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Characteristics of Undergraduate Borrowers: 1999–2000

Postsecondary Education Descriptive Analysis Reports

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January 2003

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Executive Summary

This report describes student borrowing by comparing different groups of undergraduate borrowers. Two sets of borrower groups are examined: 1) high, medium, low, and nonborrowers as defined by borrowing from all sources in 1999–2000 (excluding federal Parent Loans for Undergraduate Students (PLUS) and loans from family or friends);[1] and 2) Stafford loan maximum borrowers (total, subsidized, and unsubsidized),[2] less-than-maximum borrowers, and Stafford nonborrowers.[3] The analysis of borrower groups explores demographic and enrollment characteristics, risk for not persisting to completion of an educational program, and types of loans and other financial aid received. The final analysis in the report considers all borrowers as a group and explores the likelihood of borrowers with certain characteristics obtaining particular types of financial aid. Twenty-nine percent of undergraduates borrowed from some source to help finance postsecondary education in 1999–2000.

Data from the 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000) were used for this report. These data provide a nationally representative sample of undergraduates enrolled at postsecondary institutions that participated in the federal student aid programs authorized by Title IV of the Higher Education Act.[4] NPSAS:2000 includes information on student demographic and enrollment characteristics, the type (level and control) of the enrolling institution, and dollar amounts borrowed from various sources in 1999–2000.

Profile of Borrower Groups

The profile of borrower groups examines the demographic and enrollment characteristics of high borrowers as a group and in comparison to medium, low, and nonborrowers. It also examines each group of Stafford maximum borrowers (total, subsidized, and unsubsidized) individually and in

[1]Borrowers are separated into low, medium, and high categories based on the distribution of total amounts borrowed in 1999–2000 (independent of class level), approximating quartiles. As a result, low borrowers are defined as those undergraduate students who borrowed $2,625 or less (28 percent), medium borrowers are defined as those undergraduates who borrowed more than $2,625 but less than $6,625 (51 percent), and high borrowers are defined as those undergraduates who borrowed $6,625 and above (21 percent). The cut-points that define these groups correspond with federal Stafford and Perkins loan limits but were not chosen for this reason.

[2] For the purposes of this report, Stafford Loans include those provided through the Federal Family Education Loan Program (FFELP) and the Federal Direct Loan Program. The Stafford total loan amount includes dollars borrowed under either or both the subsidized and unsubsidized programs. A subsidized loan is awarded on the basis of financial need. If a student qualifies for a subsidized loan, the federal government pays the interest on the loan until the student begins repayment, and during authorized periods of deferment thereafter. An unsubsidized loan is not awarded on the basis of need. Students who qualify for an unsubsidized loan are charged interest from the time the loan is disbursed until it is paid in full.

[3]Stafford maximum borrowers are those who borrow 100 percent of the federal loan limit under the program in question. This classification is based on the maximum allowed amounts under the subsidized and unsubsidized programs for a given student's class level. (See "Appendix A—Glossary" for a list of undergraduate loan limits in 1999–2000.)

[4]Beginning with NPSAS:2000, institutions must have signed a Title IV participation agreement with the U.S. Department of Education, making them eligible for the federal student aid programs, to be included in the institutional sample.

comparison to their Stafford less-than-maximum and Stafford nonborrower counterparts. Key findings include:

High Borrowers

- High borrowers tended to be older (29 percent were ages 24–29 and 26 percent were 30 or older), independent students (64 percent). They also were likely to attend exclusively full time (72 percent) and to attend 4-year institutions (34 percent attended private not-for-profit and 38 percent attended public 4-year institutions).
- High, medium, and low borrowers were less likely than nonborrowers to have been high income and to have worked full time.

Stafford Maximum Borrowers

- Stafford total maximum borrowers and subsidized maximum borrowers tended to be young, single, financially dependent students. In addition, they were more likely to have had each of these characteristics than Stafford nonborrowers. Each group of maximum borrowers tended to be enrolled exclusively full time.
- Stafford maximum borrowers tended to work 1–20 hours (total and subsidized) or 1–20 hours and 35 hours or more (unsubsidized). All maximum borrowers were less likely than nonborrowers to have worked full time.

Persistence/Attainment Risk

A common method of characterizing undergraduate students is to separate students into "traditional" and "nontraditional" categories. In a 1996 NCES study, a broad definition of nontraditional was used that included seven characteristics: delaying enrollment; attending part time; being financially independent; having dependents other than a spouse; working full time while enrolled; having no high school diploma; and being a single parent. Nontraditional status was defined on a continuum based on the number of these characteristics. The nontraditional status index ranges from minimally nontraditional (one characteristic) to moderately nontraditional (two or three characteristics) to highly nontraditional (four or more characteristics) (Horn 1996). The same characteristics that define a nontraditional student have also been termed risk characteristics because they have been shown to be negatively associated with persistence and attainment (Horn 1996; Horn and Premo 1995).

This report uses the index to examine the percentage of each type of borrower group with different numbers of risk characteristics and applies the same continuum used to define nontraditional to characterize the degree of risk from minimal to high. Because research has shown that students who do not attain degrees are more likely to default, the analysis focuses on those with high risk characteristics. Key findings include:

High Borrowers

- With the exception of students at private not-for-profit 4-year institutions, high borrowers most often had moderate risk (public 4-year institutions, 39 percent; and private for-profit institutions, 52 percent) or moderate and high risk (public 2-year institutions, 46 and 33 percent) of not persisting. High borrowers at private not-for-profit 4-year institutions were more likely to have had zero risk characteristics (42 percent).
- The proportion of high borrowers with a high risk for not persisting varied by

institution type. At both private not-for-profit 4-year institutions and public 4-year institutions, high borrowers were more likely to have had high risk than medium and low borrowers. At private for-profit institutions, however, a lower percentage of high borrowers (28 percent) had high risk than medium borrowers (41 percent).

Stafford Maximum Borrowers

- The highest proportion of Stafford maximum borrowers (total, subsidized, and unsubsidized) at private not-for-profit 4-year institutions and public 4-year institutions had zero risk characteristics (were traditional students). At public 2-year institutions, they primarily had moderate risk (unsubsidized) or moderate and high risk (subsidized). Those at private for-profit institutions primarily had moderate risk.
- In all four institution types, Stafford total maximum and unsubsidized maximum borrowers were less likely to have had high risk for not persisting than their less-than-maximum borrower and nonborrower counterparts.

Types and Source of Financial Aid

Many borrowers also received other types of financial aid (loans, grants, and work-study). Thus, this profile also looks at the other types of aid that were received by each borrower group as well as average amounts received. It explores the various ways in which borrowers finance college attendance in addition to borrowing. Key findings include:

High Borrowers

- High borrowers received an average of $9,680 in loan aid. Ninety-eight percent of high borrowers received Stafford loans and about one-quarter received private loans (27 percent).
- Compared to medium and low borrowers, high borrowers were most likely to have received both Stafford subsidized loans and Stafford unsubsidized loans as well as private loans.
- Seventy-one percent of high borrowers received some form of grant aid in 1999–2000, averaging $4,667. High, medium, and low borrowers were more likely to have received some form of grant aid and to have received higher average amounts compared to nonborrowers.

Stafford Maximum Borrowers

- In 1999–2000, 80 percent of Stafford total maximum borrowers received subsidized loans, and 59 percent received unsubsidized loans. Stafford maximum borrowers also received private loans (total maximum borrowers, 13 percent; subsidized maximum borrowers, 11 percent; and unsubsidized maximum borrowers, 11 percent).
- Each group of maximum borrowers was more likely to have received private loans and to have received higher average amounts than less-than-maximum borrowers and nonborrowers.
- Most maximum borrowers received some form of grant aid (total maximum borrowers, 67 percent; subsidized maximum borrowers, 80 percent; and unsubsidized maximum borrowers, 54 percent).

Who Receives Financial Aid

All borrowers as a group were examined to determine whether borrowers with certain demographic and enrollment characteristics were more likely to have received specific types of loans and other aid or differing average amounts

in 1999–2000. The main differences are related to federal Stafford loans (subsidized and unsubsidized) and private loans. Three multivariate analyses were conducted to examine the independent association of certain characteristics with having received each of these types of loans by adjusting for covariation among the characteristics examined. Key findings include:

Stafford Loans

- Borrowers who were financially independent (versus dependent), who attended private for-profit institutions (versus private not-for-profit 4-year institutions), and who attended exclusively full time (versus less than half time) were more likely to have received both federal Stafford subsidized loans and Stafford unsubsidized loans.

Private Loans

- Borrowers who attended less than half time (versus exclusively full time), who attended a private not-for-profit 4-year institution (versus a public 4-year institution or a private for-profit institution), and who were high or middle income (versus low income) received private loans at a higher rate.

Foreword

This report describes the population of undergraduate students who borrowed to help finance their college attendance during 1999–2000. Two sets of borrower groups were considered: 1) high, medium, low, and nonborrowers as defined by borrowing from all sources; and 2) Stafford loan maximum borrowers (total, subsidized, and unsubsidized), less-than-maximum borrowers, and Stafford nonborrowers. The study explores the demographic and enrollment characteristics of these borrowers as well as their risk for not persisting to completion of an educational program and the various types of loans and other financial aid they received. The report also looks at all borrowers as a group and explores the likelihood of borrowers with certain characteristics obtaining particular types of financial aid.

Data from the 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000) were used for this report. These data provide a nationally representative sample of undergraduates enrolled at postsecondary institutions that participated in the federal student aid programs authorized by Title IV of the Higher Education Act. NPSAS:2000 includes information on student demographic and enrollment characteristics, the type (level and control) of the enrolling institution, and dollar amounts borrowed from various sources in 1999–2000.

The NCES Data Analysis System (DAS), a microcomputer application that allows users to generate tables for NPSAS:2000, as well as several other NCES surveys, was used to produce the estimates presented in this report. To allow researchers to perform tests of statistical significance, the DAS produces design-adjusted standard errors necessary for this purpose. Please consult Appendix B for more information on the DAS.

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We gratefully acknowledge the help of these individuals who made valuable contributions to the final report.

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Introduction

Researchers have explored many issues related to student borrowing, including loan volume and sources, cumulative debt and debt burden, and borrowing behaviors of various groups of students. However, there has been relatively little research on the *characteristics* of student borrowers. In contrast to other studies that have looked at the borrowing behaviors of particular groups of students, this report examines the distinguishing characteristics of groups of students who borrow different amounts. Specifically, this report seeks to describe student borrowing by examining student groups that borrow relatively high, medium, and low amounts, and those groups that do not borrow.[1]

Key questions addressed are:

- Who are high borrowers?
- Are high borrowers more likely to have risk characteristics for persistence in completing their educational programs than medium, low, and nonborrowers?
- What types of loans and other financial aid are received by high, medium, and low borrowers?
- Who are Stafford loan maximum borrowers and what types of other aid do they receive?
- Are borrowers with certain demographic and enrollment characteristics more likely to receive particular types of aid?

This report begins with background information on student borrowing followed by a description of the data source and variable definitions. Later sections provide findings on the characteristics of high borrowers in comparison to medium, low, and nonborrowers—including characteristics associated with risk of not persisting to completion of an educational program—and show the types of loans and other financial aid received by each borrower group. The next section presents findings of a similar analysis on Stafford loan (subsidized and unsubsidized) borrowers.[2] Characteristics of undergraduates who borrow the maximum allowed amounts under

[1]Borrower groups are based on annual loan amounts for 1999–2000.

[2]A subsidized loan is awarded on the basis of financial need. If a student qualifies for a subsidized loan, the federal government pays the interest on the loan until the student begins repayment, and during authorized periods of deferment thereafter. An unsubsidized loan is not awarded on the basis of need. Students who qualify for an unsubsidized loan are charged interest from the time the loan is disbursed until it is paid in full.

these programs are compared to those who borrow less-than-maximum amounts and to those who do not borrow Stafford loans. This section also examines other financial aid received by Stafford loan maximum borrowers, less-than-maximum borrowers, and Stafford nonborrowers. The final section of the report examines the likelihood of borrowers with certain characteristics obtaining particular types of financial aid.

Background

Over the last twenty years, there has been a shift in the nature of student financial aid. Loans (federal and non-federal) comprised 58 percent of total financial aid awarded in 2000–2001 compared to 41 percent in 1980–81 (College Board 2001). Over the last decade, total student loan volume has increased substantially, and an increasing number of students are borrowing (Berkner 2000). These increases are attributed, in part, to changes in federal need analysis and increased federal loan limits that have allowed more students to borrow under federal programs and to borrow higher amounts (Redd 1999). While it is unclear whether private source loans are increasing as a proportion of total loan volume, there is evidence that the absolute volume of private loans and the number of providers has increased in recent years (Hoffman 2002).

It is also unclear to what degree increased reliance on student loans has affected access, affordability, and choice for low- and middle-income students (Campaigne and Hossler 1998). Most bachelor's degree recipients who borrow to help finance postsecondary education (50 percent) are well positioned financially to make loan payments (Choy 2000). However, student loan debt has proven problematic for some groups of students. Low-income students, single parents, and minorities are all more likely to default on loans, though degree completion equalizes any race differences in default rates (Volkwein and Cabrera 1998). Other research also shows that degree completion is an important factor in whether a student defaults and that low-income students are more averse to taking on debt than middle- and high-income students (Dynarski 1994; Knapp and Seaks 1992; Hossler, Braxton, and Coopersmith 1989).

Issues surrounding increasing student debt levels, including debt burden, risk of default, and demand for higher loan limits, continue to surface in policy discussions and are likely to be a main focus in upcoming federal higher education policy debates. Discussions concerning federal loan limits will involve the realities of rising prices, the changing demographics of the population served by higher education, and concerns about debt levels and default. Given the importance of the issues surrounding student loan borrowing, this report seeks to provide an analysis that will help inform these debates. This goal guided many of the choices concerning the content of this report, while other choices resulted from the nature of the data available for this study.

A specific goal of this study was to examine the characteristics of students who borrow high amounts annually. In addition to identifying characteristics that distinguish high borrowers from other borrower groups, this report examines the number of persistence/attainment risk characteristics of high borrowers compared to other groups. Because the data are limited to students who are currently enrolled, it was impossible to include an analysis of degree attainment or default outcomes. It is useful, however, to examine whether high borrowers are at greater risk for these behaviors. The report also looks at the other types of loans that borrower groups receive and presents a profile of students who borrow at current Stafford loan maximums. In defining borrower groups, this study uses annual loan amounts rather than cumulative debt. Absolute amounts of borrowing are considered rather than defining borrower groups relative to other variables, such as type of institution attended. For the purposes of this report, high borrowing was considered as an absolute concept because of concerns about debt burden. (See "Data and Approach to Analysis" below for further discussion.)

Data and Approach to Analysis

Data from the 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000) were used for this report. These data provide a nationally representative sample of undergraduates enrolled at postsecondary institutions that participated in the federal student aid programs authorized by Title IV of the Higher Education Act.[3] NPSAS:2000 includes information on student demographic and enrollment characteristics, the type (level and control) of the enrolling institution, and dollar amounts borrowed from various sources in 1999–2000.

Definition of Borrower Groups

Borrowers are defined in this report as undergraduate students who have obtained loans from federal, state, institutional, and other sources, including private commercial loans (but excluding federal Parent Loans for Undergraduate Students (PLUS) and loans from family or friends), for 1999–2000. Using this definition, 29 percent of undergraduates were borrowers.[4]

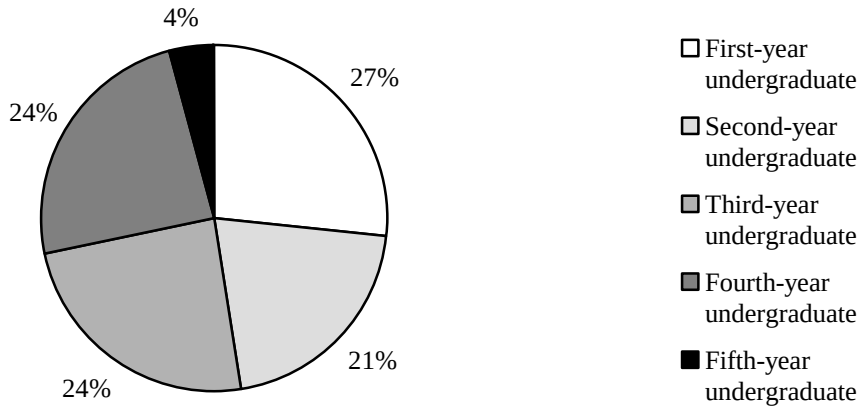
Borrowers were separated into groups based on the distribution of total amount borrowed in 1999–2000. The classification of borrowers into low, medium, and high categories was based on the distribution of loan amounts among all borrowers. Exact quartiles were not used because of "heaping" at certain dollar amounts. In order to prevent students who borrowed identical

[3]Beginning with NPSAS:2000, institutions must have signed a Title IV participation agreement with the U.S. Department of Education, making them eligible for the federal student aid programs, to be included in the institutional sample.

[4]U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000), Data Analysis System.

amounts from being classified into different groups, cut-points were chosen to approximate upper and lower quartiles.[5] Low borrowers were defined as those undergraduate students who borrowed $2,625 or less in 1999–2000. Medium borrowers were defined as those undergraduates who borrowed more than $2,625 but less than $6,625. High borrowers were defined as those undergraduates who borrowed $6,625 and above. Using this definition, 28 percent of all borrowers were low borrowers, 51 percent were medium borrowers, and 21 percent were high borrowers in 1999–2000. Nonborrowers were those undergraduates who did not borrow from the included sources (figure 1 and table 1).

Figure 1. Percentage distribution of high borrowers according to class level: 1999–2000



NOTE: Borrowers are those undergraduates who received loans from federal, state, institutional, or private sources, excluding PLUS loans. Low borrowers had total annual loan amounts of $2,625 or less in 1999–2000; medium borrowers had more than $2,625 but less than $6,625; and high borrowers had $6,625 or more. The class level characteristic used here applies to class level for student loan purposes.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

Although the definition of borrower used in this report includes borrowing from sources other than federal, most borrowers received federal loans in 1999–2000. Because the cut-points used to classify borrower groups correspond with Stafford and Perkins loan limits, which vary by class level, it is necessary to examine the possibility that the definition of borrower groups is

[5]For the purposes of this report, Stafford loans include those provided through the Federal Family Education Loan Program (FFELP) and the Federal Direct Student Loan Program. These dollar amounts correspond with federal loan limits for undergraduates under the Stafford loan and Perkins loan programs. The lower cut-point, $2,625, corresponds to the Stafford total limit for first-year dependent undergraduates (subsidized or unsubsidized) and the upper cut-point, $6,625, corresponds to the Stafford total limit for independent, first-year students.

Table 1. Percentage distribution of undergraduates by borrower status, according to selected characteristics: 1999–2000

	Nonborrower	Low borrower	Medium borrower	High borrower	All undergraduates
Total	100.0	100.0	100.0	100.0	100.0
Gender					
Male	44.6	41.4	40.7	57.1	43.7
Female	55.4	58.6	59.3	42.9	55.4
Age					
23 years or younger	53.2	76.3	73.7	45.5	57.2
24–29 years of age	16.7	12.2	14.7	29.0	17.0
30 years or older	30.2	11.5	11.6	25.5	25.8
Race-ethnicity					
White, non-Hispanic	67.5	66.9	70.6	66.1	67.7
Black, non-Hispanic	11.2	16.3	14.0	17.0	12.4
Hispanic or Latino	12.4	11.0	8.8	10.7	11.7
Asian/Pacific Islander	6.7	4.1	5.1	4.5	6.1
American Indian/Alaskan Native	1.0	0.9	0.7	0.8	0.9
Other	1.3	0.8	0.9	0.9	1.2
Marital status					
Single, never married	63.1	81.4	81.3	64.3	67.1
Married	28.6	13.5	13.9	26.5	25.2
Separated, divorced, or widowed	8.4	5.1	4.8	9.3	7.7
Single parent status					
Not a single parent	86.0	88.6	89.9	86.1	86.7
Single parent	14.0	11.4	10.2	13.9	13.3
Dependency status					
Dependent	45.0	68.6	67.1	35.9	49.1
Independent	55.1	31.4	32.9	64.1	50.9
Parent income, quartile (dependent students)					
Lowest quartile	23.9	29.4	25.1	29.2	25.0
Middle quartiles	48.2	52.7	54.1	52.2	50.0
Highest quartile	27.9	17.9	20.8	18.6	25.0
Independent student income, quartile					
Lowest quartile	19.3	43.2	43.8	36.5	24.2
Middle quartiles	50.4	48.9	48.0	51.5	50.2
Highest quartile	30.3	7.9	8.3	12.0	25.6
Parents' educational level					
Less than high school	8.9	6.5	4.7	6.5	7.8
High school graduate	31.0	37.7	31.8	36.9	32.3
Some college, including associate's degree	20.4	23.6	23.6	23.6	21.5
Bachelor's degree	22.0	19.6	23.0	19.3	21.7
Advanced degree	17.7	12.6	16.9	13.7	16.8
Delayed enrollment					
Did not delay enrollment	50.7	64.6	68.4	54.0	54.5
Delayed enrollment	49.3	35.4	31.6	46.0	45.5
Attendance status					
Exclusively full time	39.9	70.2	74.2	71.9	49.3
Half time	19.5	11.1	6.7	9.1	16.3
Less than half time	24.6	3.0	2.0	1.7	18.2
Mixed[1]	16.1	15.7	17.2	17.3	16.3

See notes at end of table.

