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Debt Burden

A Comparison of 1992–93 and 1999–2000 Bachelor's Degree Recipients a Year After Graduating

Postsecondary Education Descriptive Analysis Reports

Executive Summary

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Executive Summary

Two important changes during the 1990s had major implications for borrowing for undergraduate education. First, the price of going to college increased faster than inflation (The College Board 2003a). Second, the 1992 Reauthorization of the Higher Education Act increased loan limits for the Stafford loan program, expanded eligibility for need-based aid, and introduced unsubsidized Stafford loans for undergraduates regardless of their financial need. The resulting increase in federal borrowing was immediate and dramatic. After adjusting for inflation, the federal loan volume for undergraduate and graduate borrowing increased by 35 percent the first year after the change (1992–93 to 1993–94) (The College Board 2003b). Between 1992–93 and 2002–03, it grew from $20.7 billion (in constant 2002 dollars) to $49.1 billion, an increase of 137 percent.

This report uses the 1994 and 2001 Baccalaureate and Beyond Longitudinal Study (B&B) to compare the borrowing patterns of 1992–93 and 1999–2000 bachelor's degree recipients. It also examines their repayment situations and resulting *debt burdens* (defined as monthly loan payments as a percentage of monthly salary income a year after they graduated). Members of the earlier cohort finished their undergraduate borrowing before the changes in the Stafford loan program were implemented, and most members of the later cohort would have done all of their borrowing under the new rules.

The major finding of the analysis was that although both the percentage of graduates who had borrowed for their undergraduate education and the average total amount borrowed (adjusting for inflation) increased, the median debt burden (as defined in the previous paragraph) a year after graduating was about the same for both cohorts. Higher salaries (after adjusting for inflation) and lower payments relative to the amount borrowed for the later cohort (whose payments were kept down by declining interest rates) appear to be the major reason why there was no increase in the later cohort's debt burden. Various alternative payment options could have lowered the payments for some members of either cohort, but comparable data on how the two cohorts used these alternatives are not available.

The data presented in this report are nationally representative of bachelor's degree recipients in 1992–93 and 1999–2000. They cover the 50 states, the District of Columbia, and Puerto Rico, except for the first row in each table, which excludes Puerto Rico. The comparisons made in the text were tested using the Student's t statistic. All differences cited are statistically significant at the .05 level. The amounts borrowed by 1992–93 graduates were adjusted to 1999 constant dollars using the Consumer Price Index for all urban dwellers (CPI-U) to make them comparable to the amounts borrowed by 1999–2000 graduates; the amounts owed, monthly payments, and earnings a year later (in 1994) were adjusted to 2001 constant dollars.

Undergraduate Borrowing

The percentage of bachelor's degree recipients who had borrowed from any source to finance their undergraduate education increased from 49 percent in 1992–93 to 65 percent in 1999–2000 (tables A and 2). Among borrowers, the average amount borrowed increased from $12,100 (in constant 1999 dollars) to $19,300.

The increase in the percentage who borrowed occurred for males and females and each racial/ethnic[1] and age group. It also occurred for all categories of enrollment characteristics such as where they first enrolled, where they earned their degree, how long they took to earn their degree, and undergraduate major. Finally, the increase occurred for graduates who had been either dependent or independent and at all family income levels for dependent students. Among graduates who were dependent students, the percentage who borrowed increased from 67 to 72 percent for those in the lowest family income group and roughly doubled (from 24 to 46 percent) for those in the highest income group (figure A).

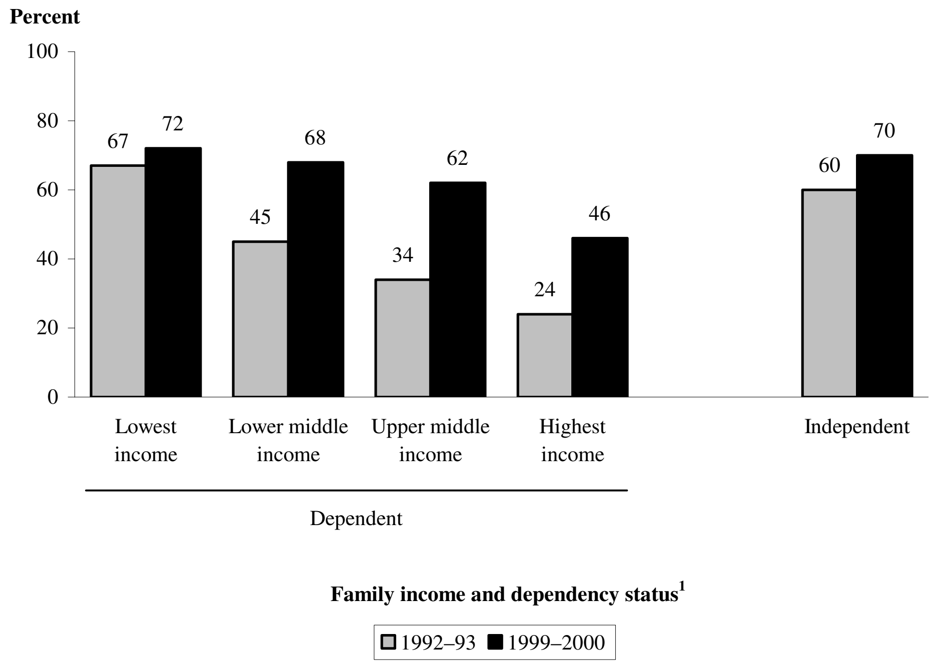
Table A. Among 1992–93 and 1999–2000 bachelor's degree recipients who borrowed for undergraduate education, average amount borrowed (in 1999 constant dollars) and among those repaying their loans a year later, average monthly salary and loan payment (in 2001 dollars) and median debt burden, by type of degree-granting institution: 1994 and 2001

