
The Role of Work and Loans in Paying for an Undergraduate Education:

Observations from the 2003-2004
National Postsecondary Student Aid Study (NPSAS)

Robin McMillion
TG Research and Analytical Services

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EXECUTIVE SUMMARY

The signing of the Higher Education Act (HEA) in 1965 by President Lyndon Johnson marked the beginning of the federal government's explicit commitment to equalizing college opportunities for needy students. Since then, however, two trends have developed which are running at cross purposes to each other. The first is the emergence, shortly after the signing of the HEA, of the human capital economy, in which human knowledge, skills, and abilities began to surpass physical labor in importance to the prosperity of both the individual and society. The second trend, which began to emerge in the early 1980s, is the decrease in affordability of higher education. As a result of an increase in costs, and a decrease in state and federal commitment to higher education, the cost of college has increasingly shifted from taxpayers to students and their families. Students from high-income families have been less adversely affected by this, but for students from low-income backgrounds, paying for college with family resources is not an option. For the expenses not covered by grants, their only recourse is work, loans, or some combination of the two.

In celebration of the 40th anniversary of the signing of the HEA, and in keeping with our vision to be the premier source of information to help students and families realize their educational dreams, TG has studied the role of work and loans in paying for an undergraduate education today. Data from the U.S. Department of Education's 2004 National Postsecondary Student Aid Study (NPSAS) and other sources indicate that 78 percent of undergraduates in the U.S. work while enrolled in school and 34 percent work full-time, with an average of 30 hours worked per week by those who work. Yet working long hours is the least likely method to result in academic success. Compared to students who work fewer than 15 hours per week, students who work full-time are less likely to attend a four-year school (68 percent vs. 34 percent), less likely to attend full-time (63 percent vs. 22 percent), less likely to remain in school at least three years (77 percent vs. 34 percent), and less likely to receive a bachelor's degree in six years (57 percent vs. 8 percent). Loans also play a significant role in paying for college, but cannot be expected to cover the widening gap between costs and grant aid for low-income students without repercussions, especially for students who are unsure if they will succeed and who are therefore reluctant to take on large debts.

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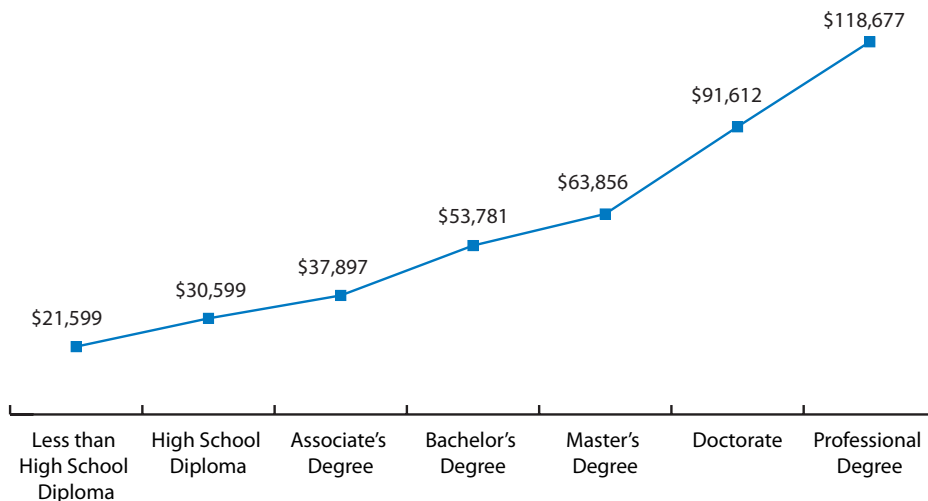
INTRODUCTION

Human capital economy and higher education

University of Chicago Economist and Nobel Laureate Gary S. Becker defines human capital as the “knowledge, information, ideas, skills, and health of individuals.”¹ While all forms of capital are important, including machinery and financial capital, Becker believes human capital, or *knowledge* capital, is the most important for modern economies. In 1987, Becker correctly predicted that the stock market crash of that year (the value of stocks listed on the New York Stock Exchange fell by 22 percent in one day) would not precipitate a major recession as had the crash of 1929 because the 1987 crash did not significantly affect the returns on human capital, which today comprise roughly three-fourths of the wealth in the United States.²

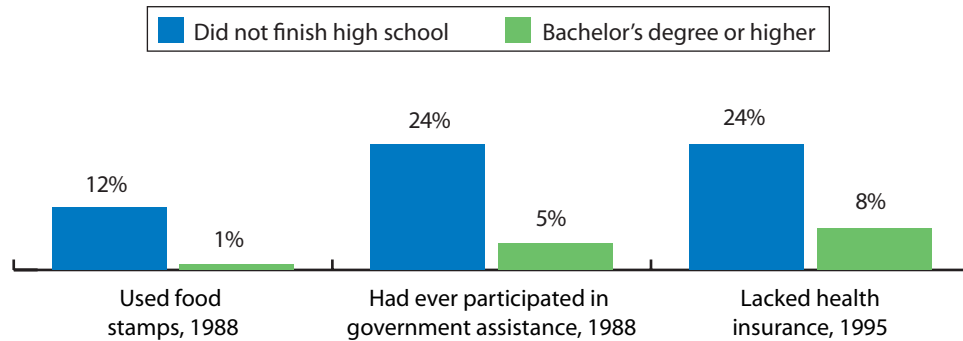
Becker and many other economists believe that the success not just of individuals, but of whole economies, depends on how much people invest in themselves. Studies on the relationship between education and other measures bear out the fact that education has substantial economic and social benefits for both the individual and society. Over the course of about 40 years, workers with a bachelor’s degree earn almost one million dollars more than those with only a high school diploma.³ These higher incomes result in more tax revenue and fewer people on public assistance. In addition to higher incomes, better-educated individuals tend to have better health, which produces lower health costs and higher productivity.⁴ A well-educated citizenry also is more likely to play an active role in the civic life of the nation:⁵ the percent of college-educated citizens who voted in the November 2004 presidential election was double the percent of those who had not completed high school.⁶

Figure 1: Average Annual Earnings by Educational Attainment (2003)



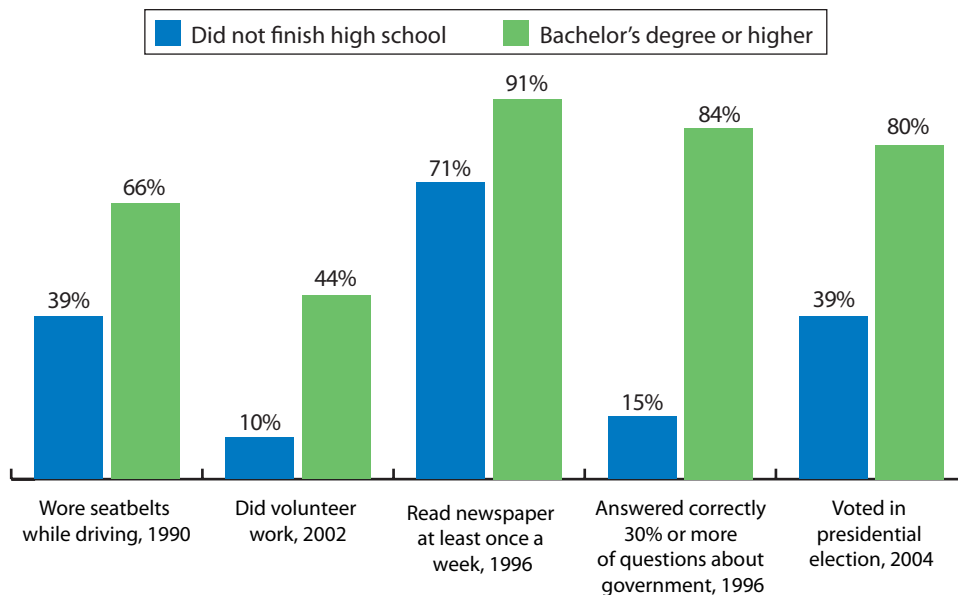
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Source: Postsecondary Education Opportunity