Table 1. Percentage distribution of undergraduates by borrower status, according to selected characteristics: 1999–2000—Continued

	Nonborrower	Low borrower	Medium borrower	High borrower	All undergraduates
Class level (Stafford loan)					
First-year undergraduate	46.4	67.1	19.6	26.6	42.7
Second-year undergraduate	28.9	17.1	28.0	20.9	27.1
Third-year undergraduate	9.7	6.8	25.8	24.1	12.9
Fourth-year undergraduate	13.5	7.6	23.5	24.3	15.3
Fifth-year undergraduate	1.6	1.4	3.1	4.1	2.0
Hours worked					
Not employed	19.7	22.8	19.1	20.1	19.9
1–20 hours	18.9	30.6	39.2	32.3	23.6
21–34 hours	16.1	20.7	20.8	18.5	17.2
35 hours or more	45.3	25.9	21.0	29.1	39.3
Type of institution attended					
Private not-for-profit 4-year	10.6	17.1	29.4	33.7	15.2
Public 4-year	28.4	47.1	54.7	37.5	33.9
Public 2-year	58.5	25.6	7.5	6.0	45.6
Private for-profit	2.5	10.3	8.4	22.8	5.3
Degree program					
Certificate	9.8	7.3	4.6	9.2	8.9
Associate's degree	48.4	32.0	13.6	17.6	40.1
Bachelor's degree	35.9	59.9	81.1	72.6	46.6
No undergraduate degree	5.9	0.9	0.8	0.6	4.4
Highest degree expected					
No degree or certificate	2.1	0.6	0.3	0.4	1.6
Certificate	2.6	2.3	1.2	1.3	2.3
Associate's degree	8.3	6.7	3.1	4.1	7.2
Bachelor's degree	34.0	30.6	20.7	21.1	30.9
Master's degree	36.8	41.5	51.8	51.2	40.3
Doctoral or first-professional degree	10.8	13.5	18.8	17.9	12.6
Don't know	5.4	4.7	4.2	4.2	5.1
Student unmet need[2]					
Less than $1,000	11.3	6.2	2.8	1.3	7.8
$1,000–$2,999	27.7	23.7	9.5	4.0	20.7
$3,000–$4,999	23.5	27.3	21.0	6.4	21.3
$5,000–$9,999	27.7	32.7	47.0	40.9	33.7
$10,000 and higher	9.8	10.1	19.7	47.4	16.5
Estimated price of attendance[3]					
Less than $5,000	42.4	8.2	1.3	#	31.4
$5,000–$9,999	33.2	41.9	24.8	6.6	30.9
$10,000–$14,999	16.5	31.3	39.4	37.4	22.1
$15,000–$19,999	3.5	9.1	14.2	26.1	7.0
$20,000 and higher	4.5	9.4	20.3	29.9	8.7

#Rounds to zero

[1]Since full-time full-year students may be enrolled full time nine or more months and part time a few months, they are categorized as mixed.

[2]Unmet need equals the attendance-adjusted student budget minus expected family contribution (EFC) minus total grant aid. Zero values were excluded for this analysis.

[3]The estimated price of attendance is the attendance-adjusted student budget, including tuition, books and supplies, room and board, and personal expenses.

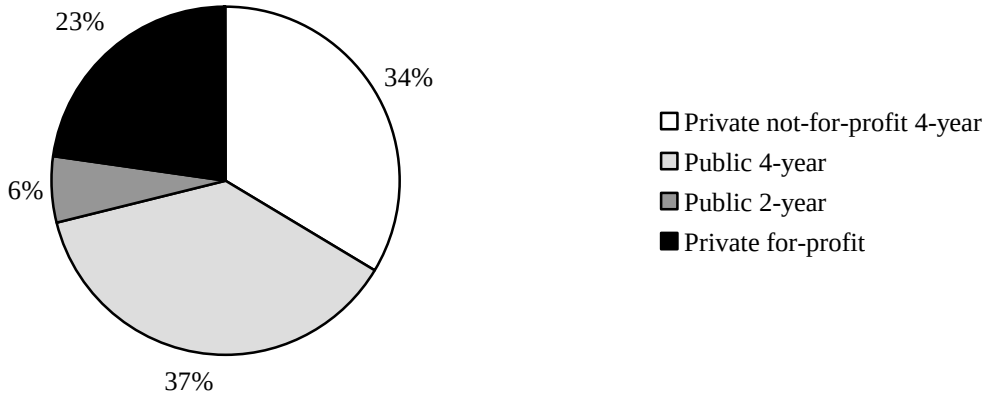
NOTE: Borrowers are those undergraduates who received loans from federal, state, institutional, or private sources, excluding Parent Loans for Undergraduate Students (PLUS). Low borrowers had total annual loan amounts of $2,625 or less in 1999–2000; medium borrowers had more than $2,625 but less than $6,625; and high borrowers had $6,625 or more. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

merely a proxy for class level. As shown in figure 1 and table 1, high borrowers were well represented in all class levels (with the exception of fifth-year undergraduates, who made up only 2 percent of undergraduate students in 1999–2000). This was also the case for medium borrowers. Although most low borrowers were first-year students (67 percent), first-year students made up a relatively large proportion of all undergraduates (43 percent) NPSAS:2000.

Given the differences in prices of attendance among institution types, an analogous concern exists that differences in borrower groups could merely reflect the type of institution attended by the borrower. Figure 2 shows that while few high borrowers attended public 2-year institutions (6 percent), high borrowers were distributed across other institutional types. Approximately one-third attended private not-for-profit 4-year institutions and another one-third attended public 4-year institutions. The largest proportion of low borrowers attended public 4-year institutions (47 percent) (table 1).

Figure 2. Percentage distribution of high borrowers according to institution type: 1999–2000



NOTE: Borrowers are those undergraduates who received loans from federal, state, institutional, or private sources, excluding Parent Loans for Undergraduate Students (PLUS). Low borrowers had total annual loan amounts of $2,625 or less in 1999–2000; medium borrowers had more than $2,625 but less than $6,625; and high borrowers had $6,625 or more. Other institutional types, including public less-than-2-year and private not-for-profit less-than-4-year, were excluded from this analysis. Also excluded were students attending more than one institution in 1999–2000.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

Stafford Loan Borrower Groups

This report includes an analysis of the subset of Stafford borrowers analogous to the analysis conducted of borrowers defined by borrowing from all sources. This analysis considers three different annual loan amounts: Stafford total; Stafford subsidized; and Stafford unsubsidized.[6] In each case, three groups are defined—maximum borrowers, less-than-maximum borrowers, and nonborrowers—resulting in a total of nine Stafford borrower groups.[7] This classification is based on the maximum allowed amounts under the subsidized and unsubsidized programs for a given student's class level.[8]

Definition of Price of Attendance and Unmet Need

Price of attendance and unmet need are important variables to consider in conjunction with income to understand how borrower groups differ in financial status.

The definition of price of attendance used in this report is the attendance-adjusted student budget, including both tuition and nontuition costs.[9] Nontuition costs include books and supplies, room and board, transportation, and personal expenses. In the context of this report, price of attendance is examined as a borrower characteristic and is divided into five categories: less than $5,000; $5,000 to $9,999; $10,000 to $14,999; $15,000 to $19,999; and $20,000 and above. Figure 3 shows the percentage of students with prices of attendance falling in each category. See table 1 for the distribution of borrowers by price of attendance.

Unmet need is a concept used to describe the amount of the total price of attendance that is higher than what the student or family is expected to pay but is not covered by financial aid awards. Unmet need may be defined in different ways. The standard definition of unmet need subtracts both the expected family contribution (EFC) and *all* financial aid from the price of attendance.[10] Given the focus on borrowers, it was most useful for the purposes of this report,

[6]Stafford maximum borrowers are those who borrow 100 percent of the federal loan limit under the program in question. The Stafford total loan amount includes dollars borrowed under either or both the subsidized and unsubsidized programs. Therefore, Stafford total borrowers include all students who borrowed under the Stafford programs, including those who borrowed exclusively subsidized loans, exclusively unsubsidized loans, and a combination of subsidized and unsubsidized loans.

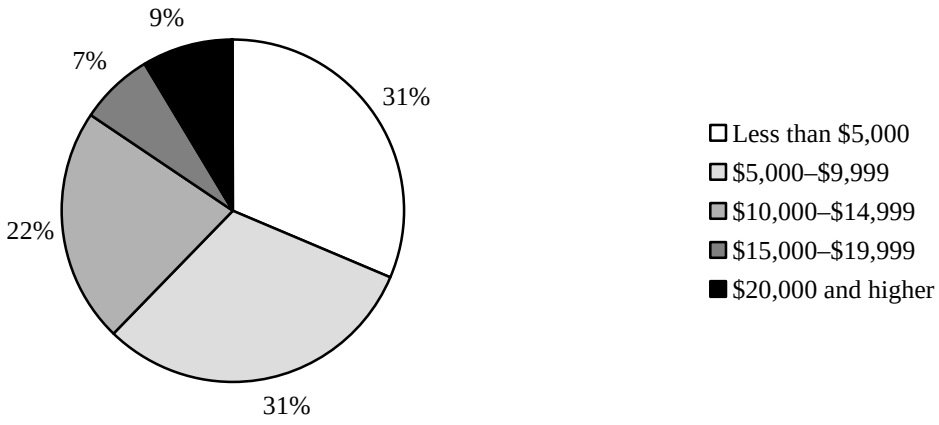
[7]In the case of this analysis, nonborrower refers only to the Stafford loan program in question. Throughout the report, they will be referred to as Stafford nonborrowers, Stafford subsidized nonborrowers, and Stafford unsubsidized nonborrowers. Therefore, these "nonborrowers" may actually have borrowed from non-Stafford sources.

[8]Stafford total borrowers are classified into maximum and less-than-maximum categories based on the maximum amounts for subsidized and unsubsidized Stafford loans combined. See Appendix A—Glossary (STAFFCT1 – STAFFCT3) for a list of undergraduate loan limits in 1999–2000.

[9]The attendance-adjusted student budget is estimated based on tuition paid, number of months enrolled, and attendance status while enrolled.

[10]EFC is determined when students apply for financial aid.

Figure 3. Percentage distribution of undergraduates according to price of attendance: 1999–2000



NOTE: The estimated price of attendance is the attendance-adjusted student budget, including tuition and fees, room and board, and other expenses.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

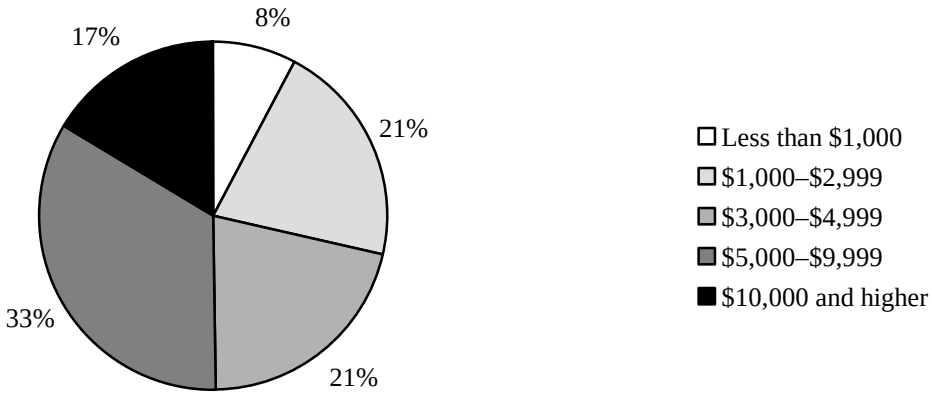
however, to adopt a definition that subtracts only grant aid. Unmet need, therefore, is defined as the attendance-adjusted student budget minus the expected family contribution (EFC) and all grant aid. Unmet need is divided into five categories: less than $1,000; $1,000 to $2,999; $3,000 to $4,999; $5,000 to $9,999; and $10,000 and above.[11] Figure 4 shows the percentage of students with each level of unmet need. See table 1 for the distribution of borrowers by unmet need level.

Definition of Nontraditional Undergraduates and Persistence/Attainment Risk Index

In examining a profile of borrowers that includes many characteristics, it is useful to have a mechanism for clustering these characteristics. A common method of characterizing undergraduate students is to divide students into "traditional" and "nontraditional" categories. The characteristics that define a nontraditional undergraduate have been debated, but in a 1996 NCES study, a broad definition of the term was used that included seven characteristics: delaying enrollment; attending part time; being financially independent; having dependents other than a spouse; working full time while enrolled; having no high school diploma; and being a single parent. Nontraditional was defined on a continuum based on the number of these characteristics that ranges from minimally nontraditional (one characteristic) to moderately nontraditional (two or three characteristics) to highly nontraditional (four or more characteristics) (Horn 1996).

[11]Zero values were excluded for the analysis in this report.

Figure 4. Percentage distribution of undergraduates according to unmet need: 1999–2000

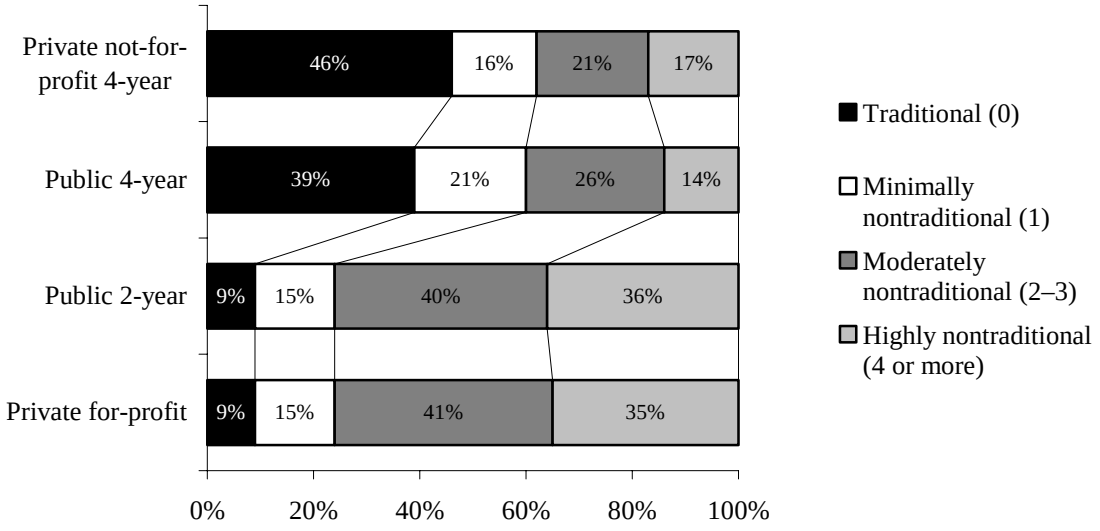


NOTE: Unmet need equals the attendance-adjusted student budget minus expected family contribution (EFC) minus total grant aid. Student budget includes tuition, books and supplies, room and board, transportation, and personal expenses. Zero values were excluded for this analysis.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

This method is particularly appropriate for this research because nontraditional students defined in this way are more likely to leave college before completing an educational program. The characteristics that define a nontraditional student have also been termed risk characteristics because of this relationship (Horn 1996; Horn and Premo 1995). An index of risk characteristics associated with lower rates of persistence and attainment based on the sum of these seven characteristics is included in NPSAS:2000. This report uses that index to examine the percentage of each type of borrower with different numbers of risk characteristics, and applies the same continuum used to define nontraditional to characterize the degree of risk. One characteristic indicates minimal risk, two or three indicates moderate risk, and four or more indicates high risk. Because the distribution of students on the nontraditional/risk continuum varies by sector (figure 5), the analysis is done within institutional types.

Figure 5. Percentage distribution of undergraduates according to number of nontraditional characteristics, by institutional type: 1999–2000



NOTE: The defininition of a nontraditional undergraduate includes seven characteristics: delaying enrollment; attending part-time; being financially independent; having dependents other than a spouse; working full time while enrolled; having no high school diploma; and being a single parent. Traditional undergraduates have none of these characteristics, minimally nontraditional undergraduates have one, moderately nontraditional undergraduates have two or three, and highly nontraditional undergraduates have four or more (Horn 1996). These characteristics also have been shown to be negatively associated with persistence and attainment (Horn 1996; Horn and Premo 1995).

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

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Profile of Borrower Groups

This section provides a profile of the characteristics of undergraduates who borrowed relatively high amounts in 1999–2000 compared to those who borrowed medium or low amounts or did not borrow.

High borrowers tended to be independent students (64 percent), and to be age 24 or older.[12] The highest percentage of high borrowers attended exclusively full time (72 percent) and attended 4-year institutions (34 percent attended private not-for-profit and 38 percent attended public 4-year institutions) (table 1). The tendency for high borrowers to be older, independent students may reflect a higher financial need among these students or reflect increased eligibility for higher loan amounts. For example, independent students are eligible for higher maximum amounts under the federal Stafford loan programs.

The characteristics of high borrowers also were compared to those of other borrower groups, and it was found that several characteristics distinguished high borrowers from medium and low borrowers, including age, marital status, and dependency status. High borrowers were less likely than medium and low borrowers to be age 23 or younger (46 percent versus 74 and 76 percent), single (64 percent versus 81 and 81 percent), and financially dependent (36 percent versus 67 and 69 percent) (table 1). Borrower groups also differed by three related characteristics—institution type, attendance status,[13] and price of attendance. Specifically, a larger percentage of students who borrowed both high and medium amounts in 1999–2000 attended private not-for-profit 4-year institutions than students who borrowed low amounts or did not borrow (34 and 30 percent versus 17 and 11 percent) (table 1). Also, all borrower groups were more likely to have attended full time than students who did not borrow. Students who borrowed high amounts were more likely to have had the highest prices of attendance ($15,000 to $19,999 and $20,000 or higher) compared to other borrower groups.

Not surprisingly, it appears that many undergraduates borrow high amounts in order to finance high prices of attendance. This may reflect one or several factors, including low income,

[12]When students are separated into two age categories, 46 percent are age 23 or younger and 55 percent are age 24 or older. Being age 24 or older is one criterion that classifies students as independent.

[13]Attendance status indicates whether a student was enrolled only full time, half time, less than half time, or a mixed pattern. Since full-time full-year students may be enrolled full time for nine or more months and part time a few months, they are categorized as mixed.

financial need unmet by grant aid, or an inability or unwillingness to work full time. In fact, all borrower groups (high, medium, and low) were less likely than nonborrowers to have had incomes in the highest quartile in 1999–2000. This was the case for both dependent students (19, 21, and 18 percent versus 28 percent) and independent students (12, 8, and 8 percent versus 30 percent) (table 1). In addition, a larger proportion of undergraduates who borrowed high amounts had unmet need higher than $10,000 compared to those who borrowed medium and low amounts or did not borrow (47 percent versus 20, 10, and 10 percent). Finally, all borrower groups were less likely to work full time than nonborrowers.

Persistence/Attainment Risk (Nontraditional) Characteristics

Certain demographic and enrollment characteristics that are used to define nontraditional undergraduates also are associated with an increased risk of leaving postsecondary education before completing an educational program (Horn 1996; Horn and Premo 1995). Research has shown that students who do not attain degrees experience more difficulty repaying student loans and are more likely to default (Hossler, Braxton, and Coopersmith 1989). The purpose of this section is to examine the degree of risk for not persisting to completion of an educational program for different borrower groups. High borrowers with high risk are of particular concern because of the increased financial burden. Based on the nontraditional continuum developed by Horn (1996), one characteristic indicates minimal risk, two or three characteristics indicate moderate risk, and four or more characteristics indicate high risk. (See "Data and Approach to Analysis" section for more detail.)

Because the percentage of students with persistence/attainment risk (nontraditional) characteristics varies greatly by institutional type, this analysis was conducted within each institutional type. The findings are presented for four institutional types: private not-for-profit 4-year institutions; public 4-year institutions; public 2-year institutions; and private for-profit institutions. Results show that the degree of risk for not persisting exhibited by high borrowers varied by institutional type.

As shown in table 2, the plurality of high borrowers at private not-for-profit 4-year institutions had zero risk characteristics (42 percent), and 15 percent had high risk in 1999–2000. High borrowers were more likely to have had high risk than medium and low borrowers (15 percent versus 8 and 9 percent).

At public 4-year institutions, the highest percentage of undergraduates who borrowed high amounts had moderate risk for not persisting (39 percent), about one-quarter (24 percent) had zero risk characteristics, and 18 percent had high risk. As was found for borrowers at private not-for-profit 4-year institutions, a comparison of borrower groups revealed that high borrowers at public 4-year institutions were more likely to have had high risk than medium and low borrowers (18 percent versus 9 and 8 percent). High borrowers also were more likely to have had moderate risk than medium and low borrowers (39 percent versus 21 and 16 percent).