	All graduates	Borrowers	Borrowers in repayment		
Type of degree-granting institution	Percent who had borrowed	Average amount borrowed	Average annual salary	Average monthly loan payment	Median debt burden
	1992–93		1994		
U.S. total (excluding Puerto Rico)	49.3	$12,100	$28,300	$170	6.7
Total (50 states, D.C., and Puerto Rico)	49.3	12,100	28,300	160	6.7
Public 4-year non-doctoral	48.0	9,800	25,000	140	6.6
Public 4-year doctoral	45.5	10,600	29,400	150	5.9
Private not-for-profit 4-year non-doctoral	57.5	14,100	27,300	180	7.8
Private not-for-profit doctoral	49.5	16,800	28,900	220	8.5
	1999–2000		2001		
U.S. total (excluding Puerto Rico)	65.5	$19,400	$34,100	$210	6.9
Total (50 states, D.C., and Puerto Rico)	65.4	19,300	34,100	210	6.9
Public 4-year non-doctoral	63.1	15,000	32,500	170	5.8
Public 4-year doctoral	63.6	17,500	34,300	200	6.7
Private not-for-profit 4-year non-doctoral	71.5	20,900	32,300	230	8.0
Private not-for-profit doctoral	65.4	28,000	37,500	260	7.7

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993/94 and 2000/01 Baccalaureate and Beyond Longitudinal Studies (B&B:93/94 and B&B:2000/01).

[1]The apparent increase for American Indians was not statistically significant.

Figure A. Percentage of 1992–93 and 1999–2000 bachelor's degree recipients who borrowed for their undergraduate education, by family income and dependency status



[1]Refers to status during 1992–93 or 1999–2000. Dependency status and income may not have been the same throughout students' undergraduate education.

NOTE: Includes education loans and loans from family or friends. Estimates include data from 50 states, D.C., and Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993/94 and 2000/01 Baccalaureate and Beyond Longitudinal Studies (B&B:93/94 and B&B:2000/01).

The increase in the average cumulative amount borrowed occurred at all types of institutions, at each income level, and across all other student and institutional characteristics just mentioned.[2] The percentage of graduates who had borrowed $25,000 or more for their undergraduate education increased from 7 percent in 1992–93 to 26 percent in 1999–2000 (table 3).

Debt did not seem to discourage graduates from enrolling in graduate or first-professional education in any major way. In fact, despite their higher debt, 1999–2000 graduates were more likely than their 1992–93 counterparts to have enrolled in a graduate or first-professional program a year later (21 vs. 16 percent) (table 5). Among 1999–2000 graduates who had not enrolled by 2001 but were expecting to attend graduate school later, 5 percent cited undergraduate debt as the primary reason for postponing their enrollment (table 6). Debt also did not appear to discourage the later cohort from entering teaching: despite their greater average debt, they were slightly more likely than the earlier cohort to have taught within a year of graduating (12 vs. 10 percent) (table 7). Nor did higher debt appear to force graduates to take jobs unrelated to their career goals: about 29 percent

[2]Again, the apparent increase for American Indians was not statistically significant.

reported taking such jobs, with no detectable increase related to the amount borrowed (table 8).

Loan Repayment

Borrowers usually must begin repaying their education loans 6 months after they graduate, although they may be able to postpone repaying if they are enrolled in postsecondary education at least half time, are unemployed, are participating in a qualifying service program (e.g., volunteering in the Peace Corps), or have an approved medical or economic hardship.[3] The standard repayment period for Stafford loans is 10 years, but alternative repayment options—graduated, extended, income-based—are available to some, depending on the specific loan program and amount borrowed. These alternatives reduce the monthly payment in the early years, but increase total interest charges. One option is for borrowers to consolidate their loans and obtain a fixed rate as well as extend the repayment period. When interest rates are low, as they are now, students who exercise this option can save substantial amounts over the life of the loan.

