
NATIONAL CENTER FOR EDUCATION STATISTICS

Statistical Analysis Report

November 1999

Postsecondary Education Descriptive Analysis Reports

Students at Private, For-Profit Institutions

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November 1999

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Suggested Citation

U.S. Department of Education. National Center for Education Statistics. *Students at Private, For-Profit Institutions*, NCES 1999-178, by Ronald A. Phipps, Katheryn V. Harrison, and Jamie P. Merisotis. Project Officer: Larry Bobbitt. Washington, D.C.: 1999.

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EXECUTIVE SUMMARY

The 1992 reauthorization of the Higher Education Act (HEA) of 1965 contained provisions that mandated institutions participating in Title IV student assistance programs to meet significantly more rigorous eligibility conditions than were previously required. These provisions were added in an attempt to reduce fraud and abuse in the student aid programs. Since then, additional legislative and regulatory oversight mechanisms have been implemented. For-profit institutions—often called proprietary or private career schools—were an intended focus of these changes.

For-profit institutions have been influenced by these changes more than any other segment of the postsecondary education community. This sector's share of federal Stafford subsidized loan dollars awarded has declined from a peak of 28 percent in 1988-89 to 8 percent in 1995-96.¹ Between Fiscal Years 1992 and 1994 the number of for-profit institutions participating in the Federal Family Education Loan (FFEL) program decreased by 14 percent. Furthermore the share of federal Pell Grants awarded to students attending for-profit institutions fell from 19

percent in 1992-93 to 13 percent in 1995-96.² In light of these changes, it is important to explore how students at private, for-profit institutions may have been affected.

Except as noted, all findings reported below apply to students at less-than-4-year institutions. Other less-than-4-year institutions are defined as public and private, not-for-profit institutions. Comparisons are made between the years 1992-93 and 1995-96.

Profile of Students

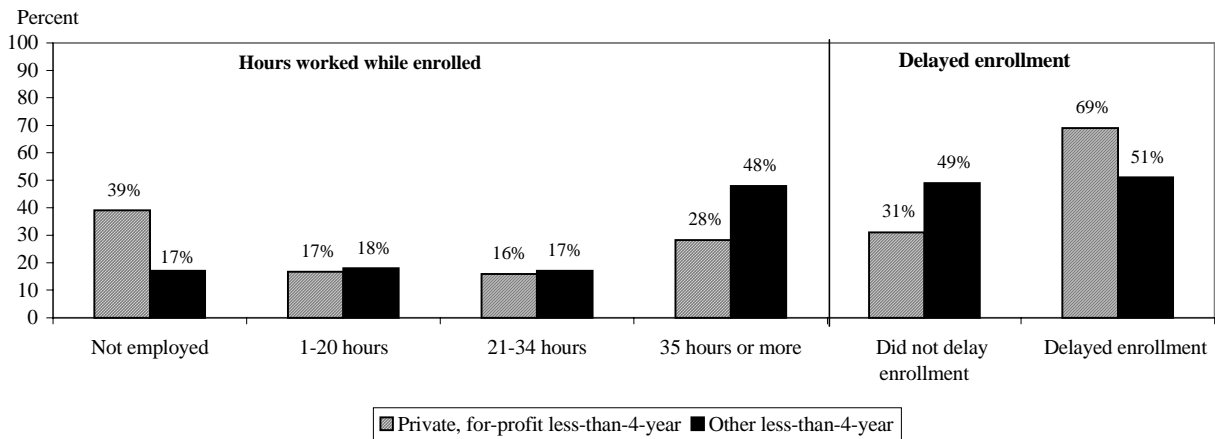
Students attending less-than-4-year, for-profit institutions in 1995-96 primarily were white (58 percent), age 23 or younger (46 percent), and female (67 percent). They were also independent (71 percent), delayed their enrollment for a year or more after high school (69 percent), attended full-time for at least part of the academic year (80 percent), and worked while enrolled (61 percent). (See figure A.)

Compared to students at other less-than-4-year institutions in 1995-96, these students were more likely to be female,

¹The College Board, *Trends in Student Aid* (Washington, DC: The College Board, 1998).

²*Ibid.*

Figure A—Percentage distribution of undergraduates enrolled in less-than-4-year institutions according to selected characteristics, by control of institution: 1995-96



NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

black, single parents, independent, and in the lowest income quartile (for both dependent and independent students).

With respect to enrollment characteristics, students at less-than-4-year, for-profit institutions in 1995-96 were more likely to have delayed their enrollment for a year or more after high school, have attended full-time for at least part of the academic year, and have not worked while enrolled compared to students at other less-than-4-year institutions.

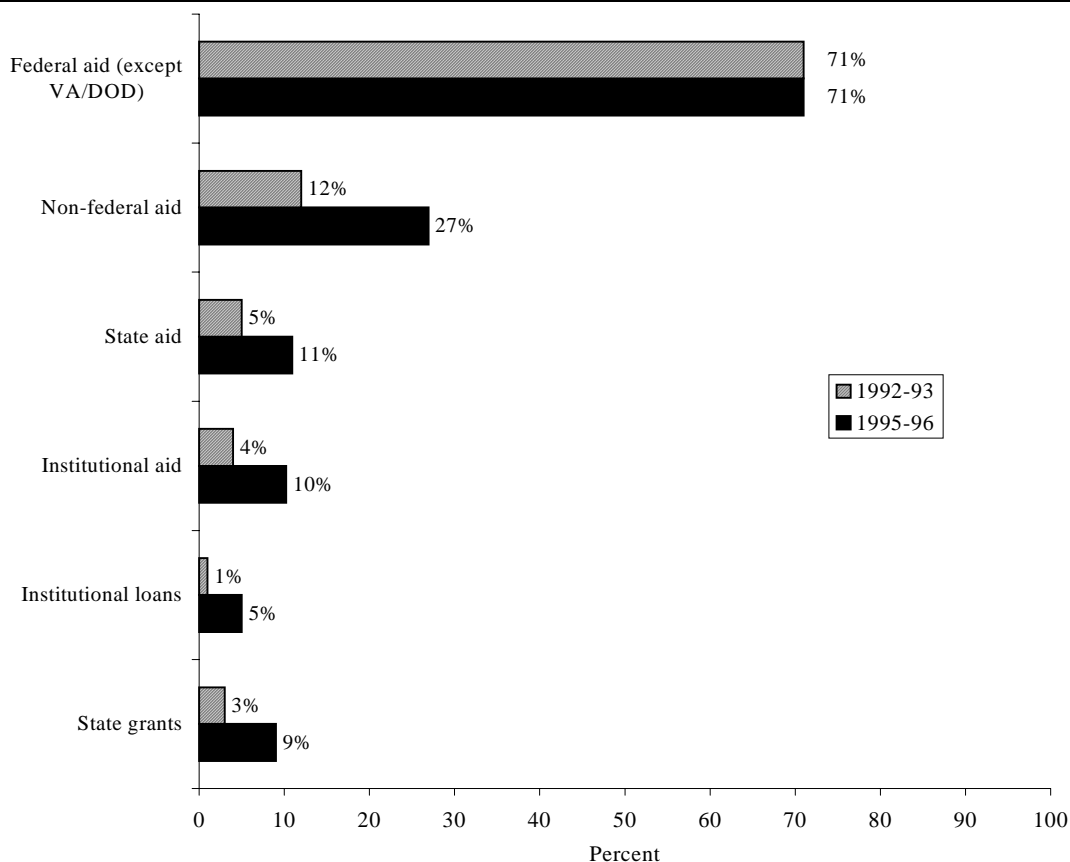
Between 1992-93 and 1995-96, there was little change in the demographic and enrollment characteristics of students at less-

than-4-year, for-profit institutions. The same is true for their counterparts at other less-than-4-year institutions.

Paying for College

In 1995-96, students at less-than-4-year, for-profit institutions were more likely than students at other less-than-4-year institutions to have received any financial aid (78 percent compared to 36 percent), a loan from any source (56 percent compared to 9 percent), and a grant from any source (56 percent compared to 29 percent).

Figure B—Percentage of undergraduates enrolled in less-than-4-year, for-profit institutions who received financial aid from various sources: 1992-93 and 1995-96



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

The federal government was the most extensive provider of financial aid to students at less-than-4-year, for-profit institutions in 1995-96 (figure B). Seventy-one percent received federal aid, 11 percent state aid, 10 percent institutional aid, and 2 percent employer aid. Sixty-six percent of aid recipients were awarded only federal aid.

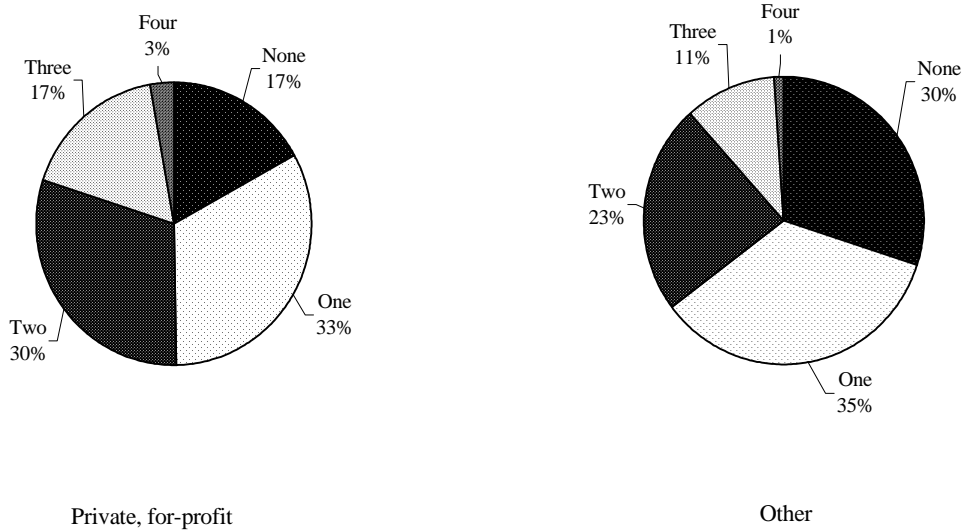
Between 1992-93 and 1995-96, changes occurred in how students at less-than-4-year, for-profit institutions financed

their educations. While the federal government remained the most extensive provider of student financial aid, the percentage of students receiving non-federal aid rose from 12 percent to 27 percent.

Profile of Borrowers

Borrowers at less-than-4-year, for-profit institutions were more likely than non-borrowers to be age 23 or younger (50 percent compared to 41 percent). They were

Figure C—Percentage distribution of undergraduate borrowers enrolled in less-than-4-year institutions according to number of loan default risk factors, by control of institution: 1995-96



NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1992-93 and 1995-96 National Postsecondary Student Aid Study (NPSAS:93 and NPSAS:96), Data Analysis System.

less likely to be in the highest income quartile. Nine percent of both dependent and independent students were in the highest income quartile, compared to 28 percent and 16 percent, respectively, of non-borrowers.

Research on loan default identifies at least four risk factors associated with higher default levels.³ These factors include students who: (1) are black; (2) are independent; (3) are from low-income families; and

(4) do not have traditional high school diplomas. Of borrowers at less-than-4-year, for-profit institutions in 1995-96, 17 percent had none of these risk factors, 33 percent had one, 30 percent had two, 17 percent had three, and 3 percent had all four risk factors (figure C).

These students were more likely to have had a greater number of loan default risk factors than borrowers at other less-than-4-year institutions. Fifty percent of borrowers at less-than-4-year, for-profit institutions had two or more default risk factors, compared to 35 percent of borrowers at

³Mark Dynarski, "Who Defaults on Student Loans? Findings from the National Postsecondary Student Aid Study." *Economics of Education Review* 13 (1994): 55-68, and Mathtech, Inc., "Methodology for Adjusting Cohort Default Rates" (Princeton, NJ: 1995).

other less-than-4-year institutions. The percentage of students with no risk factors was 17 percent and 30 percent, respectively.

There were no significant differences between 1992-93 and 1995-96 in the number of loan default risk factors for either students at less-than-4-year, for-profit institutions or their counterparts at other institutions.

4-Year, For-Profit Institutions

Over the past several years, the prominence of 4-year, for-profit postsecondary institutions that offer programs leading to a baccalaureate degree and beyond has increased.

In 1995-96, undergraduate students at 4-year, for-profit institutions were different

than those students at less-than-4-year, for-profit institutions. They were less likely to be female (43 percent compared to 67 percent), have not worked while enrolled (15 percent compared to 39 percent), and have delayed their enrollment for a year or more after high school (53 percent compared to 69 percent).

Differences also were evident with regard to financing behavior. The average amounts of federal loans and grants received by students at 4-year, for-profit institutions were higher than those for students at less-than-4-year, for-profit institutions. They also were more likely to receive employer aid. However, their average state grant was likely to be lower.

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FOREWORD

This report examines the financing patterns of students at private, for-profit institutions, and profiles changes in the demographic and enrollment characteristics of these students, including receipt of financial aid, between 1992-93 and 1995-96. There are three levels of private, for-profit institutions: less-than-2-year, 2-year, and 4-year institutions. This analysis focuses on students attending less-than-4-year private, for-profit institutions—a combination of 2-year and less-than-2-year, for-profit institutions. Due to high standard errors and low sample sizes, it is difficult to analyze any changes between 1992-93 and 1995-96 in the 4-year sector. However, because of the growing prominence of the 4-year private, for-profit sector, an essay on students attending these institutions also is provided.

The estimates in this report were produced using the 1992-93 and 1995-96 National Post-secondary Student Aid Study (NPSAS:93 and NPSAS:96), which provide information regarding the distribution of undergraduates by type (level and control) of institution attended, student characteristics, enrollment patterns, and receipt of financial aid. Students at other (public and private, not-for-profit) less-than-4-year institutions were used as a comparison group.

ACKNOWLEDGMENTS

The authors wish to thank all those who contributed to this report. At The Institute for Higher Education Policy, Colleen O'Brien reviewed the analysis at various stages and provided excellent editing assistance. Thanks also to Mark Harvey for preparing tables and graphics and assembling the final report, and Alisa Federico Cunningham for analytical support and feedback. We would like to thank several of our partners at MPR Associates, including Laura Horn for outstanding project management, Lutz Berkner for analytical advice and direction, Vicky Dinger for variable construction, and Helen Jang for overall project support. In addition, we would like to thank the reviewers of this report for their insightful comments. National Center for Education Statistics reviewers included Steve Broughman, Shelly Burns, and Bruce Taylor. Thanks also to Dan Goldenberg of the Department of Education.

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INTRODUCTION

The 1992 reauthorization of the Higher Education Act (HEA) of 1965—the legislation that contains provisions for federal financial aid—featured amendments that required institutions participating in Title IV student assistance programs to meet significantly more stringent eligibility conditions than previously were required. These provisions were added in an attempt to reduce fraud and abuse in the student aid programs. Since then, additional legislative and regulatory oversight mechanisms have been implemented. For-profit institutions—often called proprietary or private career schools—were an intended focus of these changes: prior to the federal changes, default rates at these institutions had been among the highest, a troubling fact given the large numbers of low-income students enrolled in these schools.¹

In light of these changes to the Higher Education Act, it is important to explore how students at private, for-profit institutions have been affected. Although the percentage of undergraduate students attending private, for-profit institutions is relatively small, their participation in the federal financial aid programs is important to federal financial aid policy. What are the demographic and enrollment characteristics of students at for-profit institutions? Has the enrolled student population at these institutions changed? Are these students' attendance patterns different than those of other students? Have the ways in which they pay for their education been altered? What has happened to student borrowing at for-profit institutions relative to students in other sectors?

BACKGROUND

For-profit institutions differ from traditional higher education institutions in several important ways. Many private, for-profit institutions offer programs that are less than a year in length. Many have programs that are fundamentally vocational in nature, and they generally do not grant degrees. As described by Lee and Merisotis,² one of the most important characteristics of for-profit institutions is the goal of realizing a profit for private owners. Decision-making at proprietary schools is in the hands of the owners, and teaching positions are less permanent be-

¹John B. Lee and Jamie Merisotis, *Proprietary Schools: Programs, Policies, and Prospects*, ASHE-ERIC Higher Education Report No. 5 (Washington, DC: The George Washington University, 1990).

²*Ibid.*

cause instructors do not have tenure. Moreover, these institutions are less likely to have a board of trustees. For-profit institutions tend to be more sensitive to market forces and often shift programs quickly to meet the needs of employers and the interests of students. They offer literally hundreds of programs, the majority of which are in office technology and personal service. The technical fields include auto mechanics and computer-related programs, but programs range from broadcast technology to architectural engineering.³

One of the major changes implemented in the 1992 reauthorization addressed default rates under the Federal Family Education Loan (FFEL) program. The threshold percentage for institutional eligibility (based on default rates for three consecutive years) was reduced from 30 percent in Fiscal Year (FY) 1993 to 25 percent thereafter. However, there were several other amendments related to program participation and program review that had a direct effect upon the ability of private, for-profit institutions to operate. Some of the changes are as follows.

- Private, for-profit schools deriving more than 85 percent of their revenues from Title IV funds were no longer eligible to participate in the federal aid programs.
- Institutions that offered courses of study of less than 600 hours in length were ineligible for Title IV programs, unless the institution had a graduation rate and job placement rate of 70 percent or higher.
- The Secretary of Education was given the responsibility to determine whether an institution met financial responsibility standards and criteria with respect to operating losses, net worth, asset-to-liability ratios, and operating fund deficits based on an audited or certified financial statement.
- The Secretary also was given the discretion to assign priority for program reviews to institutions under a variety of criteria including: (1) a default rate in excess of 25 percent, or that placed the institution in the highest 25 percent of institutions; (2) a default dollar volume in the highest 25 percent of institutions; (3) a significant fluctuation in loan volume or grant awards; and (4) a high annual drop-out rate.⁴

Private, for-profit institutions have been influenced by these changes more than any other segment of the postsecondary education community. The share of Pell Grants awarded to students attending private, for-profit institutions fell from 19 percent in 1992-93 to 13 percent in 1995-96. This sector's share of Stafford subsidized loan dollars awarded also has declined from

³Ibid, pp.15-16, 20.

⁴In addition to these amendments, a system of state monitoring was established under the State Postsecondary Review Program. However, a variety of higher education institutions protested the action and the 104th Congress moved first to eliminate funding for the State Postsecondary Review Entities (SPREs), and then to strike the provision from the Act. Following this Congressional action, the U.S. Department of Education suspended enforcement of the provision. See U.S. General Accounting Office, *Student Loan Defaults: Department of Education Limitations in Sanctioning Problem Schools*, GAO/HEHS-95-99 (Washington, DC: U.S. Government Printing Office, June, 1995).

a peak of 28 percent in 1988-89 to 10 percent in 1992-93 to 8 percent in 1995-96.⁵ Between FY 1992 and FY 1994 the number of private, for-profit institutions participating in the FFEL program decreased by 14 percent.⁶ These trends provide striking evidence that these policy and program changes affected the private, for-profit sector of postsecondary education.

DATA AND DEFINITIONS

This report uses data collected by the National Center for Education Statistics (NCES) to examine in more detail the effects of legislative changes on the private, for-profit sector beyond fluctuations in their share of federal aid dollars. The 1995-96 National Postsecondary Student Aid Study (NPSAS:96) provides information regarding the distribution of students by type (level and control) of institution attended, student demographic characteristics, enrollment patterns, and receipt of financial aid. The 1992-93 National Postsecondary Student Aid Study (NPSAS:93) provides similar information. The use of these two data sets permits the analysis of student financing patterns in the context of changes made to federal financial aid programs in the 1992 reauthorization of the Higher Education Act.

In particular, these data can be used to illustrate the types of students that are borrowing through the federal Title IV programs⁷ while attending private, for-profit institutions. This is an important issue given the concerns about high default rates at these institutions relative to students in other sectors. Previous research on loan defaults suggests that there are specific student characteristics associated with a higher probability of default.⁸ Comparing students who borrowed in 1992-93 with those who borrowed in 1995-96 can help to determine if there has been a change in the proportion of students with risk characteristics who borrow while attending private, for-profit institutions.

This report also references a loan default index, which identifies specific demographic and enrollment characteristics associated with higher default levels in previous studies. They include

⁵The College Board, *Trends in Student Aid* (Washington, DC: The College Board, 1998).

⁶U.S. Department of Education. *Federal Student Loan Programs Data Book FY94-FY96* (Washington, DC: U.S. Department of Education, 1997).

⁷Because the analysis in this report is focused on student financing behavior, it includes all Title IV student aid programs except for the Parent Loans for Undergraduate Students (PLUS) program.

⁸Mark Dynarski, "Who Defaults on Student Loans? Findings from the National Postsecondary Student Aid Study." *Economics of Education Review* 13 (1994): 55-68, and Mathtech, Inc., "Methodology for Adjusting Cohort Default Rates" (Princeton, NJ: 1995).

students who: (1) are black; (2) are independent; (3) are from low-income families; and (4) do not have traditional high school diplomas.⁹

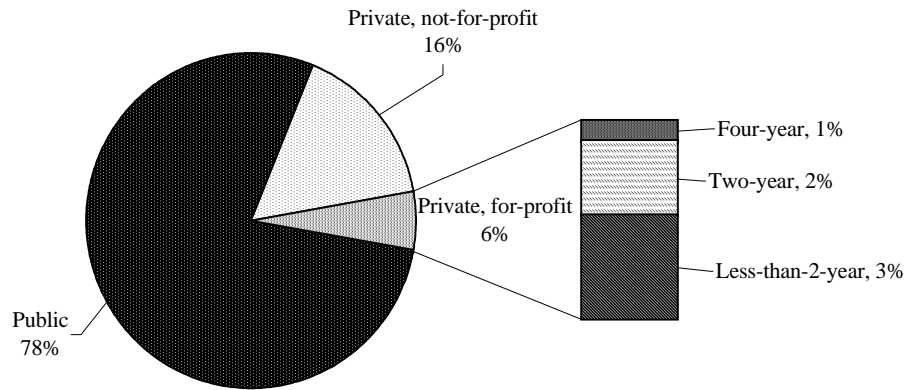
There are three levels of private, for-profit institutions: less-than-2-year, 2-year, and 4-year institutions. The analysis in this report focuses on those students attending less-than-4-year, for-profit institutions—a combination of 2-year, for-profit institutions and less-than-2-year, for-profit institutions. Due to high standard errors and low sample sizes, it is difficult to analyze any changes between 1992-93 and 1995-96 in the 4-year, for-profit sector. However, because of the growing prominence of certain 4-year private, for-profit institutions, an essay on students attending these institutions also is provided.