Table 2. Percentage distribution of undergraduates by sector of institution attended and borrower status, according to number of persistence/attainment risk characteristics: 1999–2000

	Private not-for-profit 4-year				Public 4-year			
	Non-borrower	Low borrower	Medium borrower	High borrower	Non-borrower	Low borrower	Medium borrower	High borrower
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Zero risk characteristics	35.8	59.0	63.1	42.4	36.4	54.1	46.1	23.6
Minimal risk (1)	14.2	18.6	18.4	16.6	19.6	22.2	24.5	19.6
Moderate risk (2–3)	25.9	13.0	10.9	25.6	27.5	15.6	20.8	39.2
High risk (4+)	24.2	9.4	7.6	15.3	16.6	8.1	8.6	17.7
	Public 2-year				Private for-profit			
	Non-borrower	Low borrower	Medium borrower	High borrower	Non-borrower	Low borrower	Medium borrower	High borrower
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Zero risk characteristics	8.9	17.8	12.4	7.7	6.9	17.6	10.6	6.4
Minimal risk (1)	14.3	19.1	11.4	13.0	15.1	22.2	12.6	14.1
Moderate risk (2–3)	40.1	31.9	43.5	46.3	40.0	27.9	35.9	51.9
High risk (4+)	36.7	31.2	32.7	33.0	38.0	32.3	40.9	27.6

NOTE: The risk index includes seven characteristics known to be negatively associated with persistence and attainment (Horn 1996; Horn and Premo 1995). The characteristics are: delaying enrollment; attending part-time; being financially independent; having dependents other than a spouse; working full time while enrolled; having no high school diploma; and being a single parent. Borrowers are those undergraduates who received loans from federal, state, institutional, or private sources, excluding federal Parent Loans for Undergraduate Students (PLUS). Low borrowers had total annual loan amounts of $2,625 or less in 1999–2000; medium borrowers had more than $2,625 but less than $6,625; and high borrowers had $6,625 or more. Detail may not sum to totals because of rounding

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

At public 2-year institutions, the largest percentage of high borrowers had moderate risk (46 percent) or high risk (33 percent) of not persisting (table 2). Eight percent had zero risk characteristics. No difference was detected among borrower groups in the high risk proportion.

The majority of undergraduates who borrowed high amounts at private for-profit institutions had moderate risk (52 percent), about one-quarter (28 percent) had high risk, and 6 percent had zero risk characteristics (table 2). A comparison of borrower groups showed that a lower percentage of high borrowers were at high risk for not persisting than were medium borrowers (28 percent versus 41 percent).

Types and Sources of Financial Aid

This section examines the various types of financial aid (including loans, grants, and work-study) that were received by each borrower group in order to explore how other types of financial aid are used along with loans to finance college attendance. Specifically, this section of the report presents the percentage of high borrowers who receive various types of loans and the average amounts received compared to other borrower groups. Other types of aid that each borrower group received are also noted.

Loans

High borrowers received an average of $9,680 in loan aid in 1999–2000. Ninety-eight percent of high borrowers received Stafford loans and about one-quarter received private loans (table 3). Consistent with the definition of borrower groups, students who borrowed high amounts were more likely than other borrower groups to have received various types of loans, including Stafford subsidized and unsubsidized loans, Perkins loans, state loans, and loans from private sources. Particularly interesting were the differences found for Stafford loans and private loans. Students who borrowed high amounts were more likely to have received a Stafford subsidized loan (89 percent) than both medium borrowers (81 percent) and low borrowers (72 percent). In addition, high borrowers were most likely to have received a Stafford unsubsidized loan (83 percent), followed by medium borrowers (47 percent) and low borrowers (30 percent).

Twenty-seven percent of undergraduates who borrowed high amounts received loans from private sources, a higher proportion than both medium borrowers (8 percent) and low borrowers (6 percent). This may be because some students who needed to borrow high amounts borrowed from these sources after reaching eligible federal loan limits. These also may have been students who borrowed high amounts primarily from non-federal sources because they were ineligible to receive certain federal loans.

Grants and Work-Study

Despite the larger percentages of high borrowers borrowing all types of loans, high borrowers are not financing price of attendance solely with borrowed funds. About three-quarters of high borrowers received some form of grant aid in 1999–2000 (table 3); the average amount of

Table 3. Percentage of undergraduates who received financial aid from various sources and average amount received, by borrower status: 1999–2000

	Nonborrower		Low borrower		Medium borrower		High borrower		All undergraduates	
	Percent received	Average amount received	Percent received	Average amount received	Percent received	Average amount received	Percent received	Average amount received	Percent received	Average amount received
Loans (excluding PLUS)	†	†	100.0	$2,043	100.0	$4,581	100.0	$9,680	29.0	$5,229
Federal (excluding PLUS)	†	†	94.0	2,078	98.0	4,421	98.2	7,685	27.9	4,643
Stafford (either)	†	†	91.0	2,092	97.4	4,232	98.2	7,352	27.6	4,492
Stafford subsidized	†	†	71.5	1,914	81.1	3,412	88.9	4,016	23.2	3,214
Stafford unsubsidized	†	†	30.1	1,778	47.0	2,888	83.4	4,374	14.9	3,328
Perkins	†	†	4.4	1,129	12.9	1,598	15.7	2,010	3.2	1,695
Non-federal	†	†	8.6	1,243	10.7	2,499	31.8	7,089	4.6	4,766
State	†	†	1.0	1,127	0.9	2,765	3.4	5,260	0.5	3,852
Institution	†	†	1.4	871	2.0	1,860	3.1	3,848	0.6	2,424
Private sources	†	†	6.3	1,328	8.0	2,594	26.9	7,313	3.6	5,100
Grants	34.4	$2,673	67.5	3,488	69.2	4,919	70.6	4,667	44.4	3,476
Federal[1]	14.8	1,879	43.6	1,999	42.1	2,247	46.5	2,391	23.1	2,063
Pell	14.5	1,790	42.7	1,872	41.2	2,019	45.6	2,139	22.6	1,910
FSEOG	2.9	500	11.6	600	13.1	828	16.2	823	5.9	678
Non-federal	31.2	2,266	46.9	3,237	52.7	4,808	50.1	4,516	36.7	3,086
State	9.3	1,340	24.4	1,702	25.3	2,096	22.4	2,172	13.6	1,681
Institution	11.5	2,833	23.7	3,551	32.9	4,995	29.7	4,614	16.7	3,722
Private sources	6.3	2,138	12.8	1,749	14.0	1,950	12.9	2,253	8.3	2,062
Work-study	2.1	1,692	10.9	1,505	16.2	1,639	12.6	1,764	5.4	1,653

†Not applicable.

[1]Federal grant aid primarily includes Pell Grants and Federal Supplemental Educational Opportunity Grants (FSEOG), but also includes Robert Byrd Scholarships and any other federal grants, fellowships, or traineeships received during 1999–2000.

NOTE: Borrowers are those undergraduates who received loans from federal, state, institutional, or private sources, excluding Parent Loans for Undergraduate Students (PLUS). Low borrowers had total annual loan amounts of $2,625 or less in 1999–2000; medium borrowers had more than $2,625 but less than $6,625; and high borrowers had $6,625 or more.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

grant aid was $4,667. Furthermore, each group of borrowers (high, medium, and low) was more likely to have received some form of grant aid than nonborrowers (71, 69, and 68 percent versus 34 percent) and to have received higher average amounts of grant aid than nonborrowers. Similarly, each borrower group was more likely to have received specific types of grant aid than nonborrowers, including Pell grants, Federal Supplemental Educational Opportunity Grants (FSEOG), state grants, and institutional grants. Undergraduates who borrowed high and medium amounts received higher average amounts of specific types of grant aid than those who borrowed

low amounts and those who did not borrow, including federal grant aid,[14] Pell grants, FSEOG, non-federal grants, state grants, and institutional grants.

[14]Federal grant aid primarily includes Pell Grants and FSEOG, but also includes Robert Byrd Scholarships and any other federal grants, fellowships, or traineeships received during 1999–2000.

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Stafford Maximum Borrowers

This section provides an analysis analogous to the one presented in previous sections, which focused on a profile of borrowers as defined by total loans. The following analysis is limited to a particular subset of borrowers, those who had Stafford loans. The analysis considers separately those who borrowed under the subsidized program (Stafford subsidized borrowers), those who borrowed under the unsubsidized program (Stafford unsubsidized borrowers), and those who borrowed under either or both programs (Stafford total borrowers). For each set of borrowers, groups are defined based on the maximum allowed amounts for each program. (See "Definition of Borrower Groups" in "Data and Approach to Analysis" section for more detail.) The main interest in conducting this analysis is to examine the characteristics of Stafford maximum borrowers and to look at the other types of financial aid they received.

Demographic and Enrollment Characteristics

Unlike undergraduates who borrowed high amounts from all sources, Stafford total maximum and subsidized maximum borrowers tended to be age 23 or younger, (82 and 64 percent),[15] single (87 and 76 percent), and financially dependent (79 and 55 percent) (tables 4 and 5). They were also more likely to have had each of these characteristics than their Stafford nonborrower counterparts. All Stafford maximum borrowers (total, subsidized, and unsubsidized) tended to be enrolled exclusively full time (79, 77, and 72 percent). Because dependent students have lower Stafford maximum allowed amounts than independent students, these findings may simply reflect the higher likelihood that dependent students will borrow the maximum amount, particularly for subsidized loans. It may also be that young, dependent students are more likely to attend 4-year institutions and therefore require Stafford maximum loan amounts to finance the higher prices of attendance.

In fact, Stafford maximum borrowers had relatively high prices of attendance and financial need unmet by grant aid. Specifically, the highest proportion of undergraduates who borrowed maximum Stafford amounts (total, subsidized, and unsubsidized) had prices of attendance between $10,000 and $14,999 (36, 38, and 40 percent) (tables 4, 5 and 6). In comparison to other borrower groups, these maximum borrowers were more likely to have had the highest prices of

[15]When separated into two age categories, 18 percent of Stafford total maximum borrowers, 36 percent of subsidized maximum borrowers, and 34 percent of unsubsidized maximum borrowers were 24 years or older.

Table 4. Percentage distribution of undergraduates by total Stafford borrower status, according to selected characteristics: 1999–2000

	No Stafford	Less than maximum Stafford	Maximum Stafford	All undergraduates
Total	100.0	100.0	100.0	100.0
Gender				
Male	44.6	38.8	43.8	43.7
Female	55.4	61.2	56.3	56.3
Age				
23 years or younger	53.4	50.8	82.1	57.2
24–29 years of age	16.6	27.0	9.5	17.0
30 years or older	29.9	22.2	8.4	25.8
Race-ethnicity				
White, non-Hispanic	67.4	65.3	71.5	67.7
Black, non-Hispanic	11.2	16.9	14.4	12.4
Hispanic or Latino	12.5	11.3	8.1	11.7
Asian/Pacific Islander	6.6	4.7	4.6	6.1
American Indian/Alaskan Native	1.0	1.0	0.6	0.9
Other	1.3	0.8	0.9	1.2
Marital status				
Single, never married	63.3	66.1	86.6	67.1
Married	28.4	24.6	10.3	25.2
Separated, divorced, or widowed	8.4	9.3	3.1	7.7
Single parent status				
Not a single parent	86.1	80.9	95.4	86.7
Single parent	13.9	19.1	4.6	13.3
Dependency status				
Dependent	45.2	38.0	79.0	49.1
Independent	54.8	62.0	21.0	50.9
Parent income, quartile (dependent students)				
Lowest quartile	24.0	31.3	25.1	25.0
Middle quartiles	48.2	54.5	53.3	50.0
Highest quartile	27.8	14.2	21.6	25.0
Independent student income, quartile				
Lowest quartile	19.5	43.9	32.5	24.2
Middle quartiles	50.3	48.1	54.5	50.2
Highest quartile	30.2	8.0	13.0	25.6
Parents' educational level				
Less than high school	8.9	7.7	3.7	7.8
High school graduate	31.0	40.0	30.4	32.3
Some college, including associate's degree	20.4	22.9	24.5	21.5
Bachelor's degree	22.0	17.5	24.3	21.7
Advanced degree	17.7	12.0	17.2	16.8
Delayed enrollment				
Did not delay enrollment	51.0	53.1	72.9	54.5
Delayed enrollment	49.0	46.9	27.1	45.5
Attendance status				
Exclusively full time	40.4	65.9	78.9	49.3
Half time	19.3	13.1	4.2	16.3
Less than half time	24.3	2.7	1.4	18.2
Mixed[1]	16.0	18.4	15.5	16.3

See notes at end of table.

Table 4. Percentage distribution of undergraduates by total Stafford borrower status, according to selected characteristics: 1999–2000—Continued

	No Stafford	Less than maximum Stafford	Maximum Stafford	All undergraduates
Class level (Stafford loan)				
First-year undergraduate	46.1	29.9	38.9	42.7
Second-year undergraduate	28.8	22.1	23.9	27.1
Third-year undergraduate	9.8	21.7	19.3	12.9
Fourth-year undergraduate	13.7	22.3	16.0	15.3
Fifth-year undergraduate	1.6	4.0	1.9	2.0
Hours worked				
Not employed	19.7	19.0	21.8	19.9
1–20 hours	19.2	29.3	40.5	23.6
21–34 hours	16.1	20.9	19.5	17.2
35 hours or more	45.0	30.8	18.2	39.3
Type of institution attended				
Private not-for-profit 4-year	10.9	17.8	35.2	15.2
Public 4-year	28.7	51.8	45.1	33.9
Public 2-year	57.9	18.2	6.1	45.6
Private for-profit	2.5	12.2	13.6	5.3
Degree program				
Certificate	9.8	7.5	5.6	8.9
Associate's degree	48.0	25.0	14.6	40.1
Bachelor's degree	36.5	66.8	79.2	46.6
No undergraduate degree	5.8	0.8	0.7	4.4
Highest degree expected				
No degree or certificate	2.1	0.5	0.3	1.6
Certificate	2.6	2.1	1.0	2.3
Associate's degree	8.3	5.4	3.2	7.2
Bachelor's degree	33.9	25.6	21.5	30.9
Master's degree	37.0	46.5	51.2	40.3
Doctoral or first-professional degree	10.9	15.6	18.5	12.6
Don't know	5.3	4.4	4.3	5.1
Student unmet need[2]				
Less than $1,000	11.1	3.7	2.7	7.8
$1,000–$2,999	27.4	15.4	7.4	20.7
$3,000–$4,999	23.5	21.9	14.9	21.3
$5,000–$9,999	28.0	42.3	41.1	33.7
$10,000 and higher	10.0	16.8	33.8	16.5
Estimated price of attendance[3]				
Less than $5,000	41.9	4.9	0.3	31.4
$5,000–$9,999	33.2	36.7	13.6	30.9
$10,000–$14,999	16.7	38.0	36.2	22.1
$15,000–$19,999	3.6	12.2	19.8	7.0
$20,000 and higher	4.7	8.2	30.2	8.7

[1]Since full-time full-year students may be enrolled full time nine or more months and part time a few months, they are categorized as mixed.

[2]Unmet need equals the attendance-adjusted student budget minus expected family contribution (EFC) minus total grant aid. Zero values were excluded for this analysis.

[3]The estimated price of attendance is the attendance-adjusted student budget, including tuition, books and supplies, room and board, and personal expenses.

NOTE: Stafford total loan recipients are those undergraduates who received either or both subsidized and unsubsidized loans in 1999–2000. Stafford total borrowers are classified into maximum and less-than-maximum categories based on the maximum amounts for subsidized and unsubsidized Stafford loans combined for a given student's class level. Stafford nonborrowers may have received Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

Table 5. Percentage distribution of undergraduates by subsidized Stafford borrower status, according to selected characteristics: 1999–2000

	No subsidized Stafford	Less than maximum subsidized Stafford	Maximum subsidized Stafford	All undergraduates
Total	100.0	100.0	100.0	100.0
Gender				
Male	44.6	40.3	41.2	43.7
Female	55.4	59.8	58.8	56.3
Age				
23 years or younger	55.2	63.6	64.2	57.2
24–29 years of age	16.0	19.9	20.4	17.0
30 years or older	28.8	16.5	15.5	25.8
Race-ethnicity				
White, non-Hispanic	68.3	67.0	65.0	67.7
Black, non-Hispanic	11.1	15.4	17.6	12.4
Hispanic or Latino	12.0	11.2	10.2	11.7
Asian/Pacific Islander	6.4	4.7	5.4	6.1
American Indian/Alaskan Native	1.0	1.0	0.7	0.9
Other	1.2	0.7	1.1	1.2
Marital status				
Single, never married	64.6	74.7	75.9	67.1
Married	27.4	18.6	17.4	25.2
Separated, divorced, or widowed	8.0	6.7	6.8	7.7
Single parent status				
Not a single parent	86.7	86.9	86.8	86.7
Single parent	13.3	13.1	13.2	13.3
Dependency status				
Dependent	47.3	55.1	55.1	49.1
Independent	52.7	44.9	45.0	50.9
Parent income, quartile (dependent students)				
Lowest quartile	21.8	30.1	37.4	25.0
Middle quartiles	47.8	58.6	54.4	50.0
Highest quartile	30.4	11.3	8.1	25.0
Independent student income, quartile				
Lowest quartile	19.4	40.8	44.6	24.2
Middle quartiles	50.2	50.9	50.0	50.2
Highest quartile	30.4	8.3	5.4	25.6
Parents' educational level				
Less than high school	8.4	6.6	5.8	7.8
High school graduate	30.7	37.6	35.5	32.3
Some college, including associate's degree	20.5	24.0	24.2	21.5
Bachelor's degree	22.4	18.9	20.6	21.7
Advanced degree	18.0	12.9	13.9	16.8
Delayed enrollment				
Did not delay enrollment	52.4	60.6	61.9	54.5
Delayed enrollment	47.6	39.4	38.1	45.5

See notes at end of table.

Table 5. Percentage distribution of undergraduates by subsidized Stafford borrower status, according to selected characteristics: 1999–2000—Continued

	No subsidized Stafford	Less than maximum subsidized Stafford	Maximum subsidized Stafford	All undergraduates
Attendance status				
Exclusively full time	42.3	67.6	76.7	49.3
Half time	18.6	11.3	6.5	16.3
Less than half time	23.0	2.7	1.4	18.2
Mixed[1]	16.1	18.4	15.4	16.3
Class level (Stafford loan)				
First-year undergraduate	45.3	27.7	40.4	42.7
Second-year undergraduate	28.4	20.9	24.7	27.1
Third-year undergraduate	10.5	23.9	17.7	12.9
Fourth-year undergraduate	14.1	23.9	15.0	15.3
Fifth-year undergraduate	1.7	3.7	2.2	2.0
Hours worked				
Not employed	19.9	18.3	21.4	19.9
1–20 hours	20.1	33.6	36.7	23.6
21–34 hours	16.3	21.2	19.6	17.2
35 hours or more	43.7	26.9	22.4	39.3
Type of institution attended				
Private not-for-profit 4-year	11.6	21.0	32.8	15.2
Public 4-year	30.3	53.6	40.6	33.9
Public 2-year	55.4	14.8	8.9	45.6
Private for-profit	2.7	10.6	17.7	5.3
Degree program				
Certificate	9.3	5.8	8.7	8.9
Associate's degree	46.3	20.9	18.6	40.1
Bachelor's degree	38.9	72.3	72.2	46.6
No undergraduate degree	5.5	1.1	0.5	4.4
Highest degree expected				
No degree or certificate	2.0	0.5	0.3	1.6
Certificate	2.5	1.6	1.7	2.3
Associate's degree	8.0	4.1	4.6	7.2
Bachelor's degree	33.2	25.1	22.1	30.9
Master's degree	37.8	48.3	48.9	40.3
Doctoral or first-professional degree	11.3	16.3	17.6	12.6
Don't know	5.2	4.1	4.8	5.1
Student unmet need[2]				
Less than $1,000	11.5	5.4	#	7.8
$1,000–$2,999	27.4	21.3	2.6	20.7
$3,000–$4,999	23.3	26.1	12.5	21.3
$5,000–$9,999	27.9	34.8	48.2	33.7
$10,000 and higher	10.0	12.4	36.7	16.5

See notes at end of table.

Table 5. Percentage distribution of undergraduates by subsidized Stafford borrower status, according to selected characteristics: 1999–2000—Continued

	No subsidized Stafford	Less than maximum subsidized Stafford	Maximum subsidized Stafford	All undergraduates
Estimated price of attendance[3]				
Less than $5,000	39.8	4.3	0.2	31.4
$5,000–$9,999	32.9	35.5	14.2	30.9
$10,000–$14,999	17.8	36.4	37.6	22.1
$15,000–$19,999	4.1	12.7	20.3	7.0
$20,000 and higher	5.4	11.2	27.8	8.7

#Rounds to zero

[1]Since full-time full-year students may be enrolled full time nine or more months and part time a few months, they are categorized as mixed.

[2]Unmet need equals the attendance-adjusted student budget minus expected family contribution (EFC) minus total grant aid. Zero values were excluded for this analysis.

[3]The estimated price of attendance is the attendance-adjusted student budget, including tuition, books and supplies, room and board, and personal expenses.