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Source: Postsecondary Education Opportunity and the U.S. Census Bureau

Public commitment to higher education

The Servicemen’s Readjustment Act of 1944, commonly known as the GI Bill, is widely credited with launching the era of mass education in the United States. Prior to its enactment, most Americans tended to view higher education as a right for the privileged, but not for the middle or lower classes. The GI Bill guaranteed veterans of World War II a grant sufficient to cover tuition, books, and living expenses for one year of full-time education, plus an

additional month for each month served in the armed forces. This allowed a veteran with two years of service to finance three years of education, almost enough to complete a bachelor's degree. Because service in World War II was so pervasive, extending to virtually all eligible men in society, the GI Bill substantially raised educational attainment levels and standards of living in the U.S. in the post-war era. Many veterans who benefited from the bill decided to send their own children to college, including their daughters, which launched another wave of college-going in the 1960s. All in all, the GI Bill, along with other changes it brought about, permanently altered the higher education landscape in the U.S.⁷

The GI Bill did not represent a generally available federal student aid program, but in the late 1940s there was considerable interest in starting such a program. The 1947 President's Commission on Higher Education, which called equal educational opportunity a "major goal of American democracy";⁸ recommended a federally funded national scholarship program for which the primary basis for determining aid would be financial need. Realization of this goal did not come about until President Lyndon Johnson signed the Higher Education Act in 1965.⁹ According to Lawrence E. Gladieux, former executive director for policy analysis at the College Board, and independent education consultant Arthur M. Hauptman, the HEA "embodied the first explicit federal commitment to equalizing college opportunities for needy students."¹⁰ Johnson himself, upon signing the HEA, said it meant "that a high school senior anywhere in this great land of ours can apply to any college or any university in any of the 50 states and not be turned away because his family is poor."¹¹

For the next few decades an unspoken agreement seemed to exist with regard to aid for needy students: if students would prepare themselves academically for college, the federal government would ensure that enough aid existed for them to attend. But in the 1980s, the progress made toward equalizing educational opportunity began to stall. In 1972, the proportion of high school seniors who enrolled in postsecondary education by socioeconomic (SES) background (as measured by family income, parental occupation, and parents' highest education level) was 85 percent for those in the highest SES quintile and 38 percent for those in the lowest, a gap of 47 percentage points. Two decades later this gap had only narrowed by 7 percentage points, to 94 percent and 54 percent, respectively.¹² The slow pace of improvement in narrowing the gap between the percent of high- and low-income students who enroll in college has been brought about by:

- An increase in tuition and fees due both to increased costs and decreased public commitment to higher education. In Award Year (AY) 1976-1977, tuition and fees for two semesters at a public four-year university totaled \$617, or \$1,992 in constant 2004 dollars, but in AY 2004-2005 they totaled \$5,132;¹³
- A decrease in the purchasing power of the aid that is available. In AY 1980-1981,

-
- the average Pell Grant covered 35 percent of public four-year tuition, fees, room, and board for undergraduates, but by AY 2003-2004 it only covered 23 percent;¹⁴
 - A shift from need to merit in the awarding of grants. In AY 1993-1994, 90 percent of state grant aid was based on need,¹⁵ but by AY 2003-2004 just 74 percent was based on need;¹⁶ and
 - A shift from grants to loans in the awarding of aid overall. In AY 1980-1981, grants comprised 55 percent of all direct student aid¹⁷ and loans comprised 41 percent, but in AY 2003-2004 those figures — at 40 percent and 59 percent, respectively — were almost reversed.¹⁸

The result of these and other changes is that the cost of higher education has increasingly shifted from taxpayers to students and their families. Students from high-income families have not been adversely affected by this. For those in the highest-income quintile, with family income equivalent to about \$99,000 in 2003, the combined tuition, fees, room, and board at a public four-year university has remained fairly constant, at 5 to 6 percent of family income from the mid-1970s to AY 2003-2004. But for students from the lowest-income quintile, with family income equivalent to \$25,000 or less, combined tuition, fees, room, and board has climbed from an already-high 40 percent of family income in AY 1976-1977, to 71 percent in AY 2003-2004.¹⁹

The effect of insufficient family resources and aid on the enrollment and graduation of low-income students is sobering. A study in the late 1990s indicates that about 77 percent of high school graduates from families that make \$75,000 or more enroll in a four-year university within two years of high school graduation, versus 33 percent of those from families that make \$25,000 or less. This disparity cannot be explained by academic preparation. As Figure 13 shows, even among college-qualified graduates — that is, students who took college-preparatory courses, got good grades, and scored well on aptitude tests — 83 percent of graduates from families making \$75,000 or more enroll in a four-year university within two years of graduation, versus 52 percent of those from families making \$25,000 or less. The disparity in graduation rates is even greater — 62 percent of students from high-income families complete a bachelor's degree, versus just 21 percent of students from low-income families.²⁰

Children from low-income backgrounds make up a large and growing segment of the population under age 18. After rising fairly steadily in the 1990s, the real median household income²¹ of American families has decreased every year in the new century, declining to just under \$44,400 in 2004. The effect of this decrease on children's wellbeing is not surprising. In 2004, 17.8 percent of U.S. children were living below the poverty level of \$19,157 or less for a

family of four with two children, a figure which has risen every year for four years. Another 5.1 percent were living below 125 percent of this level, or \$23,946, for a total of 18.7 million children.²² Children who grow up in low-income environments and who are successful at preparing themselves for college will most likely arrive at the doors of higher education with little financial assistance from their family and a high need for financial aid.

Many non-traditional students also have trouble paying for college. According to the U.S. Department of Education, the “traditional” student who earns a high school diploma, enrolls in postsecondary education immediately after finishing high school, depends on parents for support, and either doesn’t work while enrolled or works part-time, is now “the exception rather than the rule.”²³ Just 30 percent of undergraduates fit that description in the 2003-2004 Award Year (AY).²⁴ For many non-traditional students, and virtually all students from low-income families, paying for college with family resources is not an option. For the portion of college expenses not covered by grants, their only recourse is work, loans, or some combination of the two. Some would argue that this is as it should be: the people who benefit from higher education should pay for it. But this argument assumes that the benefits of education accrue only to the individual, when, in fact, the entire country benefits economically from a well-educated population. Consider the RAND Corporation’s findings, as described in the College Board’s *Education Pays 2004*, that:

- The amount the public saves annually on food stamps, Medicaid, criminal justice, and other programs for a U.S.-born 30 year old man who has a bachelor’s degree rather just a high school diploma is about \$800 for Whites, \$1,300 for Hispanics of Mexican origin, \$1,600 for other Hispanics, and \$2,400 for African-Americans. Comparable savings for a woman are \$800 for Whites, \$2,700 for Hispanics of Mexican origin, and \$2,500 for African-Americans and other Hispanics.
- When the additional tax revenues paid by more highly educated people are factored in, the RAND Corporation finds that every \$1.00 spent on equalizing college entrance rates across racial/ethnic groups would yield between \$2.00 and \$3.00 in public savings. If the additional incomes earned by more highly educated people are factored in (higher incomes result in more spending and thus more economic growth), the cost-to-benefit ratio enjoyed by the public is in the \$4.00 to \$5.00 range.²⁵

Unlike the mid-1900s, when manufacturing jobs often paid well enough for a high school graduate to support a family, the primary pathway for entering the middle class today is through higher education. In this way, higher education increases equity and social mobility, key factors in helping society avoid a *de facto* caste system. Because higher

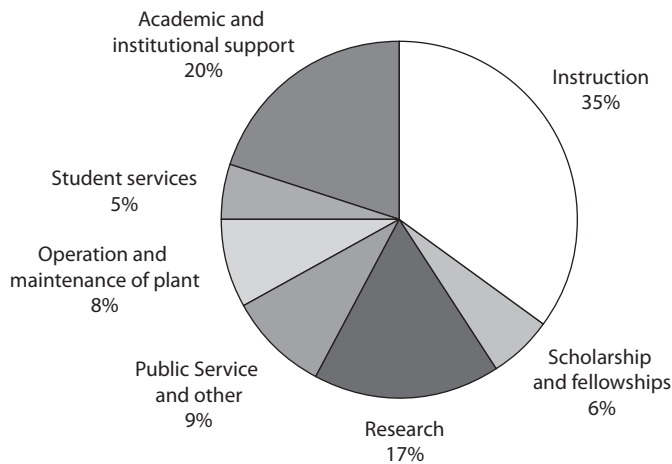
education benefits both society and the individual, both should shoulder the expense, but the balance seems to have tipped too far to the individual, with severe consequences for the low-income. The goal of educating a wide swath of society cannot be reached if capable and aspiring students must work exhausting hours or face risky debt burdens in order to go to school, simply because they were born into a low-income family.