Just under two-thirds of the borrowers in each cohort were repaying their loans a year after graduating (table 10). Because 1999–2000 graduates had borrowed more, on average, than their 1992–93 counterparts, they also had larger average monthly loan payments a year later ($210 vs. $160 per month in constant 2001 dollars) (tables A and 11). A comparison of the payments relative to the amounts borrowed for the two cohorts suggests that the later cohort had more favorable repayment terms a year after they graduated: the average amount borrowed increased by 60 percent, but the average monthly payment increased by 30 percent.[4] For the later cohort, lower interest rates helped to keep monthly payments down. Interest rates on Stafford loans disbursed before 1992 were fixed and ranged from 8 to 10 percent (although borrowers were permitted to convert them to variable rates later). Interest rates are now variable; they are set annually on July 1 and cannot exceed 8.25 percent. In 2001, the interest rate on Stafford loans was between 6 and 7 percent, depending on the date of the loan.[5]

The later cohort also benefited from higher salaries, even after adjusting for inflation. The 1999–2000 graduates had an average salary of $34,100 in 2001, compared with an average of $28,300 (in constant 2001 dollars) for 1992–93 graduates in 1994 (tables A and 13).

Debt Burden

Debt burden is defined here as the monthly loan payment as a percentage of monthly income. While this is a commonly used indicator, there is no widely recognized standard of what constitutes an acceptable level of debt burden (Greiner 1996). Scherschel (1998) noted that mortgage lenders frequently recommend that student loan payments

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[3]The U.S. Department of Education website provides detailed information on each federal loan program, including loan limits, repayment options, interest rates, and eligibility requirements. This information is available at http://www.studentaid.ed.gov.

[4]While not based on a nationally representative sample of students, a similar pattern of discrepancy was reported by Baum and O'Malley (2003) in the rate of growth in undergraduate debt level and monthly repayments based on data from the 2002 National Student Loan Survey conducted by the Nellie Mae Corporation.

[5]While both the amounts borrowed and the monthly loan payments are student reported in a telephone interview and therefore subject to recall error, the two appear to be consistent. The monthly payment on a 10-year loan for $12,100 (the average borrowed by 1992–93 graduates) at 8–10 percent interest would be $147–160; the payment on a 10-year loan for $19,300 (the average for 1999–2000 graduates) at 6–7 percent interest would be $214–224.

should not exceed 8 percent of their pre-tax income.

A comparison of the debt burden of the two cohorts reflects differences not only in how much they borrowed but also in the salaries they were able to command, the prevailing interest rates, and the repayment options they selected. Although the later graduates had borrowed more, on average, than the earlier graduates, the combination of higher salaries and apparent better repayment terms resulted in a median debt burden that was similar for both cohorts (7 percent) (tables A and 14). Goldenberg (2004) estimated comparable levels of debt burden for all borrowers (not only bachelor's degree recipients) in their first year of repayment in all years from 1997 through 2001 (6 to 7 percent) using loan data from a random sample of borrowers in the National Student Loan Data Base and income data from the Internal Revenue Service.

Even though the median debt burden did not increase, graduates with large loans or low salaries faced relatively high debt burdens. For example, 1999–2000 graduates who had borrowed $25,000 or more had a median debt burden of 10 percent in 2001, compared with 3 percent for their peers who had borrowed less than $10,000. Also, low salaries understandably make repaying loans more burdensome. For both cohorts, the lower the income category, the greater the median debt burden was. Those with the lowest salaries had a median debt burden of 18 percent in 1994 and 15 percent in 2001, and those with middle and high incomes had median debt burdens in the 4–9 percent range.

While the relationship between loan payments and earnings is probably the most important indicator of debt burden, it is useful to look at other details of graduates' financial circumstances and life choices for any signs that undergraduate debt may be creating hardships. Considering graduates who were not enrolled for further education, no systematic differences were detected between those who borrowed various amounts and those who had not borrowed in terms of their living arrangements (table 16) or propensity to marry (table 18).

However, as debt burden increased (i.e., as student loan payments used up an increasing proportion of their salaries) graduates' ability or willingness to take on other financial obligations was affected. For both cohorts, among graduates repaying their loans, those with a debt burden of less than 5 percent were more likely than those with a debt burden of 17 percent or more to have mortgage, rent, or auto loan payments, and when they did, the amounts they paid were generally larger.

It is important to understand that these data represent debt burden a year after graduation but that debt burden can change during the repayment period. Interest rates on federal loans are variable and therefore may go up or down, and income and employment status can change because of personal circumstances or changing economic conditions. Thus, the extent to which any group of borrowers is likely to have difficulty repaying their loans depends not only on the size of their loans but also on conditions during the repayment period that are difficult to predict when students and their families make decisions about borrowing. Students whose academic success is uncertain or whose families lack the financial resources to help them repay their loans if they run into difficulty are especially vulnerable to these uncertainties.

Finally, it is important to note that although median debt burden a year after graduating has not increased, the amount that the average bachelor's degree recipient borrowed, and thus will have to repay, has increased. Although loans help students gain access to undergraduate education by reducing the necessary immediate outlay, they do not decrease the total price of going to college; they simply postpone paying the bill.