NOTE: Stafford subsidized borrowers are those undergraduates who received Stafford subsidized loans in 1999–2000. Stafford subsidized borrowers are classified into maximum and less-than-maximum categories based on the maximum amounts for subsidized loans for a given student's class level. Stafford subsidized nonborrowers may have received other types of loans. Detail may not add sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

Table 6. Percentage distribution of undergraduates by unsubsidized Stafford borrower status, according to selected characteristics: 1999–2000

	No unsubsidized Stafford	Less than maximum unsubsidized Stafford	Maximum unsubsidized Stafford	All undergraduates
Total	100.0	100.0	100.0	100.0
Gender				
Male	44.0	40.3	43.9	43.7
Female	56.0	59.7	56.1	56.3
Age				
23 years or younger	57.2	58.9	56.0	57.2
24–29 years of age	16.0	22.5	22.4	17.0
30 years or older	26.8	18.6	21.6	25.8
Race-ethnicity				
White, non-Hispanic	67.3	69.7	70.6	67.7
Black, non-Hispanic	11.7	17.1	15.5	12.4
Hispanic or Latino	12.2	8.4	9.0	11.7
Asian/Pacific Islander	6.6	3.0	3.6	6.1
American Indian/Alaskan Native	1.0	0.9	0.7	0.9
Other	1.2	0.9	0.6	1.2
Marital status				
Single, never married	66.4	72.2	69.6	67.1
Married	25.9	19.2	23.1	25.2
Separated, divorced, or widowed	7.7	8.6	7.3	7.7
Single parent status				
Not a single parent	86.8	84.1	89.3	86.7
Single parent	13.2	15.9	10.7	13.3
Dependency status				
Dependent	49.2	49.2	49.0	49.1
Independent	50.8	50.8	51.0	50.9
Parent income, quartile (dependent students)				
Lowest quartile	27.0	15.7	10.5	25.0
Middle quartiles	49.6	61.1	41.8	50.0
Highest quartile	23.4	23.2	47.7	25.0
Independent student income, quartile				
Lowest quartile	21.9	42.5	30.5	24.2
Middle quartiles	50.1	49.4	53.5	50.2
Highest quartile	28.1	8.1	16.0	25.6
Parents' educational level				
Less than high school	8.2	6.1	5.3	7.8
High school graduate	31.5	38.0	33.8	32.3
Some college, including associate's degree	21.2	24.0	21.2	21.5
Bachelor's degree	21.9	18.7	22.8	21.7
Advanced degree	17.1	13.3	17.0	16.8

See notes at end of table.

Table 6. Percentage distribution of undergraduates by unsubsidized Stafford borrower status, according to selected characteristics: 1999–2000—Continued

	No unsubsidized Stafford	Less than maximum unsubsidized Stafford	Maximum unsubsidized Stafford	All undergraduates
Delayed enrollment				
Did not delay enrollment	54.0	57.4	57.6	54.5
Delayed enrollment	46.0	42.6	42.4	45.5
Attendance status				
Exclusively full time	45.5	69.6	72.4	49.3
Half time	17.5	10.3	7.9	16.3
Less than half time	21.0	2.5	1.4	18.2
Mixed[1]	16.0	17.6	18.3	16.3
Class level (Stafford loan)				
First-year undergraduate	44.4	28.7	39.3	42.7
Second-year undergraduate	28.0	21.7	23.1	27.1
Third-year undergraduate	11.5	23.4	17.4	12.9
Fourth-year undergraduate	14.4	22.2	17.4	15.3
Fifth-year undergraduate	1.7	4.0	2.7	2.0
Hours worked				
Not employed	19.8	18.0	22.9	19.9
1–20 hours	22.4	30.9	30.3	23.6
21–34 hours	16.8	21.3	17.6	17.2
35 hours or more	41.0	29.9	29.3	39.3
Type of institution attended				
Private not-for-profit 4-year	13.9	20.2	25.5	15.2
Public 4-year	31.8	49.8	42.9	33.9
Public 2-year	51.3	14.7	7.8	45.6
Private for-profit	3.0	15.4	23.8	5.3
Degree program				
Certificate	8.9	7.9	9.6	8.9
Associate's degree	43.3	23.2	20.0	40.1
Bachelor's degree	42.8	68.1	69.8	46.6
No undergraduate degree	5.1	0.8	0.6	4.4
Highest degree expected				
No degree or certificate	1.8	0.5	0.3	1.6
Certificate	2.4	1.9	1.6	2.3
Associate's degree	7.6	4.9	4.5	7.2
Bachelor's degree	32.2	24.3	23.8	30.9
Master's degree	38.9	46.1	50.2	40.3
Doctoral or first-professional degree	12.0	17.3	15.0	12.6
Don't know	5.1	4.9	4.6	5.1
Student unmet need[2]				
Less than $1,000	8.3	7.0	4.3	7.8
$1,000–$2,999	22.4	16.8	7.7	20.7
$3,000–$4,999	23.1	18.2	7.4	21.3
$5,000–$9,999	33.4	36.3	33.0	33.7
$10,000 and higher	12.9	21.7	47.6	16.5

See notes at end of table.

Table 6. Percentage distribution of undergraduates by unsubsidized Stafford borrower status, according to selected characteristics: 1999–2000—Continued

	No unsubsidized Stafford	Less than maximum unsubsidized Stafford	Maximum unsubsidized Stafford	All undergraduates
Estimated price of attendance[3]				
Less than $5,000	36.2	3.7	0.8	31.4
$5,000–$9,999	32.2	30.2	13.8	30.9
$10,000–$14,999	19.3	38.5	39.5	22.1
$15,000–$19,999	4.8	15.6	24.1	7.0
$20,000 and higher	7.4	12.0	21.8	8.7

[1]Since full-time full-year students may be enrolled full time nine or more months and part time a few months, they are categorized as mixed.

[2]Unmet need equals the attendance-adjusted student budget minus expected family contribution (EFC) minus total grant aid. Zero values were excluded for this analysis.

[3]The estimated price of attendance is the attendance-adjusted student budget, including tuition, books and supplies, room and board, and personal expenses.

NOTE: Stafford unsubsidized borrowers are those undergraduates who received Stafford unsubsidized loans in 1999–2000. Stafford unsubsidized borrowers are classified into maximum and less-than-maximum categories based on the maximum amounts for unsubsidized loans for a given student's class level. Stafford unsubsidized nonborrowers may have received other types of loans. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

attendance. Not surprisingly, unsubsidized borrowers primarily had levels of unmet need that were higher than those of subsidized borrowers. The largest percentage of Stafford total maximum borrowers and Stafford subsidized maximum borrowers had unmet need in the range of $5,000 to $9,999 (41 and 48 percent), while unsubsidized Stafford borrowers primarily had levels of unmet need $10,000 and higher (48 percent) (tables 4, 5, and 6). In comparison to other borrower groups, each group of maximum borrowers had a higher percentage of students with the highest level of unmet need than less-than-maximum borrowers and nonborrowers. It is likely that the unsubsidized maximum borrowers were either not eligible for subsidized loans or had levels of unmet need that required borrowing under both programs.

Stafford maximum borrowers were most likely to work 1–20 hours (total maximum borrowers, 41 percent; and subsidized maximum borrowers, 37 percent) or 1–20 hours and 35 hours or more (unsubsidized maximum borrowers, 30 and 30 percent). Each group of maximum borrowers was less likely to have worked full time than their nonborrower counterparts. It is possible that the availability of the maximum amounts allowed some students the choice not to work full time while in school. However, it is not clear whether students who did not receive maximum loan amounts chose not to take these loans, failed to apply for financial aid, or were ineligible.

Persistence/Attainment Risk (Nontraditional) Characteristics

Because the percentage of students with persistence/attainment risk (nontraditional) characteristics varied by institutional type, this analysis was conducted within four institutional types: private not-for-profit 4-year institutions; public 4-year institutions; public 2-year institutions; and private for-profit institutions. As in the previous section examining risk characteristics for all borrowers, one characteristic indicates minimal risk, two or three characteristics indicates moderate risk, and four or more characteristics indicates high risk (Horn 1996). (See "Data and Approach to Analysis" section for more detail.)

In all four institution types, Stafford total maximum and unsubsidized maximum borrowers were less likely to have had high risk for not persisting than their less-than-maximum borrower and nonborrower counterparts. Also, in both public 4-year institutions and private not-for-profit 4-year institutions, all maximum borrowers tended to have zero risk characteristics (i.e., to have been traditional students). Detailed results for each institutional type are presented below.

At private not-for-profit 4-year institutions, the highest percentage of undergraduates who borrowed maximum Stafford amounts (total, subsidized, and unsubsidized) had zero risk characteristics (66, 57, and 48 percent) (tables 7, 8, and 9). Also, maximum borrowers were less likely to have had high risk for not persisting. In the case of Stafford total borrowers, 5 percent of maximum borrowers had high risk compared to 23 percent of less-than-maximum borrowers and 24 percent of nonborrowers (table 7). Subsidized and unsubsidized maximum borrowers showed the same pattern.

At public 4-year institutions, the largest proportion of maximum borrowers (total, subsidized, and unsubsidized) also had zero risk characteristics (62, 41, and 53 percent). For both Stafford total borrowers and Stafford unsubsidized borrowers, maximum borrowers had a lower percentage of high risk students than less-than-maximum borrowers and nonborrowers. In the case of total Stafford borrowers, 4 percent of maximum borrowers were at high risk for not persisting compared to 17 percent of both less-than-maximum borrowers and nonborrowers (table 7).

Table 7. Percentage distribution of undergraduates by sector of institution attended and total Stafford loan borrower status, according to number of persistence/attainment risk characteristics: 1999–2000

	Private not-for-profit 4-year			Public 4-year		
	No Stafford	Less than maximum Stafford	Maximum Stafford	No Stafford	Less than maximum Stafford	Maximum Stafford
Total	100.0	100.0	100.0	100.0	100.0	100.0
Zero risk characteristics	36.8	32.4	66.4	36.5	26.5	61.6
Minimal risk (1)	14.1	17.7	18.3	19.7	22.3	23.4
Moderate risk (2–3)	25.6	26.8	10.8	27.4	34.4	11.5
High risk (4+)	23.5	23.2	4.6	16.5	16.8	3.5
	Public 2-year			Private for-profit		
	No Stafford	Less than maximum Stafford	Maximum Stafford	No Stafford	Less than maximum Stafford	Maximum Stafford
Total	100.0	100.0	100.0	100.0	100.0	100.0
Zero risk characteristics	8.9	9.2	29.9	7.1	4.3	15.0
Minimal risk (1)	14.3	12.4	28.1	14.9	9.9	20.2
Moderate risk (2–3)	40.1	38.5	32.4	40.0	38.6	44.1
High risk (4+)	36.7	39.9	9.6	38.0	47.2	20.7

NOTE: The risk index includes seven characteristics known to be negatively associated with persistence and attainment (Horn 1996; Horn and Premo 1995). The characteristics are: delaying enrollment; attending part-time; being financially independent; having dependents other than a spouse; working full time while enrolled; having no high school diploma; and being a single parent. Stafford total loan recipients are those undergraduates who received either or both subsidized and unsubsidized loans in 1999–2000. Stafford total borrowers are classified into maximum and less-than-maximum categories based on the maximum amounts for subsidized and unsubsidized Stafford loans combined for a given student's class level. Stafford nonborrowers may have received other types of loans. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

At public 2-year institutions, the largest percentage of Stafford subsidized borrowers had moderate or high risk for not persisting (39 and 35 percent). The highest proportion of Stafford unsubsidized borrowers had moderate risk (43 percent) (tables 8 and 9). In the case of both Stafford total borrowers and Stafford unsubsidized borrowers, maximum borrowers were less likely to have had high risk than less-than-maximum borrowers and nonborrowers. For example, 17 percent of Stafford unsubsidized maximum borrowers were high risk compared to 32 percent of unsubsidized less-than-maximum borrowers and 37 percent of unsubsidized nonborrowers (table 9).

Table 8. Percentage distribution of undergraduates by sector of institution attended and subsidized Stafford loan borrower status, according to number of persistence/attainment risk characteristics: 1999–2000

	Private not-for-profit 4-year			Public 4-year		
	No subsidized Stafford	Less than maximum subsidized Stafford	Maximum subsidized Stafford	No subsidized Stafford	Less than maximum subsidized Stafford	Maximum subsidized Stafford
Total	100.0	100.0	100.0	100.0	100.0	100.0
Zero risk characteristics	40.1	47.4	57.3	38.9	38.9	41.2
Minimal risk (1)	14.5	19.5	17.7	20.1	23.7	21.6
Moderate risk (2–3)	23.7	19.0	15.9	25.8	25.9	25.2
High risk (4+)	21.7	14.1	9.2	15.2	11.4	12.0

	Public 2-year			Private for-profit		
	No subsidized Stafford	Less than maximum subsidized Stafford	Maximum subsidized Stafford	No subsidized Stafford	Less than maximum subsidized Stafford	Maximum subsidized Stafford
Total	100.0	100.0	100.0	100.0	100.0	100.0
Zero risk characteristics	9.1	11.8	14.7	7.8	6.9	11.4
Minimal risk (1)	14.5	16.4	11.4	16.4	15.1	14.5
Moderate risk (2–3)	40.0	35.4	39.0	40.1	38.0	43.5
High risk (4+)	36.4	36.5	34.9	35.8	40.1	30.6

NOTE: The risk index includes seven characteristics known to be negatively associated with persistence and attainment (Horn 1996; Horn and Premo 1995). The characteristics are: delaying enrollment; attending part-time; being financially independent; having dependents other than a spouse; working full time while enrolled; having no high school diploma; and being a single parent. Stafford subsidized borrowers are those undergraduates who received Stafford subsidized loans in 1999–2000. Stafford subsidized borrowers are classified into maximum and less-than-maximum categories based on the maximum amounts for subsidized loans for a given student's class level. Stafford subsidized nonborrowers may have received other types of loans. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

At private for-profit institutions, the highest percentage of undergraduates who borrowed maximum Stafford amounts (total, subsidized, and unsubsidized) had moderate risk (44, 44, and 49 percent) (tables 7, 8, and 9). Stafford total maximum and unsubsidized maximum borrowers were less likely to have high risk for not persisting than their less-than-maximum borrower and nonborrower counterparts. In the case of Stafford unsubsidized borrowers, 24 percent of maximum borrowers had high risk compared to 48 percent of less-than-maximum borrowers and 35 percent of nonborrowers. Stafford subsidized maximum borrowers were less likely to have had high risk than subsidized less-than-maximum borrowers (table 9).

Table 9. Percentage distribution of undergraduates by sector of institution attended and unsubsidized Stafford loan borrower status, according to number of persistence/attainment risk characteristics: 1999–2000

	Private not-for-profit 4-year			Public 4-year		
	No unsubsidized Stafford	Less than maximum unsubsidized Stafford	Maximum unsubsidized Stafford	No unsubsidized Stafford	Less than maximum unsubsidized Stafford	Maximum unsubsidized Stafford
Total	100.0	100.0	100.0	100.0	100.0	100.0
Zero risk characteristics	46.6	35.8	48.0	39.0	31.1	52.8
Minimal risk (1)	15.9	16.5	16.7	20.7	21.2	22.3
Moderate risk (2–3)	20.0	26.2	23.1	25.6	32.4	18.4
High risk (4+)	17.5	21.6	12.3	14.7	15.3	6.5
	Public 2-year			Private for-profit		
	No unsubsidized Stafford	Less than maximum unsubsidized Stafford	Maximum unsubsidized Stafford	No unsubsidized Stafford	Less than maximum unsubsidized Stafford	Maximum unsubsidized Stafford
Total	100.0	100.0	100.0	100.0	100.0	100.0
Zero risk characteristics	9.2	11.6	16.3	12.3	1.1	9.8
Minimal risk (1)	14.3	15.8	23.7	17.9	6.9	17.4
Moderate risk (2–3)	39.8	41.0	42.8	35.2	43.6	48.6
High risk (4+)	36.7	31.6	17.3	34.6	48.4	24.2

NOTE: The risk index includes seven characteristics known to be negatively associated with persistence and attainment (Horn 1996; Horn and Premo 1995). The characteristics are: delaying enrollment; attending part-time; being financially independent; having dependents other than a spouse; working full time while enrolled; having no high school diploma; and being a single parent. Stafford unsubsidized borrowers are those undergraduates who received Stafford unsubsidized loans in 1999–2000. Stafford unsubsidized borrowers are classified into maximum and less-than-maximum categories based on the maximum amounts for unsubsidized loans for a given student's class level. Stafford unsubsidized nonborrowers may have received other types of loans. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

Types and Sources of Financial Aid

This section examines the ways in which Stafford maximum borrowers financed education expenses in addition to obtaining Stafford loans. The analysis considers the various types of financial aid (including loans, grants, and work-study) that were received by Stafford maximum borrowers as well as the average amounts received.

Loans

Stafford total borrowers are those students who borrowed from one or both of the Stafford subsidized and Stafford unsubsidized programs in 1999–2000. As shown in table 10, 80 percent of Stafford total maximum borrowers received subsidized loans and 59 percent received unsubsidized loans. In addition, 43 percent of Stafford subsidized maximum borrowers also received Stafford unsubsidized loans (table 11). Likewise, 55 percent of unsubsidized maximum borrowers also received subsidized loans (table 12).

Some students who borrowed Stafford maximum amounts also obtained loans from private sources. The findings for 1999–2000 indicate that a low percentage of maximum borrowers received private loans (total maximum borrowers, 13 percent; subsidized maximum borrowers, 11 percent; and unsubsidized maximum borrowers, 11 percent) (table 10, 11 and 12). Further, maximum borrowers and less-than-maximum borrowers were more likely to have received private loans than Stafford nonborrowers. For example, in the case of Stafford total borrowers, 13 percent of maximum borrowers received private loans compared to 7 percent of less-than-maximum borrowers and 1 percent of nonborrowers (table 10). Maximum borrowers also received higher average amounts in private loans than less-than-maximum and nonborrowers.

Grants and Work-Study

Not all Stafford maximum borrowers financed the price of attending college solely with borrowed funds. Most Stafford maximum borrowers received some form of grant aid in 1999–2000 (total maximum borrowers, 67 percent; subsidized maximum borrowers, 80 percent; and unsubsidized maximum borrowers, 54 percent) (tables 10, 11, and 12). Maximum borrowers also received higher average amounts of grant aid than nonborrowers (tables 10, 11, and 12). Stafford total maximum borrowers and subsidized maximum borrowers were more likely to have received work-study aid than their nonborrower counterparts.

Table 10. Percentage of undergraduates who received financial aid from various sources and average amount received, by total Stafford loan borrower status: 1999–2000

	No Stafford		Less than maximum Stafford		Maximum Stafford		All undergraduates	
	Percent received	Average amount received	Percent received	Average amount received	Percent received	Average amount received	Percent received	Average amount received
Loans (excluding PLUS)	1.9	$3,466	100.0	$4,260	100.0	$6,274	29.0	$5,229
Federal (excluding PLUS)	0.5	1,729	100.0	3,874	100.0	5,416	27.9	4,643
Stafford (either)	†	†	100.0	3,717	100.0	5,205	27.6	4,492
Stafford subsidized	†	†	87.7	2,852	80.4	3,577	23.2	3,214
Stafford unsubsidized	†	†	48.1	2,524	59.3	3,927	14.9	3,328
Perkins	0.4	1,691	8.8	1,705	12.2	1,690	3.2	1,695
Non-federal	1.5	3,898	9.0	4,032	15.6	5,572	4.6	4,766
State	0.2	2,280	0.8	3,420	1.7	4,759	0.5	3,851
Institution	0.2	2,352	1.1	1,880	2.1	2,721	0.6	2,424
Private sources	1.2	4,338	7.3	4,286	12.5	5,889	3.6	5,100
Grants	34.9	2,754	71.9	3,663	66.7	5,192	44.4	3,476
Federal[1]	15.1	1,898	54.7	2,145	34.3	2,310	23.1	2,063
Pell	14.8	1,802	53.9	1,976	33.4	2,055	22.6	1,910
FSEOG	3.1	532	15.4	660	11.7	893	5.9	678
Non-federal	31.6	2,348	47.4	3,258	52.7	5,164	36.7	3,086
State	9.5	1,374	25.4	1,768	23.6	2,217	13.6	1,681
Institution	11.8	2,929	23.0	3,401	35.1	5,261	16.7	3,722
Private sources	6.5	2,124	10.8	2,035	15.1	1,946	8.3	2,062
Work-study	2.3	1,707	10.4	1,658	16.9	1,614	5.4	1,653

†Not applicable.

[1]Federal grant aid primarily includes Pell Grants and Federal Supplemental Educational Opportunity Grants (FSEOG), but also includes Robert Byrd Scholarships and any other federal grants, fellowships, or traineeships received during 1999–2000.