⁹Ibid.

PROFILE OF STUDENTS ATTENDING LESS-THAN-4-YEAR, FOR-PROFIT INSTITUTIONS

The demographic and enrollment characteristics of students attending less-than-4-year, for-profit institutions help to provide the context for how they pay for their education. The following discussion focuses on: (1) the characteristics of students attending less-than-4-year, for-profit institutions in 1995-96; (2) a comparison of these students with students at less-than-4-year public and private, not-for-profit institutions in 1995-96; and (3) an analysis of the changes in the characteristics of students from 1992-93 to 1995-96.

Figure 1—Percentage distribution of undergraduates by level and control of institution: 1995-96



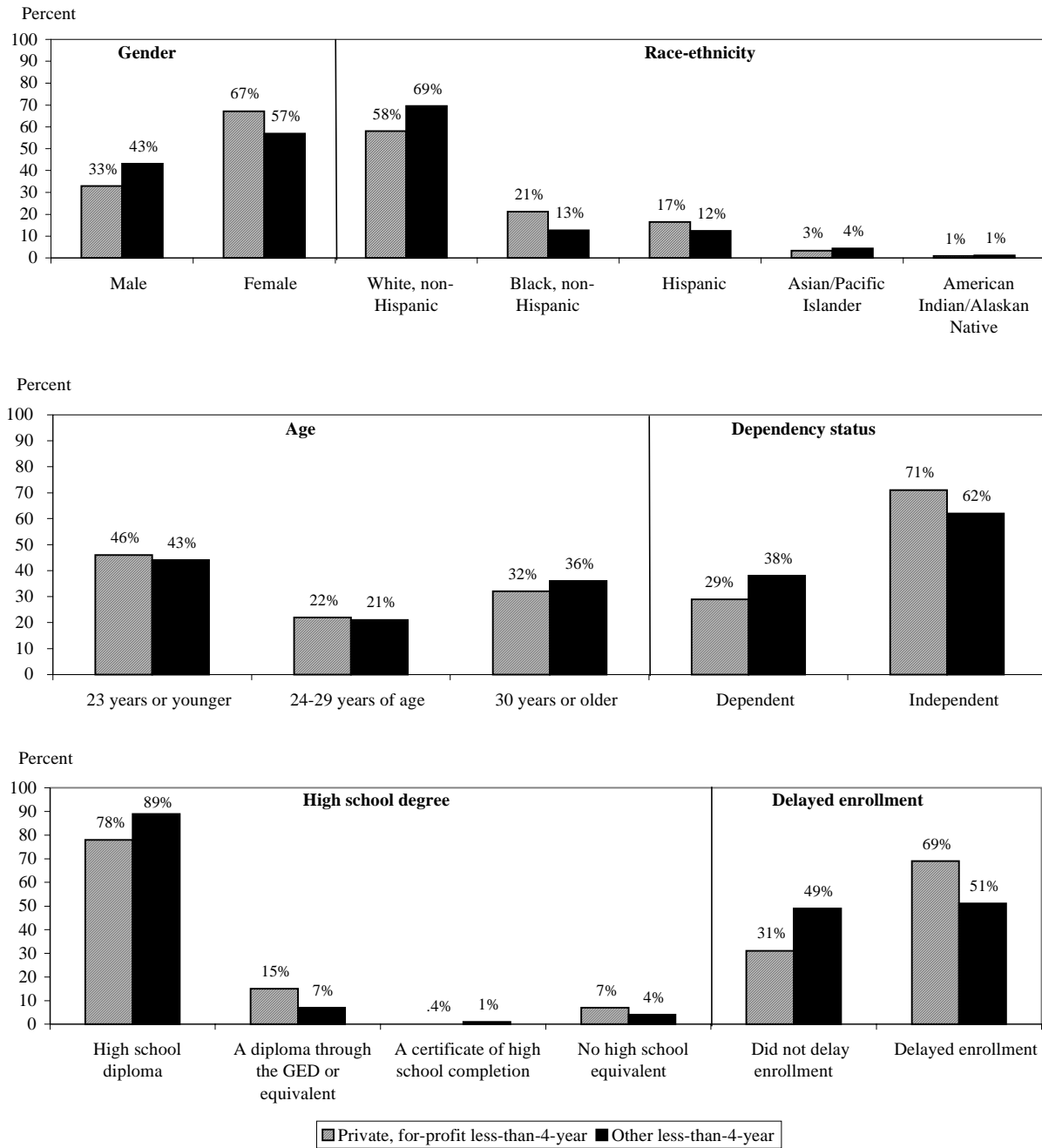
NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

CHARACTERISTICS OF STUDENTS ATTENDING LESS-THAN-4-YEAR, FOR-PROFIT INSTITUTIONS IN 1995-96

Six percent of all students in postsecondary education in 1995-96 attended a private, for-profit institution, with 5 percent at less-than-4-year, for-profit institutions. A profile of these students shows that they were likely to be white, age 23 or younger, independent, and female (figure 2 and table 1). Moreover, these students were likely to have delayed their enrollment by a year or more after high school, and to have attended full-time for at least part of the academic year. Sixty-one percent of students attending less-than-4-year private, for-profit institutions worked while enrolled. Fifty-eight percent of students attending less-than-4-year private, for-profit institutions were white, 46 percent were age 23 or younger, 71 percent were independent, 45 percent had children, and 67 percent were female. Sixty-nine percent delayed their enrollment in postsecondary education by a year or more after high school and 80 percent attended full-time for at least part of the academic year.

Figure 2—Percentage distribution of undergraduates enrolled in less-than-4-year institutions according to selected characteristics, by level and control of institution: 1995-96



NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

COMPARISON TO STUDENTS AT OTHER LESS-THAN-4-YEAR INSTITUTIONS IN 1995-96

In 1995-96, the characteristics of students at less-than-4-year, for-profit institutions were considerably different than those of students attending other less-than-4-year institutions. Students at less-than-4-year, for-profit institutions were more likely than their counterparts at other less-than-4-year institutions to be female, black, single parents, independent, and in the lowest income quartile for both dependent and independent students. In addition, students at less-than-4-year, for-profit institutions were more likely to delay their enrollment for a year or more after high school, attend full-time for at least part of the academic year, and not work while enrolled.

Table 1—Percentage distribution of undergraduates enrolled in less-than-4-year institutions according to selected characteristics, by level and control of institution: 1995-96

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Total	100.0	100.0	100.0	100.0	100.0	100.0
Gender						
Male	27.5	40.3	32.9	43.1	43.2	42.2
Female	72.5	59.7	67.1	56.9	56.8	57.8
Age						
23 years or younger	43.7	48.9	45.9	43.9	43.5	43.7
24-29 years of age	20.9	23.2	21.8	20.8	20.8	20.9
30 years or older	35.4	28.0	32.3	35.3	35.8	35.5
Race-ethnicity						
White, non-Hispanic	54.6	62.9	58.1	69.6	69.4	68.4
Black, non-Hispanic	22.9	18.8	21.2	12.4	12.6	13.4
Hispanic	18.3	14.1	16.5	12.5	12.4	12.7
Asian/Pacific Islander	3.1	3.7	3.4	4.4	4.4	4.3
American Indian/Alaskan Native	1.1	0.5	0.9	1.1	1.1	1.1
Marital status						
Not married	67.9	72.4	69.8	71.6	71.3	71.1
Married	26.0	22.5	24.5	26.0	26.3	26.1
Separated	6.2	5.1	5.7	2.5	2.5	2.8
Single parent status						
Not a single parent	74.3	80.9	77.1	85.3	85.2	84.4
Single parent	25.7	19.1	23.0	14.7	14.8	15.6
Disability status						
Student has a disability	9.5	5.5	7.8	6.0	6.1	6.2
Student does not have a disability	90.6	94.5	92.2	94.0	93.9	93.8

Table 1—Percentage distribution of undergraduates enrolled in less-than-4-year institutions according to selected characteristics, by level and control of institution: 1995-96—Continued

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Dependency status						
Dependent	25.1	34.9	29.2	38.4	37.9	37.1
Independent	74.9	65.1	70.8	61.6	62.1	62.9
Independent, no dependents	26.4	25.7	26.1	30.4	30.5	30.1
Independent, with dependents	48.5	39.4	44.7	31.2	31.6	32.9
Independent student total income, quartile						
Lower quartile	42.6	37.0	40.4	20.8	21.2	23.2
Middle quartiles	46.2	49.7	47.6	54.1	53.9	53.2
Upper quartile	11.3	13.2	12.0	25.2	24.9	23.6
Parents' total income, quartile (dependent students)						
Lower quartile	45.3	39.5	42.4	27.2	27.6	28.7
Middle quartiles	36.4	44.3	40.4	53.3	53.0	52.1
Upper quartile	18.3	16.2	17.2	19.5	19.4	19.2
Parents' highest education						
Less than high school	16.8	10.1	13.9	11.2	11.3	11.5
High school graduate	51.0	51.1	51.0	40.1	10.5	41.4
Some college, including AA	15.9	17.3	16.5	20.5	20.3	20.0
Bachelor's degree	11.0	13.7	12.2	17.5	17.4	17.0
Advanced degree	5.3	7.8	6.4	10.7	10.5	10.1
High school degree or equivalent						
High school diploma	74.1	83.0	77.8	89.2	89.0	87.9
A diploma through the GED or equivalent	15.4	13.6	14.7	6.7	6.9	7.6
A certificate of high school completion	0.6	0.2	0.4	0.6	0.6	0.6
No high school equivalent	9.9	3.2	7.1	3.6	3.6	3.9
Delayed enrollment						
Did not delay enrollment	25.6	39.7	31.2	49.5	49.0	47.2
Delayed enrollment	74.4	60.3	68.9	50.5	51.0	52.8
Attendance status						
Full-time	87.2	70.7	80.3	29.1	31.2	35.7
Part-time	12.8	29.3	19.7	70.9	68.8	64.3
Average hours worked per week while enrolled						
Not employed	45.9	29.8	39.1	16.4	17.2	19.2
1-20 hours	15.8	18.1	16.7	17.5	17.6	17.5
21-34 hours	14.0	18.6	15.9	16.9	17.0	16.9
35 hours or more	24.4	33.5	28.3	49.2	48.3	46.5

*Total refers to public and private, not-for-profit institutions.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

Sixty-seven percent of students at less-than-4-year, for-profit institutions were female, compared to 57 percent at other less-than-4-year institutions. Black students comprised a greater percentage of students at less-than-4-year, for-profit institutions, 21 percent compared to 13 percent at other less-than-4-year institutions. There was no statistically significant difference in Hispanic students, 17 percent and 12 percent, respectively. Twenty-three percent of students at less-than-4-year, for-profit institutions were single parents, compared to 15 percent at other less-than-4-year institutions. Seventy-one percent were independent (compared to 62 percent), and 45 percent were independent with children (compared to 32 percent). Fifteen percent of students at less-than-4-year, for-profit institutions had received a General Educational Development certificate (GED), compared to 7 percent of students at other less-than-4-year institutions. Forty percent of independent and 42 percent of dependent students at less-than-4-year, for-profit institutions were in the lowest income quartile, compared to 21 percent of independent and 28 percent of dependent students at other less-than-4-year institutions.

In addition, 69 percent of students attending less-than-4-year, for-profit institutions had delayed their enrollment by a year or more after high school, compared to 51 percent of students at other less-than-4-year institutions. Eighty percent attended full-time for at least part of the academic year (compared to 31 percent), and 39 percent were not employed while enrolled, in contrast to 17 percent of students at other less-than-4-year institutions.

CHANGES IN STUDENT CHARACTERISTICS BETWEEN 1992-93 AND 1995-96

There was little change in the demographic and enrollment characteristics of students at less-than-4-year, for-profit institutions between 1992-93 and 1995-96. The percentage of students who delayed their enrollment by a year or more after high school increased from 63 percent¹⁰ to 69 percent, and the percentage of students who had obtained a GED increased from 11 percent to 15 percent.

¹⁰The actual percentage is 63.48 percent, which rounds to 63.5 percent as shown in table 2, and to 63 percent as it appears in the text.

Sixty-six percent of students who attended less-than-4-year, for-profit institutions in 1992-93 and 67 percent in 1995-96 were female. The percentages of white students were not significantly different (from 49 percent to 58 percent), nor were the percentages of black students (27 compared to 21 percent) and Hispanic students (18 percent in 1992-93 and 17 percent in 1995-96). There was no statistical difference in the percentages of independent students (69 compared to 71 percent), and the percentage of independent students in the lowest income quartile remained comparable, 46 percent compared to 40 percent.

Table 2—Percentage distribution of undergraduates enrolled in less-than-4-year institutions according to selected characteristics, by level and control of institution: 1992-93

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Total	100.0	100.0	100.0	100.0	100.0	100.0
Gender						
Male	25.9	52.5	34.3	44.0	43.7	42.6
Female	74.1	47.5	65.7	56.0	56.3	57.5
Age						
23 years or younger	48.3	56.1	50.8	43.6	43.3	44.2
24-29 years of age	21.2	19.8	20.7	19.5	19.5	19.7
30 years or older	30.6	24.1	28.5	36.9	37.2	36.1
Race-ethnicity						
White, non-Hispanic	47.0	53.6	49.1	73.9	73.7	70.9
Black, non-Hispanic	29.7	21.2	27.1	10.3	10.4	12.3
Hispanic	17.7	19.3	18.2	9.4	9.4	10.4
Asian/Pacific Islander	4.3	4.4	4.3	4.6	4.4	4.4
American Indian/Alaskan Native	1.3	1.5	1.4	1.9	2.0	2.0
Marital status						
Not married	68.1	73.9	70.0	64.9	64.8	65.4
Married	25.7	22.4	24.6	33.0	33.0	31.9
Separated	6.2	3.7	5.4	2.1	2.2	2.6
Single parent status						
Not a single parent	73.2	85.5	77.2	91.4	91.1	89.4
Single parent	26.8	14.5	22.8	8.6	8.9	10.6
Disability status						
Student has a disability	8.7	6.8	8.1	7.9	8.0	8.0
Student does not have a disability	91.3	93.2	91.9	92.1	92.0	92.0

Table 2—Percentage distribution of undergraduates enrolled in less-than-4-year institutions according to selected characteristics, by level and control of institution: 1992-93—Continued

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Dependency status						
Dependent	27.0	40.2	31.3	37.8	37.5	36.7
Independent	73.0	59.8	68.7	62.2	62.6	63.3
Independent, no dependents	28.5	33.0	29.9	34.3	34.3	33.7
Independent, with dependents	44.5	26.8	38.8	28.0	28.3	29.6
Independent student total income, percentile rank						
Lower quartile	49.1	38.0	46.0	18.9	19.5	23.0
Middle quartiles	40.5	52.7	43.9	51.5	51.5	50.5
Upper quartile	10.5	9.3	10.2	29.6	29.0	26.5
Parents' total income, percentile (dependent students)						
Lower quartile	49.0	41.9	46.0	26.5	26.5	28.6
Middle quartiles	44.6	49.4	46.6	58.4	58.7	57.4
Upper quartile	6.4	8.7	7.3	15.1	14.8	14.0
Parents' highest education						
Less than high school	22.2	13.6	19.3	13.0	13.4	14.0
High school graduate	42.4	48.0	44.3	38.0	38.2	38.8
Some college, including AA	18.0	18.0	18.0	21.3	21.1	20.8
Bachelor's degree	10.5	12.7	11.2	17.0	16.8	16.3
Advanced degree	6.9	7.7	7.2	10.7	10.6	10.2
High school degree or equivalent						
High school diploma	71.7	88.9	77.2	91.7	91.3	89.6
A diploma through the GED or equivalent	11.9	7.9	10.6	5.4	5.7	6.3
A certificate of high school completion	0.4	0.5	0.4	0.8	0.8	0.7
No high school equivalent	16.0	2.7	11.8	2.2	2.3	3.4
Delayed enrollment						
Did not delay enrollment	34.1	40.8	36.5	48.2	47.6	46.4
Delayed enrollment	65.9	59.2	63.5	51.8	52.4	53.6
Attendance status						
Full-time	80.4	78.3	79.8	23.9	25.2	31.8
Part-time	19.6	21.7	20.2	76.1	74.9	68.2
Average hours worked per week while enrolled						
Not employed	55.8	32.2	48.1	21.6	22.1	24.7
1-20 hours	13.9	18.7	15.5	17.8	17.7	17.5
21-34 hours	11.7	15.6	13.0	15.3	15.1	14.9
35 hours or more	18.6	33.5	23.5	45.4	45.1	42.9

*Total refers to public and private, not-for-profit institutions.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1992-93 National Postsecondary Student Aid Study (NPSAS:93), Data Analysis System.

There were very few changes in the demographic and enrollment characteristics of students at other less-than-4-year institutions between 1992-93 and 1995-96. Demographically, the percentage of these students who were married dropped from 33 percent in 1992-93 to 26 percent in 1995-96, and the percentage of single parents grew from 9 percent to 15 percent.

In terms of enrollment characteristics, a greater percentage of students at other less-than-4-year institutions attended full-time for at least part of the academic year, increasing from 25 percent in 1992-93 to 31 percent in 1995-96. At the same time, a smaller percentage of students did not work while enrolled, down from 22 percent in 1992-93 to 17 percent in 1995-96.

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PAYING FOR COLLEGE

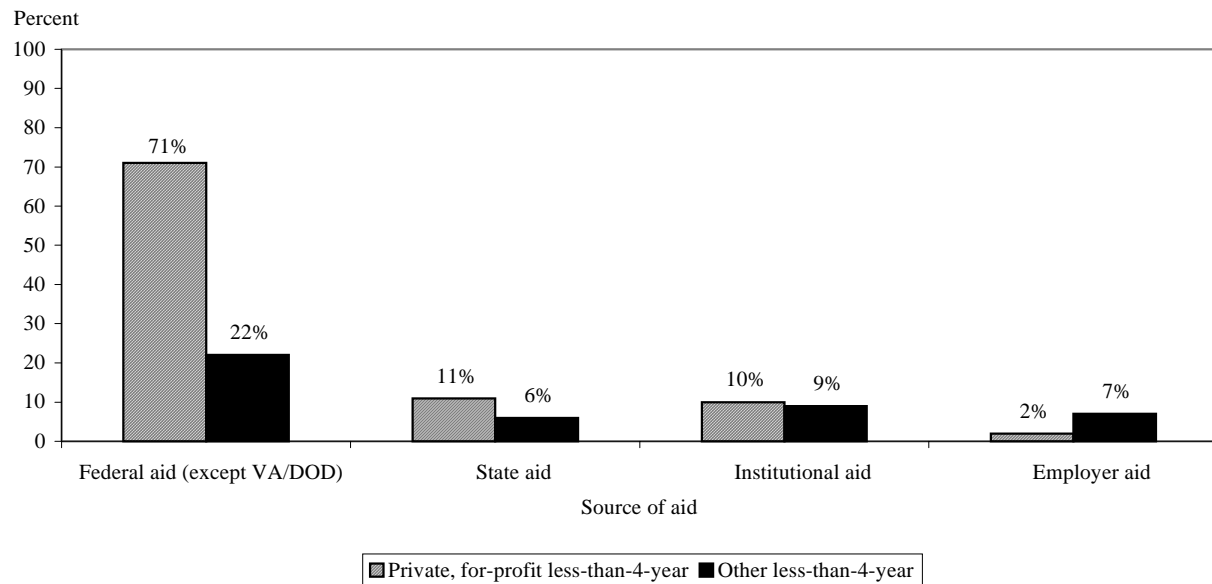
This section examines how students at less-than-4-year, for-profit institutions financed their education in 1995-96. In addition, their financing patterns are compared to students attending less-than-4-year public and private, not-for-profit institutions.

FINANCING BEHAVIOR OF STUDENTS AT LESS-THAN-4-YEAR, FOR-PROFIT INSTITUTIONS IN 1995-96

In 1995-96, 78 percent of the students at less-than-4-year, for-profit institutions received at least some financial aid (table 3). The federal government was the major source of financial aid. Seventy-one percent of students received federal aid, while 11 percent received state aid, 10 percent received institutional aid, and 2 percent received aid from employers (figure 3). The average amount of federal aid (excluding veterans' aid or military benefits)¹¹ was \$4,400, average state aid was \$2,700, average institutional aid was \$1,500, and the average employer aid amount was \$3,700 (table 4).

¹¹Veterans' aid and military benefits are subsequently referred to in the text and tables as VA (Veterans Affairs)/DOD (Department of Defense).

