Forty-five percent of bachelor's degree recipients who enrolled in graduate or first-professional degree programs took out loans to help pay for that education, borrowing an average of \$33,200 by 2003 (table 4). Borrowing a large amount as an undergraduate does not appear to

Table 4. Among 1992–93 bachelor's degree recipients with graduate degree enrollment, percentage who borrowed for graduate education and, among borrowers, average amount and percentage distribution of amount borrowed for graduate education, by student and institutional characteristics: 2003

	Percent		Amount borrowed					
	who	Average	Less than	\$10,000-	\$15,000-	\$30,000-	\$55,000	
Student and institutional characteristics	borrowed	amount	\$10,000	14,999	29,999	54,999	or more	
Total	44.8	\$33,200	23.2	10.3	27.0	20.1	19.4	
Type of degree-granting institution								
Public 4-year	44.4	31,200	25.5	10.2	26.9	19.3	18.1	
Non-doctorate-granting	40.0	25,000	27.3	11.3	32.4		10.7	
Doctorate-granting	46.5	33,900	24.7	9.7			21.2	
Private not-for-profit 4-year	45.9	36,600	20.3	10.3	25.7		21.8	
Non-doctorate-granting	46.1	31,300	24.8	8.9			17.1	
Doctorate-granting	45.7	42,300	15.5	11.8	23.8		26.8	
Other	41.3	31,900	11.2	11.2	43.2	15.7	18.8	
Undergraduate major								
Business and management	34.3	28,700	28.1	7.1	28.9	19.4	16.5	
Education	34.3	23,000	37.4	12.5	25.5		11.8	
Engineering, mathematics, or science	47.1	47,400	19.1	8.7			33.4	
Humanities or social sciences	52.8	32,800	20.0	8.5	31.3	21.5	18.7	
Other	47.4	28,100	21.6	14.3	28.0	22.9	13.2	
Amount borrowed (undergraduate)								
Did not borrow	36.0	36,900	19.3	7.7	26.5	22.7	23.9	
Less than \$5,000	45.7	30,300	29.7	9.5			15.2	
\$5,000-9,999	56.3	29,200	28.0	13.0		12.9	15.1	
\$10,000–14,999	54.7	28,700	25.7	16.1	23.6		15.3	
\$15,000 or more	58.4	35,100	18.7	9.9	25.3	24.9	21.3	
Highest enrollment after bachelor's degree by 2003								
Master's degree	37.9	19,900	30.0	13.2	33.5	18.9	4.5	
Doctoral degree	63.1	43,700	18.3	7.6			31.5	
First-professional degree	71.8	69,200	4.6	2.6			59.9	
Highest degree earned by 2003								
Bachelor's degree	32.3	23,300	36.2	11.6	26.6	14.4	11.4	
Master's degree	45.4	22,900	23.9	12.6			5.9	
Doctoral degree	64.3	44,100	21.4	9.6			35.2	
First-professional degree	78.8	75,500	2.0	1.1	8.2		67.1	

NOTE: Graduate includes first-professional. Detail may not sum to totals because of rounding. Estimates include students from the 50 states, DC, and Puerto Rico. Standard error tables are available at <a href="http://nces.ed.gov/das/library/reports.asp">http://nces.ed.gov/das/library/reports.asp</a>. SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993/03 Baccalaureate and Beyond Longitudinal Study (B&B:93/03).

have prevented additional borrowing for graduate study: those who borrowed \$5,000 or more as undergraduates were actually more likely to borrow for graduate or first-professional education (55–58 percent) than those who borrowed less than \$5,000 (46 percent) or not at all (36 percent).

Among advanced degree completers, those whose highest degree was a master's were the least likely to have borrowed to help pay for their graduate education (45 vs. 64 percent of doctoral degree recipients and 79 percent of first-professional recipients). In addition, they had borrowed the least (an average of \$22,900 vs. \$44,100 for doctoral students and \$75,500 for first-professional students). This pattern reflects the fact that master's degree programs are typically shorter than doctoral or first-professional degree programs and therefore less expensive and also that master's degree students are more likely than others to attend part time (Choy and Cataldi 2006). Variation in graduate borrowing patterns by undergraduate major reflects, at least in part, the types of graduate programs in which they enroll.

## **Combined Undergraduate and Graduate Borrowing**

Among bachelor's degree recipients who had enrolled in a graduate degree program by 2003, some 31 percent did not borrow at either the undergraduate or graduate level (table 5). Another 24 percent borrowed only as undergraduates and 18 percent only as graduates; the remaining 27 percent borrowed at both levels. Figure 2 shows the pattern by highest degree earned by 2003. Students might need to borrow at one level but not the other for a number of reasons. For example, the price of attending might differ because of a change in the type of institution attended, attendance status, or living arrangements. In addition, financial circumstances might change, with support from parents or a spouse available at one level but not the other. Finally, the availability of other types of financial aid such as grants or assistantships might mitigate the need to borrow at one level but not the other.