This report, produced to coincide with the 40th anniversary of enactment of the Higher Education Act, will look at the role that work and loans play in the funding of undergraduate higher education in the United States today. The report will look at how much undergraduates are working, how much debt they are taking on, and the effects of work and debt on access to higher education, persistence through school, and degree completion. Most of the data in the report come from the U.S. Department of Education's National Postsecondary Student Aid Study, or NPSAS, a comprehensive nationwide study which uses institutional records, financial aid records, and student interviews to determine how both aided and non-aided undergraduates pay for postsecondary education. NPSAS was last conducted during AY 2003-2004 and is considered to be representative of the undergraduate population of the United States. Unless otherwise noted, data in the report pertain to all undergraduates, not just those who are full-time or degree-seeking.

Cost of higher education and the financial aid formula

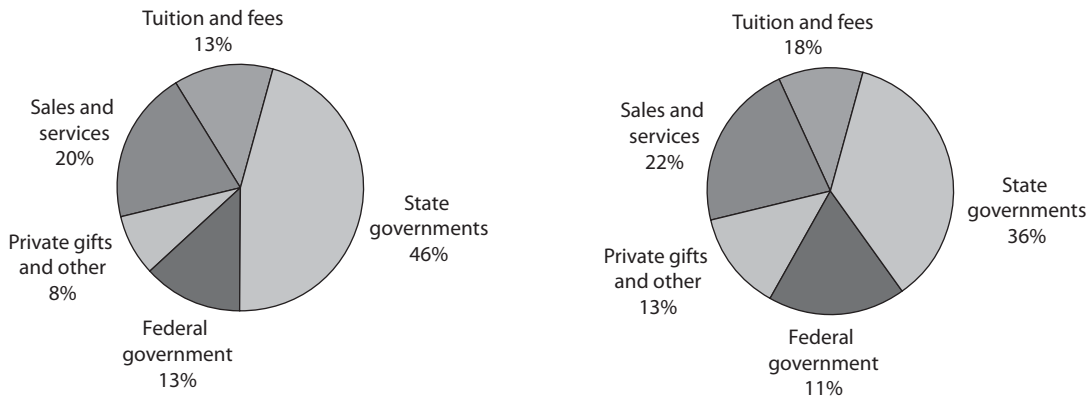
Before discussing the role of work and loans in paying for college, a brief look at the cost of education — both to the institution and to the student — is in order. The cost to an institution of educating a student is generally far higher than the tuition he or she is charged. In AY 2000-2001, educational and general expenditures at public four-year degree-granting institutions in the U.S. averaged \$21,622 per full-time equivalent undergraduate, two-thirds of which consisted of instruction, academic and institutional support, student services, and operation and maintenance of the physical plant.²⁶ Costs not covered by revenue from state, federal, and other sources are usually passed on to the student as tuition and fees, which, weighted for enrollment, averaged \$3,487 at public four-year universities in AY 2000-2001.²⁷ Funding cuts to colleges and universities are the main reason for tuition increases: from 1980 to 2000, the proportion of revenue at public institutions²⁸ that came from state funding declined from 46 percent to 36 percent while the proportion from tuition and fees increased from 13 percent to 18 percent.²⁹

Figure 4: Educational and General Expenditures at U.S. Public Four-year Degree-granting Institutions (AY 2000-2001)



Source: U.S. Department of Education

Figures 5 and 6: Current Fund Revenue at U.S. Public Degree-granting Institutions, by Source (AY 1980-1981 and AY 2000-2001)



Source: U.S. Department of Education

The tuition and fees charged to students are only part of the cost of attending college. The rest of the student budget consists of food and housing, books and supplies, transportation, and other expenses. These expenses, together with tuition and fees, constitute an institution's cost of attendance, or "sticker price," which is the starting point for calculating financial aid for the 74 percent of undergraduates who apply for aid.³⁰ In order to evaluate students' financial need fairly and equally, institutions strongly encourage all students needing aid to apply using the Free Application for Federal Student Aid, or FAFSA. From the institution's sticker price, the student's expected family contribution or EFC (which is determined through a federal formula that takes into account family income and assets as

well as family size and the number of children in college) is subtracted to arrive at the student's need. Once need is determined, a financial aid package, consisting primarily of grants and loans, can be developed. That portion of costs which is not covered by EFC or aid, including both grants and loans, is called "unmet need."

At least two things must be kept in mind when considering the effect of the aid formula on students' decisions about how to finance their education:

- The method for calculating EFC, which was created by the federal government to equitably ration scarce financial resources based on ability to pay, is based primarily on income tax statements. What families actually contribute to educational costs is unknown. One-half of undergraduates are considered to be independent of their parents, and data indicate about three-fourths of all undergraduates get no financial support from their parents.³¹
- From the perspective of the government and the institutions which allocate aid, loans are part of financial aid, but from the student's perspective they are part of the total work/loan burden — either the student's or the family's — that must be taken into account when making decisions about higher education, including not only how to pay for it, but whether to attend in the first place. The tables below illustrate this difference.

Tables 1 and 2: Loan Burden and Financial Aid: A Difference in Perspectives

Table 1: The aid allocation perspective:

Cost of Attendance – Expected Family Contribution = Need

Need – Aid (grants, loans, and work/study) = Unmet need

Table 2: The student perspective:

Cost of Attendance – grants = Net price

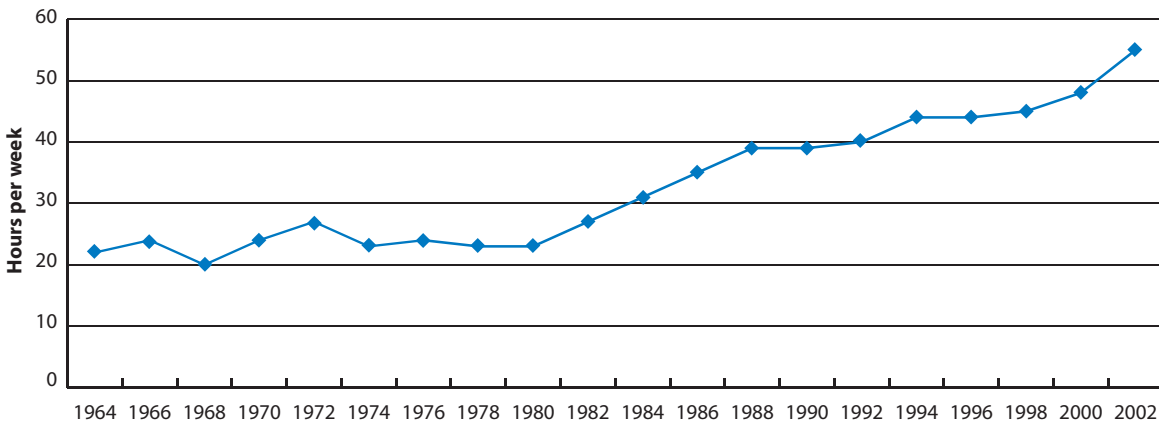
Net price – savings = Work/loan burden

WORK

Historical perspective on work as a method for financing higher education

Many people pride themselves on having worked their way through college. From 1964 to 1981, a time in which the minimum wage increased fairly regularly, an industrious undergraduate could have paid all the expenses for a year of attendance at a four-year public university — including tuition, fees, food, and housing — by working 24 hours per week at a minimum wage job. But in the early 1980s, as the cost of education began to climb and minimum wage increases became less frequent, the number of work hours needed to pay for education began to rise. By 1988, a student working at the then-minimum wage of \$3.35 per hour³² would have had to work 39 hours per week to put himself or herself through school. The number of work hours needed to pay for an undergraduate education continued to inch upward in the 1990s, then rose again sharply at the turn of the century. By 2002, as a result both of increased costs and stagnant wages, a student working at the minimum wage of \$5.15 per hour would have had to work 55 hours per week every week of the year³³ in order to pay the tuition, fees, and living expenses associated with two semesters of attendance at a public university.³⁴