Figure 3—Percentage distribution of undergraduates enrolled in less-than-4-year institutions who received financial aid from various sources, by level and control of institution: 1995-96



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

The federal student loan programs were an important resource for students at less-than-4-year, for-profit institutions. Fifty-four percent of students at less-than-4-year, for-profit institutions received a federal Stafford loan, 50 percent received subsidized Stafford loans, 32 percent received unsubsidized Stafford loans,¹² and 3 percent received federal Perkins loans (table 3). Five percent of students received institutional loans and less than 1 percent received state loans or loans from other sources. The average federal loan amounts in 1995-96 were as follows:¹³ Stafford (all)—\$3,900; Stafford subsidized—\$2,300; Stafford unsubsidized—\$2,900; and Perkins—\$1,400 (table 4). The sample sizes were too small for reliable estimates of average amounts of state and other loans; however, the average institutional loan amount was \$1,900.

¹²Students can receive both subsidized and unsubsidized federal Stafford loans during the same year.

¹³This average excludes federal Parent Loans for Undergraduate Students (PLUS), since only parents are eligible for PLUS loans and the focus of this analysis is how *students* paid for their education.

Table 3—Percentage of undergraduates enrolled in less-than-4-year institutions who received financial aid from various sources, by level and control of institution: 1995-96

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Total aid	77.7	78.6	78.1	35.2	36.0	39.9
Federal aid (except VA/DOD)	70.1	72.7	71.2	21.0	21.7	26.3
Non-federal aid	26.1	28.1	26.9	22.9	23.3	23.7
State aid	7.7	15.5	10.9	6.1	6.5	6.9
Institutional aid	12.9	6.6	10.2	8.3	8.6	8.8
Other aid (including VA/DOD)	6.8	8.4	7.5	10.6	10.6	10.3
Employer aid	2.0	2.0	2.0	7.0	6.8	6.4
Loans (except PLUS)	54.7	58.7	56.4	8.6	9.2	13.6
Federal (except PLUS)	52.1	58.4	54.8	8.3	9.0	13.2
Stafford (all)	50.8	57.9	53.8	8.1	8.7	12.9
Stafford subsidized	48.9	52.6	50.4	6.9	7.4	11.4
Stafford unsubsidized	31.1	33.3	32.0	3.4	3.8	6.4
Perkins	1.5	5.1	3.0	0.5	0.5	0.7
Non-federal	7.6	1.8	5.2	0.3	0.5	0.9
State	0.1	0.1	0.1	†	†	†
Institutional	6.8	1.6	4.6	0.3	0.4	0.8
Other	0.6	0.2	0.5	0	†	0.1
Grants	56.5	55.8	56.2	28.9	29.4	31.9
Federal	51.6	48.0	50.1	16.6	17.0	20.0
Pell	51.2	47.7	49.7	16.6	16.9	20.0
SEOG	12.4	12.4	12.4	3.2	3.1	4.0
Non-federal	13.3	20.1	16.2	19.1	19.3	19.0
State	5.4	13.9	9.0	5.5	5.8	6.1
Institutional	6.3	4.8	5.7	7.2	7.4	7.2
Other	1.8	2.8	2.2	7.6	7.5	7.0

*Total refers to public and private, not-for-profit institutions.

†Values are less than 0.05.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

Table 4—Average amount of financial aid received from various sources for undergraduates enrolled in less-than-4-year institutions, by level and control of institution: 1995-96

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Total aid	\$4,770	\$5,143	\$4,928	\$2,113	\$2,242	\$2,729
Federal aid (except VA/DOD)	4,310	4,592	4,431	2,565	2,658	3,103
Non-federal aid	2,631	2,503	2,575	901	989	1,156
State aid	3,214	2,301	2,672	808	973	1,222
Institutional aid	1,643	1,252	1,537	564	635	733
Other aid (including VA/DOD)	3,363	3,157	3,266	1,031	1,067	1,214
Employer aid	4,159	3,009	3,685	463	494	587
Loans (except PLUS)	3,927	4,023	3,969	2,994	3,128	3,451
Federal (except PLUS)	3,857	3,959	3,902	3,070	3,184	3,461
Stafford (all)	3,895	3,884	3,890	3,084	3,200	3,467
Stafford subsidized	2,211	2,457	2,319	2,382	2,409	2,372
Stafford unsubsidized	2,894	2,871	2,884	2,514	2,583	2,722
Perkins	1,963	1,230	1,441	1,392	1,388	1,408
Non-federal	1,825	2,607	1,940	—	681	1,364
State	—	—	—	—	—	—
Institutional	1,839	—	1,933	—	527	1,269
Other	—	—	—	—	—	—
Grants	1,879	2,044	1,948	1,274	1,341	1,440
Federal	1,555	1,523	1,543	1,472	1,480	1,494
Pell	1,494	1,408	1,459	1,403	1,408	1,420
SEOG	304	471	374	369	389	384
Non-federal	1,952	2,036	1,996	649	742	841
State	2,800	2,067	2,323	768	926	1,116
Institutional	800	775	791	577	646	657
Other	3,165	3,076	3,119	524	557	632

*Total refers to public and private, not-for-profit institutions.

—Sample size was too small for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

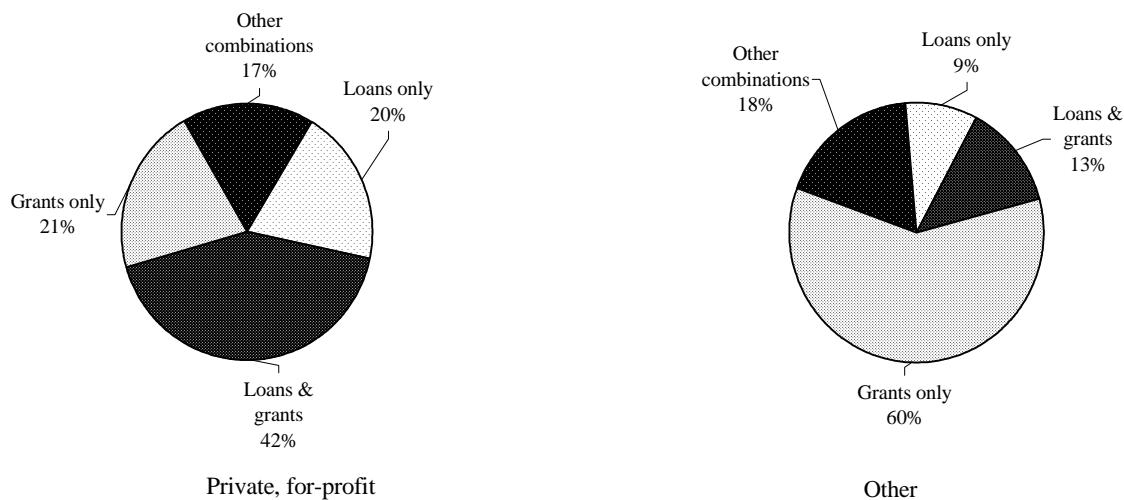
Federal grants also played an important role in how these students financed their education. In 1995-96, a total of 50 percent of students at less-than-4-year, for-profit institutions received some type of federal grant, with 50 percent receiving a federal Pell Grant and 12 percent receiving a federal Supplemental Educational Opportunity Grant (SEOG).¹⁴ Fourteen percent of stu-

¹⁴Students can receive both Pell and SEOG awards during the same year.

dents at less-than-4-year, for-profit institutions received the maximum Pell Grant.¹⁵ The average federal Pell and SEOG awards received were \$1,500 and \$370, respectively. Highlighting grants from sources outside the federal government, 9 percent of students received state grants, 6 percent received institutional grants, and 2 percent received grants from other sources. The average grants from non-federal sources ranged from \$790 for institutional grants, to \$2,300 for state grants, to \$3,100 in grants from other sources.

The financial aid packages that students at less-than-4-year, for-profit institutions received were varied. Twenty percent of the students received only loans, 21 percent received only grants, and 42 percent received a combination of loans and grants (table 5 and figure 4). Nearly two-thirds (66 percent) received federal aid only, reflecting the overall dominance of federal student aid programs (table 5 and figure 5). Ten percent received a combination of federal and institutional aid, 9 percent received a combination of federal and state aid, 5 percent received a combination of federal and other aid, and 4 percent received state aid only.

Figure 4—Percentage distribution of undergraduates enrolled in less-than-4-year institutions who received financial aid according to aid package, by type of aid and control of institution: 1995-96

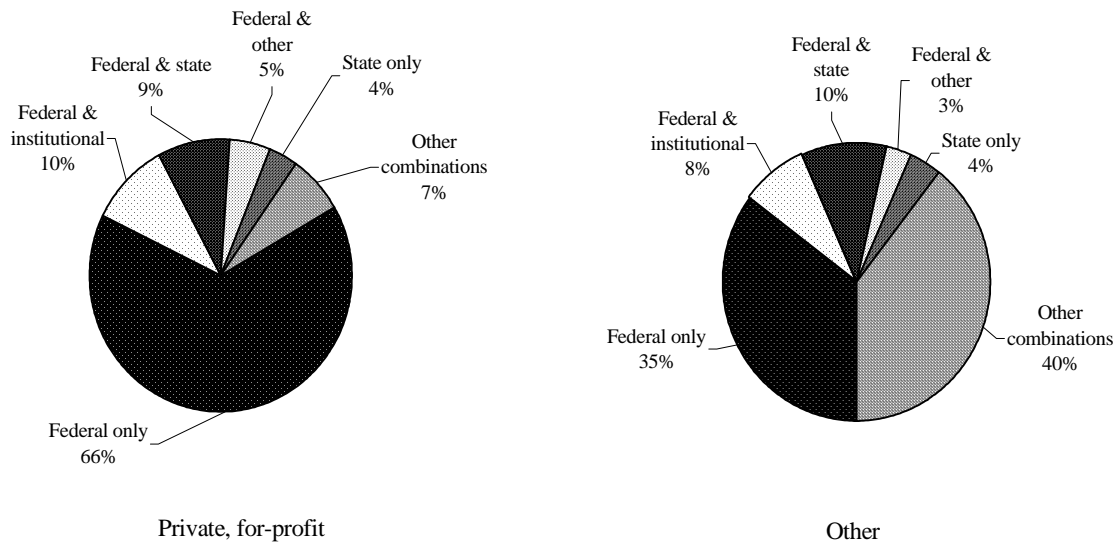


NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

¹⁵U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

Figure 5—Percentage distribution of undergraduates enrolled in less-than-4-year institutions who received financial aid according to aid package, by source of aid and control of institution: 1995-96



NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

The prominence of the federal programs also can be seen in the types of aid students received. Ninety-one percent of students who borrowed received federal loans only, while 5 percent¹⁶ were awarded a combination of federal and institutional loans and 3 percent received institutional loans only. Seventy-one percent of grant recipients were awarded federal grants only, 10 percent received a combination of federal and state grants, 7 percent received a combination of federal and institutional grants, and 5 percent received state grants only.

¹⁶The actual percentage is 5.49 percent, which rounds to 5.5 percent as shown in table 5, and to 5 percent as it appears in the text.

Table 5—Percentage distribution of undergraduates enrolled in less-than-4-year institutions who received financial aid according to aid package, by level and control of institution: 1995-96

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Total	100.0	100.0	100.0	100.0	100.0	100.0
Package by type of aid (all combinations) 1996						
Loans only	19.1	20.2	19.6	8.9	9.1	11.0
Grants only	22.8	19.0	21.2	60.9	59.8	52.8
Work-study only	0	0	0	0.1	0.1	0.1
Other only ¹	3.5	3.7	3.6	7.9	8.0	7.2
Loans & grants	42.3	42.5	42.3	12.4	13.0	18.3
Loans & work-study	0	†	†	0.2	0.2	0.2
Loans & other	4.7	5.1	4.9	0.8	1.0	1.7
Grants & work-study	0.1	0.1	0.1	3.0	2.8	2.3
Grants & other	3.3	2.6	3.0	3.4	3.5	3.4
Work-study & other	0	0	0	0	0	0
Loans, grants, & work-study	0.1	0.6	0.3	0.7	0.7	0.6
Loans, grants, & other	4.2	6.2	5.0	1.3	1.5	2.1
Loans, work-study, & other	0	0	0	0	0	0
Grants, work-study, & other	0	0	0	0.3	0.3	0.2
Loans, grants, work-study, & other	†	0.1	†	0.1	0.1	0.1
Package by source of aid (all combinations) 1996						
Federal only	66.5	64.2	65.5	35.1	35.2	40.7
State only	4.8	2.2	3.7	3.5	4.0	3.9
Institutional only	1.9	1.2	1.6	11.2	11.0	9.3
Other only ²	2.7	3.6	3.1	23.3	22.3	18.8
Federal & state	4.1	15.3	8.8	10.2	10.1	9.9
Federal & institutional	13.4	5.5	10.0	7.9	8.2	8.5
Federal & other	5.1	5.0	5.0	2.9	3.1	3.4
State & institutional	0.1	0.1	0.1	0.3	0.3	0.3
State & other	0.2	0.2	0.2	0.5	0.5	0.4
Institutional & other	0.1	0.2	0.2	1.8	1.7	1.4
Federal, state, & institutional	0.6	0.8	0.7	1.6	1.9	1.6
Federal, state, & other	0.2	1.1	0.6	1.0	1.0	0.9
Federal, institutional, & other	0.5	0.6	0.5	0.5	0.6	0.6
State, institutional, & other	0	0	0	0	†	0
Federal, state, institutional, & other	0	0	0	0.3	0.3	0.3

Table 5—Percentage distribution of undergraduates enrolled in less-than-4-year institutions who received financial aid according to aid package, by level and control of institution: 1995-96—Continued

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Grant package by source of aid (all combinations) 1996						
Federal only	76.5	63.9	71.3	33.9	34.4	40.4
State only	4.8	5.9	5.3	4.4	5.0	5.0
Institutional only	1.6	3.5	2.4	13.6	13.7	11.8
Other only ²	2.2	3.2	2.6	22.8	21.7	18.6
Federal & state	4.3	17.0	9.6	11.9	11.7	11.3
Federal & institutional	9.1	3.4	6.7	8.0	7.8	7.7
Federal & other	1.0	0.6	0.8	1.2	1.2	1.1
State & institutional	0.1	0.7	0.4	0.1	0.3	0.3
State & other	0	0.5	0.2	0.4	0.4	0.4
Institutional & other	0	0.2	0.1	1.2	1.2	1.0
Federal, state, & institutional	0.4	0.5	0.5	1.7	1.8	1.6
Federal, state, & other	0	0.3	0.1	0.5	0.5	0.5
Federal, institutional, & other	0	0.2	0.1	0.2	0.2	0.2
State, institutional, & other	0	0	0	0	†	†
Federal, state, institutional, & other	0	0	0	0.1	0.1	0.1
Loan package by source of aid (all combinations) 1996						
Federal only	86.2	96.9	90.9	96.6	95.2	93.5
State only	0.2	0	0.1	0.1	0.2	0.1
Institutional only	4.5	0.3	2.7	2.8	2.6	2.6
Other only ²	0.1	0.1	0.1	†	0.1	0.1
Federal & state	0.1	0.1	0.1	0	0	†
Federal & institutional	8.0	2.3	5.5	0.4	1.9	3.3
Federal & other	1.1	0.3	0.7	†	0.1	0.3
State & institutional	0	0	0	0	0	0
State & other	0	0	0	0	0	0
Institutional & other	0	0	0	0	0	0
Federal, state, & institutional	0	0	0	0	†	†
Federal, state, & other	0	0	0	0	0	0
Federal, institutional, & other	0	0	0	0	†	†

*Total refers to public and private, not-for-profit institutions.

†Values are less than 0.05.

¹Other aid is aid not classified as grants, loans, or work-study. It includes teaching and research assistantships, PLUS loans, veterans' benefits and military aid, vocational rehabilitation, and JTPA.

²Other aid is received from a source other than federal, state, or institutional.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

COMPARISON TO FINANCING BEHAVIOR OF STUDENTS AT OTHER LESS-THAN-4-YEAR INSTITUTIONS IN 1995-96

There were several differences in terms of how students at less-than-4-year, for-profit institutions financed their education compared to students attending other less-than-4-year institutions. Consistent with their greater likelihood of being in the lowest income quartile and their higher average tuition and fees,¹⁷ students at less-than-4-year, for-profit institutions were more likely to receive aid than students at other less-than-4-year institutions. These students were more likely than students at other less-than-4-year institutions to have received any financial aid (78 percent compared to 36 percent), a loan from any source (56 percent to 9 percent), and a grant from any source (56 percent to 29 percent). Students at less-than-4-year, for-profit institutions were more likely than students at other less-than-4-year institutions to be awarded federal aid (71 percent compared to 22 percent); 50 percent received Pell Grants, compared to 17 percent; 12 percent were awarded SEOG aid, versus 3 percent; and 55 percent received federal loans, compared to 9 percent. Fourteen percent of students at less-than-4-year, for-profit institutions were awarded the maximum Pell Grant, compared to 4 percent of students at other less-than-4-year institutions.¹⁸

Consistent with their greater likelihood of being in the lowest income quartile and their higher average tuition and fees, students at less-than-4-year, for-profit institutions were more likely to receive higher average award amounts than students at other less-than-4-year institutions. For example, total aid for students at less-than-4-year, for-profit institutions was higher than for students at other less-than-4-year institutions, \$4,900 compared to \$2,200. Students at less-than-4-year, for-profit institutions also received greater average federal and institutional loan awards—\$3,900 and \$1,900—compared to students at other less-than-4-year institutions who received average loan amounts of \$3,200 and \$530, respectively. In addition, average state grants (\$2,300 compared to \$930) and employer aid (\$3,700 compared to \$490) were substantially higher.

Analyzing how students' financial aid was packaged reveals several differences. A higher percentage of students at less-than-4-year, for-profit institutions received only loans compared to students at other less-than-4-year institutions, 20 percent compared to 9 percent. A smaller per-

¹⁷In 1995-96, the average tuition and fees at less-than-4-year, for-profit institutions were \$5,300, while the average tuition and fees at less-than-4-year, public and private not-for-profit institutions were \$680. In 1992-93, they were \$4,600 and \$590, respectively. U.S. Department of Education, National Center for Education Statistics, 1992-93 and 1995-96 National Postsecondary Student Aid Study (NPSAS:93 and 96), Data Analysis System.

¹⁸U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

centage of students at less-than-4-year, for-profit institutions than students at other less-than-4-year institutions were awarded only grants, 21 percent compared to 60 percent. The role of federal aid was not as dominant for students at other institutions. While 66 percent of students at less-than-4-year, for-profit institutions received only federal aid, 35 percent of students at other less-than-4-year institutions did so. Aid from other sources played a larger role for students at other less-than-4-year institutions. The percentages of students at less-than-4-year, for-profit institutions who received only institutional aid or only aid from other sources were smaller than at other less-than-4-year institutions: 2 percent compared to 11 percent were awarded institutional aid only, while 3 percent compared to 22 percent received only aid from other sources.

Among students who received grants, 71 percent of students at less-than-4-year, for-profit institutions received federal grants only, compared to 34 percent of students at other less-than-4-year institutions. Two percent of students at less-than-4-year, for-profit institutions were awarded institutional grants only, compared to 14 percent at other less-than-4-year institutions. Three percent of students at less-than-4-year, for-profit institutions were awarded grants from other sources only, compared to 22 percent at other less-than-4-year institutions.

CHANGES IN FINANCING BEHAVIOR BETWEEN 1992-93 AND 1995-96

The percentage of students at less-than-4-year, for-profit institutions who received aid from non-federal sources increased between 1992-93 and 1995-96, from 12 percent (table 6) to 27 percent. Likewise, the percentage of these students who received federal aid only decreased from 81 percent¹⁹ in 1992-93 (table 7) to 66 percent in 1995-96. The increase in the percentage of students who received non-federal aid may be explained partially by a corresponding increase in the percentage of students who obtained institutional aid, from 4 percent to 10 percent. While the percentage of students who borrowed through federal programs did not change significantly (47 percent in 1992-93 compared to 55 percent in 1995-96), the percentage who obtained a loan from a non-federal source increased from 2 percent to 5 percent. In addition, the percentage of students at less-than-4-year, for-profit institutions who were awarded non-federal grants rose from 8 percent in 1992-93 to 16 percent in 1995-96.

¹⁹The actual percentage is 81.47 percent, which rounds to 81.5 percent as shown in table 7, and to 81 percent as it appears in the text.

Table 6—Percentage of undergraduates enrolled in less-than-4-year institutions who received financial aid from various sources, by level and control of institution: 1992-93

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Total aid	75.2	77.0	75.8	31.5	32.2	37.6
Federal aid (except VA/DOD)	70.5	71.4	70.8	18.4	19.2	25.6
Non-federal aid	10.4	15.0	11.9	14.8	15.2	14.8
State aid	3.4	8.3	5.0	6.7	6.8	6.6
Institutional aid	4.4	2.8	3.9	4.7	5.0	4.9
Other aid (including VA/DOD)	4.7	8.4	5.9	10.7	10.7	10.1
Employer aid	1.5	4.4	2.4	7.6	7.5	6.8
Loans (except PLUS)	42.3	57.0	47.0	6.7	7.1	12.1
Federal (except PLUS)	41.7	56.7	46.5	6.4	6.8	11.7
Stafford (all)	40.4	56.0	45.4	5.9	6.4	11.2
Stafford subsidized	**	**	**	**	**	**
Stafford unsubsidized	**	**	**	**	**	**
Perkins	1.9	3.7	2.5	0.6	0.6	0.8
Non-federal	1.7	1.7	1.7	0.5	0.5	0.6
State	0.2	0.1	0.2	0.1	0.1	0.1
Institutional	0.5	0.5	0.5	0.1	0.1	0.2
Other	1.1	1.2	1.1	0.2	0.2	0.3
Grants	61.4	52.9	58.6	28.4	29.0	32.6
Federal	57.9	45.0	53.8	16.3	16.9	21.4
Pell	56.7	43.8	52.5	15.5	16.0	20.6
SEOG	10.3	11.9	10.8	2.8	2.9	3.9
Non-federal	6.4	11.5	8.1	13.1	13.4	12.7
State	1.3	6.4	2.9	5.7	5.7	5.4
Institutional	3.9	2.4	3.4	4.1	4.3	4.2
Other	1.9	2.9	2.2	4.5	4.5	4.2

*Total refers to public and private, not-for-profit institutions.