NOTE: Stafford total borrowers are those undergraduates who received either or both subsidized and unsubsidized loans in 1999–2000. Stafford total loan recipients are classified into maximum and less-than-maximum categories based on the maximum amounts for subsidized and unsubsidized Stafford loans combined for a given student's class level. Stafford nonborrowers may have received other types of loans.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

Table 11. Percentage of undergraduates who received financial aid from various sources and average amount received, by subsidized Stafford loan borrower status: 1999–2000

	No subsidized Stafford		Less than maximum subsidized Stafford		Maximum subsidized Stafford		All undergraduates	
	Percent received	Average amount received	Percent received	Average amount received	Percent received	Average amount received	Percent received	Average amount received
Loans (excluding PLUS)	7.7	$4,395	100.0	$4,189	100.0	$6,450	29.0	$5,229
Federal (excluding PLUS)	6.2	3,802	100.0	3,727	100.0	5,722	27.9	4,643
Stafford (either)	5.8	3,934	100.0	3,557	100.0	5,467	27.6	4,492
Stafford subsidized	†	†	100.0	2,388	100.0	3,903	23.2	3,214
Stafford unsubsidized	5.8	3,934	47.5	2,461	43.2	3,628	14.9	3,328
Perkins	0.5	1,703	10.0	1,662	14.4	1,713	3.2	1,695
Non-federal	2.2	4,432	10.9	3,879	13.6	5,663	4.6	4,766
State	0.3	3,515	1.0	3,306	1.2	4,648	0.5	3,851
Institution	0.3	2,397	1.3	1,750	2.1	2,782	0.6	2,424
Private sources	1.7	4,763	9.0	4,134	10.7	6,076	3.6	5,100
Grants	35.1	2,852	69.8	3,856	79.8	4,867	44.4	3,476
Federal[1]	14.4	1,898	46.7	1,958	56.2	2,394	23.1	2,063
Pell	14.1	1,800	45.8	1,795	55.2	2,161	22.6	1,910
FSEOG	2.9	537	13.5	653	17.9	834	5.9	678
Non-federal	32.0	2,478	50.9	3,780	53.8	4,737	36.7	3,086
State	9.5	1,397	26.8	1,787	27.9	2,184	13.6	1,681
Institution	12.6	3,111	26.2	3,950	33.6	4,961	16.7	3,722
Private sources	7.0	2,106	12.7	2,114	13.0	1,878	8.3	2,062
Work-study	2.4	1,693	12.4	1,628	17.9	1,634	5.4	1,653

†Not applicable.

[1]Federal grant aid primarily includes Pell Grants and Federal Supplemental Educational Opportunity Grants (FSEOG), but also includes Robert Byrd Scholarships and any other federal grants, fellowships, or traineeships received during 1999–2000.

NOTE: Stafford subsidized borrowers are those undergraduates who received Stafford subsidized loans in 1999–2000. Stafford subsidized borrowers are classified into maximum and less-than-maximum categories based on the maximum amounts for subsidized loans for a given student's class level. Stafford subsidized nonborrowers may have received other types of loans.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

Table 12. Percentage of undergraduates who received financial aid from various sources and average amount received, by unsubsidized Stafford loan borrower status: 1999–2000

	No unsubsidized Stafford		Less than maximum unsubsidized Stafford		Maximum unsubsidized Stafford		All undergraduates	
	Percent received	Average amount received	Percent received	Average amount received	Percent received	Average amount received	Percent received	Average amount received
Loans (excluding PLUS)	16.6	$4,096	100.0	$5,271	100.0	$7,340	29.0	$5,229
Federal (excluding PLUS)	15.3	3,483	100.0	4,767	100.0	6,529	27.9	4,643
Stafford (either)	14.9	3,251	100.0	4,651	100.0	6,442	27.6	4,492
Stafford subsidized	14.9	3,251	82.9	2,916	54.5	3,473	23.2	3,214
Stafford unsubsidized	†	†	100.0	2,234	100.0	4,548	14.9	3,328
Perkins	2.7	1,701	6.8	1,682	5.0	1,669	3.2	1,695
Non-federal	3.3	4,276	9.9	4,952	13.3	6,082	4.6	4,766
State	0.3	3,313	1.0	4,072	1.5	5,113	0.5	3,851
Institution	0.5	2,451	1.0	2,070	1.5	2,609	0.6	2,424
Private sources	2.6	4,606	8.2	5,191	10.9	6,398	3.6	5,100
Grants	41.6	3,397	65.5	3,767	54.4	3,810	44.4	3,476
Federal[1]	20.9	2,028	41.8	2,082	29.3	2,357	23.1	2,063
Pell	20.4	1,878	41.1	1,934	28.9	2,163	22.6	1,910
FSEOG	5.1	693	11.7	617	9.2	663	5.9	678
Non-federal	35.8	2,957	45.5	3,689	38.4	3,743	36.7	3,086
State	12.8	1,636	21.7	1,793	14.2	1,974	13.6	1,681
Institution	15.5	3,665	23.7	4,021	22.5	3,840	16.7	3,722
Private sources	7.8	2,084	11.6	2,075	11.2	1,872	8.3	2,062
Work-study	5.1	1,652	8.4	1,620	6.4	1,710	5.4	1,653

†Not applicable.

[1]Federal grant aid primarily includes Pell Grants and Federal Supplemental Educational Opportunity Grants (FSEOG), but also includes Robert Byrd Scholarships and any other federal grants, fellowships, or traineeships received during 1999–2000.

NOTE: Stafford unsubsidized borrowers are those undergraduates who received Stafford unsubsidized loans in 1999–2000. Stafford unsubsidized borrowers are classified into maximum and less-than-maximum categories based on the maximum amounts for unsubsidized loans for a given student's class level. Stafford unsubsidized nonborrowers may have received other types of loans.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

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Likelihood of Receiving Certain Types of Financial Aid

Thus far, the analysis has focused on the characteristics of different groups of undergraduate borrowers and the other types of aid they received. This section of the report examines all borrowers as a group and reviews whether borrowers with certain demographic and enrollment characteristics were more likely to have received specific types of loans and other aid or to have received differing average amounts. The main differences found in this section are related to federal Stafford loans and private loans.

Stafford Loans

Borrowers with certain characteristics were more likely to have received both subsidized and unsubsidized Stafford loans. These characteristics included being older than 23, being married versus single, being financially independent, and delaying enrollment in college. Borrowers attending private for-profit institutions were more likely to have received Stafford subsidized (92 percent) and unsubsidized loans (78 percent) in comparison to borrowers attending other types of institutions (table 13). Private for-profit institutions are likely to offer certificate programs, and borrowers enrolled in these programs were more likely to have received Stafford subsidized loans (91 percent) and Stafford unsubsidized loans (69 percent) compared to borrowers in other degree programs. These findings may reflect the higher financial need of independent undergraduates. It is also possible that because certificate programs are relatively short, students choose to obtain loans to support full time enrollment rather than working.

As expected, given the different eligibility requirements of the Stafford subsidized and unsubsidized loan programs, borrowers with different income levels received these loans at different rates in 1999–2000. Low-income borrowers were more likely to have received Stafford subsidized loans than high-income borrowers. This was the case for both dependent students (94 percent versus 37 percent) and independent students (94 percent versus 62 percent) (table 13). In addition, a larger percentage of high-income borrowers received Stafford unsubsidized loans than both middle- and low-income borrowers for both dependent students (74 percent versus 42 and 21 percent) and independent students (79 percent versus 67 and 60 percent). Borrowers with high incomes also received higher average amounts of Stafford unsubsidized loans (table 14).

Table 13. Percentage of undergraduate borrowers who received loans from various sources, by selected characteristics: 1999–2000

	Federal (excluding PLUS)	Stafford (either)	Stafford sub-sidized	Stafford unsub-sidized	Perkins	Total non-federal	State	Institution	Private sources
Total[1]	96.9	95.8	80.4	51.7	11.2	15.7	1.6	2.1	12.5
Gender									
Male	96.7	95.7	79.1	52.4	11.1	17.1	1.6	2.4	13.6
Female	97.1	95.9	81.4	51.2	11.4	14.7	1.5	1.9	11.7
Age									
23 years or younger	97.0	95.7	76.5	44.1	13.2	17.6	2.0	2.5	13.9
24–29 years of age	97.5	96.7	91.4	66.0	8.6	11.2	0.7	1.1	9.4
30 years or older	96.1	95.1	84.8	68.8	5.8	12.2	1.0	1.5	9.8
Race-ethnicity									
White, non-Hispanic	96.8	96.0	77.5	52.9	11.2	16.5	1.8	2.4	13.0
Black, non-Hispanic	98.1	97.0	86.8	55.1	9.4	11.3	0.4	1.6	9.7
Hispanic or Latino	95.7	93.3	86.6	45.5	10.9	17.6	2.0	1.3	14.4
Asian/Pacific Islander	97.5	95.4	87.9	37.0	18.5	13.2	1.3	2.5	9.9
American Indian/Alaskan Native	96.4	96.0	84.2	53.5	8.0	15.5	1.1	0.3	14.8
Other	96.2	91.7	82.9	45.3	18.3	13.8	0.0	0.4	13.3
Marital status									
Single, never married	96.7	95.6	78.3	47.2	12.7	16.5	1.7	2.1	13.0
Married	95.8	95.4	83.8	63.4	5.7	12.0	1.4	1.4	9.6
Separated, divorced, or widowed	95.8	94.7	88.4	66.9	8.3	12.8	1.2	2.3	9.4
Single parent status									
Not a single parent	96.8	95.7	78.9	50.5	11.5	16.4	1.7	2.2	13.0
Single parent	98.0	96.4	92.2	60.9	8.9	10.4	0.7	1.2	8.6
Dependency status									
Dependent	96.9	95.7	74.5	42.3	13.6	18.2	2.0	2.6	14.4
Independent	97.1	96.0	89.1	65.5	7.7	12.0	1.0	1.3	9.7
Parent income, quartile (dependent students)									
Lowest quartile	97.7	95.3	93.6	20.8	20.2	15.2	1.0	2.8	12.1
Middle quartiles	97.1	96.2	78.6	41.5	13.7	18.5	2.1	2.5	14.7
Highest quartile	95.2	94.9	36.6	74.3	4.3	21.4	3.0	2.9	16.8
Independent student income, quartile									
Lowest quartile	98.2	96.4	93.9	60.0	11.1	10.2	1.0	1.3	7.8
Middle quartiles	97.1	96.4	90.5	67.4	6.1	12.5	1.0	1.3	10.3
Highest quartile	92.0	91.9	61.5	78.5	1.6	15.8	1.0	1.5	14.1
Parents' educational level									
Less than high school	95.9	94.0	87.6	52.1	9.7	15.3	2.0	1.9	12.2
High school graduate	97.6	96.3	83.9	52.5	10.5	13.6	1.0	1.7	11.4
Some college, including associate's degree	97.3	96.3	81.6	48.9	12.3	15.8	2.1	2.1	12.5
Bachelor's degree	96.9	95.7	75.2	49.5	12.2	17.3	2.1	2.5	13.2
Advanced degree	95.9	95.0	72.6	51.4	12.5	17.6	1.3	2.7	13.9
Delayed enrollment									
Did not delay enrollment	96.8	95.5	77.5	46.6	13.3	17.2	1.9	2.5	13.4
Delayed enrollment	97.3	96.3	85.4	60.6	7.8	12.0	1.1	1.4	10.2

See notes at end of table.

Table 13. Percentage of undergraduate borrowers who received loans from various sources, by selected characteristics: 1999–2000—Continued

	Federal (excluding PLUS)	Stafford (either)	Stafford sub-sidized	Stafford unsub-sidized	Perkins	Total non-federal	State	Institution	Private sources
Attendance status									
Exclusively full time	97.3	96.0	80.5	50.5	12.8	16.3	1.7	2.4	12.8
Half time	96.1	95.4	82.0	56.6	3.9	12.3	0.9	1.4	9.8
Less than half time	87.3	86.2	73.1	50.6	4.6	29.5	0.2	1.0	27.4
Mixed[2]	97.1	96.3	80.2	54.7	9.1	12.6	1.7	1.3	10.5
Class level (Stafford loan)									
First-year undergraduate	97.2	96.4	80.9	50.6	10.1	16.4	1.6	2.2	13.1
Second-year undergraduate	96.8	95.7	80.0	50.4	11.8	16.0	1.7	2.0	12.9
Third-year undergraduate	98.0	97.0	81.6	52.4	11.1	15.1	1.2	2.2	12.2
Fourth-year undergraduate	96.3	94.5	79.0	52.7	12.8	14.6	1.9	2.0	11.0
Fifth-year undergraduate	97.5	96.6	80.9	60.4	8.5	12.1	0.7	0.5	10.7
Hours worked									
Not employed	97.0	95.9	78.2	51.1	10.7	14.4	1.3	2.0	11.6
1–20 hours	97.2	95.7	80.1	44.3	17.0	17.0	2.0	2.5	13.2
21–34 hours	96.3	95.3	80.3	49.7	9.3	15.8	2.1	1.8	12.3
35 hours or more	95.1	94.4	79.4	61.7	5.3	14.8	1.0	1.3	12.5
Type of institution attended									
Private not-for-profit 4-year	96.8	95.1	81.5	43.2	19.1	25.0	2.2	4.8	19.4
Public 4-year	97.4	96.1	77.4	49.9	11.8	11.8	1.1	1.4	9.6
Public 2-year	94.0	93.5	76.3	48.8	2.0	16.1	3.2	0.7	12.4
Private for-profit	98.1	97.8	92.0	78.1	3.5	12.1	1.2	1.5	9.8
Degree program									
Certificate	96.1	95.8	90.9	69.0	1.7	14.8	1.7	2.9	10.5
Associate's degree	95.9	95.3	81.6	57.1	3.2	14.9	2.1	0.8	12.2
Bachelor's degree	97.3	96.0	79.1	48.5	14.4	16.0	1.5	2.4	12.8
No undergraduate degree	96.9	95.5	81.4	53.8	7.6	11.6	1.1	2.1	10.4
Highest degree expected									
No degree or certificate	94.9	94.4	78.3	53.3	7.3	32.1	16.3	1.3	14.7
Certificate	95.5	95.4	88.0	59.6	0.9	12.6	2.8	3.0	7.4
Associate's degree	94.9	93.9	80.6	56.1	4.0	16.1	4.1	1.0	11.3
Bachelor's degree	95.9	95.2	79.7	51.9	8.6	15.1	1.4	2.1	12.1
Master's degree	96.7	95.7	79.6	50.4	11.8	15.6	1.4	1.8	12.7
Doctoral or first-professional degree	97.2	95.6	79.6	49.6	15.5	15.3	1.6	2.9	11.4
Don't know	96.5	95.8	82.8	55.7	12.6	14.0	1.5	1.9	11.2
Student unmet need[3]									
Less than $1,000	95.2	94.9	69.2	83.1	1.1	16.5	5.1	1.2	12.5
$1,000–$2,999	96.1	94.5	86.4	51.8	4.5	13.2	1.5	1.4	10.7
$3,000–$4,999	97.6	95.7	92.4	36.1	8.4	12.3	1.4	0.9	10.5
$5,000–$9,999	98.3	96.8	94.9	38.2	15.4	12.7	1.3	2.1	9.6
$10,000 and higher	98.6	97.7	96.6	55.8	19.1	20.9	1.4	3.6	16.9

See notes at end of table.

Table 13. Percentage of undergraduate borrowers who received loans from various sources, by selected characteristics: 1999–2000—Continued

	Federal (excluding PLUS)	Stafford (either)	Stafford sub-sidized	Stafford unsub-sidized	Perkins	Total non-federal	State	Institution	Private sources
Estimated price of attendance[4]									
Less than $5,000	84.6	83.1	56.3	42.7	3.6	22.1	1.4	2.7	19.6
$5,000–$9,999	96.0	94.4	76.4	46.9	4.9	11.4	1.3	0.8	9.5
$10,000–$14,999	97.8	96.8	81.2	54.8	10.0	11.4	1.4	1.6	8.6
$15,000–$19,999	98.3	97.8	85.4	63.4	10.7	17.0	1.8	2.6	13.2
$20,000 and higher	97.3	95.8	82.8	43.1	24.3	27.8	2.6	5.0	21.9

[1]Total percent receiving falls within the range of the subcategories for each characteristic. When it appears otherwise, this is due to a subcategory being excluded from the table.

[2]Since full-time full-year students may be enrolled full time nine or more months and part time a few months, they are categorized as mixed.

[3]Unmet need equals the attendance-adjusted student budget minus expected family contribution (EFC) minus total grant aid. Zero values were excluded for this analysis.

[4]The estimated price of attendance is the attendance-adjusted student budget, including tuition, books and supplies, room and board, and personal expenses.

NOTE: Borrowers are those undergraduates who received loans from federal, state, institutional, or private sources, excluding Parent Loans for Undergraduate Students (PLUS), in 1999–2000.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

Table 14. Average amount of loan aid received by undergraduate borrowers from various sources, by selected characteristics: 1999–2000

	Total (excluding PLUS)	Federal (excluding PLUS)	Stafford (either)	Stafford subsidized	Stafford unsub-sidized	Perkins	Total non-federal	State	Institution	Private sources
Total	$5,229	$4,643	$4,492	$3,214	$3,328	$1,695	$4,766	$3,851	$2,424	$5,100
Gender										
Male	5,307	4,648	4,497	3,221	3,358	1,698	4,788	3,707	2,564	5,183
Female	5,173	4,639	4,488	3,210	3,305	1,693	4,748	3,959	2,298	5,031
Age										
23 years or younger	4,803	4,119	3,931	3,141	3,084	1,709	4,627	4,016	2,511	4,877
24–29 years of age	6,079	5,686	5,588	3,395	3,488	1,602	4,771	‡	1,756	5,261
30 years or older	6,165	5,748	5,697	3,278	3,841	1,711	5,681	‡	2,377	6,368
Race-ethnicity										
White, non-Hispanic	5,269	4,614	4,452	3,241	3,332	1,692	4,957	4,035	2,515	5,304
Black, non-Hispanic	5,123	4,752	4,621	3,110	3,239	1,820	4,261	‡	1,863	4,618
Hispanic or Latino	5,054	4,624	4,545	3,132	3,361	1,607	3,902	2,676	2,065	4,207
Asian/Pacific Islander	5,424	4,787	4,578	3,415	3,681	1,570	5,242	‡	‡	5,843
American Indian/Alaskan Native	5,092	4,205	4,068	2,927	2,690	‡	‡	‡	‡	‡
Other	5,143	4,628	4,412	3,102	3,249	2,200	‡	‡	‡	‡
Marital status										
Single, never married	5,018	4,385	4,199	3,202	3,197	1,730	4,706	3,983	2,553	5,000
Married	5,992	5,637	5,550	3,367	3,906	1,763	5,217	3,635	1,972	5,719
Separated, divorced, or widowed	5,827	5,424	5,324	3,165	3,350	1,732	5,147	‡	‡	6,324
Single parent status										
Not a single parent	5,223	4,611	4,452	3,243	3,375	1,701	4,806	3,987	2,489	5,119
Single parent	5,272	4,883	4,802	3,023	3,026	1,635	4,303	‡	1,489	4,886
Dependency status										
Dependent	4,709	3,999	3,800	3,145	3,060	1,703	4,634	4,190	2,582	4,847
Independent	6,001	5,584	5,504	3,299	3,581	1,676	5,066	2,821	1,972	5,658
Parent income, quartile (dependent students)										
Lowest quartile	4,518	4,045	3,779	3,254	2,660	1,693	3,862	3,035	2,034	4,212
Middle quartiles	4,670	3,962	3,753	3,112	2,803	1,696	4,494	4,090	2,548	4,688
Highest quartile	5,076	4,036	3,961	2,951	3,609	1,827	5,715	4,946	3,388	5,850
Independent student income, quartile										
Lowest quartile	5,892	5,444	5,340	3,416	3,232	1,722	4,630	2,103	1,799	5,359
Middle quartiles	5,960	5,557	5,483	3,214	3,527	1,613	5,094	3,486	2,008	5,632
Highest quartile	6,618	6,358	6,337	3,190	4,932	‡	6,009	‡	‡	6,372

See notes at end of table.

Table 14. Average amount of loan aid received by undergraduate borrowers from various sources, by selected characteristics: 1999–2000 —Continued

	Total (excluding PLUS)	Federal (excluding PLUS)	Stafford (either)	Stafford subsidized	Stafford unsub-sidized	Perkins	Total non-federal	State	Institution	Private sources
Parents' educational level										
Less than high school	$5,043	$4,719	$4,625	$3,052	$3,211	$1,736	$3,841	‡	‡	$4,381
High school graduate	5,058	4,621	4,491	3,109	3,269	1,666	4,630	3,744	2,186	4,864
Some college, including associate's degree	5,278	4,547	4,367	3,202	3,260	1,693	4,996	4,197	2,501	5,220
Bachelor's degree	5,307	4,572	4,397	3,371	3,389	1,714	4,862	4,425	2,106	5,341
Advanced degree	5,443	4,700	4,506	3,417	3,504	1,778	5,053	4,257	3,257	5,422
Delayed enrollment										
Did not delay enrollment	5,154	4,448	4,257	3,279	3,278	1,733	4,701	4,024	2,550	4,998
Delayed enrollment	5,430	4,981	4,899	3,123	3,389	1,573	5,056	3,307	2,074	5,495
Attendance status										
Exclusively full time	5,300	4,607	4,429	3,229	3,281	1,726	4,852	4,014	2,605	5,171
Half time	4,905	4,510	4,490	2,875	3,403	1,146	4,768	‡	‡	5,623
Less than half time	4,322	4,667	4,631	3,188	3,286	‡	2,993	‡	‡	3,160
Mixed[1]	5,154	4,862	4,746	3,330	3,480	1,619	4,671	3,781	1,814	4,947
Class level (Stafford loan)										
First-year undergraduate	4,021	3,444	3,286	2,205	2,731	1,747	4,020	3,953	2,260	4,182
Second-year undergraduate	4,784	4,150	3,986	2,882	2,992	1,662	5,076	3,783	2,995	5,345
Third-year undergraduate	6,386	5,791	5,646	4,249	3,834	1,749	5,015	4,350	2,141	5,473
Fourth-year undergraduate	6,283	5,726	5,600	4,090	3,917	1,630	5,335	3,677	2,643	5,895
Fifth-year undergraduate	6,520	5,894	5,799	4,007	3,908	1,470	6,476	‡	‡	7,079
Hours worked										
Not employed	5,129	4,542	4,392	3,119	3,475	1,679	5,215	4,626	2,191	5,583
1–20 hours	5,329	4,636	4,392	3,395	3,342	1,730	4,801	4,072	2,265	5,151
21–34 hours	5,098	4,525	4,402	3,245	3,190	1,734	4,648	3,501	3,526	4,879
35 hours or more	5,233	4,864	4,806	3,070	3,404	1,606	4,361	2,892	1,837	4,716
Type of institution attended										
Private not-for-profit 4-year	6,450	5,132	4,853	3,694	3,723	1,776	5,892	5,193	2,871	6,340
Public 4-year	4,890	4,568	4,419	3,354	3,307	1,655	3,718	3,288	2,038	3,920
Public 2-year	3,356	3,052	3,035	2,191	2,390	‡	3,509	‡	‡	3,790
Private for-profit	5,919	5,338	5,308	2,724	3,435	1,383	5,714	‡	2,279	6,242

See notes at end of table.