Figure 7: Hours of Minimum Wage Work Needed per Week to Pay for Two Semesters of a Public University Undergraduate Education (1964 – 2002)



Source: Postsecondary Education Opportunity

While working long hours may help pay the bills, it is the least likely method to result in academic success. First, working full-time usually means going to school part-time. This delays graduation, and the money students save by lowering their per-year tuition is often less than the additional income they would have earned had they finished school earlier and gotten a higher paying job sooner. Worse still, for many part-time students the semesters

stretch into years, and life circumstances change. Marriage, mortgage, children, and other changes interfere with the initial plan to stay in school, as part-time students miss out not just on a year or two, but a lifetime, of higher earnings. Nevertheless, for students with insufficient family resources, work is the most common method for financing undergraduate education. This section of the report will look at students who are working today, and the effect of work on student decision-making and student outcomes.

Who is working today and how much are they working?

Students work long hours

In the 2003-2004 Award Year,³⁵ 78 percent of all undergraduates in the U.S. worked while enrolled in school, with an average of 30 hours worked per week among those who worked. By contrast, only 34 percent of undergraduates took out loans from the federal government, the primary source of loan aid, and only 44 percent had ever borrowed on federal loans. Whether or not a student works while enrolled varies little by sub-group. What stands out are the number of hours worked by those who are working, the long hours worked by students who can least afford academically to do so, and the inverse relationship between the amount of time spent working and the amount of time spent on school. Ironically, the situation most likely to lead to academic success — working 1 to 14 hours per week while enrolled — is chosen by the fewest students. Just 11 percent of all undergraduates work 1 to 14 hours per week, versus about a third who work 15 to 34 hours and another third who work 35 or more hours, the amount considered to be full-time. Long work hours may be related to the number of jobs held: of undergraduates who work while enrolled, 26 percent report that they have more than one job.

Students at proprietary and two-year public schools are not a great deal more likely to work than students at four-year public or private universities, but they are a good deal more likely to work long hours, working an average of 35 and 32 hours per week, respectively, compared to 26 hours worked per week by students at four-year institutions. Although students who are just beginning their postsecondary education are less likely to work than returning students, beginning students who do work are about equally likely to work long hours: 34 percent of all first-year undergraduates work full-time, almost the same as second-, third-, fourth-, and fifth-year students. Older students are a good deal more likely to work long hours than younger students. Half or more of undergraduates age 24 and older work full-time versus one-fifth of those under age 24. But even among the younger group, three-fourths of students work.

The work patterns of male and female students are virtually identical. The percentages of Whites, African-Americans, and Hispanics who don't work while enrolled are also similar to one another, but the hours worked by the three groups differ. African-American

undergraduates are the most likely to work full-time (41 percent) and Hispanics are the second most likely (38 percent), while the proportion of White undergraduates who work full-time is 33 percent. Asians are the least likely to work full-time, and are a good deal less likely than other groups to work at all: 32 percent of Asian undergraduates don't work while enrolled in school, the highest percentage of any student sub-group.

Work patterns by dependency status differ quite a bit. About half of all undergraduates in the U.S. are considered to be dependent on their parents and half are considered independent. The U.S. Department of Education defines an independent undergraduate as someone who is age 24 or older, married, with dependents to support, a veteran, or orphan or ward of the court. Students who do not meet any of these criteria, but who receive no financial support from their parents, may also be considered independent. While independent undergraduates are only somewhat more likely to work than dependent students, they are far more likely to work long hours: 50 percent of independent undergraduates work full-time versus 18 percent of dependent students. Among dependent students, the percent who work full-time decreases as parents' income rises, although even among students whose parents make \$90,000 or more, 70 percent work. Among independent undergraduates, however, the percent who work full-time increases with income. More than one-third of independent undergraduates who made under \$15,000 in 2002, more than half who made between \$15,000 and \$44,999, and about three-fifths who made \$45,000 or more, worked full-time while enrolled in AY 2003-2004.³⁶ Although income figures are for 2002 and hours worked are for AY 2003-2004, and thus the exact relationship between income and hours worked is unknown, it appears that a good many students who are no longer dependent on their parents are working their way through school. Ironically, because working full-time results in higher incomes, independent students may actually be reducing their eligibility for financial aid.³⁷

Table 3: Percent distribution of all U.S. undergraduates by hours worked per week while enrolled in AY 2003-2004 and institutional and student characteristics, and, among those who worked, average hours worked

Institutional and student characteristics	Did not work	Worked 1-14 hours	Worked 15-34 hours	Worked 35 or more hours	Average hours worked per week
Total	22%	11%	32%	34%	30
Institution type					
Four-year public	25%	15%	37%	23%	26
Four-year private	24%	19%	29%	28%	26
Two-year public	20%	7%	31%	42%	32
Proprietary	23%	6%	23%	48%	35

Class level					
First-year student	27%	10%	30%	34%	30
All other	20%	12%	34%	35%	29
Gender					
Male	23%	11%	32%	34%	30
Female	22%	12%	32%	34%	29
Race/ethnicity					
White	22%	12%	34%	33%	29
African-American	22%	9%	28%	41%	32
Hispanic	21%	9%	32%	38%	31
Asian	32%	15%	30%	24%	26
Age (as of Dec. 31 of AY)					
Under 24	24%	15%	40%	20%	25
24-29	18%	7%	27%	48%	34
30 or older	22%	5%	18%	55%	36
Dependency status					
Dependent	25%	16%	41%	18%	24
Independent	20%	6%	23%	50%	35
Income of dependent student's parents					
Under \$30,000	25%	15%	41%	20%	25
\$30,000-\$59,999	21%	16%	44%	19%	25
\$60,000-\$89,999	22%	17%	43%	18%	24
\$90,000 or more	30%	18%	39%	14%	23
*Income of independent student (includes spouse's if any)					
Under \$15,000	23%	9%	33%	36%	31
\$15,000-\$29,999	18%	5%	24%	54%	35
\$30,000-\$44,999	17%	6%	19%	58%	36
\$45,000 or more	17%	5%	17%	61%	37

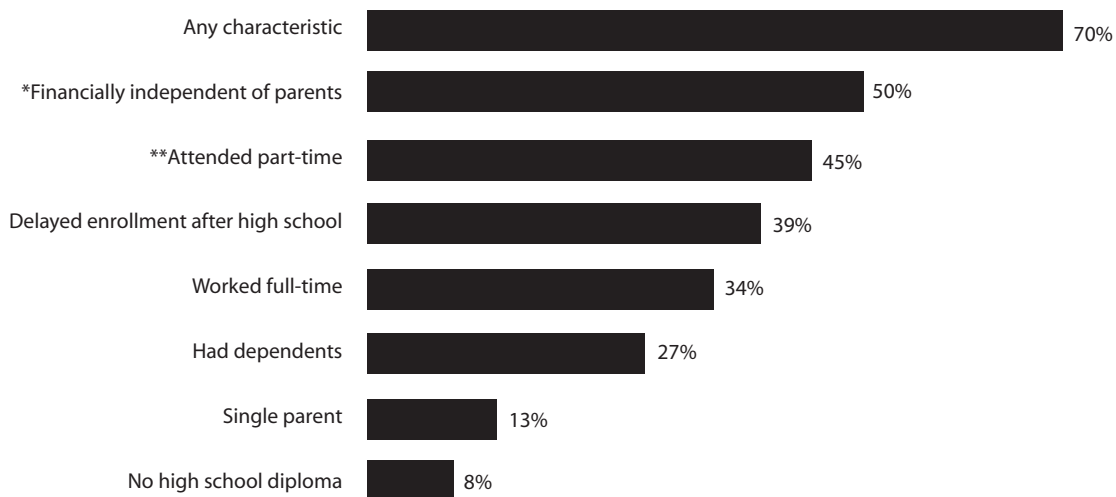
*No relationship is implied with respect to income, which is for 2002, and hours worked in AY 2003-2004.

Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

At-risk students work even more

About 70 percent of all U.S. undergraduates have at least one characteristic associated with the risk of leaving school before completing a certificate or degree, and 19 percent have four or more at-risk characteristics. In addition to working full-time or being financially independent of one's parents, other factors identified by the U.S. Department of Education as placing a student at-risk include not having a high school diploma, delaying enrollment in postsecondary education after high school, attending part-time, having dependents, or being a single parent.³⁸

Figure 8: Percent of U.S. Undergraduates with At-risk Characteristics: Total and by Characteristic (AY 2003-2004)



* Age 24 or older, married, with dependents, a veteran, or orphan/ward of the court.

** Unlike "less than full-time/full year" used elsewhere in report, "part-time" in the above graph does not include students who attend full-time but for less than 9 months.

Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

A far greater percentage of students who are at-risk work long hours than students who are not at-risk. About 44 percent of at-risk undergraduates worked full-time while enrolled in AY 2003-2004 compared to only 12 percent of non-at-risk students, with an average of 33 hours and 22 hours, respectively, worked per week by those who work. The more at-risk a student is, the more likely he or she is to work long hours: 48 percent of undergraduates with two or three at-risk characteristics, and 53 percent of those with four or more characteristics, work full-time. In fact, every at-risk characteristic, without exception, is associated with higher levels of work:

- 46 percent of undergraduates who delay entering postsecondary education after high school work full-time versus 27 percent of those who do not delay enrollment;
- 51 percent of those who are single parents work full-time versus 32 percent of those who are not single parents;
- 42 percent of those who don't have a high school diploma work full-time versus 34 percent of those who do have a high school diploma.³⁹

In addition, lower levels of parent education, although not officially considered a risk factor, are associated both with a greater likelihood of leaving school and with longer hours of work: students whose parents have a high school diploma or less — often called

“first-generation” college students — are about twice as likely as those whose parents have a bachelor’s degree to leave college before their second year.⁴⁰ Nevertheless, these students work an average of 32 hours per week compared to 27 hours for those whose parents have a bachelor’s degree.⁴¹

Table 4: Percent distribution of all U.S. undergraduates by hours worked per week while enrolled in AY 2003-2004, at-risk characteristics, and parents’ highest education level, and, among those who worked, average hours worked

At-risk characteristics	Did not work	Worked 1-14 hours	Worked 15-34 hours	Worked 35 or more hours	Average hours worked per week
Total	22%	11%	32%	34%	30
Index of risk					
Not at-risk	27%	20%	41%	12%	22
At-risk	20%	7%	29%	44%	33
Number of at-risk characteristics					
One	21%	11%	41%	27%	28
Two or three	20%	6%	25%	48%	34
Four or more	19%	5%	22%	53%	35
Attendance pattern					
Full-time/full-year	26%	17%	38%	19%	24
Less than full-time/full-year	20%	7%	29%	45%	33
Delayed enrollment after high school					
Did not delay enrollment	23%	14%	36%	27%	27
Delayed enrollment	22%	7%	26%	46%	33
Has dependents					
Did not have dependents	23%	13%	36%	28%	27
Had dependents	21%	6%	22%	51%	35
Single parent student					
Not a single parent	23%	12%	34%	32%	29
Single parent	19%	6%	24%	51%	34
High school degree type					
High school degree	22%	12%	33%	34%	29
GED or other equivalency	24%	7%	26%	42%	33
Parents’ highest education level					
Bachelor’s degree or higher	25%	15%	34%	27%	27
Some postsecondary education	20%	10%	35%	35%	30
High school or less (first-generation student)	21%	8%	30%	41%	32

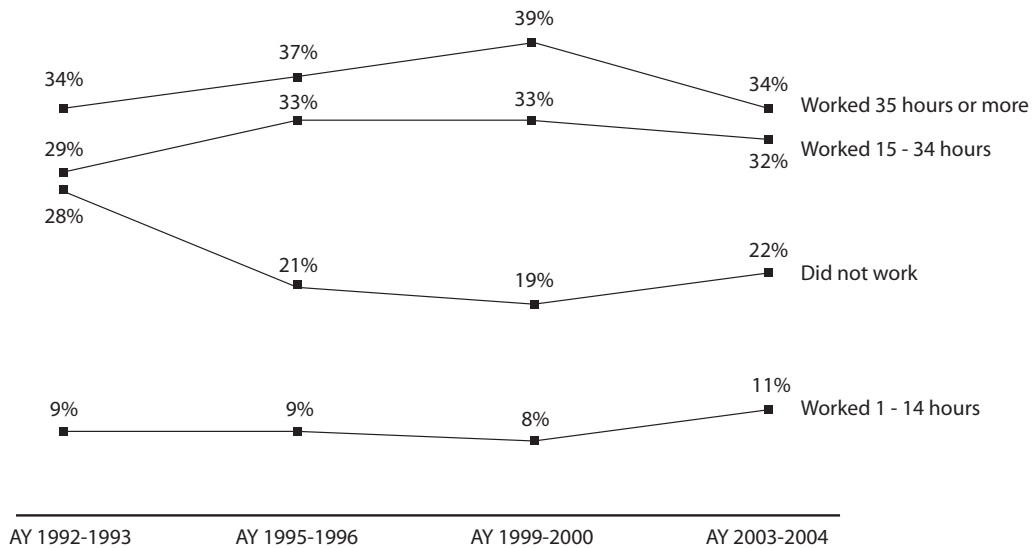
Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

Are students working more than they used to?

Long work hours have been common for at least a decade

The percent of undergraduates who work long hours while enrolled has been rising steadily for years, and the percent who do not work has been falling. Whether long work hours were common for students in past generations is unknown, but long work hours have been common for at least a decade. AY 1999-2000 marked the zenith of student work: 39 percent of all undergraduates worked full-time while enrolled that year, with an average of 32 hours worked per week by those who worked.⁴² In AY 2003-2004, 34 percent worked full-time with an average of 30 hours worked.⁴³ The apparent decrease in the percent who work and the hours they work is probably due less to reduced need — the total cost of attendance at four-year public universities rose about 25 percent from AY 1999-2000 to AY 2003-2004⁴⁴ — than to reduced access to jobs: the national unemployment rates for 1999 and 2000 were 4.2 percent and 4.0 percent, respectively, versus 6.0 percent and 5.5 percent, respectively, for 2003 and 2004.⁴⁵ Meanwhile, the work pattern most likely to lead to academic success — working fewer than 15 hours per week — has consistently been chosen over the past decade by the smallest percentage of students.⁴⁶

Figure 9: Percent Distribution of U.S. Undergraduates by Hours Worked per Week While Enrolled (AY 1992-1993 to AY 2003-2004)



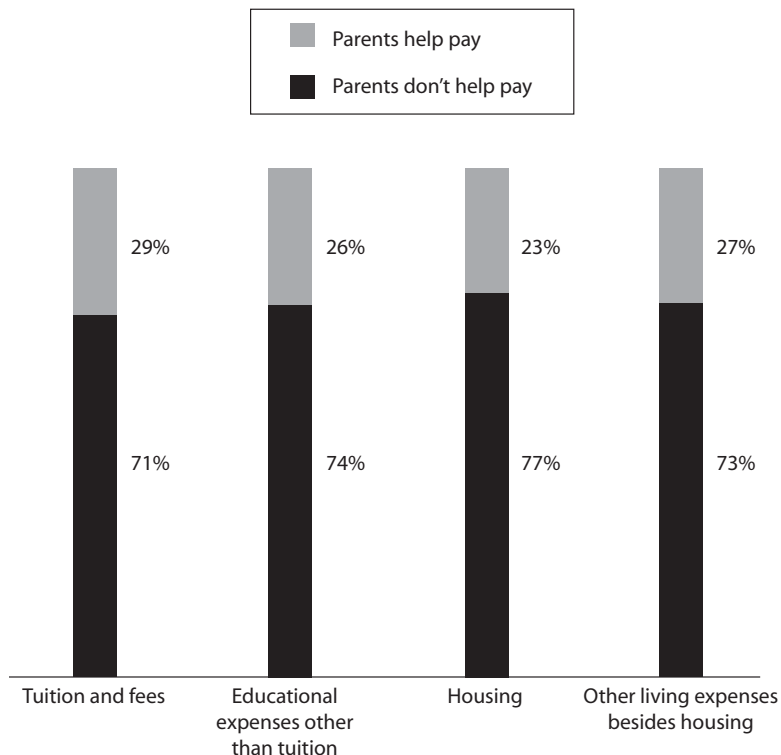
Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS)* 1993, 1996, 2000, and 2004

Why are students working so much?