**Program did not exist in 1992-93.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1992-93 National Postsecondary Student Aid Study (NPSAS:93), Data Analysis System.

Table 7—Percentage distribution of undergraduates enrolled in less-than-4-year institutions who received financial aid according to aid package, by level and control of institution: 1992-93

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Total	100.0	100.0	100.0	100.0	100.0	100.0
Package by type of aid (all combinations) 1993						
Loans only	12.7	18.4	14.6	4.3	4.5	7.0
Grants only	40.4	22.8	34.7	68.0	67.2	59.1
Work-study only	0.3	0	0.2	0.3	0.3	0.3
Other only ¹	2.6	2.4	2.5	4.2	4.1	3.7
Loans & grants	36.7	37.4	36.9	12.4	12.9	18.9
Loans & work-study	†	0	†	0.1	0.1	0.1
Loans & other	2.7	10.3	5.2	0.7	0.8	1.9
Grants & work-study	0.2	0.3	0.3	2.5	2.5	1.9
Grants & other	0.9	0.8	0.9	3.7	3.7	3.0
Work-study & other	†	0	†	0	0	†
Loans, grants, & work-study	0.2	0.5	0.3	1.3	1.2	1.0
Loans, grants, & other	3.2	6.8	4.4	1.7	2.0	2.6
Loans, work-study, & other	0	0	0	0	0	0
Grants, work-study, & other	†	0.1	0.1	0.5	0.4	0.4
Loans, grants, work-study, & other	0.1	0.1	0.1	0.2	0.3	0.3
Package by source of aid (all combinations) 1993						
Federal only	84.4	75.4	81.5	35.9	36.4	47.7
State only	2.1	1.6	1.9	5.0	4.7	4.0
Institutional only	1.2	0.2	0.9	6.1	6.2	4.9
Other only ²	2.4	5.3	3.4	27.3	26.2	20.5
Federal & state	2.1	8.8	4.3	13.3	13.2	10.9
Federal & institutional	3.7	2.9	3.4	4.0	4.4	4.2
Federal & other	3.0	5.2	3.7	2.5	2.7	2.9
State & institutional	0.1	0	0.1	0.4	0.4	0.3
State & other	0.1	0	0.1	0.4	0.4	0.3
Institutional & other	0.3	0	0.2	2.2	2.1	1.6
Federal, state, & institutional	0.2	0.3	0.2	1.1	1.3	1.1
Federal, state, & other	†	0.1	0.1	0.8	0.9	0.7
Federal, institutional, & other	0.4	0.2	0.4	0.7	0.7	0.6
State, institutional, & other	0	†	†	0.1	0.1	0.1
Federal, state, institutional, & other	†	0	†	0.2	0.3	0.2

Table 7—Percentage distribution of undergraduates enrolled in less-than-4-year institutions who received financial aid according to aid package, by level and control of institution: 1992-93—Continued

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Grant package by source of aid (all combinations) 1993						
Federal only	88.1	74.0	84.0	38.1	38.6	48.7
State only	0.6	4.2	1.6	5.2	5.1	4.3
Institutional only	1.7	2.1	1.8	6.9	7.2	6.0
Other only ²	3.0	8.7	4.6	28.0	27.0	22.0
Federal & state	1.2	7.6	3.1	12.8	12.6	10.5
Federal & institutional	3.8	2.1	3.3	3.8	4.1	3.9
Federal & other	0.8	1.0	0.9	1.2	1.4	1.3
State & institutional	0.1	0	0.1	0.4	0.4	0.4
State & other	0	0	0	0.2	0.2	0.2
Institutional & other	0.4	0	0.3	1.8	1.7	1.4
Federal, state, & institutional	0.2	0.3	0.2	0.9	1.0	0.8
Federal, state, & other	0	0	0	0.2	0.3	0.2
Federal, institutional, & other	0.4	0	0.3	0.3	0.3	0.3
State, institutional, & other	0	0	0	0.2	0.2	0.1
Federal, state, institutional, & other	0	0	0	0.1	0.1	0.1
Loan package by source of aid (all combinations) 1993						
Federal only	96.1	97.0	96.4	93.4	93.5	94.9
State only	0.2	0	0.1	1.1	1.0	0.6
Institutional only	0.7	0	0.4	1.3	1.2	0.8
Other only ²	0.5	0.2	0.4	1.4	1.4	0.9
Federal & state	0.2	0.1	0.2	0.4	0.4	0.3
Federal & institutional	0.3	0.8	0.5	0.6	0.7	0.6
Federal & other	1.9	1.9	1.9	1.5	1.5	1.7
State & institutional	0	0	0	0	0	0
State & other	0	†	†	0.3	0.2	0.1
Institutional & other	†	0	†	0.1	0.1	0.1
Federal, state, & institutional	†	0	†	0	0	†
Federal, state, & other	†	0	†	0	0	†
Federal, institutional, & other	0.1	0	†	0	0	†
State, institutional, & other	0	0	0	0	0	0

*Total refers to public and private, not-for-profit institutions.

†Values are less than 0.05.

¹Other aid is aid not classified as grants, loans, or work-study. It includes teaching and research assistantships, PLUS loans, veterans' benefits and military aid, vocational rehabilitation, and JTPA.

²Other aid is received from a source other than federal, state, or institutional.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1992-93 National Postsecondary Student Aid Study (NPSAS:93), Data Analysis System.

Table 8—Average amount of financial aid received from various sources for undergraduates enrolled in less-than-4-year institutions, by level and control of institution: 1992-93

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Total aid	\$3,788	\$4,973	\$4,175	\$1,880	\$1,963	\$2,514
Federal aid (except VA/DOD)	3,549	4,522	3,864	2,244	2,292	2,829
Non-federal aid	2,426	2,525	2,466	889	946	1,096
State aid	2,522	1,890	2,185	728	785	916
Institutional aid	1,520	1,904	1,608	844	875	948
Other aid (including VA/DOD)	2,952	3,446	3,179	814	844	1,012
Employer aid	3,050	—	3,397	594	622	744
Loans (except PLUS)	3,417	3,836	3,580	2,556	2,582	3,062
Federal (except PLUS)	3,375	3,745	3,520	2,593	2,605	3,053
Stafford (all)	2,526	2,687	2,590	2,245	2,258	2,424
Stafford subsidized	**	**	**	**	**	**
Stafford unsubsidized	**	**	**	**	**	**
Perkins	1,617	1,386	1,505	989	993	1,181
Non-federal	2,311	—	2,743	1,189	1,321	1,798
State	—	—	—	—	—	—
Institutional	—	—	—	—	—	1,622
Other	2,027	—	2,512	—	—	2,009
Grants	1,901	2,083	1,954	1,244	1,285	1,433
Federal	1,739	1,721	1,734	1,375	1,394	1,499
Pell	1,639	1,618	1,633	1,313	1,334	1,428
SEOG	541	515	531	494	504	513
Non-federal	2,035	2,331	2,171	812	843	947
State	1,846	1,837	1,839	665	705	781
Institutional	1,389	1,426	1,397	776	806	865
Other	2,868	—	3,372	827	835	996

*Total refers to public and private, not-for-profit institutions.

**Program did not exist in 1992-93.

—Sample size was too small for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1992-93 National Postsecondary Student Aid Study (NPSAS:93), Data Analysis System.

The average amount of aid awarded to students at less-than-4-year, for-profit institutions changed from 1992-93 to 1995-96. Average total aid increased from \$4,200 (table 8) to \$4,900. Average federal grants, however, declined from \$1,700 to \$1,500, which may reflect, in part, the decline in the maximum Pell Grant award—from \$2,400 to \$2,340—between 1992-93 and 1995-96.²⁰ Changes in the average total loan and average federal loan amounts were not statistically significant: average total loans were \$3,600 and \$4,000, respectively. However, the average federal Stafford loan did increase from \$2,600 to \$3,900.

The trends for students at other less-than-4-year institutions were similar. The percentage of students at other less-than-4-year institutions who received aid from non-federal sources rose from 15 percent in 1992-93 to 23 percent in 1995-96. Changes in institutional aid were significant: the percentage who received institutional aid increased from 5 percent in 1992-93 to 9 percent in 1995-96. The percentage of students who borrowed from any source increased from 7 percent to 9 percent, as did the percentage who received a federal Stafford loan (from 6 percent to 9 percent).

Similar to the for-profit sector, the average amount of aid awarded to students at other less-than-4-year institutions increased from 1992-93 to 1995-96. Average total aid increased from \$2,000 to \$2,200, average total loans rose from \$2,600 to \$3,100, average federal loans increased from \$2,600 to \$3,200, and average state grants grew from \$710 to \$930.

²⁰The College Board, *Trends in Student Aid* (Washington, DC: The College Board, 1998).

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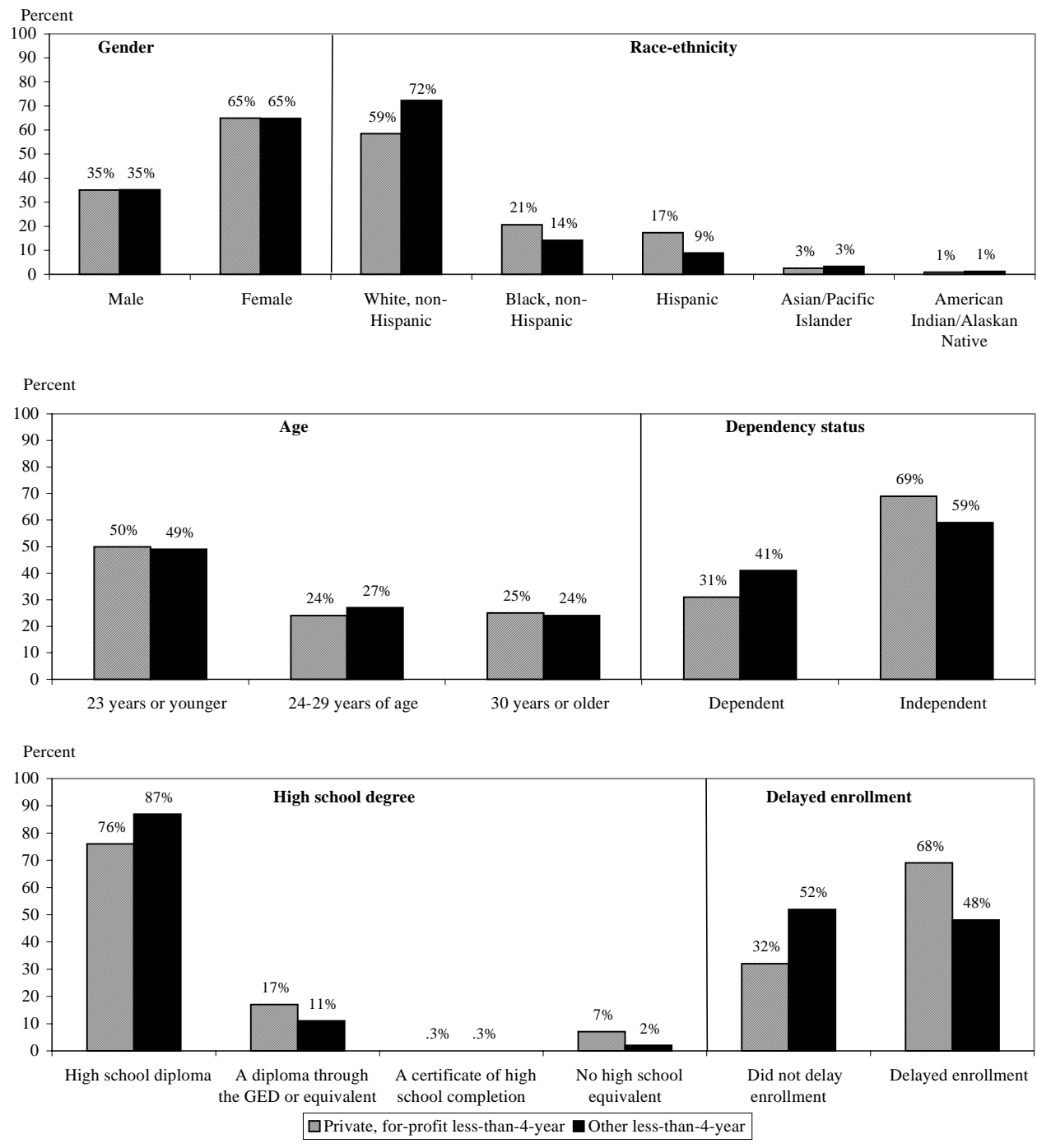
PROFILE OF BORROWERS

It is important to explore how students at less-than-4-year, for-profit institutions have been affected by changes to the Higher Education Act, particularly with respect to borrowing, given the high default rates at these institutions relative to students in other sectors. This section provides a demographic and enrollment profile of borrowers at less-than-4-year, for-profit institutions in 1995-96, as well as comparing them with students at other less-than-4-year institutions. In addition, changes in the characteristics of borrowers between 1992-93 and 1995-96 are analyzed. Finally, risk factors associated with loan default are discussed for students at both less-than-4-year, for-profit institutions and other less-than-4-year institutions in 1995-96.

CHARACTERISTICS OF BORROWERS AT LESS-THAN-4-YEAR, FOR-PROFIT INSTITUTIONS IN 1995-96

Similar to all students at less-than-4-year, for-profit institutions in 1995-96, a profile of borrowers shows that they were likely to be white, young, independent, female, to attend full-time for at least part of the academic year, and delay their enrollment for a year or more after high school (figure 6 and table 9). Fifty-nine percent of borrowers at less-than-4-year, for-profit institutions were white, 50 percent were age 23 or younger, and 69 percent were independent. Sixty-five percent were female, 83 percent attended full-time for at least part of the academic year, and 68 percent of borrowers had delayed their enrollment for a year or more after high school.

Figure 6—Percentage distribution of undergraduates who borrowed while enrolled in less-than-4-year institutions according to selected characteristics, by level and control of institution: 1995-96



NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

Comparing demographic and enrollment characteristics of borrowers and non-borrowers at less-than-4-year, for-profit institutions in 1995-96 reveals that borrowers were more likely to be younger and to be employed while enrolled. Moreover, independent borrowers were less likely to be in the highest income quartile than independent non-borrowers. Fifty percent of borrowers at less-than-4-year, for-profit institutions were age 23 or younger compared to 41 percent of non-borrowers, and 33 percent of borrowers did not work while enrolled compared to 47 percent of non-borrowers. In addition, 9 percent of independent borrowers were in the upper income quartile compared to 16 percent of independent non-borrowers.

Table 9—Percentage distribution of undergraduates enrolled in less-than-4-year, for-profit institutions according to selected characteristics, by borrower status and level of institution: 1995-96

	Borrowers			Non-borrowers		
	Less-than-2-year	2-year	Total	Less-than-2-year	2-year	Total
Total	100.0	100.0	100.0	100.0	100.0	100.0
Gender						
Male	29.9	40.9	35.1	25.0	39.3	30.1
Female	70.1	59.1	64.9	75.0	60.7	69.9
Age						
23 years or younger	48.2	52.9	50.3	38.9	43.2	40.6
24-29 years of age	22.6	26.6	24.4	19.0	18.3	18.7
30 years or older	29.2	20.5	25.3	42.1	38.5	40.7
Race-ethnicity						
White, non-Hispanic	53.6	64.2	58.5	55.6	60.9	57.5
Black, non-Hispanic	20.7	20.4	20.6	25.3	15.9	22.0
Hispanic	21.7	12.6	17.4	14.7	16.7	15.4
Asian/Pacific Islander	2.7	2.4	2.6	3.5	5.9	4.4
American Indian/Alaskan Native	1.4	0.4	0.9	0.9	0.7	0.8
Marital status						
Not married	67.9	76.3	71.6	67.9	67.0	67.5
Married	24.0	19.0	21.8	28.2	27.4	27.9
Separated	8.1	4.7	6.6	4.0	5.7	4.6
Single parent status						
Not a single parent	75.8	80.4	77.9	72.6	81.5	76.0
Single parent	24.2	19.6	22.1	27.4	18.5	24.0
Disability status						
Student has a disability	7.1	5.5	6.3	12.0	5.5	9.7
Student does not have a disability	93.0	94.5	93.7	88.0	94.5	90.3

Table 9—Percentage distribution of undergraduates enrolled in less-than-4-year, for-profit institutions according to selected characteristics, by borrower status and level of institution: 1995-96—Continued

	Borrowers			Non-borrowers		
	Less-than-2-year	2-year	Total	Less-than-2-year	2-year	Total
Dependency status						
Dependent	26.4	36.8	31.1	23.6	32.2	26.9
Independent	73.6	63.2	68.9	76.4	67.8	73.1
Independent, no dependents	25.7	25.1	25.4	27.2	26.5	26.9
Independent, with dependents	47.9	38.1	43.5	49.2	41.3	46.1
Independent student total income, quartile						
Lower quartile	44.6	38.3	42.0	40.4	35.4	38.6
Middle quartiles	46.8	52.8	49.3	45.5	45.7	45.6
Upper quartile	8.6	8.9	8.7	14.1	18.8	15.8
Parents' total income, quartile (dependent students)						
Lower quartile	49.1	40.0	44.3	40.6	38.9	39.8
Middle quartiles	40.9	51.4	46.4	31.1	33.0	32.0
Upper quartile	10.0	8.7	9.3	28.4	28.1	28.3
Parents' highest education						
Less than high school	17.7	7.1	12.7	15.7	15.6	15.7
High school graduate	54.2	55.5	54.8	47.3	42.9	45.7
Some college, including AA	14.7	17.7	16.2	17.3	16.5	17.0
Bachelor's degree	9.3	13.2	11.1	13.0	14.8	13.6
Advanced degree	4.1	6.5	5.2	6.7	10.2	8.0
High school degree or equivalent						
High school diploma	70.2	83.0	75.9	78.4	82.9	80.2
A diploma through the GED or equivalent	17.7	15.3	16.6	13.0	11.2	12.3
A certificate of high school completion	0.6	†	0.3	0.5	0.5	0.5
No high school equivalent	11.5	1.7	7.1	8.1	5.4	7.0
Delayed enrollment						
Did not delay enrollment	24.3	41.9	32.0	27.0	35.8	30.0
Delayed enrollment	75.7	58.1	68.0	73.0	64.2	70.0
Attendance status						
Full-time	89.5	75.6	83.3	84.6	63.5	76.6
Part-time	10.5	24.4	16.7	15.4	36.5	23.4
Average hours worked per week while enrolled						
Not employed	39.6	24.6	32.5	52.4	38.5	47.4
1-20 hours	15.9	21.3	18.4	15.7	12.6	14.6
21-34 hours	16.2	23.7	19.7	11.6	10.0	11.1
35 hours or more	28.3	30.4	29.3	20.3	38.8	26.9

†Value is less than 0.05.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

COMPARISON TO BORROWERS AT OTHER LESS-THAN-4-YEAR INSTITUTIONS IN 1995-96

Several differences were evident regarding the demographic and enrollment characteristics of borrowers at less-than-4-year, for-profit institutions and borrowers at other less-than-4-year institutions. Borrowers at less-than-4-year, for-profit institutions were more likely to be single parents (22 percent compared to 15 percent), to be independent with children (44 percent compared to 33 percent), and to have a GED (17 percent compared to 11 percent). Other differences in enrollment patterns include the following: borrowers at less-than-4-year, for-profit institutions were more likely than borrowers at other less-than-4-year institutions to not work while enrolled (33 percent compared to 20 percent), to have delayed enrollment by a year or more after high school (68 percent compared to 48 percent), and to have attended full-time for at least part of the academic year (83 percent versus 50 percent). There was no significant difference with respect to race.