Table 14. Average amount of loan aid received by undergraduate borrowers from various sources, by selected characteristics: 1999–2000 —Continued

	Total (excluding PLUS)	Federal (excluding PLUS)	Stafford (either)	Stafford subsidized	Stafford unsub-sidized	Perkins	Total non-federal	State	Institution	Private sources
Degree program										
Certificate	$5,167	$4,686	$4,671	$2,476	$3,222	$1,746	$4,611	‡	$2,376	$5,472
Associate's degree	4,210	3,852	3,823	2,465	2,858	1,535	4,064	3,262	‡	4,294
Bachelor's degree	5,438	4,797	4,602	3,471	3,447	1,702	4,918	4,187	2,521	5,239
No undergraduate degree	4,606	4,519	4,437	3,060	3,245	‡	‡	‡	‡	‡
Highest degree expected										
No degree or certificate	4,141	2,964	2,844	2,056	2,016	‡	‡	‡	‡	‡
Certificate	4,178	3,983	3,976	2,312	2,952	‡	3,002	‡	‡	‡
Associate's degree	4,211	3,857	3,827	2,381	2,987	‡	3,677	‡	‡	3,939
Bachelor's degree	4,685	4,203	4,091	2,844	3,143	1,555	4,406	3,406	1,701	4,816
Master's degree	5,463	4,847	4,674	3,400	3,507	1,725	4,968	3,952	2,301	5,339
Doctoral or first-professional degree	5,662	5,009	4,786	3,620	3,409	1,808	5,161	4,248	2,655	5,643
Don't know	5,073	4,539	4,323	2,955	3,038	1,828	5,036	‡	‡	4,628
Student unmet need[2]										
Less than $1,000	3,613	3,227	3,231	576	3,210	‡	3,403	‡	‡	3,399
$1,000–$2,999	3,425	3,084	3,088	1,797	2,642	965	3,031	‡	‡	3,269
$3,000–$4,999	3,829	3,490	3,429	2,671	2,249	1,481	3,728	‡	1,408	3,830
$5,000–$9,999	5,324	4,923	4,721	3,581	3,062	1,697	3,908	4,048	1,737	4,221
$10,000 and higher	7,571	6,116	5,796	3,739	3,677	1,852	7,321	4,955	3,420	7,958
Estimated price of attendance[3]										
Less than $5,000	1,736	1,928	1,932	1,585	1,671	‡	1,331	‡	‡	1,346
$5,000–$9,999	3,381	3,261	3,248	2,424	2,586	1,270	2,412	1,752	1,358	2,569
$10,000–$14,999	5,084	4,826	4,706	3,310	3,404	1,613	3,332	3,835	1,787	3,470
$15,000–$19,999	6,343	5,572	5,402	3,453	3,684	1,745	4,868	4,554	1,551	5,383
$20,000 and higher	7,282	5,399	4,998	3,820	3,771	1,870	7,452	5,326	3,624	8,043

‡Reporting standards not met. (Too few cases.)

[1]Since full-time full-year students may be enrolled full time nine or more months and part time a few months, they are categorized as mixed.

[2]Unmet need equals the attendance-adjusted student budget minus expected family contribution (EFC) minus total grant aid. Zero values were excluded for this analysis.

[3]The estimated price of attendance is the attendance-adjusted student budget, including tuition, books and supplies, room and board, and personal expenses.

NOTE: Borrowers are those undergraduates who received loans from federal, state, institutional, or private sources, excluding Parent Loans for Undergraduate Students (PLUS), in 1999–2000.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System

Multivariate Analysis

As shown in the previous sections, several characteristics—age, marital status, dependency status, income, institution type, and degree program—distinguished borrowers who received Stafford subsidized and unsubsidized loans from those who did not. Some of these characteristics are related, such as age and dependency status. In order to examine the independent association of these characteristics with having received a Stafford loan, a multivariate analysis was conducted using a regression model to adjust for covariation of other characteristics. Two multivariate analyses were conducted concerning the receipt of Stafford loans: 1) for having received a subsidized loan; and 2) for having received an unsubsidized loan. Results are presented in table 15 and table 16. Each model contains the same set of demographic and enrollment characteristics as independent variables. The first column of each table shows the percentage of borrowers who received the Stafford loan without adjustments. The second column shows the corresponding percentages after being adjusted for covariation of the independent variables included in the regression equation. Asterisks indicate when a particular group differs significantly from the comparison group (shown in italics).

Stafford Subsidized Loans

The results presented in table 15 show that some variables continued to be associated with having received a Stafford subsidized loan relative to the comparison group both before and after adjusting for the covariation of other demographic and enrollment characteristics. These included being married, being financially independent, being low income, and having prices of attendance or unmet need higher than the lowest categories. Attending private for-profit institutions (compared to attending private not-for-profit 4-year institutions) and attending exclusively full time (compared to attending less than half time) also were associated with having received a subsidized loan.

Stafford Unsubsidized Loans

Results presented in table 16 show that after adjusting for the covariation of other variables, certain demographic and enrollment characteristics continued to be associated with having received a Stafford unsubsidized loan in 1999–2000 relative to the comparison group. For example, these included being age 24–29, being financially independent, not being low income, and having prices of attendance higher than the lowest category (with the exception of $20,000 and higher). Attending public 4-year or private for-profit institutions, enrolling in certificate or associate's degree programs, and not attending half time or less than half time also were

Table 15. Percentage of undergraduate borrowers who received subsidized Stafford loans, and the adjusted percentage after taking into account the covariation of the variables listed in the table: 1999–2000

	Unadjusted percentage[1]	Adjusted percentage[2]	LS coefficient[3]	Standard error[4]
Gender				
Male	*79.1*	*78.9*	*†*	*†*
Female	81.4 *	79.6	0.70	.80
Age				
23 years or younger	*76.5*	*78.7*	*†*	*†*
24–29 years of age	91.4 *	80.3	1.60	1.50
30 years or older	84.8 *	80.5	1.80	1.90
Race-ethnicity				
White, non-Hispanic	*77.5*	*78.5*	*†*	*†*
Black, non-Hispanic	86.8 *	82.2 *	3.70	1.20
Hispanic or Latino	86.6 *	79.4	0.90	1.40
Asian/Pacific Islander	87.9 *	84.1 *	5.60	2.00
American Indian/Alaskan Native	84.2	82.3	3.80	5.00
Other	82.9	77.3	-1.20	3.90
Marital status				
Single, never married	*78.3*	*78.1*	*†*	*†*
Married	83.8 *	85.1 *	7.00	1.40
Separated, divorced, or widowed	88.4 *	79.2	1.10	2.00
Single parent status				
Not a single parent	*78.9*	*79.3*	*†*	*†*
Single parent	92.2 *	79.6	0.30	1.60
Dependency status				
Dependent	*74.5*	*76.1*	*†*	*†*
Independent	89.1 *	84.4 *	8.30	1.60
Income percentile rank (all students)				
Lowest quartile	*93.8*	*93.5*	*†*	*†*
Middle quartiles	83.2 *	83.0 *	-10.50	.90
Highest quartile	42.9 *	39.3 *	-54.20	1.40
Parents' educational level				
Less than high school	87.6 *	78.7	0.90	2.00
High school graduate	83.9 *	80.4 *	2.60	1.10
Some college, including associate's degree	81.6 *	80.2 *	2.40	1.20
Bachelor's degree	*75.2*	*77.8*	*†*	*†*
Advanced degree	72.6	78.6	0.80	1.30
Delayed enrollment				
Did not delay enrollment	*77.5*	*79.3*	*†*	*†*
Delayed enrollment	85.4 *	79.5	0.20	1.00
Attendance status				
Exclusively full time	*80.5*	*79.1*	*†*	*†*
Half time	82.0	81.2	2.10	1.50
Less than half time	73.1 *	67.7 *	-11.40	3.90
Mixed[5]	80.2	80.6	1.50	1.30
Class level (Stafford loan)				
First-year undergraduate	*80.9*	*80.3*	*†*	*†*
Second-year undergraduate	80.0	79.5	-0.80	1.10
Third-year undergraduate	81.6	80.2	-0.10	1.20
Fourth-year undergraduate	79.0	77.1 *	-3.20	1.30
Fifth-year undergraduate	80.9	78.3	-2.00	2.50

See notes at end of table.

Table 15. Percentage of undergraduate borrowers who received subsidized Stafford loans, and the adjusted percentage after taking into account the covariation of the variables listed in the table: 1999–2000—Continued

	Unadjusted percentage[1]	Adjusted percentage[2]	LS coefficient[3]	Standard error[4]
Hours worked				
Not employed	*78.2*	*79.7*	*†*	*†*
1–20 hours	80.1	80.3	0.60	1.10
21–34 hours	80.3	79.8	0.10	1.30
35 hours or more	79.4	77.4	-2.30	1.30
Type of institution attended				
Private not-for-profit 4-year	*81.5*	*78.8*	*†*	*†*
Public 4-year	77.4 *	78.4	-0.40	1.30
Public 2-year	76.3 *	76.5	-2.30	2.40
Private for-profit	92.0 *	86.7 *	7.90	2.10
Degree program				
Certificate	90.9 *	77.6	-2.30	2.50
Associate's degree	81.6	77.7	-2.20	2.00
Bachelor's degree	*79.1*	*79.9*	*†*	*†*
No undergraduate degree	81.4	84.8	4.90	6.80
Highest degree expected				
No degree or certificate	78.3	78.7	-0.80	6.50
Certificate	88.0 *	83.8	4.30	3.50
Associate's degree	80.6	78.3	-1.20	2.10
Bachelor's degree	*79.7*	*79.5*	*†*	*†*
Master's degree	79.6	79.7	0.20	1.00
Doctoral or first-professional degree	79.6	77.8	-1.70	1.30
Don't know	82.8	79.5	0.00	2.00
Student unmet need[6]				
Less than $1,000	*69.2*	*61.4*	*†*	*†*
$1,000–$2,999	86.4 *	82.6 *	21.20	2.50
$3,000–$4,999	92.4 *	84.5 *	23.10	2.40
$5,000–$9,999	94.9 *	80.7 *	19.30	2.30
$10,000 and higher	96.6 *	74.2 *	12.80	2.50
Estimated price of attendance[7]				
Less than $5,000	*56.3*	*47.4*	*†*	*†*
$5,000–$9,999	76.4 *	70.3 *	22.90	2.60
$10,000–$14,999	81.2 *	78.4 *	31.00	2.70
$15,000–$19,999	85.4 *	85.1 *	37.70	2.90
$20,000 and higher	82.8 *	91.8 *	44.40	3.00

†Not applicable for the reference group.

*$p \leq .05$.

[1]The estimates are from the NPSAS:2000 Undergraduate Data Analysis System.

[2]The percentages are adjusted for differences associated with other variables in the table.

[3] Least squares (LS) coefficient, multiplied by 100 to reflect percentage.

[4]Standard error of LS coefficient, adjusted for design effect, multiplied by 100 to reflect percentage.

[5]Since full-time full-year students may be enrolled full time nine or more months and part time a few months, they are categorized as mixed.

[6]Unmet need equals the attendance-adjusted student budget minus expected family contribution (EFC) minus total grant aid. Zero values were excluded for this analysis.

[7]The estimated price of attendance is the attendance-adjusted student budget, including tuition, books and supplies, room and board, and personal expenses.

NOTE: The italicized group in each category is the reference group being compared. Borrowers are those undergraduates who received loans from federal, state, institutional, or private sources, excluding Parent Loans for Undergraduate Students (PLUS), in 1999–2000. Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

Table 16. Percentage of undergraduate borrowers who received unsubsidized Stafford loans, and the adjusted percentage after taking into account the covariation of the variables listed in the table: 1999–2000

	Unadjusted percentage[1]	Adjusted percentage[2]	LS coefficient[3]	Standard error[4]
Gender				
Male	*52.4*	*51.0*	*†*	*†*
Female	51.2	51.0	0.00	1.07
Age				
23 years or younger	*44.1*	*49.2*	*†*	*†*
24–29 years of age	66.0 *	55.0 *	5.80	1.93
30 years or older	68.8 *	52.3	3.10	2.36
Race-ethnicity				
White, non-Hispanic	*52.9*	*51.6*	*†*	*†*
Black, non-Hispanic	55.1	55.3 *	3.70	1.50
Hispanic or Latino	45.5 *	44.9 *	-6.70	1.82
Asian/Pacific Islander	37.0 *	38.1 *	-13.50	2.68
American Indian/Alaskan Native	53.5	56.0	4.40	6.42
Other	45.3	45.5	-6.10	5.03
Marital status				
Single, never married	*47.2*	*52.2*	*†*	*†*
Married	63.4 *	43.2 *	-9.00	1.71
Separated, divorced, or widowed	66.9 *	57.6 *	5.40	2.57
Single parent status				
Not a single parent	*50.5*	*51.4*	*†*	*†*
Single parent	60.9 *	47.6	-3.80	2.03
Dependency status				
Dependent	*42.3*	*42.5*	*†*	*†*
Independent	65.5 *	64.4 *	21.90	2.14
Income percentile rank (all students)				
Lowest quartile	*40.6*	*36.9*	*†*	*†*
Middle quartiles	51.6 *	50.8 *	13.90	1.18
Highest quartile	75.4 *	79.5 *	42.60	1.82
Parents' educational level				
Less than high school	52.1	44.9 *	-6.90	2.57
High school graduate	52.5	50.4	-1.40	1.39
Some college, including associate's degree	48.9	53.0	1.20	1.50
Bachelor's degree	*49.5*	*51.8*	*†*	*†*
Advanced degree	51.4	50.0	-1.80	1.61
Delayed enrollment				
Did not delay enrollment	*46.6*	*50.8*	*†*	*†*
Delayed enrollment	60.6 *	51.3	0.50	1.28
Attendance status				
Exclusively full time	*50.5*	*51.8*	*†*	*†*
Half time	56.6 *	43.9 *	-7.90	2.03
Less than half time	50.6	33.8 *	-18.00	5.03
Mixed[5]	54.7 *	51.9	0.10	1.71
Class level (Stafford loan)				
First-year undergraduate	*50.6*	*48.1*	*†*	*†*
Second-year undergraduate	50.4	49.5	1.40	1.39
Third-year undergraduate	52.4	54.7 *	6.60	1.61
Fourth-year undergraduate	52.7	52.4 *	4.30	1.71
Fifth-year undergraduate	60.4 *	58.4 *	10.30	3.21

See notes at end of table.

Table 16. Percentage of undergraduate borrowers who received unsubsidized Stafford loans, and the adjusted percentage after taking into account the covariation of the variables listed in the table: 1999–2000—Continued

	Unadjusted percentage[1]	Adjusted percentage[2]	LS coefficient[3]	Standard error[4]
Hours worked				
Not employed	*51.1*	*50.7*	*†*	*†*
1–20 hours	44.3 *	49.0	-1.70	1.39
21–34 hours	49.7	51.5	0.80	1.61
35 hours or more	61.7 *	53.6	2.90	1.61
Type of institution attended				
Private not-for-profit 4-year	*43.2*	*47.0*	*†*	*†*
Public 4-year	49.9 *	50.9 *	3.90	1.61
Public 2-year	48.8 *	43.5	-3.50	3.11
Private for-profit	78.1 *	66.3 *	19.30	2.68
Degree program				
Certificate	69.0 *	55.9 *	6.30	3.21
Associate's degree	57.1 *	55.4 *	5.80	2.57
Bachelor's degree	*48.5*	*49.6*	*†*	*†*
No undergraduate degree	53.8	43.4	-6.20	8.78
Highest degree expected				
No degree or certificate	53.3	46.5	-3.20	8.35
Certificate	59.6	43.4	-6.30	4.50
Associate's degree	56.1	47.2	-2.50	2.68
Bachelor's degree	*51.9*	*49.7*	*†*	*†*
Master's degree	50.4	51.3	1.60	1.28
Doctoral or first-professional degree	49.6	53.3 *	3.60	1.71
Don't know	55.7	51.2	1.50	2.57
Student unmet need[6]				
Less than $1,000	*83.1*	*83.5*	*†*	*†*
$1,000–$2,999	51.8 *	56.6 *	-26.90	3.21
$3,000–$4,999	36.1 *	44.0 *	-39.50	3.11
$5,000–$9,999	38.2 *	43.7 *	-39.80	3.00
$10,000 and higher	55.8 *	61.6 *	-21.90	3.21
Estimated price of attendance[7]				
Less than $5,000	*42.7*	*37.2*	*†*	*†*
$5,000–$9,999	46.9	49.6 *	12.40	3.43
$10,000–$14,999	54.8 *	56.7 *	19.50	3.53
$15,000–$19,999	63.4 *	54.3 *	17.10	3.75
$20,000 and higher	43.1	41.5	4.30	3.96

†Not applicable for the reference group.

*$p \leq .05$.

[1]The estimates are from the NPSAS:2000 Undergraduate Data Analysis System.

[2]The percentages are adjusted for differences associated with other variables in the table.

[3] Least squares (LS) coefficient, multiplied by 100 to reflect percentage.

[4]Standard error of LS coefficient, adjusted for design effect, multiplied by 100 to reflect percentage.

[5]Since full-time full-year students may be enrolled full time nine or more months and part time a few months, they are categorized as mixed.

[6]Unmet need equals the attendance-adjusted student budget minus expected family contribution (EFC) minus total grant aid. Zero values were excluded for this analysis.

[7]The estimated price of attendance is the attendance-adjusted student budget, including tuition, books and supplies, room and board, and personal expenses.

NOTE: The italicized group in each category is the reference group being compared. Borrowers are those undergraduates who received loans from federal, state, institutional, or private sources, excluding Parent Loans for Undergraduate Students (PLUS), in 1999–2000. Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

associated with having received these types of loans. Before adjustment, single borrowers were less likely to have received unsubsidized loans in comparison to married borrowers. After adjusting for covariation, however, being single versus married was positively associated with having received an unsubsidized loan.

Private Loans

Given increased concern about private loan volume, it is worth noting that borrowers with certain characteristics were more likely to have obtained private loans in 1999–2000. Unlike those related to the likelihood of receiving Stafford loans, these characteristics included being age 23 or younger, single, financially dependent, and not delaying enrollment compared to other age, marital status, dependency, and delayed enrollment categories. In addition, a higher percentage of borrowers who attended on a less-than-half-time basis received private loans (27 percent) compared to borrowers with other attendance patterns (exclusively full time, 13 percent; half time, 10 percent; and mixed, 11 percent) (table 13). However, less-than-half-time borrowers received a lower average private loan amount than undergraduates with other attendance patterns. (table 14). Undergraduates who attended less than half time may not have applied for federal financial aid at the same rate or were not eligible for other types of loans.

Having a high income, high unmet need, and attending a private not-for-profit 4-year institution were all associated with higher rates of receiving private loans. Specifically, borrowers in the highest income quartile were more likely to have received private loans than borrowers in the lowest income quartile. This was the case for both dependent students (17 percent compared to 12 percent) and independent students (14 percent compared to 8 percent). In addition, borrowers with unmet need higher than $10,000 received private loans (17 percent) at a higher rate than borrowers with most other levels of unmet need ($5,000 to $9,999, 10 percent; $3,000 to $4,999, 11 percent; and $1,000 to $2,999, 11 percent) (table 13). They also received higher average amounts ($7,958) than borrowers with all other levels of unmet need (table 14). Finally, borrowers attending private not-for-profit 4-year institutions were more likely to have received private loans (19 percent) than borrowers attending other institutional types (public 4-year, 10 percent; public 2-year, 12 percent; and private for-profit, 10 percent) (table 13). Both borrowers attending private not-for-profit 4-year institutions and those attending private for-profit institutions received higher average amounts of private loans than those attending public 4-year institutions and public 2-year institutions (table 14).

Multivariate Analysis

As shown in the previous section, several characteristics distinguished borrowers who received private loans from those who did not receive these loans in 1999–2000. A multivariate analysis was conducted to examine the independent association of these characteristics to having received a private loan by adjusting for the possible covariation of related characteristics. Results of this multivariate analysis are presented in table 17. After adjusting for other variables, certain demographic and enrollment characteristics were associated with having received a private loan relative to the comparison group. These included attending less than half time compared to attending exclusively full time, attending a private not-for-profit 4-year institution compared to attending a public 4-year institution or a private for-profit institution, and being high or middle income in comparison to being low income.