Most students work because they have to

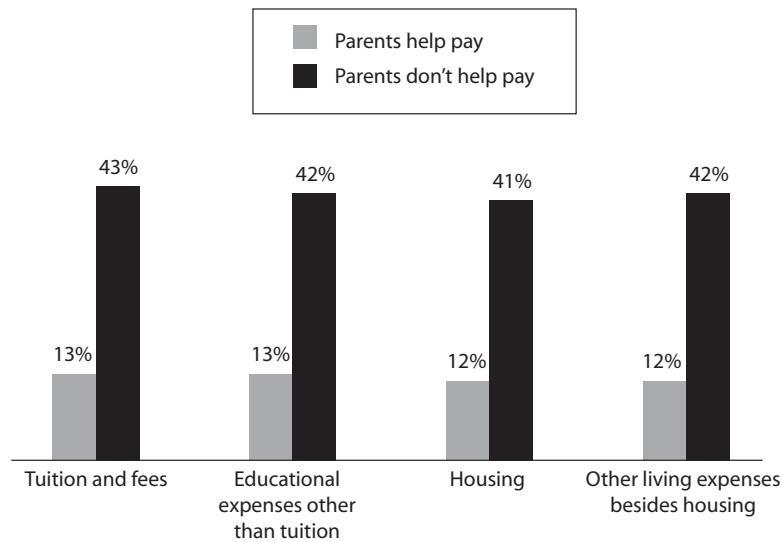
Not all students go to school to earn a degree or certificate, and not all consider school to be the primary responsibility in their lives. About one-third of undergraduates who worked in AY 2003-2004 defined their primary role not as a student, but as “an employee enrolled in school,” while two-thirds described themselves as “a student working to meet expenses.” Among the latter — those who consider their primary role to be student — 63 percent say the main reason they work is to pay tuition, fees, or living expenses, while 24 percent say they work mainly to earn spending money. Most students who work apparently do so out of necessity, and for reasons which are understandable. More than two-fifths of undergraduates who are considered dependent on their parents report that they actually get no help from their parents in paying tuition and fees, and more than half say they get no help in paying housing. With independent undergraduates making up one-half of the population, the proportion of total undergraduates who get little or no financial help from their parents is around three-fourths. The effect on students is apparent: among undergraduates who don’t get help from parents, about 42 percent work full-time, but among those who do get help, only about 12 to 13 percent work full-time.⁴⁷

Figure 10: Percent Distribution of U.S. Undergraduates by Level of Parental Support for Expenses (AY 2003-2004)



Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

Figure 11: Percent Distribution of U.S. Undergraduates Who Work Full-time, by Level of Parental Support for Expenses (AY 2003-2004)



Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

How much are students earning?

Student wages appear to be low

Working undergraduates who consider their primary role to be a student and not an employee earned a median of about \$4,800 while enrolled in AY 2003-2004. Although the NPSAS did not capture hourly wages, this much is known: Students who consider their primary role to be student were enrolled for an average of 8.7 months in AY 2003-2004, and worked an average of 25 hours per week while enrolled. With about 4.3 weeks in a month, these students worked an average of 935 hours while enrolled ($8.7 \times 25 \times 4.3$), giving them a salary of about \$5.13 per hour (\$4,800 divided by 935), or just under the U.S. minimum wage of \$5.15.⁴⁸

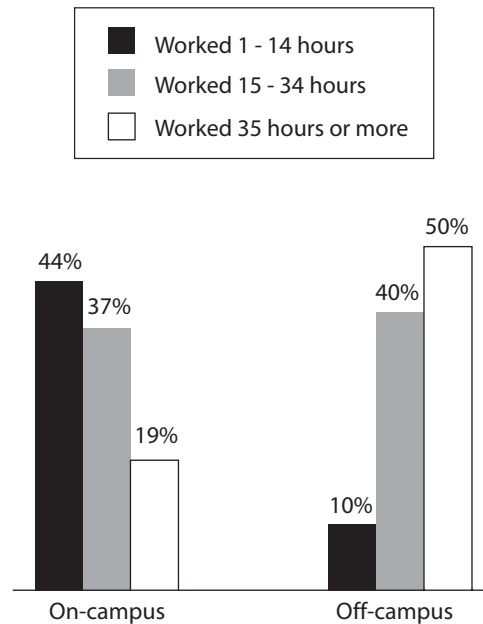
Where are students working?

Nine out of ten students work off-campus

Although on-campus employment is strongly associated with modest work hours, 91 percent of working undergraduates work off-campus and only 7 percent work on-campus, while 2 percent work both on- and off-campus. A similar breakdown exists with respect to the types of jobs worked. Ninety percent of working undergraduates work at regular jobs, and only 5 percent are in work/study or assistantship programs, with an additional 5 percent working both a regular job and a work/study or assistantship. The effect of job location on

hours worked is clear: 50 percent of undergraduates who work off-campus work full-time, but only 19 percent of those who work on-campus work full-time.⁴⁹

Figure 12: Percent Distribution of Undergraduates* Who Worked While Enrolled, by Hours Worked per Week and Location of Job (AY 2003-2004)



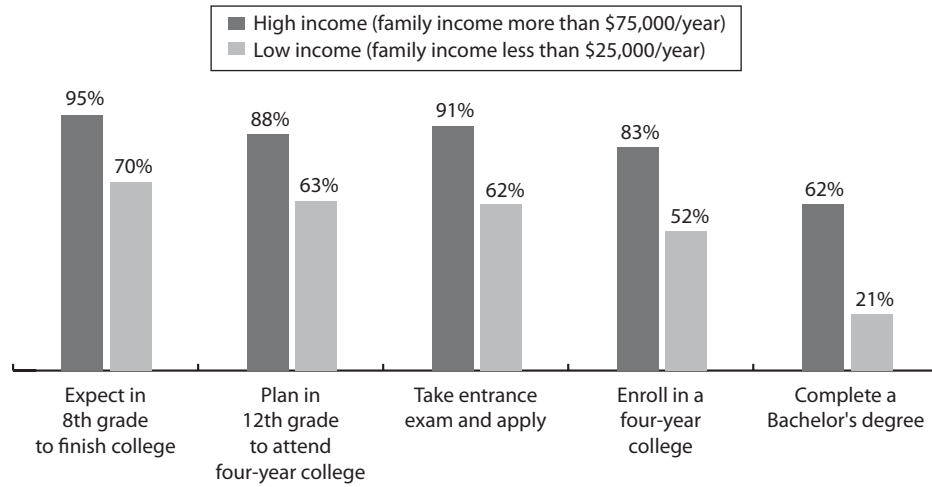
* Excludes students who worked more than one job or whose job was both on-and off-campus.

Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

What is the relationship between work and student outcomes?