Table 10—Percentage distribution of undergraduates who borrowed while enrolled in less-than-4-year institutions according to selected characteristics, by level and control of institution: 1995-96

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Total	100.0	100.0	100.0	100.0	100.0	100.0
Gender						
Male	29.9	40.9	35.1	33.6	35.2	35.2
Female	70.1	59.1	64.9	66.4	64.8	64.9
Age						
23 years or younger	48.2	52.9	50.3	49.4	49.0	49.5
24-29 years of age	22.6	26.6	24.4	27.6	27.1	26.1
30 years or older	29.2	20.5	25.3	23.0	23.9	24.5
Race-ethnicity						
White, non-Hispanic	53.6	64.2	58.5	71.9	72.3	67.0
Black, non-Hispanic	20.7	20.4	20.6	15.1	14.2	16.6
Hispanic	21.7	12.6	17.4	9.2	8.9	12.1
Asian/Pacific Islander	2.7	2.4	2.6	2.5	3.4	3.1
American Indian/Alaskan Native	1.4	0.4	0.9	1.4	1.2	1.1
Marital status						
Not married	67.9	76.3	71.6	77.3	76.6	74.7
Married	24.0	19.0	21.8	18.5	19.5	20.3
Separated	8.1	4.7	6.6	4.2	4.0	5.0
Single parent status						
Not a single parent	75.8	80.4	77.9	84.6	85.0	82.3
Single parent	24.2	19.6	22.1	15.4	15.0	17.8
Disability status						
Student has a disability	7.1	5.5	6.3	6.3	6.4	6.3
Student does not have a disability	93.0	94.5	93.7	93.8	93.6	93.7
Dependency status						
Dependent	26.4	36.8	31.1	42.1	41.1	37.2
Independent	73.6	63.2	68.9	57.9	58.9	62.8
Independent, no dependents	25.7	25.1	25.4	25.0	25.9	25.7
Independent, with dependents	47.9	38.1	43.5	32.9	33.0	37.1
Independent student total income, quartile						
Lower quartile	44.6	38.3	42.0	37.3	36.2	38.7
Middle quartiles	46.8	52.8	49.3	54.1	54.3	52.2
Upper quartile	8.6	8.9	8.7	8.6	9.5	9.2

Table 10—Percentage distribution of undergraduates who borrowed while enrolled in less-than-4-year institutions according to selected characteristics, by level and control of institution: 1995-96—Continued

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Parents' total income, quartile (dependent students)						
Lower quartile	49.1	40.0	44.3	26.9	27.7	33.0
Middle quartiles	40.9	51.4	46.4	60.7	60.0	55.7
Upper quartile	10.0	8.7	9.3	12.4	12.3	11.4
Parents' highest education						
Less than high school	17.7	7.1	12.7	7.4	7.6	9.5
High school graduate	54.2	55.5	54.8	50.7	50.4	52.1
Some college, including AA	14.7	17.7	16.2	15.3	15.5	15.8
Bachelor's degree	9.3	13.2	11.1	16.7	17.1	14.9
Advanced degree	4.1	6.5	5.2	9.9	9.4	7.9
High school degree or equivalent						
High school diploma	70.2	83.0	75.9	86.7	87.1	82.8
A diploma through the GED or equivalent	17.7	15.3	16.6	10.8	10.6	12.9
A certificate of high school completion	0.6	†	0.3	0.4	0.3	0.3
No high school equivalent	11.5	1.7	7.1	2.2	2.0	4.0
Delayed enrollment						
Did not delay enrollment	24.3	41.9	32.0	53.4	52.3	44.0
Delayed enrollment	75.7	58.1	68.0	46.6	47.7	56.0
Attendance status						
Full-time	89.5	75.6	83.3	45.2	49.6	62.6
Part-time	10.5	24.4	16.7	54.8	50.4	37.5
Average hours worked per week while enrolled						
Not employed	39.6	24.6	32.5	19.1	19.9	24.6
1-20 hours	15.9	21.3	18.4	28.0	28.0	24.4
21-34 hours	16.2	23.7	19.7	22.3	21.6	20.9
35 hours or more	28.3	30.4	29.3	30.6	30.6	30.1

*Total refers to public and private, not-for-profit institutions.

†Value is less than 0.05.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

CHANGES IN BORROWER CHARACTERISTICS BETWEEN 1992-93 AND 1995-96

Between 1992-93 and 1995-96, there were few changes in the demographic and enrollment characteristics of borrowers at less-than-4-year, for-profit institutions. The percentage of borrowers who obtained a GED increased from 11 percent to 17 percent (tables 10 and 11). The percentage of borrowers at less-than-4-year, for-profit institutions who did not work while enrolled decreased from 42 percent to 33 percent.

There were no significant differences in the race-ethnicity of borrowers between 1992-93 and 1995-96: the percentage of white borrowers remained comparable (57 percent in 1992-93 and 59 percent in 1995-96); the percentage of Hispanic borrowers was consistent as well, 14 percent compared to 17 percent; and the percentage of black borrowers stayed relatively the same, 24 percent in 1992-93 compared to 21 percent in 1995-96. There were no significant changes in the percentage of borrowers at less-than-4-year, for-profit institutions who were independent (69 percent in both years), who had delayed their enrollment by a year or more after high school (65 percent and 68 percent), and who were independent and in the lowest income quartile (47 percent compared to 42 percent).

Table 11—Percentage distribution of undergraduates who borrowed while enrolled in less-than-4-year institutions according to selected characteristics, by level and control of institution: 1992-93

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Total	100.0	100.0	100.0	100.0	100.0	100.0
Gender						
Male	23.8	53.4	35.1	38.7	37.9	36.5
Female	76.2	46.6	64.9	61.3	62.1	63.5
Age						
23 years or younger	54.2	56.2	55.0	48.3	48.2	51.5
24-29 years of age	21.6	22.1	21.8	22.5	22.1	22.0
30 years or older	24.2	21.8	23.2	29.2	29.7	26.5
Race-ethnicity						
White, non-Hispanic	55.3	59.6	56.9	73.8	74.7	66.5
Black, non-Hispanic	23.7	24.4	23.9	13.2	12.6	17.8
Hispanic	14.9	12.8	14.1	6.3	6.5	10.0
Asian/Pacific Islander	5.0	2.2	4.0	4.8	4.3	4.2
American Indian/Alaskan Native	1.1	1.1	1.1	2.0	1.9	1.6
Marital status						
Not married	70.6	73.7	71.8	68.3	68.3	70.0
Married	24.0	22.7	23.5	28.4	28.0	25.7
Separated	5.4	3.6	4.7	3.2	3.8	4.2
Single parent status						
Not a single parent	74.6	84.4	78.5	83.4	82.9	80.7
Single parent	25.4	15.6	21.5	16.6	17.1	19.3
Disability status						
Student has a disability	6.1	5.7	6.0	9.5	8.8	7.5
Student does not have a disability	93.9	94.3	94.0	90.5	91.2	92.6
Dependency status						
Dependent	27.3	36.3	30.9	34.5	34.4	32.7
Independent	72.7	63.7	69.1	65.5	65.7	67.4
Independent, no dependents	30.4	34.3	32.0	28.5	28.0	29.9
Independent, with dependents	42.3	29.4	37.2	37.0	37.6	37.4
Independent student total income, quartile						
Lower quartile	50.9	40.2	47.1	44.1	44.0	45.5
Middle quartiles	41.3	50.6	44.7	48.1	47.2	45.9
Upper quartile	7.8	9.2	8.3	7.8	8.8	8.6

Table 11—Percentage distribution of undergraduates who borrowed while enrolled in less-than-4-year institutions according to selected characteristics, by level and control of institution: 1992-93
—Continued

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Parents' total income, quartile (dependent students)						
Lower quartile	61.3	45.0	53.6	52.0	50.6	52.0
Middle quartiles	34.7	49.2	41.5	44.0	44.4	43.1
Upper quartile	4.0	5.8	4.9	4.0	5.0	4.9
Parents' highest education						
Less than high school	18.6	11.9	16.0	13.7	13.4	14.6
High school graduate	47.8	47.0	47.5	40.7	41.5	44.3
Some college, including AA	18.8	17.9	18.5	22.9	22.8	20.8
Bachelor's degree	9.1	14.8	11.4	14.1	13.8	12.7
Advanced degree	5.6	8.3	6.7	8.6	8.5	7.7
High school degree or equivalent						
High school diploma	78.0	90.4	82.7	91.7	90.9	86.9
A diploma through the GED or equivalent	14.0	6.7	11.2	6.3	6.8	9.0
A certificate of high school completion	0.4	0.8	0.6	0.6	0.6	0.6
No high school equivalent	7.6	2.1	5.5	1.3	1.7	3.5
Delayed enrollment						
Did not delay enrollment	32.4	38.7	34.9	39.3	40.2	37.7
Delayed enrollment	67.6	61.3	65.1	60.7	59.8	62.3
Attendance status						
Full-time	85.7	84.5	85.2	43.8	46.5	65.6
Part-time	14.3	15.5	14.8	56.2	53.5	34.4
Average hours worked per week while enrolled						
Not employed	49.3	30.0	41.8	34.1	33.6	37.5
1-20 hours	16.6	18.7	17.4	27.0	27.3	22.6
21-34 hours	14.1	16.0	14.8	17.3	17.4	16.2
35 hours or more	20.1	35.3	26.0	21.6	21.7	23.7

*Total refers to public and private, not-for-profit institutions.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1992-93 National Postsecondary Student Aid Study (NPSAS:93), Data Analysis System.

Several demographic and enrollment characteristics of borrowers at other less-than-4-year institutions, however, did change significantly. In 1992-93, 34 percent of borrowers did not work while attending school, but by 1995-96, the percentage had dropped to 20 percent. Furthermore, the percentage of borrowers at other less-than-4-year institutions who delayed their enrollment decreased from 60 percent in 1992-93 to 48 percent in 1995-96. Changes in the proportion of student borrowers by race-ethnicity were not statistically significant.

LIKELIHOOD OF BORROWING

In order to measure the association of a single variable with the likelihood of borrowing apart from its relationship to other factors, the effects of related variables must be controlled. In these analyses, a least squares regression model was used to measure how each demographic and enrollment characteristic was associated with the likelihood of a student borrowing in 1995-96 and in 1992-93. The model is used to estimate the proportion of students at less-than-4-year, for-profit institutions who had received Title IV loans (except PLUS) in the stated academic year. The independent variables include the four risk factors most often associated with loan default: (1) being black; (2) being independent; (3) being from a low-income family; and (4) not having a traditional high school diploma. In addition, other demographic and enrollment characteristics are included as independent variables, such as gender, age, marital status, single parent status, disability status, parents' highest education level, delayed enrollment status, attendance status, and the average hours worked per week while enrolled. The regression coefficients were used to adjust the original estimates, taking into account the joint effects of all the independent variables (see appendix B for details on the methodology).

The results are displayed in tables 12 and 13. The original (unadjusted) estimates of the proportion of students who were awarded a Title IV loan (except PLUS) in the given academic year are in the first column. The adjusted percentages after controlling for the variation of all other variables in the model can be found in the second column. Asterisks indicate a statistically significant difference between the percentage of students who had borrowed at a less-than-4-year, for-profit institution in a given category and its reference group (always the italicized group in each category).

In 1992-93, two variables had one or more characteristics that showed a statistically significant difference in the likelihood of borrowing (compared to their reference characteristics) before controlling for the effects of other variables: disability status and type of high school degree (table 12). Students with disabilities were less likely to have borrowed than those who were not

disabled (33 percent versus 45 percent). Students who had a certificate of high school completion were more likely than those with no equivalent to a high school degree—those who did not complete high school—to borrow (60 percent versus 21 percent). Students with a high school diploma or a GED (or other equivalent high school degree) also were more likely than those with no high school degree or equivalent to have borrowed. However, after controlling for the effects of other variables, disability status did not show a statistically significant difference, while the type of high school degree continued to show a statistically significant difference. Students with a high school diploma or a GED were more likely than those without a high school degree to have borrowed.

Four other variables had one or more characteristics that showed a statistically significant difference in the likelihood of borrowing (compared to their reference characteristics) after controlling for the effects of other variables: age; dependency status; attendance status; and average hours worked while enrolled. Students age 30 or older were less likely to have borrowed than those age 23 or younger (36 percent versus 54 percent). Dependent students were less likely to have borrowed than independent students (36 percent compared to 52 percent). Students who attended on a part-time basis were less likely than full-time students to have borrowed (35 percent compared to 50 percent). Those who worked an average of 35 hours or more per week while enrolled were more likely to have borrowed than those who were not employed (54 percent versus 41 percent).

In summary, in 1992-93, disability status showed statistically significant differences before controlling for other variables, but did not show such differences after the adjustment. The type of high school degree showed statistically significant differences in the likelihood of borrowing both before and after controlling for the effects of other variables. Before adjustment the characteristics of age, dependency status, attendance status, and average hours worked while enrolled were not significantly different than their reference groups, but after controlling for other variables were statistically different.

Table 12—Percentage distribution of students at less-than-4-year, for-profit institutions who borrowed a Title IV loan (except PLUS), and the adjusted percentage after taking into account the covariation of the variables listed in the table:¹ 1992-93

	Unadjusted percentage ²	Adjusted percentage ³	LS coefficient ⁴	Standard error ⁵
Total	46.4	46.8	46.9	10.5
Gender				
Male	46.6	47.2	0.6	4.9
<i>Female</i>	45.0	46.6	†	†
Age				
23 years or younger	50.3	53.8	†	†
24-29 years of age	48.9	44.7	-9.1	6.9
30 years or older	37.9	36.1*	-17.7	6.7
Race-ethnicity				
<i>White, non-Hispanic</i>	51.9	51.8	†	†
Black, non-Hispanic	39.6	41.8	-10.0	5.4
Hispanic	34.6	41.1	-10.7	6.4
Asian/Pacific Islander	41.2	44.8	-7.0	11.0
American Indian/Alaskan Native	37.4	44.8	-7.0	18.7
Marital status				
<i>Not married</i>	48.2	47.6	†	†
Married	44.7	44.6	-2.9	6.2
Separated	40.7	46.9	-0.6	10.3
Single parent status				
<i>Not a single parent</i>	47.1	47.7	†	†
Single parent	43.7	43.9	-3.8	6.9
Disability status ⁶				
Student has a disability	32.5*	35.7	-12.1	7.9
<i>Student does not have a disability</i>	45.0	47.8	†	†
Dependency status				
Dependent	46.0	36.3*	-15.2	7.4
<i>Independent</i>	46.5	51.5	†	†
Income status ⁶				
Low-income	46.8	49.2	3.9	5.1
<i>Not low-income</i>	47.1	45.4	†	†

Table 12—Percentage distribution of students at less-than-4-year, for-profit institutions who borrowed a Title IV loan (except PLUS), and the adjusted percentage after taking into account the covariation of the variables listed in the table:¹ 1992-93—Continued

	Unadjusted percentage ²	Adjusted percentage ³	LS coefficient ⁴	Standard error ⁵
Parents' highest education				
Less than high school	36.5	45.1	-4.1	6.2
<i>High school graduate</i>	<i>47.4</i>	<i>49.2</i>	†	†
Some college, including AA	45.5	45.0	-4.2	5.9
Bachelor's degree	44.8	46.3	-2.9	7.2
Advanced degree	41.2	42.4	-6.8	8.7
High school degree or equivalent				
High school diploma	49.0*	49.2*	21.7	7.2
A diploma through the GED or other equivalent	48.4*	50.0*	22.5	9.2
A certificate of high school completion	60.4*	60.4	32.9	32.8
<i>No high school equivalent</i>	<i>21.4</i>	<i>27.5</i>	†	†
Delayed enrollment ⁶				
Did not delay enrollment	47.0	43.5	-5.3	4.6
<i>Delayed enrollment</i>	<i>50.4</i>	<i>48.8</i>	†	†
Attendance status				
Part-time	39.5	35.3*	-14.5	5.4
<i>Full-time</i>	<i>48.5</i>	<i>49.8</i>	†	†
Average hours worked per week while enrolled				
<i>Not employed</i>	<i>38.2</i>	<i>41.4</i>	†	†
1-20 hours	49.3	50.1	8.6	6.4
21-34 hours	50.3	50.2	8.8	6.9
35 hours or more	48.7	53.8*	12.4	5.6

*p ≤ .05.

†Not applicable for the reference group.

¹The italicized group in each category is the reference group being compared.

²The estimates are from the NPSAS:93 Data Analysis System.

³The percentages are adjusted for differences associated with other variables in the table (see appendix B).

⁴Least squares (LS) coefficient, multiplied by 100 to reflect percentage (see appendix B).

⁵Standard error of LS coefficient, adjusted for design effect, multiplied by 100 to reflect percentage (see appendix B).

⁶The range of the unadjusted percentage values for the row variable does not include the unadjusted percentage value of the total due to missing data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1992-93 National Postsecondary Student Aid Study (NPSAS:93), Data Analysis System.

The student demographic and enrollment characteristics that were significantly different than their reference groups prior to adjustment in 1995-96 were different than in 1992-93 (table 13). In 1995-96, students who were 30 years of age or older were less likely to have borrowed than those age 23 or younger (43 percent compared to 60 percent). Also, students who worked an average of 21 to 34 hours per week while enrolled were more likely to have borrowed than those who were not employed (70 percent versus 48 percent).

The characteristics of age and average hours worked per week while enrolled remained related to borrowing even after the adjustment. Students who were age 30 or older were less likely to have borrowed than those age 23 or younger (43 percent compared to 62 percent). Students who worked while enrolled (regardless of the number of hours worked) were more likely to have borrowed than those who did not work while enrolled (46 percent versus 60 percent for those who worked 1 to 20 hours, 64 percent for those who worked 21 to 34 hours, and 59 percent for those who averaged 35 or more hours of work per week while enrolled).

There was one variable that showed a significant difference in the likelihood of borrowing only after controlling for other variables. After adjustment, Asian/Pacific Islanders were less likely to have borrowed than their white counterparts (36 percent compared to 57 percent).

Table 13—Percentage distribution of students at less-than-4-year, for-profit institutions who borrowed a Title IV loan (except PLUS), and the adjusted percentage after taking into account the covariation of the variables listed in the table:¹ 1995-96

	Unadjusted Percentage ²	Adjusted percentage ³	LS coefficient ⁴	Standard error ⁵
Total	54.8	54.7	66.2	11.4
Gender				
Male	58.9	58.3	5.5	4.4
<i>Female</i>	52.6	52.8	†	†
Age				
23 years or younger	60.0	61.5	†	†
24-29 years of age	61.2	57.8	-3.7	6.8
30 years or older	43.0*	42.8*	-18.7	6.6
Race-ethnicity				
<i>White, non-Hispanic</i>	56.8	56.6	†	†
Black, non-Hispanic	53.5	53.6	-3.0	5.2
Hispanic	56.1	53.8	-2.9	5.8
Asian/Pacific Islander	32.6	36.4*	-20.2	10.0
American Indian/Alaskan Native	63.9	65.8	9.2	22.4
Marital status				
<i>Not married</i>	56.2	55.5	†	†
Married	48.6	49.9	-5.7	6.4
Separated	63.2	65.3	9.7	9.8
Single parent status				
<i>Not a single parent</i>	55.4	55.8	†	†
Single parent	52.8	51.0	-4.9	6.8
Disability status ⁶				
Student has a disability	46.8	47.1	-8.3	7.6
<i>Student does not have a disability</i>	52.7	55.4	†	†
Dependency status				
Dependent	58.3	46.1	-12.2	8.2
<i>Independent</i>	53.3	58.3	†	†
Income status				
Low-income	54.5	53.3	-2.5	4.6
<i>Not low-income</i>	54.9	55.8	†	†

Table 13—Percentage distribution of students at less-than-4-year, for-profit institutions who borrowed Title IV loan (except PLUS), and the adjusted percentage after taking into account the covariation of the variables listed in the table:¹ 1995-96—Continued

	Unadjusted Percentage ²	Adjusted percentage ³	LS coefficient ⁴	Standard error ⁵
Parents' highest education				
Less than high school	56.2	55.2	-2.6	6.2
<i>High school graduate</i>	<i>64.7</i>	<i>57.8</i>	†	†
Some college, including AA	59.3	50.4	-7.4	5.8
Bachelor's degree	57.6	50.3	-7.5	6.8
Advanced degree	49.5	40.3	-17.5	9.4
High school degree or equivalent				
High school diploma	53.4	53.0	-4.1	8.4
A diploma through the GED or equivalent	62.1	62.5	5.4	9.2
A certificate of high school completion	—	54.6	-2.5	31.6
<i>No high school equivalent</i>	<i>55.0</i>	<i>57.1</i>	†	†
Delayed enrollment ⁶				
Did not delay enrollment	59.6	56.7	2.9	5.0
<i>Delayed enrollment</i>	<i>57.4</i>	<i>53.8</i>	†	†
Attendance status				
Part-time	47.3	47.1	-9.5	5.2
<i>Full-time</i>	<i>57.8</i>	<i>56.6</i>	†	†
Average hours worked per week while enrolled				
<i>Not employed</i>	<i>48.1</i>	<i>45.6</i>	†	†
1-20 hours	63.0	59.5*	13.9	6.0
21-34 hours	69.9*	64.4*	18.8	6.2
35 hours or more	61.9	59.4*	13.8	5.2

*p ≤ .05.

—Sample size was too small for a reliable estimate.

†Not applicable for the reference group.

¹The italicized group in each category is the reference group being compared.

²The estimates are from the NPSAS:96 Data Analysis System.

³The percentages are adjusted for differences associated with other variables in the table (see appendix B).

⁴Least squares (LS) coefficient, multiplied by 100 to reflect percentage (see appendix B).

⁵Standard error of LS coefficient, adjusted for design effect, multiplied by 100 to reflect percentage (see appendix B).

⁶The range of the unadjusted percentage values for the row variable does not include the unadjusted percentage value of the total due to missing data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

RISK FACTORS ASSOCIATED WITH LOAN DEFAULT

Research on the specific demographic and enrollment characteristics of loan defaulters identifies at least four risk factors associated with higher default levels. These factors include students who: (1) are black; (2) are independent; (3) are from low-income families; and (4) do not have traditional high school diplomas. The literature suggests that there is a positive correlation between these identified student characteristics and student loan default.²¹ Of borrowers at less-than-4-year, for-profit institutions in 1995-96, 17 percent had zero risk factors, 33 percent had one, 30 percent had two, 17 percent had three, and 3 percent had all four risk factors (figure 7 and table 14).

