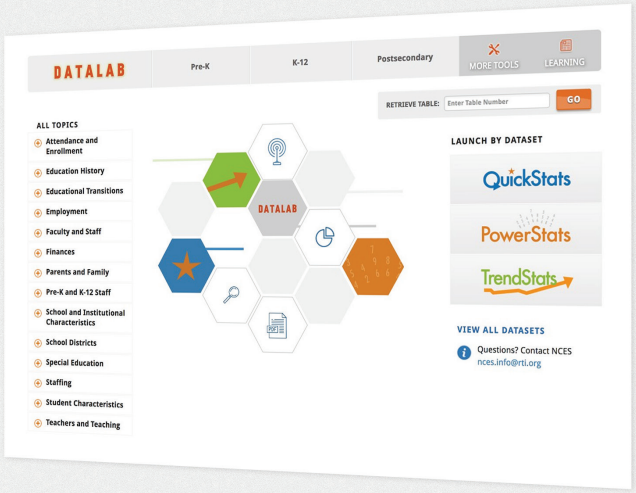

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