Table 17. Percentage of undergraduate borrowers who received private loans, and the adjusted percentage after taking into account the covariation of the variables listed in the table: 1999–2000

	Unadjusted percentage[1]	Adjusted percentage[2]	LS coefficient[3]	Standard error[4]
Gender				
Male	*13.6*	*13.1*	*†*	*†*
Female	11.7 *	11.9	-1.20	.82
Age				
23 years or younger	*13.9*	*13.1*	*†*	*†*
24–29 years of age	9.4 *	11.7	-1.40	1.53
30 years or older	9.8 *	10.7	-2.40	1.88
Race-ethnicity				
White, non-Hispanic	*13.0*	*12.5*	*†*	*†*
Black, non-Hispanic	9.7 *	10.8	-1.70	1.17
Hispanic or Latino	14.4	15.7 *	3.20	1.41
Asian/Pacific Islander	9.9 *	9.8	-2.70	2.11
American Indian/Alaskan Native	14.8	15.9	3.40	5.05
Other	13.3	13.5	1.00	3.99
Marital status				
Single, never married	*13.0*	*12.8*	*†*	*†*
Married	9.6 *	10.9	-1.90	1.41
Separated, divorced, or widowed	9.4 *	12.9	0.10	2.00
Single parent status				
Not a single parent	*13.0*	*12.6*	*†*	*†*
Single parent	8.6 *	11.3	-1.30	1.64
Dependency status				
Dependent	*14.4*	*12.8*	*†*	*†*
Independent	9.7 *	11.8	-1.00	1.64
Income percentile rank (all students)				
Lowest quartile	*10.0*	*10.5*	*†*	*†*
Middle quartiles	13.0 *	12.8 *	2.30	.94
Highest quartile	16.1 *	15.0 *	4.50	1.41
Parents' educational level				
Less than high school	12.2	13.4	1.10	2.00
High school graduate	11.4	12.1	-0.20	1.06
Some college, including associate's degree	12.5	13.2	0.90	1.17
Bachelor's degree	*13.2*	*12.3*	*†*	*†*
Advanced degree	13.9	12.1	-0.20	1.29
Delayed enrollment				
Did not delay enrollment	*13.4*	*12.6*	*†*	*†*
Delayed enrollment	10.2 *	12.1	-0.50	1.06
Attendance status				
Exclusively full time	*12.8*	*12.2*	*†*	*†*
Half time	9.8 *	11.6	-0.60	1.53
Less than half time	27.4 *	33.4 *	21.20	3.99
Mixed[5]	10.5 *	12.7	0.50	1.29
Class level (Stafford loan)				
First-year undergraduate	*13.1*	*13.7*	*†*	*†*
Second-year undergraduate	12.9	12.7	-1.00	1.06
Third-year undergraduate	12.2	11.6	-2.10	1.29
Fourth-year undergraduate	11.0 *	11.1 *	-2.60	1.29
Fifth-year undergraduate	10.7	12.3	-1.40	2.58

See notes at end of table.

Table 17. Percentage of undergraduate borrowers who received private loans, and the adjusted percentage after taking into account the covariation of the variables listed in the table: 1999–2000 —Continued

	Unadjusted percentage[1]	Adjusted percentage[2]	LS coefficient[3]	Standard error[4]
Hours worked				
Not employed	*11.6*	*11.5*	*†*	*†*
1–20 hours	13.2	11.8	0.30	1.17
21–34 hours	12.3	12.7	1.20	1.29
35 hours or more	12.5	14.0	2.50	1.29
Type of institution attended				
Private not-for-profit 4-year	*19.4*	*15.7*	*†*	*†*
Public 4-year	9.6 *	12.4 *	-3.30	1.29
Public 2-year	12.4 *	12.8	-2.90	2.46
Private for-profit	9.8 *	5.5 *	-10.20	2.11
Degree program				
Certificate	10.5	15.8	4.10	2.58
Associate's degree	12.2	14.5	2.80	2.00
Bachelor's degree	*12.8*	*11.7*	*†*	*†*
No undergraduate degree	10.4	10.5	-1.20	6.92
Highest degree expected				
No degree or certificate	14.7	7.4	-5.60	6.57
Certificate	7.4	9.9	-3.10	3.64
Associate's degree	11.3	12.0	-1.00	2.11
Bachelor's degree	*12.1*	*13.0*	*†*	*†*
Master's degree	12.7	12.9	-0.10	1.06
Doctoral or first-professional degree	11.4	11.2	-1.80	1.29
Don't know	11.2	12.0	-1.00	2.11
Student unmet need[6]				
Less than $1,000	*12.5*	*11.4*	*†*	*†*
$1,000–$2,999	10.7	10.7	-0.70	2.46
$3,000–$4,999	10.5	11.4	0.00	2.46
$5,000–$9,999	9.6	11.2	-0.20	2.35
$10,000 and higher	16.9	16.4	5.00	2.58
Estimated price of attendance[7]				
Less than $5,000	*19.6*	*16.5*	*†*	*†*
$5,000–$9,999	9.5	10.2 *	-6.30	2.70
$10,000–$14,999	8.6	10.1 *	-6.40	2.70
$15,000–$19,999	13.2	13.2	-3.30	2.93
$20,000 and higher	21.9	18.5	2.00	3.05

†Not applicable for the reference group.

*$p \leq .05$.

[1]The estimates are from the NPSAS:2000 Undergraduate Data Analysis System.

[2]The percentages are adjusted for differences associated with other variables in the table.

[3] Least squares (LS) coefficient, multiplied by 100 to reflect percentage.

[4]Standard error of LS coefficient, adjusted for design effect, multiplied by 100 to reflect percentage.

[5]Since full-time full-year students may be enrolled full time nine or more months and part time a few months, they are categorized as mixed.

[6]Unmet need equals the attendance-adjusted student budget minus expected family contribution (EFC) minus total grant aid. Zero values were excluded for this analysis.

[7]The estimated price of attendance is the attendance-adjusted student budget, including tuition, books and supplies, room and board, and personal expenses.

NOTE: The italicized group in each category is the reference group being compared. Borrowers are those undergraduates who received loans from federal, state, institutional, or private sources, excluding Parent Loans for Undergraduate Students (PLUS), in 1999–2000. Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

Summary and Conclusions

Twenty-nine percent of undergraduates borrowed from some source to help finance postsecondary education in 1999–2000. High borrowers in this group are of particular interest because of concerns about debt burden and loan default. A profile of high borrowers shows that they had a tendency to be older, independent students, to attend 4-year institutions (public and private), and to enroll exclusively full time. They were also more likely than medium and low borrowers to have been age 24 or older, married, and independent. In addition, both high borrowers and medium borrowers were more likely than low borrowers to have attended private not-for-profit 4-year institutions. High borrowers were also more likely than other borrower groups to have had the highest prices of attendance and levels of unmet need. All borrower groups were less likely than nonborrowers to have been high income, and nonborrowers were more likely to have worked full time.

An examination of the persistence/attainment risk (nontraditional) characteristics of high borrowers within institution types revealed that, with the exception of students at private not-for-profit 4-year institutions, high borrowers most often had moderate or high risk. High borrowers at private not-for-profit 4-year institutions most often had zero risk characteristics. Differences among borrower groups in the likelihood of having high risk also varied by institution type. At both private not-for-profit 4-year institutions and public 4-year institutions, high borrowers were more likely to have had high risk than medium and low borrowers. At private for-profit institutions, a lower percentage of high borrowers had high risk than medium borrowers.

High borrowers received an average of $9,680 in loan aid in 1999–2000. Ninety-eight percent of high borrowers received Stafford loans and about one-quarter received private loans (27 percent). Compared to other borrower groups, high borrowers were most likely to have received both Stafford subsidized loans and Stafford unsubsidized loans as well as private loans. In addition, 71 percent of high borrowers received some form of grant aid in 1999–2000, averaging $4,667. All borrower groups were more likely to have received some form of grant aid and to have received higher average amounts compared to nonborrowers. Borrowers were also more likely to have received specific types of grant aid, including Pell grants, FSEOG, state grants, and institutional grants, than nonborrowers.

Analysis of 1999–2000 Stafford loan maximum borrower groups (total, subsidized, and unsubsidized) revealed that total maximum borrowers and subsidized maximum borrowers

tended to be young, single, financially dependent students. In addition, they were more likely to have had each of these characteristics than their Stafford nonborrower counterparts. Each group of Stafford maximum borrowers tended to be enrolled exclusively full time. Maximum borrowers also were more likely (compared to Stafford less-than-maximum borrowers and Stafford nonborrowers) to have had the highest prices of attendance and to have had the highest levels of unmet need. Finally, maximum borrowers primarily worked 1–20 hours (total and subsidized) or 1–20 hours and 35 hours or more (unsubsidized). All maximum borrowers were less likely than nonborrowers to have worked full time.

The profile of the persistence/attainment risk characteristics of Stafford maximum borrowers within institution type shows that the highest proportion of maximum borrowers at private not-for-profit 4-year institutions and public 4-year institutions had zero risk characteristics. At private for-profit institutions, the largest percentage had moderate risk. At public 2-year institutions, they primarily had moderate risk (unsubsidized) or moderate and high risk (subsidized). In all four institution types, all three groups of maximum borrowers were less likely to have had high risk than less-than-maximum borrowers and nonborrowers (with the exception of subsidized borrowers at public 4-year institutions and subsidized borrowers at public 4-year institutions). It is important to note that in all four sectors, all total maximum borrowers were more likely to have had zero risk characteristics (to have been traditional students) compared to less-than-maximum borrowers and nonborrowers.

In 1999–2000, 80 percent of Stafford total maximum borrowers received subsidized loans and 59 percent received unsubsidized loans. Stafford maximum borrowers also received private loans (total maximum borrowers, 13 percent; subsidized maximum borrowers, 11 percent; and unsubsidized maximum borrowers, 11 percent). Also, each group of maximum borrowers (total, subsidized, and unsubsidized) was more likely to have received private loans and to have received higher average amounts than less-than-maximum borrowers and nonborrowers. In addition, most maximum borrowers also received some form of grant aid (total maximum borrowers, 67 percent; subsidized maximum borrowers, 80 percent; and unsubsidized maximum borrowers, 54 percent). For each group of borrowers, maximum borrowers received higher average amounts of grant aid than nonborrowers.

The final analysis of the report considers borrowers as a group and examines the likelihood of borrowers with certain demographic and enrollment characteristics receiving particular types of loans and other aid, as well as average amounts. As expected, low-income borrowers received Stafford subsidized loans at higher rates than high-income borrowers, and high-income borrowers received Stafford unsubsidized loans at higher rates than both middle- and low-income borrowers. Borrowers who attended private for-profit institutions and those who enrolled in

certificate programs were more likely to have received Stafford subsidized and unsubsidized loans. Also, borrowers older than 23, married, financially independent, and with delayed enrollment were more likely to have received both federal Stafford subsidized loans and Stafford unsubsidized loans than borrowers in other age, marital status, dependency, and delayed enrollment categories.

A multivariate analysis revealed that after adjusting for the covariation of demographic and enrollment characteristics, certain variables continued to be associated with receiving Stafford subsidized and Stafford unsubsidized loans. Low-income borrowers and borrowers with the lowest levels of unmet need were least likely to have received unsubsidized loans and most likely to have received subsidized loans. Dependent borrowers were less likely to have received both subsidized and unsubsidized loans than independent borrowers, and borrowers attending private for-profit institutions were more likely to have received both types of loans (compared to borrowers attending private not-for-profit 4-year institutions). In addition, borrowers who attended exclusively full time were more likely to have received subsidized loans (compared to those attending less than half time) and more likely to have received unsubsidized loans (compared to those attending half time and less than half time).

Before adjusting for the covariation of other variables, borrowers with certain characteristics were more likely to have received private loans. In contrast to the findings related to Stafford loans, borrowers who were age 23 or younger, single, financially dependent, and who did not delay enrollment were more likely to receive private loans. Also, students who attended on a less-than-half-time basis were more likely to have received private loans but received lower average amounts. In addition, high-income borrowers (compared to low-income borrowers) with the highest prices of attendance, and borrowers with the highest levels of unmet need received private loans at higher rates. Borrowers with the highest prices of attendance and levels of unmet need also received higher average amounts.

A multivariate analysis revealed that after adjusting for covariation among characteristics, borrowers who attended on a less-than-half-time basis (compared to those who attended exclusively full time) and borrowers who attended private not-for-profit 4-year institutions (compared to public 4-year and private for-profit institutions) were more likely to have received private loans. High- and middle-income borrowers received private loans at a higher rate.

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Appendix A—Glossary

This glossary describes the variables used in this report. The items were taken directly from the NPSAS:2000 undergraduate Data Analysis Systems (DAS), the NCES software application that generates tables from the NPSAS:2000 data (see Appendix A for a description of the DAS).

The variables listed in the index below are organized by sections in the order they appear in the report. The variables in the glossary are presented in alphabetical order by the variable label in the DAS, shown in bold, capital letters, and displayed along the right-hand side of each column.

Glossary Index

DAS Variable Name

Institutional Characteristics

Institution type **AIDSECT**

Indicates the level and control of the NPSAS institution. Institution level concerns the institution's highest offering, and control concerns the source of revenue and control of operations. Doctorate- and nondoctorate-granting 4-year institutions are aggregated in this report. Students attending more than one institution in 1999–2000 are in a separate category and are excluded for the analyses in this report. Students attending public less-than-2-year and private not-for-profit less-than-4-year institutions also are excluded.

Public 4-year	Public institutions are supported primarily by public funds and operated by publicly elected or appointed officials who control the programs and activities. Public 4-year institutions award bachelor's degrees or higher, including doctorate and first-professional degrees. First-professional degrees include chiropractic, pharmacy, dentistry, podiatry, medicine, veterinary medicine, optometry, law, osteopathic medicine, and theology.
Private not-for-profit 4-year	Private, not-for-profit institutions are controlled by an independent governing board and incorporated under section 501(c)(3) of the Internal Revenue Code. Private, not-for-profit 4-year institutions offer the same range of degrees as public 4-year institutions.
Public 2-year	Public 2-year institutions are public institutions (described above) that do not confer bachelor's degrees, but provide 2-year programs that result in a certificate or an associate's degree, or 2-year programs that fulfill part of the requirements for a bachelor's degree or higher at a 4-year institution.
Private for-profit	Private for-profit institutions are privately owned and operated as profit-making enterprises. They include career colleges and proprietary institutions. They may be 4-year, 2-year, or less-than-2-year institutions. Less-than-2-year institutions offer at least one program that is three months or longer and produces a terminal award or certificate.

DAS Variable Name

Price of attendance **BUDGETA2**

Indicates the attendance-adjusted student budget at the NPSAS institution for students who attended only one institution in 1999–2000. It excludes students who attended more than one institution because the budget at the second institution is not known. For full-time, full-year students, it is the same as the full-time budget. The attendance-adjusted student budget is estimated based on tuition paid, number of months enrolled, and attendance status while enrolled. Average full-time nontuition costs are reduced for half-time (75 percent), unknown or mixed status (50 percent), and less-than-half-time (25 percent) students. Tuition is added to the estimated nontuition costs. Nontuition costs include books and supplies, room and board, transportation, and personal expenses.

Less than $4,999
$5,000 to $9,999
$10,000 to $14,999
$15,000 to $19,999
$20,000 and higher

Student Characteristics

Age **AGE**

Indicates student's age as of 12/31/99. Calculated from date of birth.

23 years or younger
24–29 years of age
30 years or older

Attendance intensity (all schools) **ATTNPTRN**

Indicates attendance intensity during the months enrolled during 1999–2000.

Exclusively full time
Half time
Less than half time
Mixed

Since full-time, full-year students may be enrolled for 9 or more months full time plus a few part-time months, they are categorized as mixed.

Last degree program **DEGLAST**

Undergraduate's degree program, indicating last program (including graduate and professional degrees) if the student was in more than one during the year. Based on student reported degree programs or the program indicated by the NPSAS sample institution. graduate and first-professional. Student's indicating graduate and professional degree programs were excluded from the analysis in this report.

Certificate
Associate's degree
Bachelor's degree
No undergraduate degree

DAS Variable Name

Delayed postsecondary enrollment **DELAYENR**

Indicates the number of years between high school graduation and entry into postsecondary education. Students are considered to have delayed enrollment if they enter postsecondary education one or more years after completing high school.

Did not delay enrollment
Delayed enrollment

Dependency status **DEPEND**

Indicates student's dependency status for federal financial aid. Students were considered to be independent if they met any of the following criteria:

- Student was age 24 or older as of 12/31/99;
- Student was a veteran of the U.S. Armed Forces;
- Student was enrolled in a graduate or professional program (beyond a bachelor's degree) in 1995-96;
- Student was married;
- Student was an orphan or ward of the court;
- Student had legal dependents other than spouse.

In addition, financial aid officers may designate students who do not meet these criteria to be independent, if the students can document that they are self-supporting.

Gender **GENDER**

Indicates student gender.

Male
Female

Marital status **NBMARR**

Indicates student reported marital status.

Single, never married
Married
Separated, divorced, or widowed

Hours worked per week while enrolled **NDHOURS**

Average number of hours worked per week while enrolled, as reported by students. Students were asked to exclude summer hours if not enrolled during the summer.

Not employed
1–20 hours
21–34 hours
35 hours or more

DAS Variable Name

Highest degree planned **NEEXPEVR**

Indicates the highest degree that a student plans to pursue.

No degree or certificate
Certificate
Associate's degree
Bachelor's degree or post-baccalaureate certificate
Master's degree
Doctoral or first-professional degree
Don't know

Parent's education **NPARED**

Indicates the highest level of education of either parent.

Less than high school
High school graduate
Some college, including associate's degree
Bachelor's degree
Advanced degree

Income percentile of all students **PCTALL2**

Indicates income percentile for all students. The percentile is calculated separately for dependent and independent students and then combined into this variable. Each ranking thus compares the student only to other students of the same dependency status. Parents' income is used if the student is dependent, and student's own income is used if the student is independent. Total income in 1998 is used because this was the income reported on the financial aid applications and used for federal need analysis for the 1999–2000 academic year.

Lowest quartile
Middle quartiles
Highest quartile

Income percentile of dependent students **PCTDEP**

Indicates income percentiles for parents of dependent students in 1998.

Lowest quartile
Middle quartile
Highest quartile

DAS Variable Name

Income percentile of independent students **PCTINDEP**

Indicates income percentiles for independent students in 1998.

Lowest quartile
Middle quartile
Highest quartile

Race/ethnicity **RACE2**

Indicates student race/ethnicity. This race/ethnicity variable gives priority to Hispanic/Latino regardless of race and then to those who choose more than one race. However, students indicating more than one race are excluded from the analysis in this report.

White, non-Hispanic	A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin).
Black, non-Hispanic	A person having origins in any of the black racial groups of Africa, not of Hispanic origin.
Hispanic or Latino	A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
Asian/Pacific Islander	A person having origin in any of the peoples of the Far East, Southeast Asia, the Indian subcontinent, or Pacific Islands. This includes people from China, Japan, Korea, the Philippine Islands, Samoa, India, and Vietnam.
American Indian/Alaskan Native	A person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition.
Other	A person not in one of the above categories.

DAS Variable Name

Score on persistence/attainment risk index **RISKINDX**

Represents an index of risk from 0 to 7 for seven characteristics known to adversely affect persistence and attainment. These characteristics include delayed enrollment, attending part-time, being financially independent, having dependents other than a spouse, working full time while enrolled, having no high school diploma (including GED recipients), and being a single parent.

0	Indicates student has zero risk characteristics.
1	Indicates student has number of risk characteristics associated with minimal risk.
2–3	Indicates student has number of risk characteristics associated with moderate risk.
4 or more	Indicates student has number of risk characteristics associated with high risk.

Single parent status **SINGLPAR**

Identifies independent students who were single parents in 1999–2000. Students were considered to be single parents if they had dependents and were not married. Because the number of dependents does not always distinguish between dependent children and other dependents such as parents or relatives, single parent is best interpreted as single caretaker.

Not a single parent
Single parent

Unmet need **SNEED5**

The definition of unmet need used in this report is different from the standard definition, which indicates remaining need after *all* financial aid. Because of the focus of this report on borrowing, a definition was employed that excludes loan aid and indicates the remaining need after only *grant* aid has been taken into account. Specifically, unmet need defined in this way is equal to the attendance-adjusted student budget (BUDGETA2) minus expected family contribution minus total grant aid (TOTGRT). In addition to need-based aid, grants include merit-based scholarships, employer tuition reimbursements, and many private scholarships (PRIVAID) that are not need-based. Negative values (indicating that there is no remaining need) are set to zero. Zero values were excluded from the analysis in this report.

Less than $1,000
$1,000 to $2,999
$3,000 to $4,999
$5,000 to $9,999
$10,000 and higher

DAS Variable Name

Class level for student loans **UGLVL2**

Indicates undergraduate class level for loans in 1999–2000. Graduate, first professional, and unclassified students were excluded from the analysis in this report.

First year
Second year
Third year
Fourth year
Fifth year

Financial Aid Variables

Any institutional grants/Average any institutional grant amount **INGRTAMT**

Indicates the total amount of institutional grant aid received in 1999–2000. Includes all grants and scholarships, tuition waivers, and graduate fellowships. The percentage with a positive value is the percentage with any institutional grant aid.