In 1995-96, borrowers at less-than-4-year, for-profit institutions were more likely to have had a greater number of loan default risk factors than borrowers at other less-than-4-year institutions. Seventeen percent of borrowers at less-than-4-year, for-profit institutions compared to 30 percent of borrowers at other less-than-4-year institutions had no loan default risk factors, 30 percent versus 23 percent had two factors, and 17 percent versus 11 percent had three. Fifty percent of borrowers at less-than-4-year, for-profit institutions had two or more default risk factors compared to 35 percent of borrowers at other less-than-4-year institutions.²²

²¹Mark Dynarski, "Who Defaults on Student Loans? Findings from the National Postsecondary Student Aid Study." *Economics of Education Review* 13 (1994): 55-68, and Mathtech, Inc., "Methodology for Adjusting Cohort Default Rates" (Princeton, NJ: 1995).

²²U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

Table 14—Percentage distribution of undergraduate borrowers enrolled in less-than-4-year institutions according to number of loan default risk factors, by level and control of institution: 1992-93 and 1995-96

	Number of loan default risk factors					
	None	One	Two	Three	Four	Two or more
			1995-96			
Total	25.0	34.0	26.0	13.2	1.8	41.0
Private, for-profit total	17.1	32.6	30.2	17.2	2.9	50.3
Private, for-profit 2-year	22.4	35.6	26.9	13.5	1.7	42.0
Private, for-profit less-than-2-year	12.7	30.3	32.9	20.3	3.8	57.0
Other, total*	30.0	34.9	23.4	10.6	1.2	35.2
Public, 2-year	30.8	33.5	23.4	11.0	1.3	35.7
			1992-93			
Total	20.9	39.1	28.9	10.2	1.0	40.0
Private, for-profit total	17.2	38.3	29.5	13.5	1.5	44.5
Private, for-profit 2-year	23.1	41.8	25.3	9.2	0.7	35.2
Private, for-profit less-than-2-year	13.5	36.0	32.2	16.2	2.1	50.5
Other, total*	24.5	39.8	28.3	7.1	0.4	35.7
Public, 2-year	24.4	39.7	28.6	7.0	0.3	35.9

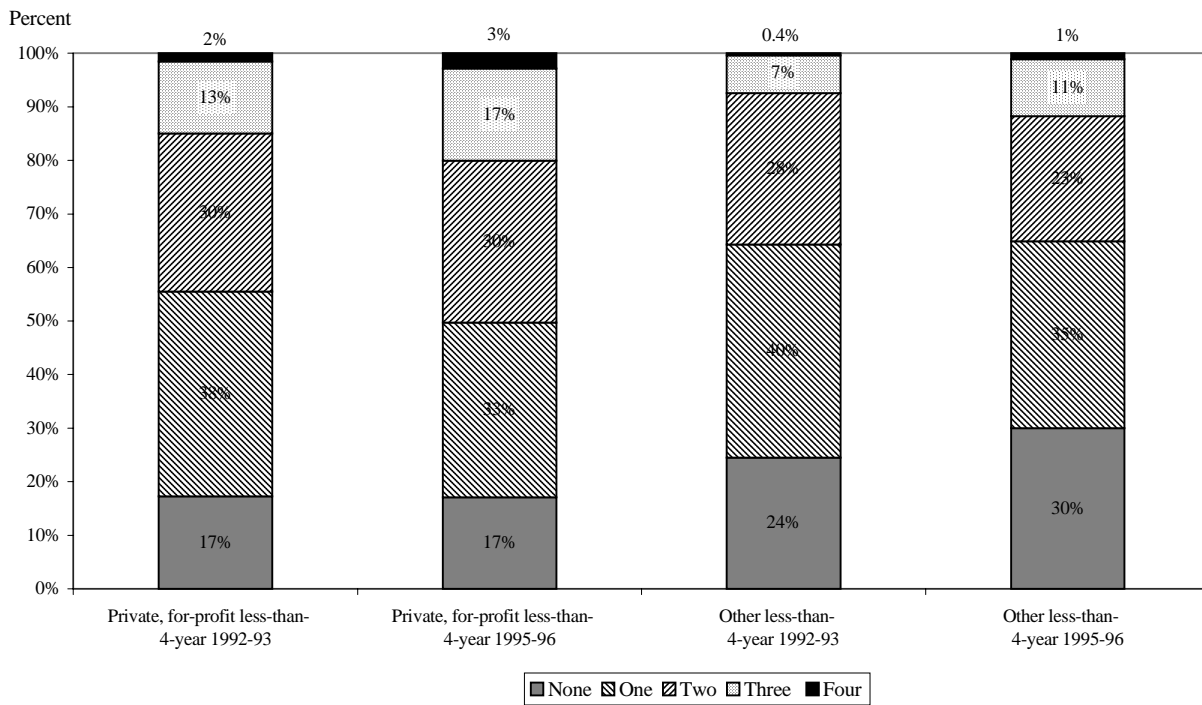
*Total refers to public and private, not-for-profit institutions.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1992-93 and 1995-96 National Postsecondary Student Aid Study (NPSAS:93 and NPSAS:96), Data Analysis System.

There were no significant differences between 1992-93 and 1995-96 in the percentage of borrowers with two or more risk factors at less-than-4-year, for-profit institutions. For students at other less-than-4-year institutions, there also were no significant differences between 1992-93 and 1995-96 in the percentage of borrowers with two or more risk factors (36 percent in 1992-93 compared to 35 percent in 1995-96).

Figure 7—Percentage distribution of undergraduate borrowers enrolled in less-than-4-year institutions according to number of loan default risk factors, by control of institution: 1992-93 and 1995-96



NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1992-93 and 1995-96 National Postsecondary Student Aid Study (NPSAS:93 and NPSAS:96), Data Analysis System.

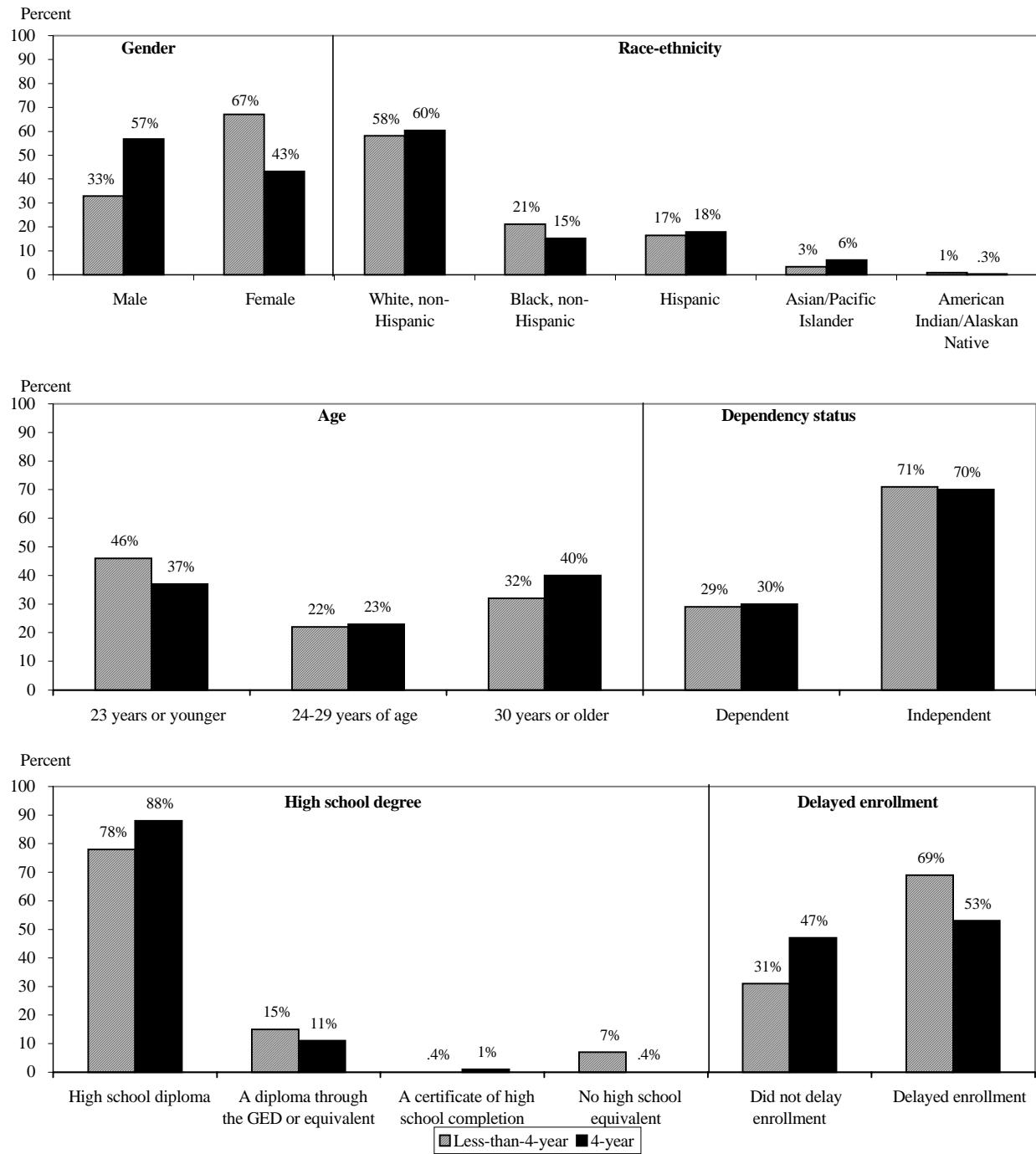
4-YEAR, FOR-PROFIT INSTITUTIONS

Over the past several years, the prominence of 4-year, for-profit postsecondary institutions that offer programs leading to a baccalaureate degree and beyond has increased. The University of Phoenix and schools owned by DeVry Inc. are well-known examples of institutions in this sector. Due to high standard errors and low sample sizes, appropriate analysis of changes in student characteristics or financing behavior between 1992-93 and 1995-96 was not possible. However, sufficient data were available to compare the differences of students attending 4-year, for-profit institutions with students attending less-than-4-year, for-profit institutions, as discussed below.

In 1995-96, undergraduate students attending 4-year, for-profit institutions were likely to be independent and not married, and not likely to be single parents (figure 8 and table 15). Seventy percent of students at 4-year, for-profit institutions were independent, 65 percent were not married, and 13 percent were single parents. Fifty-seven percent of the students were male. Thirty-seven percent were age 23 or younger, 23 percent were between 24 and 29 years old, and 40 percent were age 30 or older.

Enrollment data show that students at 4-year, for-profit institutions were likely to attend full-time for at least part of the academic year, and likely to delay their enrollment for a year or more after high school. Sixty-five percent of students at 4-year, for-profit institutions attended full-time for at least part of the academic year, while 53 percent delayed their enrollment.

Figure 8—Percentage distribution of undergraduates enrolled in for-profit institutions according to selected characteristics, by level of institution: 1995-96



NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

In 1995-96, the demographic and enrollment characteristics of students attending 4-year, for-profit institutions differed considerably from those of students attending less-than-4-year, for-profit institutions. The proportion of the population that was female at 4-year institutions was smaller than at less-than-4-year institutions—43 percent compared to 67 percent. Fifteen percent of the students at 4-year, for-profit institutions were not employed while enrolled, in contrast to 39 percent of students who attended less-than-4-year, for-profit institutions. Sixty-five percent of students at 4-year, for-profit institutions were enrolled full-time, compared to 80 percent of the students enrolled at less-than-4-year, for-profit institutions. Fifty-three percent of students who attended 4-year, for-profit institutions had delayed their enrollment by a year or more after high school; at less-than-4-year, for-profit institutions, the percentage was 69 percent. Twenty-five percent of independent students at 4-year, for-profit institutions were in the lowest income quartile compared to 40 percent of the independent students at the less-than-4-year, for-profit institutions. At the same time, 29 percent of independent students at 4-year, for-profit institutions were in the upper income quartile compared to 12 percent of their counterparts at less-than-4-year, for-profit institutions.

Table 15—Percentage distribution of undergraduates enrolled in for-profit institutions according to selected characteristics, by level of institution: 1992-93 and 1995-96

	1995-96		1992-93	
	Less-than-4-year	4-year	Less-than-4-year	4-year
Total	100.0	100.0	100.0	100.0
Gender				
Male	32.9	56.8	34.3	46.7
Female	67.1	43.2	65.7	53.3
Age				
23 years or younger	45.9	37.1	50.8	42.4
24-29 years of age	21.8	23.1	20.7	24.9
30 years or older	32.3	39.8	28.5	32.8
Race-ethnicity				
White, non-Hispanic	58.1	60.4	49.1	67.3
Black, non-Hispanic	21.2	15.3	27.1	18.6
Hispanic	16.5	17.9	18.2	7.6
Asian/Pacific Islander	3.4	6.1	4.3	6.3
American Indian/Alaskan Native	0.9	0.3	1.4	0.2
Marital status				
Not married	69.8	65.3	70.0	64.5
Married	24.5	31.9	24.6	32.9
Separated	5.7	2.9	5.4	2.7
Single parent status				
Not a single parent	77.1	87.1	77.2	93.0
Single parent	23.0	12.9	22.8	7.0
Disability status				
Student has a disability	7.8	4.3	8.1	3.5
Student does not have a disability	92.2	95.7	91.9	96.6
Dependency status				
Dependent	29.2	30.2	31.3	30.9
Independent	70.8	69.8	68.7	69.1
Independent, no dependents	26.1	32.8	29.9	42.5
Independent, with dependents	44.7	37.0	38.8	26.7
Independent student total income, quartile				
Lower quartile	40.4	25.2	46.0	26.3
Middle quartiles	47.6	45.5	43.9	38.8
Upper quartile	12.0	29.3	10.2	34.9

Table 15—Percentage distribution of undergraduates enrolled in for-profit institutions according to selected characteristics, by level of institution: 1992-93 and 1995-96—Continued

	1995-96		1992-93	
	Less-than-4-year	4-year	Less-than-4-year	4-year
Parents' total income, quartile (dependent students)				
Lower quartile	42.4	47.0	46.0	40.5
Middle quartiles	40.4	34.6	46.6	36.9
Upper quartile	17.2	18.4	7.3	22.7
Parents' highest education				
Less than high school	13.9	8.4	19.3	13.1
High school graduate	51.0	44.0	44.3	32.6
Some college, including AA	16.5	19.1	18.0	17.2
Bachelor's degree	12.2	16.4	11.2	17.6
Advanced degree	6.4	12.2	7.2	19.6
High school degree or equivalent				
High school diploma	77.8	88.3	77.2	94.4
A diploma through the GED or equivalent	14.7	10.8	10.6	4.0
A certificate of high school completion	0.4	0.6	0.4	0.4
No high school equivalent	7.1	0.4	11.8	1.2
Delayed enrollment				
Did not delay enrollment	31.2	47.2	36.5	45.9
Delayed enrollment	68.9	52.8	63.5	54.1
Attendance status				
Full-time	80.3	65.1	79.8	53.0
Part-time	19.7	34.9	20.2	47.0
Average hours worked per week while enrolled				
Not employed	39.1	15.4	48.1	20.0
1-20 hours	16.7	14.0	15.5	16.4
21-34 hours	15.9	13.0	13.0	13.9
35 hours or more	28.3	57.6	23.5	49.7

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1992-93 and 1995-96 National Postsecondary Student Aid Study (NPSAS:93 and NPSAS:96), Data Analysis System.

Compared to students at less-than-4-year, for-profit institutions, students at 4-year, for-profit institutions financed their education differently. The average amount of federal loans obtained by students at 4-year, for-profit institutions was higher than the average obtained by students at less-than-4-year, for-profit institutions—\$5,500 compared to \$3,900 (table 16). The trend was the opposite for state grant aid. The average state grant received by students who attended 4-year, for-profit institutions was \$880, lower than the average state grant of \$2,300 for

students attending less-than-4-year, for-profit institutions. Finally, there was a significant difference in the percentage of students who received employer aid. About one in 10 students (11 percent) who were enrolled at 4-year, for-profit institutions received employer aid compared to 2 percent of students who attended less-than-4-year, for-profit institutions.

Table 16—Financing behavior of students at for-profit institutions, by level of institution: 1992-93 and 1995-96

	1995-96				1992-93			
	Less-than-4-year		4-year		Less-than-4-year		4-year	
	Percent	Average	Percent	Average	Percent	Average	Percent	Average
Total aid	78.1	\$4,928	74.7	\$5,956	75.8	\$4,175	60.4	\$5,397
Federal aid (except VA/DOD)	71.2	4,431	63.7	5,836	70.8	3,864	47.8	5,252
Non-federal aid	26.9	2,575	27.3	2,687	11.9	2,466	18.9	2,390
State aid	10.9	2,672	6.9	1,241	5.0	2,185	8.8	1,264
Institutional aid	10.2	1,537	5.3	2,183	3.9	1,608	7.2	1,596
Other aid (including VA/DOD)	7.5	3,266	16.9	3,142	5.9	3,179	18.7	2,520
Employer aid	2.0	3,685	11.2	2,757	2.4	3,397	13.1	2,659
Loans (except PLUS)	56.4	3,969	52.2	5,490	47.0	3,580	43.2	4,256
Federal (except PLUS)	54.8	3,902	51.9	5,451	46.5	3,520	43.2	4,233
Stafford (all)	53.8	3,890	51.4	5,241	45.4	2,590	42.5	3,061
Stafford subsidized	50.4	2,319	45.3	3,343	**	**	**	**
Stafford unsubsidized	32.0	2,884	35.0	3,376	**	**	**	**
Perkins	3.0	1,441	9.2	1,471	2.5	1,505	4.1	1,237
Non-federal	5.2	1,940	0.7	—	1.7	2,743	1.1	—
State	0.1	—	0.2	—	0.2	—	0	—
Institutional	4.6	1,933	0.3	—	0.5	—	0.2	—
Other	0.5	—	0.2	—	1.1	2,512	0.9	—
Grants	56.2	1,948	52.8	2,140	58.6	1,954	40.6	2,599
Federal	50.1	1,543	38.9	1,699	53.8	1,734	26.7	1,803
Pell	49.7	1,459	38.7	1,480	52.5	1,633	26.4	1,596
SEOG	12.4	374	15.7	560	10.8	531	8.8	673
Non-federal	16.2	1,996	21.9	2,145	8.1	2,171	15.9	2,394
State	9.0	2,323	6.4	878	2.9	1,839	8.6	1,203
Institutional	5.7	791	4.8	2,052	3.4	1,397	4.1	1,417
Other	2.2	3,119	11.5	2,739	2.2	3,372	7.6	—

**Program did not exist in 1992-93.

—Sample size was too small for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1992-93 and 1995-96 National Postsecondary Student Aid Study (NPSAS: 93 and NPSAS: 96), Data Analysis System.

SUMMARY

This report examined the financing patterns of students at private, for-profit institutions, and profiled changes in the demographic and enrollment characteristics of these students, including receipt of financial aid, between 1992-93 and 1995-96. The analysis focused more specifically on student borrowing through the federal Title IV programs (excluding PLUS).

The overall findings of this report indicate that the demographic and enrollment characteristics of students attending less-than-4-year, for-profit institutions in 1995-96 were female, white, age 23 or younger, independent, delayed their enrollment for a year or more after high school, attended full-time for at least part of the academic year, and did not work while enrolled. They were more likely than their counterparts at other less-than-4-year institutions to be female, black, single parents, independent, and in the lowest income quartile. These characteristics remained consistent between 1992-93 and 1995-96, with no significant changes in the student population.

The federal government was the most extensive provider of financial aid in 1995-96 to students attending less-than-4-year, for-profit institutions, followed by states, institutions, and employers. While this pattern was similar to that in 1992-93, there were some significant changes in how these students financed their educations. The percentage of students who received aid from non-federal sources increased from 12 percent to 27 percent.

The demographic and enrollment characteristics of borrowers at less-than-4-year, for-profit institutions were similar to those of all students in that sector and changed little between 1992-93 and 1995-96. Comparing the characteristics of borrowers to non-borrowers reveals that borrowers were generally younger, in the lowest income quartile, and worked while enrolled. Borrowers at less-than-4-year, for-profit institutions were more likely than those at other less-than-4-year institutions to have more risk factors associated with loan default, including being black, independent, from a low-income family, and not having a traditional high school diploma. There were no differences in these characteristics between 1992-93 and 1995-96.

The number of 4-year, for-profit postsecondary institutions that offer programs leading to a baccalaureate degree and beyond has increased. The students that attended these institutions in 1995-96 were different than those students that attended less-than-4-year, for-profit institutions.

Students in the 4-year, for-profit sector were more likely to be male, employed while enrolled, and not to have delayed their enrollment for a year or more after high school.

There also were differences with regard to financing behavior. The average amounts of federal loans and grants received by students at 4-year, for-profit institutions were higher than the amounts that students at less-than-4-year, for-profit institutions received. However, state aid differed: students at 4-year, for-profit institutions received lower average state grant amounts. In addition, students at 4-year, for-profit institutions were more likely to receive employer aid than students at less-than-4-year institutions.

APPENDIX A: GLOSSARY

The variables in this glossary were taken directly from the National Center for Education Statistics (NCES) NPSAS:93 and NPSAS:96 Data Analysis System (DAS). This is an NCES software application that generates tables from the NPSAS:93 and NPSAS:96 data. A description of the DAS software can be found in appendix B. The labels in parentheses correspond to the names of the variables in the DAS. Variables from NPSAS:93 are given first, followed by those from NPSAS:96.

NPSAS:93

Demographic and enrollment characteristics

Age (AGE)

23 years or younger	Student was 23 years old or younger as of 12/31/92.
24-29 years of age	Student was between 24 and 29 years of age as of 12/31/92.
30 years or older	Student was 30 years old or older as of 12/31/92.