Gaining access to and persisting in college is a sequential process, the academic portion of which is often referred to as an “education pipeline” consisting of five stages: 1) having educational expectations in middle school or earlier, 2) preparing academically in high school, 3) taking college entrance exams and applying, 4) enrolling and making financial and other arrangements after being accepted, and 5) persisting to degree completion. At each step along the way, the gap between students from high-income and low-income families grows. A study in the late 1990s indicates that, even among college-qualified high school graduates, children from low-income families lag behind their high-income counterparts in enrolling for and completing a college degree. This gap may very well be due to low-income students needing to work, or perceiving that they need to work, in order to make up for inadequate financial aid.⁵⁰

Figure 13: Impact of Family Income on High School Graduates: College-qualified* Only



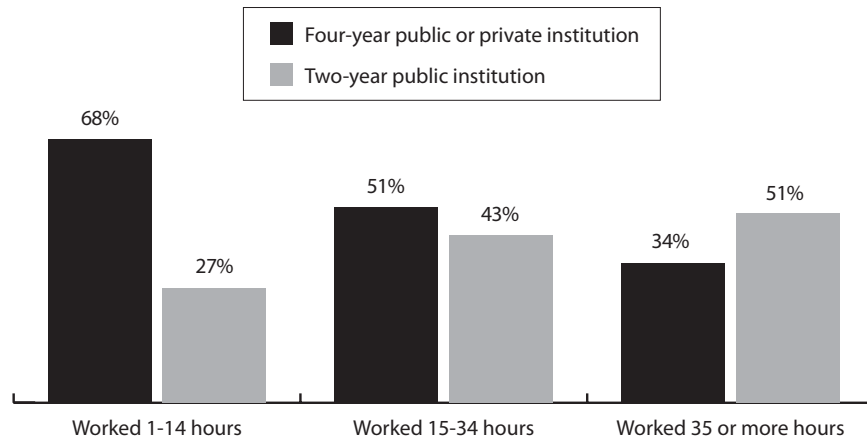
* High school graduates who took college preparatory courses, got good grades, and scored well on aptitude tests.

Source: The Advisory Committee on Student Financial Assistance

Work affects school choice

While work may seem like a logical method for financing an undergraduate education, too much work can jeopardize attendance, persistence, and degree completion, starting with the choice of schools. The more that students work, the less likely they are to attend a school from which they can obtain a bachelor's degree. More than half of undergraduates who work full-time attend a two-year public institution. By contrast, among students who work fewer than 15 hours per week, two-thirds attend a four-year public or private university.⁵¹

Figure 14: Work and School Choice: Type of Institution Attended* by Hours Worked per Week While Enrolled (AY 2003-2004)



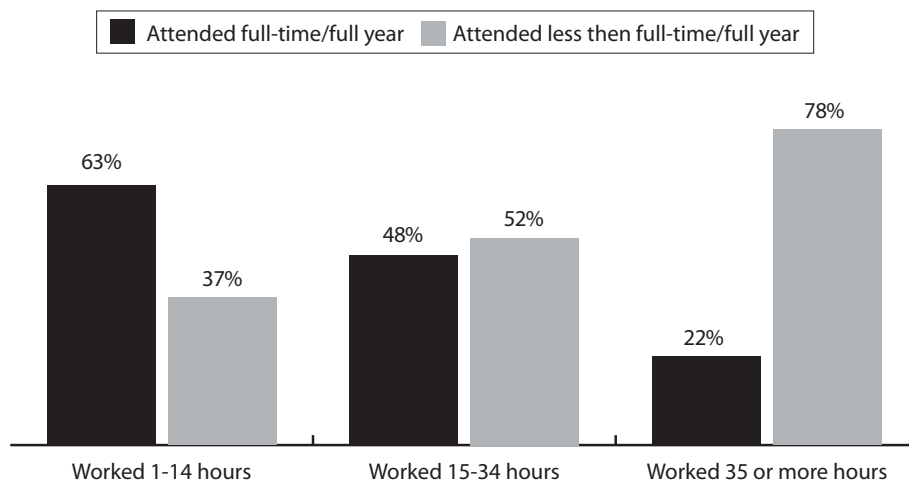
* Excludes students who attended more than one institution

Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

Work affects attendance intensity

Working long hours also affects attendance intensity, which in turn affects degree completion. Undergraduates who enroll on a full-time basis and devote most of their time to school are more likely to complete a degree in a timely manner than those who go to school part-time. In the U.S., just 41 percent of all undergraduates attend school full-time/full-year — that is, they take a full course load, usually 12 or more credit hours, for at least nine months. Students who attend less than full-time/full-year either take a full course load but for less than nine months, or do not take a full course load. Not surprisingly, the students who are the most likely to attend full-time/full-year are those who work modest hours: almost two-thirds of undergraduates who worked fewer than 15 hours per week in AY 2003-2004 attended school full-time/full-year. This stands in stark contrast to students who worked 35 or more hours, the vast majority of whom — over three-fourths — attended school less than full-time/full-year. These are the students who will have the most difficulty completing their degree in a timely manner, assuming they complete their degree at all.⁵²

Figure 15: Work and Attendance: Attendance Intensity of Undergraduates by Hours Worked per Week While Enrolled (AY 2003-2004)



Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

Work affects academics

In addition to affecting attendance intensity, many undergraduates report that working long hours has a negative effect on academics. Among those who feel their primary role is student and not employee and who also work full-time, almost two-thirds say the job limits their class schedule, and more than half report that it limits the number of classes they can take, both of which can affect students' ability to progress through school. In addition, about half of undergraduates who work full-time say the job has a negative effect on their

grades. By contrast, only about one-fifth of undergraduates who work fewer than 15 hours per week report that the job has a negative effect on their schooling.⁵³

Table 5: Among Undergraduates Who Consider School to be Their Primary Responsibility, the Percent Reporting Various Effects of Work on Academics, by Hours Worked per Week While Enrolled (AY 2003-2004)

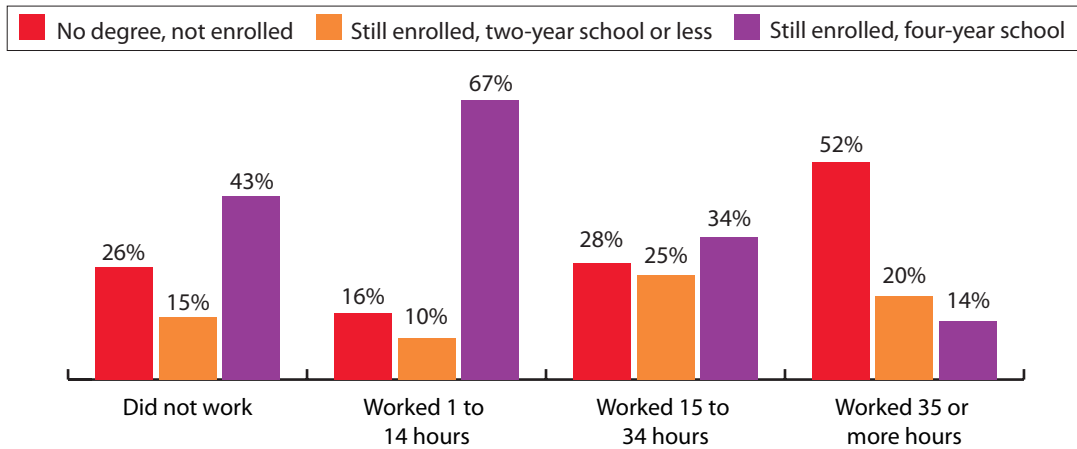
	Work limited the number of classes	Work limited the class schedule	Work limited facility access	Work restricted class choice	Work had negative effect on grades
Worked 1-14 hours	22%	27%	17%	18%	24%
Worked 15-34 hours	39%	48%	30%	32%	40%
Worked 35 or more hours	56%	63%	43%	48%	52%

Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

Work affects persistence

Research indicates that the students who are the most likely to remain in school are those who work fewer than 15 hours per week. Interestingly, students who work modest hours are even more likely to persist than students who don't work at all, perhaps because they learn to manage their time more effectively. By contrast, students who work long hours have low rates of persistence: just 14 percent of freshmen who began postsecondary education in 1995 and who worked 35 or more hours per week their first year were still enrolled in a four-year school three years later, versus 67 percent of beginning freshmen who worked 1 to 14 hours.⁵⁴ Data on students by hours worked their second year or beyond are not available.