Among those who earned advanced degrees, those who earned master's degrees were the most likely to avoid borrowing at either level (32 percent, compared with 24 percent of those with doctoral degrees and 18 percent of those with first-professional degrees) (table 5). Among graduate degree earners who borrowed only for graduate education, first-professional degree recipients borrowed the most, on average (\$73,900), followed by doctoral degree recipients (\$46,600) and then master's degree recipients (\$25,200). First-professional degree completers who borrowed at both levels had an average total debt of \$88,900.

Table 5. Among 1992–93 bachelor's degree recipients with graduate degree enrollment, percentage who borrowed for undergraduate and graduate education and average amounts, by student and institutional characteristics: 2003

	ī	Percent who	horrowe	Average amount borrowed (by borrowers)			
	1	Under-	bollowed	Under-			
		graduate C	Graduate			Graduate	
Student and institutional characteristics	Neither	only	only	Both	only	only	Both
Total	31.4	23.7	17.7	27.2	\$9,600	\$36,900	\$41,700
Type of degree-granting institution							
Public 4-year	32.6	23.0	19.5	24.9	8,100	36,500	36,900
Non-doctorate-granting	34.4	25.6	15.9	24.1	7,800	29,100	31,900
Doctorate-granting	31.7	21.7	21.3	25.2	8,200	39,300	39,300
Private not-for-profit 4-year	29.7	24.2	15.3	30.8	12,500	37,500	48,900
Non-doctorate-granting	27.5	26.1	14.5	32.0	12,000	31,500	43,200
Doctorate-granting	32.1	22.3	16.1	29.5	13,000	43,200	55,500
Other	26.9	31.8	7.1	34.2	‡	‡	39,600
Undergraduate major							
Business and management	39.6	26.4	13.0	21.1	8,900	33,000	38,800
Education	34.6	31.0	12.8	21.7	10,100	28,600	30,800
Engineering, mathematics, or science	29.4	23.3	19.1	28.2	10,000	47,200	57,400
Humanities or social sciences	28.6	18.4	21.8	31.1	9,600	38,200	40,000
Other	29.3	23.4	17.8	29.5	9,500	31,000	37,400
Amount borrowed (undergraduate)							
Did not borrow	64.0	†	36.0	†	†	36,900	†
Less than \$5,000	†	54.4	†	45.7	2,700	†	32,700
\$5,000-9,999	†	43.7	†	56.3	6,900	†	36,200
\$10,000–14,999	†	45.3	†	54.7	11,300	†	40,200
\$15,000 or more	†	41.6	†	58.4	22,400	†	57,700
Highest enrollment after bachelor's degree	by 2003						
Master's degree	34.3	27.8	13.6	24.3	9,500	22,600	29,000
Doctoral degree	23.6	13.2	28.3	34.9	10,400	44,300	54,900
First-professional degree	20.4	7.6	33.6	38.5	‡	68,000	82,000
Highest degree earned by 2003							
Bachelor's degree	35.5	32.0	10.8	21.7	9,500	25,500	32,500
Master's degree	31.8	22.8	17.5	27.9	9,500	25,200	32,500
Doctoral degree	23.7	11.8	31.2	33.3	‡	46,600	52,900
First-professional degree	17.8	3.5	37.6	41.1	‡	73,900	88,900

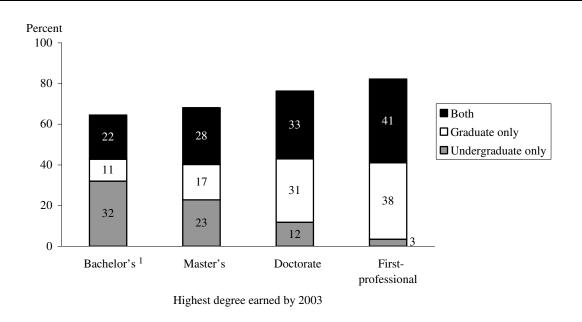
<sup>†</sup> Not applicable.

NOTE: Graduate includes first-professional. Estimates include students from the 50 states, DC, and Puerto Rico. Standard error tables are available at <a href="http://nces.ed.gov/das/library/reports.asp">http://nces.ed.gov/das/library/reports.asp</a>.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993/03 Baccalaureate and Beyond Longitudinal Study (B&B:93/03).

<sup>‡</sup> Reporting standards not met (too few cases).

Figure 2. Among 1992–93 bachelor's degree recipients with graduate degree enrollment, percentage who borrowed for undergraduate and graduate education, by highest degree earned as of 2003 and level at which borrowed



<sup>&</sup>lt;sup>1</sup> Enrolled in a graduate or first-professional degree program but did not complete one.

NOTE: Graduate includes first-professional. Estimates include students from the 50 states, DC, and Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993/03 Baccalaureate and Beyond Longitudinal Study (B&B:93/03).

The amounts borrowed by students who had enrolled in a graduate or first-professional program but had not earned a degree by 2003 resembled those of students who had earned a master's degree. There were no measurable differences between the two groups in terms of the average total amount borrowed, regardless of whether borrowing occurred at the undergraduate level only (about \$9,500), at the graduate level only (\$25,200–25,500), or at both levels (about \$32,500).