Attendance status (ATTNST8)

Attendance status describes the student's full- or part-time attendance while enrolled during 1992-93, as defined by the institution.

Full-time	Student was enrolled 8 or more months full-time, or attended less than 8 months, all months full-time.
Part-time	Student was enrolled 8 or more months, but less than 8 months full-time, or attended less than 8 months, all or some months part-time.

Delayed enrollment (DELAYENR)

Student delayed enrollment into postsecondary education (PSE). Immediate enrollment is defined as entry into PSE during the same calendar year as graduating from high school or receiving a General Educational Development certificate (GED). The assumption is that high school graduation takes place in May or June and entry into PSE takes place the subsequent summer or fall of the same year.

Did not delay enrollment Student entered PSE the same calendar year as high school graduation or GED receipt.

Delayed enrollment Student entered PSE, but delayed their enrollment for a year or more after high school.

Dependency status (DEPEND4)

Dependent A student was considered dependent if he or she did not meet any of the criteria for independence (see below).

Independent A student was considered independent if he or she met one or more of the following criteria:

Twenty-four years of age or older as of 12/31/92.

Was a veteran.

Was an orphan or ward of the court.

Had legal dependents, other than spouse.

Was married, and not claimed by parents on 1992 tax returns.

Was a graduate student and not claimed as a dependent by parents on 1992 tax return.

Was a single undergraduate, not claimed as a dependent by parents on either 1990 or 1991 tax returns, and was self-sufficient for two years prior to receiving any federal aid.

Independent, no dependents A student was considered independent if he or she met any of the criteria for independence (see above). In addition, the student did not have any dependents (other than spouse if married).

Independent, with dependents A student was considered independent if he or she met any of the criteria for independence (see above). In addition, the student had at least one dependent (not including spouses).

Disability status (DISABILITY)

Student does not have a disability A student was not considered to have a disability if they did not indicate such (see below).

Student has a disability A student was considered to have a disability if they indicated having any of the following:

Hearing impairment.

Speech disability or limitation.

Orthopedic or mobility limitation.

Specific learning disability.

Vision impairment that cannot be corrected by glasses, or legally blind.

Other type of disability.

Gender (GENDER)

Male

Female

Average hours worked per week while enrolled (EMWKHR4)

The average number of hours worked per week while enrolled (including work-study). If a student reported being employed during the month, the average number of hours worked per week was derived based on the starting and ending dates and the hours reported for each job during the

survey interview. Note that this variable only represents the average hours a student worked while working and enrolled. Thus, if a student worked an average of 20 hours per week while enrolled for 6 months and then did not work for the remaining 3 months of enrollment, the average hours would still be 20 hours per week.

Not employed Student reported no hours of work during enrollment.

1-20 hours Student worked 1-20 hours per week while enrolled.

21-34 hours Student worked 21-34 hours per week while enrolled.

35 or more Student worked full time while enrolled.

High school degree or equivalent (HSDEG)

Form in which the high school degree or equivalent was received.

High school diploma

A diploma through the General Educational Development certificate (GED) or other equivalent

A certificate of high school completion

No high school equivalent

Independent student total income, quartile (PCTINDEP)

Percentile rank of independent student's total income in 1991. Calculated for independent students only. Equal to the proportion of the sample of independent students who had an income lower than the sample student.

Lower quartile Income falls at or below the 25th percentile of independent students' income distribution.

Middle quartiles Income falls between the 26th percentile and 75th percentile of independent students' income distribution.

Upper quartile Income falls at or above the 76th percentile of independent students' income distribution.

Parents' total income, quartile (dependent students) (PCTDEP)

Percentile rank of parents' total income in 1991. Calculated for dependent students only. Equal to the proportion of the sample of dependent students' parents who had an income lower than sample student's parents.

Lower quartile	Income falls at or below the 25 th percentile of dependent students' parents' income distribution.
Middle quartiles	Income falls between the 26 th percentile and 75 th percentile of dependent students' parents' income distribution.
Upper quartile	Income falls at or above the 76 th percentile of dependent students' parents' income distribution.

Income status (PCTPOV91)

Total 1991 income as a percentage of the federal poverty level thresholds for 1991, based on family size, total income, and dependency. Refers to the family of the parents of dependent students and the student's own family if independent.

Low-income	Income was less than 100 percent of the federal poverty threshold.
Not low-income	Income was 100 percent or more of the federal poverty threshold.

Parents' highest education (PEDUC)

The highest level of education completed by either of the student's parents (mother or father, whoever had the highest level).

Less than high school	Neither parent graduated from high school or received a GED certificate.
High school graduate	One or both parents graduated from high school or received a GED certificate.
Some college, including AA	One or both parents had some postsecondary education, less than a bachelor's degree, but could include an associate's degree.
Bachelor's degree	One or both parents earned a bachelor's degree.

Advanced degree One or both parents earned an advanced degree, including a master's degree, Ph.D., M.D., etc.

Race-ethnicity (RACE2R)

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 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 origins in any of the original 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.

Marital status (SMARITAL)

Student marital status. Since almost all dependent students were not married, dependent students for whom there was no information were assumed to be unmarried.

Not married Student was not currently married.

Married Student was currently married.

Separated Student was currently divorced, widowed, or separated.

Single parent status (SINGLPAR)

Students who had dependents but were not married. Note that in the case that a student was caring for dependents who were not the student's children (i.e., elderly parents or relatives) and the student was not married, the student was identified as a single parent.

Not a single parent

Single parent

Type of institution (SECTOR)

Indicates the level and control of the NPSAS institution where the student was surveyed during 1992-93.

Public 2-year Included in "other, public 2-year," "other, total," and "total, less-than-4-year institutions."

Public less-than-2-year Included in "other, total" and "total, less-than-4-year institutions."

Private, not-for-profit 2-year Included in "other, total" and "total, less-than-4-year institutions."

Private, not-for-profit less-than-2-year Included in "other, total" and "total, less-than-4-year institutions."

Public 4-year (Not used in this analysis)

Private, not-for-profit 4-year (Not used in this analysis)

Level of private, for-profit institution (PRIVFP)

Indicates the level of the private, for-profit NPSAS institution where the student was surveyed during 1992-93.

4-year Included in "private, for-profit 4-year."

2-year Included in "private, for-profit less-than-4-year."

Less-than-2-year Included in "private, for-profit less-than-4-year."

Loan default risk factors (LNDEFI)

Represents an index of risk based on the sum of four possible characteristics that have been shown to be associated with defaulting on student loans. These four factors are:

Being black

Being financially independent

Being from a low-income family

Not having a traditional high school diploma

Financial aid variables

Total aid (TOTAIDR2)

Total amount of financial aid received from all sources (federal, state, institutional, other) in 1992-93, including loans, grants, work-study, and all other types of aid. Positive values on this variable were also used to identify the percentage of students who received aid.

Federal aid (except VA/DOD) (TFEDAID)

Total amount of federal financial aid received in 1992-93, including loans, grants, work-study, and all other federal aid, but excluding veterans' benefits (VA/DOD). Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Non-federal aid (TNFEDAID)

Total amount of non-federal aid from states, institutions, and other sources (not federal) in 1992-93, including loans, grants, work-study, and all other types of aid. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

State aid (STATEAMT)

Total amount of financial aid awarded by states in 1992-93, including loans, grants, work-study, and all other types of aid. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Institutional aid (INSTAMT)

Total amount of financial aid received from postsecondary institutions in 1992-93, including loans, grants, work-study, and all other types of aid. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Other aid (OTHERAMR)

Total amount of aid received from a source other than federal, state, or institutional in 1992-93. Other aid includes veterans' benefits (VA/DOD), loans, grants, work-study, and all other types of aid. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Employer aid (EMPLAMTR)

Total amount of financial aid received from employers in 1992-93. It is equal to the sum of tuition waivers for employees and employee tuition reimbursement. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Loans (except PLUS) (TOTLOANR)

Total amount of loans received in 1992-93. This includes all loans from federal, state, institutional, or other programs except PLUS loans (which are made to parents). Loans are a type of student financial aid that advances funds evidenced by a promissory note requiring the recipient to repay the specified amounts under prescribed conditions. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Federal loans (except PLUS) (TFEDLNR)

Total amount of loans received in 1992-93 from federal sources. PLUS loans (which are made to parents) are not included. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Federal Stafford (all) loan (STAFFR)

Total amount of federal Stafford loans received in 1992-93. This includes all Stafford loans taken out at all institutions the student attended during the academic year. Stafford loans are long-term, low-interest loans administered by the federal government. Students borrow money for educational expenses directly from banks or other lending institutions. The loans are guaranteed by the federal government. This program was formerly known as the Guaranteed Student Loan (GSL) program. In 1992-93 the federal Stafford loan program consisted only of subsidized

loans. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Federal Perkins loan (PERKAMT)

Total amount of federal Perkins loans received in 1992-93. The Perkins loan is a campus-based, low-interest loan for students who show exceptional financial need. Total awards, including awards from all previous years, cannot exceed \$9,000 for undergraduate students. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Non-federal loans (TNFEDLN)

Total amount of loans received in 1992-93 from non-federal sources (state, institutional, and other). Positive values on this variable were also used to identify the percentage of students who received this category of aid.

State loans (STLNAMT)

Total amount of state loans received in 1992-93. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Institutional loans (INLNAMT)

Total amount of institutional loans received in 1992-93. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Other loans (OTHLNAMT)

Total amount of loans received in 1992-93 from a source other than federal, state, or institutional. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Grants (TOTGRTR)

Total amount of grants received in 1992-93 from federal, state, institutional, and other sources. Grants are a type of student financial aid that does not require repayment or employment. Grants include scholarships and fellowships. Employer aid is also considered grant aid. Positive values

on this variable were also used to identify the percentage of students who received this category of aid.

Federal grants (TFEDGRT)

Total amount of federal grants received in 1992-93, including Pell Grants, Supplemental Educational Opportunity Grants (SEOG), and other federal grants, scholarships, fellowships, and traineeships. These are all forms of financial aid that do not require repayment or employment. Does not include veterans' benefits (VA/DOD). Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Federal Pell Grant (PELLAMT)

Total amount of Pell Grant received in 1992-93. Pell Grants are awarded to undergraduates who have not yet earned a bachelor's degree and are intended as a financial base to which other forms of aid may be added. Award amounts were based upon need, the cost of the institution attended, and attendance status. To be eligible, students must attend at least half-time. The maximum award in 1992-93 was \$2,400. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Federal SEOG grant (SEOGAMT)

Total amount of SEOG grants received in 1992-93. The Supplemental Educational Opportunity Grant (SEOG) is a campus-administered federal grant available to undergraduates without a bachelor's degree who show exceptional financial need. The SEOG is intended to supplement the Pell Grant, and priority is given to undergraduates who have received a Pell Grant. The maximum award was \$4,000 per year in 1992-93. Eligibility for a SEOG grant does not guarantee receipt of an award, as funds available to each institution are limited. Eligibility is not based upon attendance status, so undergraduates who are enrolled less than half-time may be eligible for a SEOG grant. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Non-federal grants (TNFEDGRT)

Total amount of loans received in 1992-93 from non-federal sources (state, institutional, and other). Grants include scholarships and fellowships. Employer aid is also considered grant aid. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

State grants (STGTAMT)

Total amount of state-based grants, scholarships, fellowships, and traineeships, including the federal portion of State Student Incentive Grants (SSIG) received in 1992-93. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Institutional grants (INGRTAMT)

Total amount of institutional grant aid received in 1992-93. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Other grants (OTHGTAMT)

Total amount of grants received in 1992-93 from a source other than federal, state, or institutional. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Package by type of aid (all combinations) 1993 (AIDTYPE)

Identification of federal aid combinations received by students in 1992-93 by the type of aid received (loans, grants, work-study, other).

Loans only

Grants only

Work-study only

Other only

Loans & grants

Loans & work-study

Loans & other

Grants & work-study

Grants & other

Work-study & other

Loans, grants, & work-study

Loans, grants, & other

Loans, work-study, & other

Grants, work-study, & other

Loans, grants, work-study, & other

Package by source of aid (all combinations) 1993 (AIDSRC)

Identification of financial aid received by students in 1992-93 by the source of aid (federal, state, institutional, and other).

Federal only

State only

Institutional only

Other only

Federal & state

Federal & institutional

Federal & other

State & institutional

State & other

Institutional & other

Federal, state, & institutional

Federal, state, & other

Federal, institutional, & other

State, institutional, & other

Federal, state, institutional, & other

Loan package by source of aid (all combinations) 1993 (LOANSRC)

Identification of combinations of loans received by students in 1992-93 by the source of aid (federal, state, institutional, and other). (See above for different combinations.)

Grant package by source of aid (all combinations) 1993 (GRNTSRC)

Identification of combinations of grants received by students in 1992-93 by the source of aid (federal, state, institutional, and other). (See above for different combinations.)

Borrowed a Title IV loan (except PLUS) (T4AMT1R)

Total amount of federal Title IV loans received in 1992-93. Title IV loans include Perkins loans, Stafford loans, Supplemental Loans for Students (SLS), and income contingent loans. PLUS loans (which are made to parents) are not included. Positive values on this variable were also used to identify the percentage of students who received this category of aid. This variable was used as the basis for the borrowers section.

NPSAS:96

Demographic and enrollment characteristics

Age (AGE)

23 years or younger Student was 23 years old or younger as of 12/31/95.

24-29 years of age Student was between 24 and 29 years of age as of 12/31/95.

30 years or older Student was 30 years old or older as of 12/31/95.

Attendance status (ATTNST1)

Attendance pattern describes the student's full- or part-time attendance while enrolled during 1995-96, as defined by the institution.

Full-time Student was enrolled 8 or more months full-time, or attended less than 8 months, all months full-time.

Part-time Student was enrolled 8 or more months, but less than 8 months full-time or attended less than 8 months, all or some months part-time.

Delayed enrollment (DELAYED)

Student delayed enrollment into postsecondary education (PSE). Immediate enrollment is defined as entry into PSE the same calendar year as graduating from high school or receiving a GED. The assumption is that high school graduation takes place in May or June and entry into PSE takes place the subsequent summer or fall of the same year.

Did not delay enrollment Student entered PSE the same calendar year as high school graduation or GED receipt.

Delayed enrollment Student entered PSE, but delayed their enrollment for a year or more after high school.

Dependency status (DEPEND4)

Dependent A student was considered dependent if he or she did not meet any of the criteria for independence (see below).

Independent A student was considered independent by meeting one or more of the following criteria:

Age twenty-four or older as of 12/31/95 (born before January 1, 1972).

A veteran of the U.S. Armed Forces.

Enrolled in a graduate or professional program (beyond a bachelor's degree) in 1995-96.

Married.

Orphan or ward of the court.

Had legal dependents, other than spouse.

Independent, no dependents A student was considered independent if he or she met any of the criteria for independence (see above). In addition,

the student did not have any dependents (other than spouse if married).

Independent, with dependents

A student was considered independent if he or she met any of the criteria for independence (see above). In addition, the student had at least one dependent (not including spouses).

Disability status (DISABIL)

Student does not have a disability

A student was not considered to have a disability if they did not indicate such (see below).

Student has a disability

A student was considered to have a disability if they indicated having any of the following:

Hearing impairment.

Other health-related limitation.

Learning disability.

Orthopedic or mobility limitation.

Speech disability or limitation.

Visual impairment.

Gender (GENDER)

Male

Female

Average hours worked per week while enrolled (HRSWORK)

The average number of hours worked per week while enrolled (including work-study). If a student reported being employed during the month, the average number of hours worked per week was derived based on the starting and ending dates and the hours reported for each job during the survey interview. Note that this variable only represents the average hours a student worked

while working and enrolled. Thus, if a student worked an average of 20 hours per week while enrolled for 6 months and then did not work for the remaining 3 months of enrollment, the average hours would still be 20 hours per week.

Not employed Student reported no hours of work during enrollment.

1-20 hours Student worked 1-20 hours per week while enrolled.

21-34 hours Student worked 21-34 hours per week while enrolled.

35 or more Student worked full-time while enrolled.

High school degree or equivalent (HSDEG)

Form in which the high school degree or equivalent was received.

High school diploma

A diploma through the General Educational Development certificate (GED) or other equivalent

A certificate of high school completion

No high school equivalent

Independent student total income, quartile (PCTINDEP)

Percentile rank of independent student's total income in 1994. Calculated for independent students only. Equal to the proportion of the sample of independent students who had an income lower than the sample student.

Lower quartile Income falls at or below the 25th percentile of independent students' income distribution.

Middle quartiles Income falls between the 26th percentile and 75th percentile of independent students' income distribution.

Upper quartile Income falls at or above the 76th percentile of independent students' income distribution.

Parents' total income, quartile (dependent students) (PCTDEP)

Percentile rank of parents' total income in 1994. Calculated for dependent students only. Equal to the proportion of the sample of dependent students' parents who had an income lower than sample student's parents.

Lower quartile Income falls at or below the 25th percentile of dependent students' parents' income distribution.

Middle quartiles Income falls between the 26th percentile and 75th percentile of dependent students' parents' income distribution.

Upper quartile Income falls at or above the 76th percentile of dependent students' parents' income distribution.

Income status (PCTPOV94)

Total 1994 income as a percentage of the federal poverty level thresholds for 1994, based on family size, total income, and dependency. Refers to the family of the parents of dependent students and the student's own family if independent.

Low-income Income was less than 100 percent of the federal poverty threshold.

Not low-income Income was 100 percent or more of the federal poverty threshold.

Parents' highest education (PAREduc)

The highest level of education completed by either of the student's parents (mother or father, whoever had the highest level).

Less than high school Neither parent graduated from high school or received a GED certificate.

High school graduate One or both parents graduated from high school or received a GED certificate.

Some college, including AA One or both parents had some postsecondary education, less than a bachelor's degree, but could include an associate's degree.

Bachelor's degree	One or both parents earned a bachelor's degree.
Advanced degree	One or both parents earned an advanced degree, including a master's degree, Ph.D., M.D., etc.

Race-ethnicity (RACE)

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	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 origins in any of the original 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.

Marital status (SMARITAL)

Student marital status. Since almost all dependent students were not married, dependent students for whom there was no information were assumed to be unmarried.

Not married	Student was not currently married.
Married	Student was currently married.
Separated	Student was currently divorced, widowed, or separated.

Single parent status (SINGLPAR)

Students who had dependents but were not married. Note that in the remote case that a student was caring for dependents who were not the student’s children (i.e., elderly parents or relatives) and the student was not married, the student was identified as a single parent.

Not a single parent

Single parent

Type of institution (SECTOR_C)

Indicates the level and control of the NPSAS institution where the student was surveyed during 1995-96.

Public 2-year Included in “other, public 2-year,” “other, total,” and “total, less-than-4-year institutions.”

Public less-than-2-year Included in “other, total” and “total, less-than-4-year institutions.”

Private, not-for-profit 2-year Included in “other, total” and “total, less-than-4-year institutions.”

Private, not-for-profit less-than-2-year Included in “other, total” and “total, less-than-4-year institutions.”

Public 4-year (Not used in this analysis)

Private, not-for-profit 4-year (Not used in this analysis)

Level of private, for-profit institution (PRIVFP)

Indicates the level of the private, for-profit NPSAS institution where the student was surveyed during 1995-96.

4-year Included in “private, for-profit 4-year.”

2-year Included in “private, for-profit less-than-4-year.”

Less-than-2-year Included in “private, for-profit less-than-4-year.”

Loan default risk factors (LNDEFI)

Represents an index of risk based on the sum of four possible characteristics that have been shown to be associated with defaulting on student loans. These four factors are:

Being black

Being from a low-income family

Not having a traditional high school diploma

Being financially independent

Financial aid variables***Total aid (TOTAID)***

Total amount of financial aid received from all sources (federal, state, institutional, other) in 1995-96, including loans, grants, work-study, and all other types of aid. Positive values on this variable were also used to identify the percentage of students who received aid.

Federal aid (except VA/DOD) (TFEDAID)

Total amount of federal financial aid received in 1995-96, including loans, grants, work-study, and all other federal aid, but excluding veterans' benefits (VA/DOD). Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Non-federal aid (TNFEDAID)

Total amount of non-federal aid from states, institutions, and other sources (not federal) in 1995-96, including loans, grants, work-study, and all other types of aid. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

State aid (STATEAMT)

Total amount of financial aid awarded by states in 1995-96, including loans, grants, work-study, and all other types of aid. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Institutional aid (INSTAMT)

Total amount of financial aid received from postsecondary institutions in 1995-96, including loans, grants, work-study, and all other types of aid. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Other aid (including VA/DOD) (OTHERSCR)

Total amount of aid received from a source other than federal, state, or institutional in 1995-96. Other aid includes veterans' benefits (VA/DOD), loans, grants, work-study, and all other types of aid. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Employer aid (EMPLYAMT)

Total amount of financial aid received from employers in 1995-96. It is equal to the sum of tuition waivers for employees and employee tuition reimbursement. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Loans (except PLUS) (TOTLOAN)

Total amount of loans received in 1995-96. This includes all loans from federal, state, institutional, or other programs except PLUS loans (which are made to parents). Loans are a type of student financial aid that advances funds evidenced by a promissory note requiring the recipient to repay the specified amounts under prescribed conditions. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Federal loans (except PLUS) (TFEDLN)

Total amount of loans received in 1995-96 from federal sources. PLUS loans (which are made to parents) are not included. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Federal Stafford loan (STAFFAMT)

Total amount of federal Stafford loans received in 1995-96. This includes all Stafford loans taken out at all institutions the student attended during the year. Stafford loans are long-term, low-interest loans administered by the federal government. Students borrow money for educational expenses directly from banks or other lending institutions. The loans are guaranteed by the

federal government. This program was formerly known as the Guaranteed Student Loan (GSL) program. In 1995-96 the federal Stafford loan program consisted of both subsidized and unsubsidized loans. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Federal Stafford subsidized loan (STAFSUB)

Total amount of federal Stafford subsidized loans received in 1995-96. This includes all subsidized Stafford loans taken out at all institutions the student attended during the year. There are two categories of federal Stafford subsidized loans. Under the Direct loan program, the federal government makes loans directly to students and parents through schools. Under the Federal Family Education Loan (FFEL) Program, private lenders such as banks, credit unions, and savings and loan associations usually make the loans. Although the source of funds is different, both programs provide the same types of loans. 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. Annual loan limits vary considerably.