Any institutional loans/Average any institutional loan amount **INLNAMT**

Indicates the loan amount from funds provided by the educational institution in 1999–2000. The percentage with a positive value is the percentage with any institutional loan aid.

Any Pell grants/Average any Pell grant amount **PELLAMT**

Indicates the federal Pell grant amount received at all institutions attended during 1999–2000. The percentage with a positive value is the percentage with any Pell grant aid.

Any private grants/Average any private grant amount **PRIVAID**

Indicates the amount of grants and scholarships from private outside sources received during 1999–2000. The percentage with a positive value is the percentage with any private grant aid.

Any private loans/Average any private loan amount **PRIVLOAN**

Indicates the amount of commercial or private source loans received for education in 1999–2000. The percentage with a positive value is the percentage with any private loan aid.

Any FSEOG/Average any FSEOG amount **SEOGAMT**

Indicates the total amount of Federal Supplemental Educational Opportunity Grant (FSEOG) aid received in 1999–2000. The percentage with a positive value is the percentage with any FSEOG aid.

DAS Variable Name

Stafford subsidized maximum categories **STAFFCT1**

Indicates whether the student borrowed the maximum amount allowable for undergraduates in Stafford subsidized loans during 1999–2000. Classifies the Stafford subsidized loan amount (STAFSUB) into categories based on maximum loan limits for Stafford subsidized loans. The maximum loan amounts in 1999–2000 were the same for dependent and independent students but differed by class level. The subsidized maximum for first-year students was $2,625; for second-year students, $3,500; for third-, fourth-, and fifth-year students, $5,500.

Stafford total maximum categories **STAFCT2R**

Indicates whether the student borrowed the maximum amount allowable for undergraduates in Stafford loans during 1999–2000. Classifies the Stafford loan total amount (STAFFAMT) into categories based on maximum loan limits for subsidized and unsubsidized Stafford loans combined. The normal maximum loan amounts in 1999–2000 were determined by the student's class level and dependency status according to the following table:

Student year	Dependent	Independent
First year	$2,625	$6,625
Second year	$3,500	$7,500
Third to fifth year	$5,500	$10,500

There are several exceptions to these normal limits. Dependent undergraduates with exceptional need whose parents were unable to qualify for a PLUS loan could qualify for an unsubsidized loan at the independent student maximum. Undergraduates in programs of continuous study lasting longer than the usual 9-10 months of an academic year were eligible for larger amounts than the normal academic year maximum. Students who borrowed beyond the normal limits are considered to have exceptional maximum amounts. This variable combines students who borrowed normal maximum and exceptional maximum amounts into one maximum category.

None
Less than maximum
Maximum

Stafford unsubsidized maximum categories **STAFFCT3**

Indicates whether the student borrowed the maximum amount allowable for undergraduates in Stafford unsubsidized loans during 1999–2000. Classifies the Stafford unsubsidized loan amount (STAFUNSB) into categories based on maximum loan limits for unsubsidized Stafford loans. The normal maximum loan amounts in 1999–2000 were determined by the student's class level and dependency status according to the following table:

Student year	Dependent	Independent
First year	$2,625	$4,000
Second year	$3,500	$4,000
Third to fifth year	$5,500	$5,000

DAS Variable Name

Stafford unsubsidized maximum categories—continued **STAFFCT3**

There are several exceptions to these normal limits. Dependent undergraduates with exceptional need whose parents were unable to qualify for a PLUS loan could qualify for an unsubsidized loan at the independent student maximum. Independent students who were not qualified to receive the maximum (or any) subsidized Stafford loan amount could borrow up to the total Stafford maximum in unsubsidized loans. Students who borrowed beyond the normal limits are considered to have exceptional maximum amounts. This variable combines students who borrowed normal maximum and exceptional maximum amounts into one maximum category. Missing values were excluded from the analysis in this report.

None
Less than maximum
Maximum

Any Stafford loans/Average any Stafford loan amount **STAFFAMT**

Indicates the total amount of Stafford loans (Direct, FFEL, subsidized, and unsubsidized) received during 1999–2000, including loans to attend schools other than the NPSAS sample institution. The percentage with a positive value is the percentage with any Stafford loan aid.

Any Stafford subsidized loans/Average any Stafford subsidized loan amount **STAFSUB**

Indicates the amount of Stafford subsidized FFEL or Direct loans received during 1999–2000, including loans received to attend schools other than the NPSAS sample institution. The percentage with a positive value is the percentage with any Stafford subsidized loan aid.

Any Stafford unsubsidized loans/Average any Stafford unsubsidized loan amount **STAFUNSUB**

Indicates the amount of Stafford unsubsidized FFEL or Direct loans received during 1999–2000, including loans received to attend schools other than the NPSAS sample institution. The percentage with a positive value is the percentage with any Stafford unsubsidized loan aid.

Any state grants/Average any state grant amount **STGTAMT**

Indicates the total amount of state grants, scholarships, and fellowships, including the federal portion of the Leveraging Educational Assistance Partnerships (LEAP) funds to states, received in 1999–2000. The percentage with a positive value is the percentage with any state grant aid.

Any state loans/Average any state loan amount **STLNAMT**

Indicates the total amount of state loans received in 1999–2000. The percentage with a positive value is the percentage with any state loan aid.

DAS Variable Name

Any federal grants/Average any federal grant amount **TFEDGRT**

Indicates the total amount of federal grants received in 1999–2000. Includes primarily Pell Grants (PELLAMT) and Supplemental Educational Opportunity Grants (SEOGAMT), but also Robert Byrd Scholarships and any other federal grants, fellowships, or traineeships received during 1999–2000. Does not include federal veteran's benefits or military aid. The percentage with a positive value is the percentage with any federal grant aid.

Any federal loans/Average any federal loan amount **TFEDLN**

Indicates the total amount of federal loans, excluding PLUS loans to parents, including loans received to attend schools other than the NPSAS sample institution. Includes Perkins (PERKAMT), Stafford (STAFFAMT), and federal loans through the Public Health Service received during 1999–2000. The percentage with a positive value is the percentage with any federal loan aid

Any non-federal grants/Average any federal grant amount **TNFEDGRT**

Indicates the total amount of grants from sources other than the federal government. The sum of state, institutional, and other grants, including private sources and employer aid. The variable is calculated by subtracting total federal grant aid (TFEDGRT) from total grant aid (TOTGRT) . The percentage with a positive value is the percentage with any non-federal grant aid.

Any non- federal loans/Average any federal loan amount **TNFEDLN**

Indicates the total amount of loans from sources other than the federal government. The sum of state, institutional, and other loans, including private and commercial loans. Does not include loans from family or friends. The variable is calculated by subtracting total federal loans (TFEDLN) from total loans (TOTLOAN) . The percentage with a positive value is the percentage with any non-federal loan aid.

Any grants/Average any grant amount **TOTGRT**

Indicates the total amount of all grants and scholarships: federal, state, institutional, and other received during 1999–2000. Equal to the sum of all federal grants (TFEDGRT), state grants (STGTAMT), institutional grants (INGTAMT), and other grants that were not classified as federal, state, or institutional. Includes employer tuition reimbursements and grants from private sources (PRIVAID). The percentage with a positive value is the percentage with any grant aid.

Any loans/Average any loan amount **TOTLOAN**

Indicates the total amount of all loans to students: federal, state, institutional, and private sector received during 1999–2000. Equal to the sum of federal loan amount (TFEDLN), state loan amount (STLNAMT), institutional loan amount (INLNAMT), and other loan amounts, which include private loan amounts (PRIVLOAN). Does not include PLUS loans (PLUSAMT). The percentage with a positive value is the percentage with any loan aid.

DAS Variable Name

Any work-study/Average any work-study amount **TOTWKST**

Indicates the total amount of all work-study awards received during 1999–2000. Equal to the sum of federal work-study amount, state work-study amount, and institution work-study amount Institutions were asked to report the amount actually earned rather than the award amount, which may be higher. Research and teaching assistantships are not included. The percentage with a positive value is the percentage with any work-study aid.

Appendix B—Technical Notes

The 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000)

The 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000) is a comprehensive nationwide study conducted by the Department of Education's National Center for Education Statistics (NCES) to determine how students and their families pay for postsecondary education. It also describes demographic and other characteristics of students enrolled. The study is based on a nationally representative sample of about 50,000 undergraduates enrolled at approximately 1,000 institutions. Students attending all types and levels of institutions are represented in the sample, including public and private institutions, less-than-2-year institutions, 2-year institutions, and 4-year colleges and universities. The study is designed to address the policy questions resulting from the rapid growth of financial aid programs and the succession of changes in financial aid program policies since 1986. The first NPSAS was conducted in 1986–87, then again in 1989–90, 1992–93, 1995–96, and 1999–2000.[16]

Accuracy of Estimates

The statistics in this report are estimates derived from a sample. Two broad categories of error occur in such estimates: sampling and nonsampling errors. Sampling errors occur because observations are made only on samples of students, not on entire populations. Nonsampling errors can be attributed to a number of sources: inability to obtain complete information about all students in all institutions in the sample (some students or institutions refused to participate, or students participated but answered only certain items); ambiguous definitions; differences in interpreting questions; inability or unwillingness to give correct information; mistakes in recording or coding data; and other errors of collecting, processing, sampling, and imputing missing data.

[16] For more information on the NPSAS survey, consult U.S. Department of Education, National Center for Education Statistics, *Methodology Report for the 1999–2000 National Postsecondary Student Aid Study* (NCES 2002–152) (Washington, D.C.: 2002).

Data Analysis System

The estimates presented in this report were produced using the NPSAS:2000 Undergraduate Data Analysis System (DAS). The DAS software makes it possible for users to specify and generate their own tables from the NPSAS:2000 data. With the DAS, users can replicate or expand upon the tables presented in this report. In addition to the table estimates, the DAS calculates proper standard errors[17] and weighted sample sizes for these estimates. For example, table B1 contains standard errors that correspond to table 12, and was generated by the DAS. If the number of valid cases is too low to produce a reliable estimate (less than 30 cases), the DAS prints the message "low-N" instead of the estimate.

In addition to the tables, the DAS will also produce a correlation matrix of selected variables to be used for linear regression models. Included in the output with the correlations matrix are the design effects (DEFTs) for each variable in the matrix. Since statistical procedures generally compute regression coefficients based on simple random sample assumptions, the standard errors must be adjusted with the design effects to take into account the NPSAS:2000 stratified sampling method. (See discussion under "Statistical Procedures" below for the adjustment procedure.)

The DAS can be accessed electronically at nces.ed.gov/DAS. For more information about the NPSAS:2000 Data Analysis System contact:

Aurora D'Amico
NCES Postsecondary Studies Division
1990 K Street, NW
Washington, DC 20006
(202) 502-7334
Internet address: Aurora.d'amico@ed.gov

[17] The NPSAS:2000 sample is not a simple random sample and, therefore, simple random sample techniques for estimating sampling error cannot be applied to these data. The DAS takes into account the complexity of the sampling procedures and calculates standard errors appropriate for such samples. The method for computing sampling errors used by the DAS involves approximating the estimator by the linear terms of a Taylor series expansion. The procedure is typically referred to as the Taylor series method.

Table B1. Standard errors for table 12: Percentage of undergraduates who received financial aid from various sources and average amount received, by unsubsidized Stafford loan borrower status: 1999–2000

	No unsubsidized Stafford		Less than maximum unsubsidized Stafford		Maximum unsubsidized Stafford		All undergraduates	
	Percent received	Average amount received	Percent received	Average amount received	Percent received	Average amount received	Percent received	Average amount received
Loans (excluding PLUS)	0.38	55.94	0.00	68.17	0.00	99.65	0.52	53.86
Federal (excluding PLUS)	0.34	27.67	0.00	50.18	0.00	65.54	0.50	37.94
Stafford (either)	0.34	22.90	0.00	48.00	0.00	64.42	0.50	37.81
Stafford subsidized	0.34	22.90	0.75	37.97	1.77	62.80	0.46	20.95
Stafford unsubsidized	†	†	0.00	24.75	0.00	35.12	0.38	30.84
Perkins	0.12	35.77	0.47	58.59	0.56	82.70	0.12	31.16
Non-federal	0.15	172.73	0.65	245.04	0.88	341.55	0.16	142.67
State	0.07	403.37	0.36	301.74	0.43	502.38	0.08	302.31
Institution	0.05	241.57	0.18	230.55	0.30	629.81	0.06	200.88
Private sources	0.11	196.92	0.58	283.42	0.72	374.24	0.13	160.27
Grants	0.05	60.80	0.18	96.56	0.30	117.32	0.56	56.17
Federal[1]	0.47	18.83	1.07	34.23	1.50	39.23	0.45	15.84
Pell	0.48	17.79	1.06	32.09	1.50	34.22	0.45	15.09
FSEOG	0.19	22.61	0.84	36.82	1.28	80.59	0.23	23.01
Non-federal	0.65	68.21	1.29	150.70	1.54	165.94	0.60	66.75
State	0.62	56.76	0.96	66.54	0.95	97.95	0.55	50.13
Institution	0.24	111.29	0.72	180.26	0.70	181.44	0.42	102.95
Private sources	0.24	63.74	0.72	140.27	0.70	126.34	0.22	55.68
Work-study	0.20	34.39	0.54	70.73	0.57	112.36	0.19	33.15

†Not applicable.

[1]Federal grant aid primarily includes Pell Grants and Federal Supplemental Educational Opportunity Grants (FSEOG), but also includes Robert Byrd Scholarships and any other federal grants, fellowships, or traineeships received during 1999–2000.

NOTE: Stafford unsubsidized borrowers are those undergraduates who received Stafford unsubsidized loans in 1999–2000. Stafford unsubsidized borrowers are classified into maximum and less-than-maximum categories based on the maximum amounts for unsubsidized loans for a given student's class level. Stafford unsubsidized nonborrowers may have received other types of loans.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS: 2000), Data Analysis System.

Statistical Procedures

Differences Between Means

The descriptive comparisons were tested in this report using Student's *t* statistic. Differences between estimates are tested against the probability of a Type I error,[18] or

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

significance level. The significance levels were determined by calculating the Student's *t* values for the differences between each pair of means or proportions and comparing these to published tables of significance levels for two-tailed hypothesis testing.

Student's *t* values may be computed to test the difference between estimates with 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. This formula is valid only for independent estimates. When estimates are not independent, a covariation term must be added to the formula:

$$\frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2 - 2(r)se_1se_2}}$$

where r is the correlation between the two estimates.[19] This formula is used when comparing two percentages from a distribution that adds to 100. If the comparison is between the mean of a subgroup and the mean of the total group, the following formula is used:

$$\frac{E_{sub} - E_{tot}}{\sqrt{se^2{}_{sub} + se^2{}_{tot} - 2\,pse^2{}_{sub}}}$$

where p is the proportion of the total group contained in the subgroup.[20] The estimates, standard errors, and correlations can all be obtained from the DAS.

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 since the magnitude of the *t* statistics is related not only to the observed differences in means or percentages but also to the number of students in the specific categories used for comparison. Hence, a small difference compared across a large number of students would produce a large *t* statistic.

[19] U.S. Department of Education, National Center for Education Statistics, A Note from the Chief Statistician, no. 2, 1993.
[20] Ibid.

A second hazard in reporting statistical tests for each comparison occurs when making multiple comparisons among categories of an independent variable. For example, when making paired comparisons among different levels of income, the probability of a Type I error for these comparisons taken as a group is larger than the probability for a single comparison. When more than one difference between groups of related characteristics or "families" are tested for statistical significance, one must apply a standard that assures a level of significance for all of those comparisons taken together.

Comparisons were made in this report only when $p \leq .05/k$ for a particular pair-wise comparison, where that comparison was one of k tests within a family. This guarantees both that the individual comparison would have $p \leq .05$ and that when k comparisons were made within a family of possible tests, the significance level of the comparisons would sum to $p \leq .05$.[21]

For example, in a comparison between males and females of average aid received only one comparison is possible (males vs. females). In this family, $k = 1$, and the comparison can be evaluated with Student's t test. When students are separated into five racial-ethnic groups and all possible comparisons are made, then k=10 and the significance level of each test must be $p < .05/10$, or .005. The formula for calculating family size (k) is as follows:

$$k = \frac{j(j-1)}{2}$$

where j is the number of categories for the variable being tested. In the case of race-ethnicity, there are five racial-ethnic groups (American Indian/Alaskan Native, Asian/Pacific Islander, black, non-Hispanic, Hispanic, and White, non-Hispanic), so substituting 5 for j in the above equation yields:

$$k = \frac{5(5-1)}{2} = 10$$

[21] The standard that $p \leq .05/k$ for each comparison is more stringent than the criterion that the significance level of the comparisons should sum to $p \leq .05$. For tables showing the t statistic required to ensure that $p \leq .05/k$ for a particular family size and degrees of freedom, see Olive Jean Dunn, "Multiple Comparisons Among Means," *Journal of the American Statistical Association* 56 (1970):52-64.

Adjustment of Means to Control for Background Variation

Tabular results are limited by sample size when attempting to control for additional factors that may account for the variation observed between two variables. For example, when examining the percentages of those who received a Stafford loan, it is impossible to know to what extent the observed variation is due to income differences and to what extent it is due to differences in other factors related to income, such as type of institution attended, parents' education, and so on. However, if a nested table were produced showing income within type of institution attended within parents' education, the cell sizes would be too small to identify the patterns. When the sample size becomes too small to support controls for another level of variations, one must use other methods to take such variations into account.

To overcome this difficulty, multiple linear regression was used to obtain means that were adjusted for covariation among a list of control variables.[22] Adjusted means for subgroups were obtained by regressing the dependent variable on a set of descriptive variables such as gender, race-ethnicity, etc. Substituting ones or zeros for the subgroup characteristic(s) of interest and the mean percentages for the other variables results in an estimate of the adjusted percentage for the specified subgroup, holding all other variables constant.

For example, consider a hypothetical case in which two variables, age and gender, are used to describe an outcome, Y (such as receiving a Stafford loan). The variables age and gender are recoded into a dummy variable representing age, A, and a dummy variable representing gender, G:

Age	*A*
24 years or older	1
Less than 24 years old	0

Gender	*G*
Female	1
Male	0

The following regression equation is then estimated from the correlation matrix output from the DAS:

$$Y = a + \beta_1 A + \beta_2 G$$

[22] For more information about weighted least squares regression, see Michael S. Lewis-Beck, *Applied Regression: An Introduction*, Vol. 22 (Beverly Hills, CA: Sage Publications, Inc., 1980); William D. Berry and Stanley Feldman, *Multiple Regression in Practice*, Vol. 50 (Beverly Hills, CA: Sage Publications, Inc., 1987).

To estimate the adjusted mean for any subgroup evaluated at the mean of all other variables, one substitutes the appropriate values for that subgroup's dummy variables (1 or 0) and the mean for the dummy variable(s) representing all other subgroups. For example, suppose Y represents receiving a Stafford loan, and is being described by age (*A*) and gender (*G*), coded as shown above, and the means for *A* and *G* are:

Variable	Mean
A	0.355
G	0.521

Next, suppose the regression equation results in:

$$\hat{Y} = 0.15 + (0.17)A + (0.01)G$$

To estimate the adjusted value for older students, one substitutes the appropriate parameter estimates and variable values into equation #.

Variable	Parameter	Value
a	0.15	—
A	0.17	1.000
G	0.01	0.521

This results in:

$$\hat{Y} = 0.15 + (0.17)(1) + (0.01)(0.521) = 0.325$$

In this case the adjusted mean for older students is 0.325 (compared to an unadjusted mean of 0.355) and represents the expected outcome for older students who resemble the average student across the other variables (in this example, gender). In other words the adjusted percentage of older students who received a Stafford loan is 32.5 percent (0.325 x 100 for conversion to a percentage).

One can produce a multivariate model using the DAS, since one of the output options of the DAS is a correlation matrix, computed using pairwise missing values and weighted to

account for sampling design and nonresponse.[23] This matrix can be used by most statistical software packages as the input data for least-squares regression. That is the approach used for this report, with an additional adjustment to incorporate the complex sample design into the statistical significance tests of the parameter estimates (described below). For tabular presentation, parameter estimates and standard errors were multiplied by 100 to match the scale used for reporting unadjusted and adjusted percentages.

Most statistical software packages assume simple random sampling when computing standard errors of parameter estimates. Because of the complex sampling design used for NPSAS, this assumption is incorrect. When more precise software is not available, a better approximation of the standard errors is to multiply each standard error by the average design effect associated with the dependent variable (DEFT),[24] where the DEFT is the ratio of the true standard error to the standard error computed under the assumption of simple random sampling. It is calculated by the DAS and is part of the correlation matrix output file.

[23] Although the DAS simplifies the process of making regression models, it also limits the range of models. Analysts who wish to use other than pairwise treatment of missing values to estimate probit/logit models (which are the most appropriate for models with categorical dependent variables) can apply for a restricted data license from NCES. See John H. Aldrich and Forrest D. Nelson "Linear Probability, Logit and Probit Models," *Quantitative Applications in the Social Sciences*, Vol. 45. (Beverly Hills, CA: Sage University Press, 1984).

[24] The adjustment procedure and its limitations are described in C.J. Skinner, D. Hold, and T.M.F. Smith (eds.), A*nalysis of Complex Surveys* (New York: John Wiley & Sons, 1989).