Federal Stafford unsubsidized loan (STAFUNSB)

Total amount of federal Stafford unsubsidized loans received in 1995-96. This includes all unsubsidized Stafford loans taken out at all institutions the student attended during the year. There are two categories of federal Stafford unsubsidized loans. Under the Direct loan program, the federal government makes loans directly to students and parents through schools. Under the FFEL Program, private lenders such as banks, credit unions, and savings and loan associations usually make the loans. Although the source of funds is different, both programs provide the same types of loans. An unsubsidized loan is not awarded on the basis of need. If a student qualifies for an unsubsidized loan, they are charged interest from the time the loan is disbursed until it is paid in full. Students can choose to pay the interest or allow it to accumulate. If the student allows the interest to accumulate, it will be capitalized (added to the principal amount of the loan). Annual loan limits vary considerably.

Federal Perkins loan (PERKAMT)

Total amount of federal Perkins loans received in 1995-96. The Perkins loan is a campus-based, low-interest loan for students who show exceptional financial need. For undergraduates, total annual awards cannot exceed \$3,000, and the maximum amount that can be borrowed is \$15,000. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Non-federal loans (TNFEDLN)

Total amount of loans received in 1995-96 from non-federal sources (state, institutional, and other). Positive values on this variable were also used to identify the percentage of students who received this category of aid.

State loan (STLNAMT)

Total amount of state loans received in 1995-96. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Institutional loans (INLNAMT)

Total amount of institutional loans received in 1995-96. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Other loans (OTHLNAMT)

Total amount of loans received in 1995-96 from a source other than federal, state, or institutional. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Grants (TOTGRT)

Total amount of grants received in 1995-96 from federal, state, institutional, and other sources. Grants are a type of student financial aid that does not require repayment or employment. Grants include scholarships and fellowships. Employer aid is also considered grant aid. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Federal grants (TFEDGRT)

Total amount of federal grants received in 1995-96, including Pell Grants, Supplemental Educational Opportunity Grants (SEOG), and other federal grants, scholarships, fellowships, and traineeships. These are all forms of financial aid that do not require repayment or employment. Does not include veterans' benefits (VA/DOD). Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Federal Pell Grant (PELLAMT)

Total amount of Pell Grant received in 1995-96. Pell Grants are awarded to undergraduates who have not yet received a bachelor's or first professional degree. They are intended as a financial base, to which other financial aid awards can be added. The amount of a Pell Grant depends on estimated family contribution (EFC), cost of attendance, and attendance status (i.e. full-time or part-time, full-year or part-year). In 1995-96 the maximum Pell Grant amount was \$2,340. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Federal SEOG grant (SEOGAMT)

Total amount of SEOG grants received in 1995-96. The Supplemental Educational Opportunity Grant (SEOG) is a campus-administered federal grant available to undergraduates without a bachelor's degree who show exceptional financial need. The SEOG is intended to supplement the Pell Grant, and priority is given to undergraduates who have received a Pell Grant. The maximum award was \$4,000 per year in 1995-96. Eligibility for a SEOG grant does not guarantee receipt of an award, as funds available to each institution are limited. Eligibility is not based upon attendance status, so undergraduates who are enrolled less than half-time may be eligible for a SEOG grant. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Non-federal grants (TNFEDGRT)

Total amount of loans received in 1995-96 from non-federal sources (state, institutional, and other). Grants include scholarships and fellowships. Employer aid is also considered grant aid. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

State grants (STGTAMT)

Total amount of state-based grants, scholarships, fellowships, and traineeships, including the federal portion of State Student Incentive Grants (SSIG) received in 1995-96. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Institutional grants (INGRTAMT)

Total amount of institutional grant aid received in 1995-96. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Other grants (OTHGTAMT)

Total amount of grants received in 1995-96 from a source other than federal, state, or institutional. Positive values on this variable were also used to identify the percentage of students who received this category of aid.

Package by type of aid (all combinations) 1996 (AIDTYPE)

Identification of federal aid combinations received by students in 1995-96 by the type of aid received (loans, grants, work-study, other).

Loans only

Grants only

Work-study only

Other only

Loans & grants

Loans & work-study

Loans & other

Grants & work-study

Grants & other

Work-study & other

Loans, grants, & work-study

Loans, grants, & other

Loans, work-study, & other

Grants, work-study, & other

Loans, grants, work-study, & other

Package by source of aid (all combinations) 1996 (AIDSRC)

Identification of financial aid received by students in 1995-96 by the source of aid (federal, state, institutional, and other).

Federal only

State only

Institutional only

Other only

Federal & state

Federal & institutional

Federal & other

State & institutional

State & other

Institutional & other

Federal, state, & institutional

Federal, state, & other

Federal, institutional, & other

State, institutional, & other

Federal, state, institutional, & other

Loan package by source of aid (all combinations) 1996 (LOANSRC)

Identification of combinations of loans received by students in 1995-96 by the source of aid (federal, state, institutional, and other). (See above for different combinations.)

Grant package by source of aid (all combinations) 1996 (GRNTSRC)

Identification of combinations of grants received by students in 1995-96 by the source of aid (federal, state, institutional, and other). (See above for different combinations.)

Borrowed a Title IV loan (except PLUS) (T4LNAMT1)

Total amount of federal Title IV loans received in 1995-96. Title IV loans include Perkins loans and Stafford loans (subsidized and unsubsidized). PLUS loans (which are made to parents) are not included. Positive values on this variable were also used to identify the percentage of students who received this category of aid. This variable was used as the basis for the borrowers section.

APPENDIX B: TECHNICAL NOTES AND METHODOLOGY

THE NATIONAL POSTSECONDARY STUDENT AID STUDY (NPSAS:93 AND NPSAS:96)

The National Postsecondary Student Aid Study (NPSAS) is a comprehensive nationwide study conducted by the U.S. Department of Education's National Center for Education Statistics (NCES) to determine how students and their families pay for postsecondary education. It is designed to address the policy questions resulting from the rapid growth of financial aid programs and the succession of changes in financial aid policies since 1986. The study also describes demographic and other characteristics of students enrolled. Students attending all types and levels of institutions are represented in the sample, including those in public and private institutions, and those in less-than-2-year institutions, 2-year institutions, and 4-year colleges and universities. The NPSAS study has been conducted in 1986-87, 1989-90, 1992-93, and 1995-96.

NPSAS:96 was based on a nationally representative sample of approximately 41,400 undergraduates (including 27,000 student interviews) enrolled in about 830 postsecondary education institutions. NPSAS:93 included a stratified sample of approximately 52,000 undergraduates from about 1,100 institutions.

For more information on the NPSAS survey, consult *Methodology Report for the 1993 National Postsecondary Student Aid Study* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, NCES 92-080, June 1992) or *National Postsecondary Student Aid Study, 1995-96 (NPSAS:96) Methodology Report* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, NCES 98-073, October 1997). Both documents are available from the Postsecondary Studies Division at NCES.

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 occur not only in sample surveys but also in complete censuses of 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.

DATA ANALYSIS SYSTEM

The estimates presented in this report were produced using the NPSAS:93 and NPSAS:96 Data Analysis System (DAS) software developed by NCES. The DAS software makes it possible for users to specify and generate their own tables (cross tabulations) from the NPSAS:96 and NPSAS:93 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 and weighted sample sizes for these estimates. For example, tables B1 and B2 (at the end of this appendix) contain standard errors that correspond to tables 1 and 2, and were generated by the DAS. If the number of valid cases is too small to produce a reliable estimate (less than 30 cases), the DAS prints the message “low n” instead of an estimate.

In addition to tables, the DAS will produce a correlation matrix of selected variables to be used for linear regression models. The design effects (DEFTs) for all the variables identified in the correlation matrix also are produced. 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:96 and NPSAS:93 stratified sampling method (see discussion under “Statistical Procedures” below for the adjustment procedure). For more information about the NPSAS:96 or NPSAS:93 Data Analysis Systems or to obtain access to them, consult the NCES DAS website (www.pedar-das.org) or contact:

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WEIGHTS

Two sets of weights were used in this analysis: (1) the full sample weight, whose primary source of data was from the institution or the central processing system (CPS); and (2) the Computer Assisted Telephone Interview (CATI) weight, which was based on students who were interviewed. In cases in which information was obtained only from students, estimates were calculated using the CATI weight.

STATISTICAL PROCEDURES

Two types of statistical procedures were employed in this report: testing differences between means, and adjustment of means after controlling for covariation among a group of variables. Each procedure is described below.

Differences Between Means

The descriptive comparisons in the report were tested using Student's t statistics. Statistical significance was determined by calculating t values for differences between pairs of means or proportions and comparing these with published values of t for two-tailed hypothesis testing, using a 5 percent probability of a Type I error (a significance level of 0.05).

Student's t values may be computed for comparisons using these tables' estimates with the following formula:

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2}} \quad (1)$$

where E_1 and E_2 are estimates to be compared, and se_1 and se_2 are the corresponding standard errors. Note that this formula is only valid for independent estimates. When estimates were not independent (for example, when comparing the percentages across a percentage distribution; in this report, down a column), a covariance term was added to the denominator of the t -test formula:

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

where r is the correlation between the two estimates.²³ 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 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.

A second hazard in reporting statistical tests for each comparison is 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” is 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 $p \leq .05$.²⁴

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 divided 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.

²³U.S. Department of Education, National Center for Education Statistics, *A Note From the Chief Statistician*, No. 2, 1993.

²⁴The 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.

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

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:

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

Adjustment of Means

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 borrowed across income groups, it is impossible to know to what extent the observed variation is due to differences in other factors related to income such as age, race-ethnicity, parents' education, and so on. However, if a nested table were produced showing income within age groups, within race-ethnicity categories, and within parents' education, for example, 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 variation, one must use other methods to take such variation 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.²⁵ The dependent variable—borrowing a Title IV loan (except PLUS)—was regressed on a set of descriptive variables such as attendance status, gender, and race-ethnicity. Substituting ones or zeros for the subgroup characteristic(s) of interest and the mean proportions for the other variables results in an estimate of the adjusted probability of the outcome for a given individual, holding all other variables constant. Then, the probability for the individual is multiplied by 100 to obtain the adjusted percentage of the specified subgroup experiencing the outcome of interest.²⁶ For example, consider a hypothetical case in which two variables, attendance status and gender, are used to describe an out-

²⁵For more information about regression, see M. S. Lewis-Beck, *Applied Regression*, Vol. 22 (Beverly Hills, CA: Sage Publication, Inc., 1980); and W. D. Berry and S. Feldman, *Multiple Regression in Practice*, Vol. 50 (Beverly Hills, CA: Sage Publications, Inc., 1987).

²⁶For more information about the use of linear regression for a binary outcome, see J. H. Aldrich and F. D. Nelson, *Linear Probability, Logit and Probit Models*, Vol. 45 (Beverly Hills, CA: Sage Publication, Inc., 1984).

thetical case in which two variables, attendance status and gender, are used to describe an outcome, Y (such as borrowing a Title IV loan). The attendance status and gender variables are recorded as dummy variables, one representing attendance and one representing gender:

Attendance status	A
Full-time	1
Part-time	0
Gender	G
Female	1
Male	0

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

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

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 variables representing all other subgroups. For example, suppose we had a case where Y was being described by attendance status (A) and gender (G), coded as shown above, and the means for A and G are:

<u>Variable</u>	<u>Mean</u>
A	0.355
G	0.521

Suppose the regression equation results in:

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

To estimate the adjusted value for full-time students, one substitutes the appropriate parameter values into equation X.

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 full-time students is 0.325 (compared to an unadjusted mean of 0.355) and represents the expected outcome for full-time students who look like the average student across the other variables (in this example, gender). In other words the adjusted percentage of full-time students who received a Title IV loan is 32.5 percent (0.325 x 100 for conversion to a percentage).

It is relatively straightforward to produce a multivariate model using NPSAS:96 and NPSAS:93 data, since one of the output options of the DAS is a correlation matrix, computed using pair-wise missing values.²⁷ This matrix can be used by most commercial regression packages as the input data to produce least-squares regression estimates of the parameters. That was the general approach used for this report, with additional adjustments (described below) to incorporate the complex sample design into the statistical significance tests of the parameter estimates.

Most statistical software packages assume simple random sampling when computing standard errors of parameter estimates. Because of the complex sampling design used for the NPSAS:96 and NPSAS:93, this assumption is incorrect. A better approximation of their standard errors is to multiply each standard error by the average design effect of the dependent variable (DEFT),²⁸ 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 produced with the correlation matrix.

²⁷Although 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 or to estimate probit/logit models can apply for a restricted data license from NCES.

²⁸The adjustment procedure and its limitations are described in C.J. Skinner, Holt, D., and Smith, T.M.F., eds., *Analysis of Complex Surveys* (New York: John Wiley & Sons, 1989).

Table B1—Standard errors for table 1

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Gender						
Male	4.02	5.12	3.21	1.43	1.38	1.28
Female	4.02	5.12	3.21	1.43	1.38	1.28
Age						
23 years or younger	2.76	3.31	2.12	1.16	1.11	1.02
24-29 years of age	1.17	1.41	0.91	0.78	0.75	0.68
30 years or older	2.67	2.49	1.87	1.15	1.10	1.01
Race-ethnicity						
White, non-Hispanic	4.49	3.45	2.98	2.00	1.90	1.75
Black, non-Hispanic	3.85	2.56	2.47	1.22	1.16	1.08
Hispanic	4.00	2.78	2.60	1.46	1.38	1.28
Asian/Pacific Islander	0.69	0.99	0.55	0.56	0.54	0.49
American Indian/Alaskan Native	0.40	0.19	0.25	0.31	0.30	0.27
Marital status						
Not married	1.91	1.99	1.38	1.05	1.00	0.92
Married	1.71	1.75	1.22	1.05	1.00	0.91
Separated	0.89	0.74	0.60	0.31	0.30	0.28
Single parent status						
Not a single parent	1.78	1.66	1.27	0.81	0.77	0.71
Single parent	1.78	1.66	1.27	0.81	0.77	0.71
Disability status						
Student has a disability	1.46	0.79	0.93	0.49	0.47	0.44
Student does not have a disability	1.46	0.79	0.93	0.49	0.47	0.44
Dependency status						
Dependent	2.17	3.26	1.86	1.11	1.07	0.98
Independent	2.17	3.26	1.86	1.11	1.07	0.98
Independent, no dependents	1.99	2.01	1.43	0.97	0.92	0.85
Independent, with dependents	2.24	2.81	1.78	1.15	1.10	1.01
Independent student total income, quartile						
Lower quartile	2.80	1.94	1.88	0.94	0.89	0.84
Middle quartiles	2.21	1.75	1.51	1.25	1.18	1.07
Upper quartile	1.58	1.57	1.15	1.32	1.24	1.12

Table B1—Standard errors for table 1—Continued

	Private, for-profit			Other		Total
	Less-than- 2-year	2-year	Total	Public 2-year	Total*	
Parents' total income, quartile (dependent students)						
Lower quartile	5.02	3.15	2.96	1.50	1.45	1.37
Middle quartiles	3.36	2.39	2.08	1.42	1.37	1.28
Upper quartile	3.24	1.85	1.86	1.15	1.11	1.04
Parents' highest education level						
Less than high school	2.26	1.24	1.42	0.89	0.85	0.78
High school graduate	2.48	2.69	1.83	1.59	1.51	1.39
Some college, including AA	1.77	1.37	1.17	1.14	1.09	1.00
Bachelor's degree	1.45	1.49	1.06	1.23	1.17	1.07
Advanced degree	0.98	1.32	0.80	1.05	1.00	0.91
High school degree or equivalent						
High school diploma	2.07	1.74	1.43	0.85	0.81	0.75
A diploma through the GED or equivalent	1.45	1.40	1.02	0.55	0.52	0.49
A certificate of high school completion	0.23	0.16	0.15	0.15	0.14	0.13
No high school equivalent	1.91	1.13	1.23	0.52	0.50	0.46
Delayed enrollment						
Did not delay enrollment	1.93	2.95	1.70	1.50	1.43	1.31
Delayed enrollment	1.93	2.95	1.70	1.50	1.43	1.31
Attendance status						
Full-time	2.51	1.04	2.42	1.27	1.26	1.20
Part-time	2.51	1.04	2.42	1.27	1.26	1.20
Average hours worked per week while enrolled						
Not employed	3.14	2.92	2.32	1.12	1.08	1.02
1-20 hours	1.50	1.26	1.01	1.02	0.97	0.89
21-34 hours	1.33	1.78	1.09	1.06	1.01	0.92
35 hours or more	2.52	2.83	1.96	1.54	1.48	1.37

*Total refers to public and private, not-for-profit institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995-96 National Postsecondary Student Aid Study (NPSAS:96), Data Analysis System.

Table B2—Standard errors for table 2

	Private, for-profit			Other		Total
	Less-than-2-year	2-year	Total	Public 2-year	Total*	
Gender						
Male	4.27	4.30	3.63	0.74	0.76	0.85
Female	4.27	4.30	3.63	0.74	0.76	0.85
Age						
23 years or younger	2.52	2.88	1.95	0.89	0.90	0.85
24-29 years of age	1.04	1.67	0.85	0.55	0.53	0.47
30 years or older	2.23	2.08	1.72	0.92	0.89	0.84
Race-ethnicity						
White, non-Hispanic	5.06	6.79	4.16	1.25	1.19	1.24
Black, non-Hispanic	3.33	5.50	2.94	0.88	0.85	0.87
Hispanic	3.82	2.44	2.74	0.63	0.61	0.69
Asian/Pacific Islander	1.46	2.82	1.34	0.36	0.34	0.33
American Indian/Alaskan Native	0.19	0.49	0.19	0.47	0.45	0.40
Marital status						
Not married	1.54	2.66	1.43	0.86	0.81	0.76
Married	1.76	2.56	1.53	0.86	0.82	0.78
Separated	0.65	0.77	0.54	0.18	0.17	0.16
Single parent status						
Not a single parent	2.76	2.12	2.20	0.35	0.35	0.44
Single parent	2.76	2.12	2.20	0.35	0.35	0.44
Disability status						
Student has a disability	1.12	1.41	0.88	0.40	0.38	0.36
Student does not have a disability	1.12	1.41	0.88	0.40	0.38	0.36
Dependency status						
Dependent	2.38	3.67	2.14	0.90	0.91	0.88
Independent	2.38	3.67	2.14	0.90	0.91	0.88
Independent, no dependents	1.93	2.75	1.60	0.78	0.75	0.69
Independent, with dependents	2.85	3.10	2.47	0.67	0.65	0.71
Independent student total income, quartile						
Lower quartile	3.58	2.83	2.89	0.81	0.80	0.87
Middle quartiles	2.07	2.36	1.81	1.17	1.10	0.98
Upper quartile	1.95	1.73	1.52	1.20	1.14	1.05

Table B2—Standard errors for table 2—Continued

	Private, for-profit			Other		Total
	Less-than- 2-year	2-year	Total	Public 2-year	Total*	
Parents' total income, quartile (dependent students)						
Lower quartile	4.77	4.92	3.46	1.18	1.16	1.13
Middle quartiles	4.00	4.58	3.03	1.07	1.12	1.08
Upper quartile	1.24	2.34	1.20	0.88	0.85	0.76
Parents' highest education level						
Less than high school	2.01	1.61	1.58	0.59	0.57	0.53
High school graduate	1.54	2.99	1.46	0.93	0.88	0.81
Some college, including AA	1.03	1.57	0.90	0.58	0.54	0.50
Bachelor's degree	0.93	1.90	0.90	0.65	0.63	0.58
Advanced degree	0.57	1.83	0.73	0.52	0.50	0.46
High school degree or equivalent						
High school diploma	4.50	2.08	3.40	0.58	0.55	0.74
A diploma through the GED or equivalent	0.95	1.26	0.77	0.44	0.42	0.40
A certificate of high school completion	0.13	0.23	0.12	0.16	0.15	0.14
No high school equivalent	5.06	1.06	3.60	0.35	0.33	0.55
Delayed enrollment						
Did not delay enrollment	1.51	3.28	1.55	0.80	0.83	0.80
Delayed enrollment	1.51	3.28	1.55	0.80	0.83	0.80
Attendance status						
Full-time	3.73	4.66	2.88	1.08	1.07	1.12
Part-time	3.73	4.66	2.88	1.08	1.07	1.12
Average hours worked per week while enrolled						
Not employed	2.03	3.62	2.20	0.73	0.70	0.71
1-20 hours	1.21	2.37	1.18	0.59	0.58	0.55
21-34 hours	0.95	1.54	0.88	0.52	0.49	0.44
35 hours or more	1.58	3.09	1.65	1.01	0.97	0.91

*Total refers to public and private, not-for-profit institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1992-93 National Postsecondary Student Aid Study (NPSAS:93), Data Analysis System.