Figure 16: Work and Persistence: Status in 1998 of Students Who Began Postsecondary Education in 1995, by Hours Worked per Week While Enrolled Their First Year (Students Who Obtained Certificate or Associate's Degree Not Shown)



Source: U.S. Department of Education, *Beginning Postsecondary Students* (2001)

Work affects degree completion

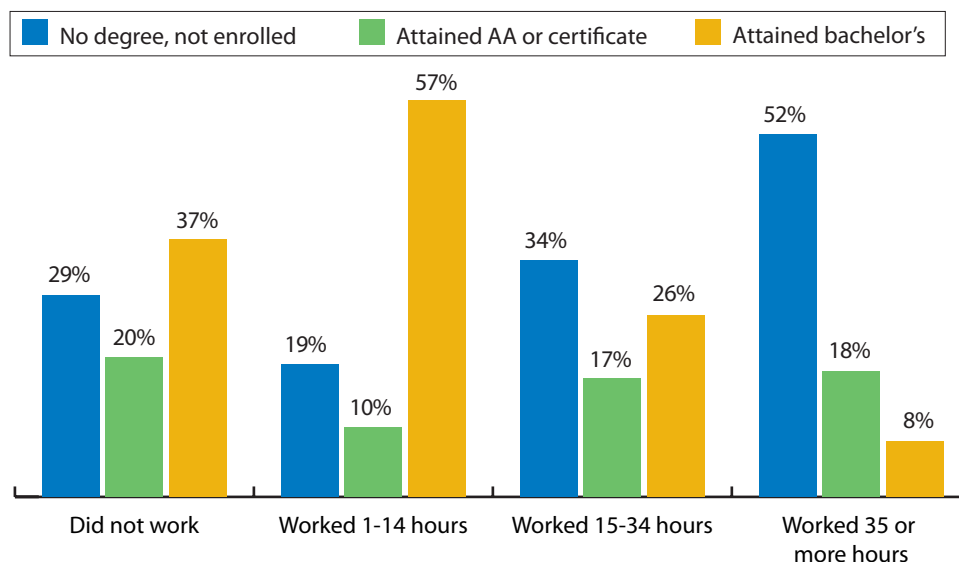
Most undergraduates, regardless of hours worked, take more than four years to complete a bachelor's degree. Reasons for this phenomenon vary, but include the following:

- pursuing a degree that requires more than 120 credit hours;
- pursuing more than one degree;
- changing the degree plan or major;
- taking extra courses beyond those needed to graduate;
- leaving or "stopping out" of school for brief periods of time; and,
- transferring from one institution to another.

Students who received bachelor's degrees in AY 1999-2000 and who had not stopped out of school for more than six months averaged 55 months from first enrollment to degree completion, with the number varying from 51 months for students who attended only one institution to 59 months for those who attended two. In addition, students who began their education at a two-year school and then transferred to a four-year school took about a year and a half longer to earn a degree than students who started at a four-year public university.⁵⁵

For students who work full-time, degree completion can take even longer, or not occur at all. Only 8 percent of students who began postsecondary education in 1995 and who worked full-time their first year had obtained a bachelor's degree by 2001, compared to 57 percent of those who worked 1 to 14 hours. Among those who worked full-time their first year, over half — 52 percent — had left higher education by 2001 without obtaining a certificate or degree of any kind.⁵⁶

Figure 17: Work and Completion: Status in 2001 of Students Who Began Postsecondary Education in 1995, by Hours Worked per Week While Enrolled Their First Year (Students Who Are Still Enrolled Not Shown)



Source: U.S. Department of Education, *Beginning Postsecondary Students* (2001)

Do student outcomes differ for students with work-study jobs?

Students in work-study jobs are more likely to complete than students in regular jobs

Undergraduates in work-study jobs, which are paid for with financial aid dollars and in which students usually work on-campus, are far more likely to exhibit the characteristics associated with bachelor's degree completion than students who work in regular jobs.

Consider:

- *School choice:* 80 percent of undergraduates in work-study/assistantship jobs in AY 2003-2004 attended four-year institutions, versus 42 percent of those with regular jobs;
- *Attendance intensity:* 76 percent of undergraduates in work-study jobs in AY 2003-2004 attended school full-time/full-year, versus 35 percent of those with regular jobs;⁵⁷
- *Persistence:* 69 percent of freshmen who began postsecondary education in 1995 and who worked in a work-study job or internship their first year were still enrolled in a four-year school three years later, versus 33 percent of all those who worked their first year (data on 1995 freshmen who worked in regular jobs only are not available);
- *Degree completion:* 65 percent of 1995 beginning freshmen who worked in a work-study job their first year had obtained a bachelor's degree by 2001, versus 25 percent of all freshmen who worked their first year.⁵⁸

It's not clear whether undergraduates who are more likely to succeed are also more likely to take work-study jobs, or whether work-study jobs are more likely to help working undergraduates succeed than regular jobs, but it is probably more the latter than the former, for at least the following reasons:

- Work-study jobs are almost always on-campus. Like living on-campus, working on-campus helps connect students to the institution. Also, on-campus work reduces both the time and money that students must expend getting to a job.
- Work-study jobs usually have limited hours: in AY 2003-2004, undergraduates in work-study jobs worked an average of 14 hours per week, but undergraduates in regular jobs worked an average of 29 hours.⁵⁹
- In work-study jobs, the primary goal is ensuring that the student gets through school, not ensuring that tasks are performed. Thus, students in work-study jobs have more flexibility in their schedules than students in regular jobs who must rely on the good will of their employer if they need to take time off for school.

LOANS AND DEBT

Historical perspective on loans as a method for financing higher education

Of all the changes in higher education that have occurred over the past decade, few have garnered more attention than the dramatic increase in student debt. The increase has been brought about not only by an increase in college costs and a decrease in the purchasing power of grants — particularly the Pell Grant, which is the largest need-based grant program in the country — but also by the increased availability of loans and credit. Most loans come from the federal government, but private or alternative loans as well as credit cards have also become popular with students. In AY 2003-2004, 12 percent of undergraduates carried a balance on a credit card, although whether or not this was for educational expenses is unknown, and 5 percent took out a private or alternative loan, not including loans from family or friends. Less than 1 percent took out a loan from state or institutional sources.⁶⁰ This section of the report will look at these three sources of money for undergraduates — federal loans, private loans, and credit cards — and the effect of loans on student decision-making and outcomes.

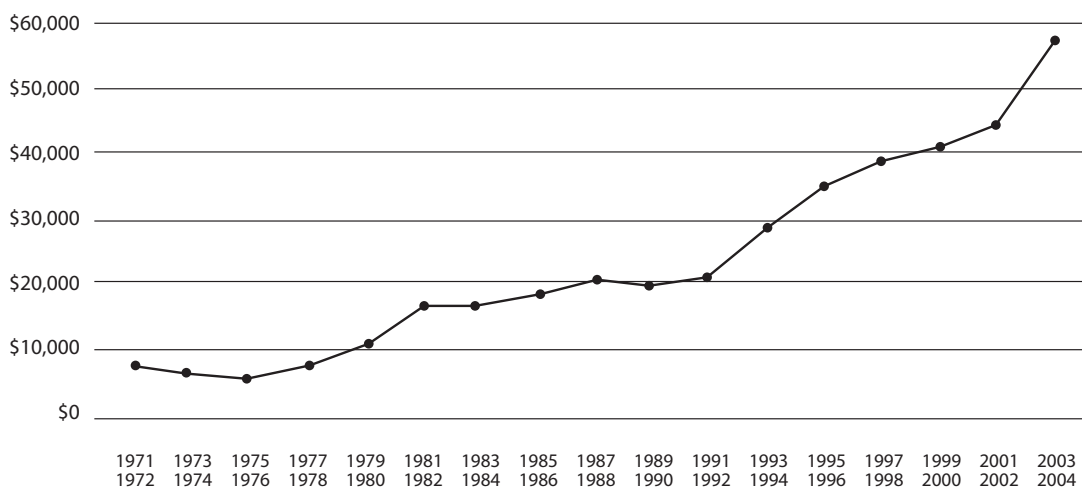
Federal loan volume has increased substantially due to increased need and increased access to loans

Perhaps the biggest reason for the increased indebtedness, other than increased need, is due to changes made to the Higher Education Act (HEA) in the early 1990s. By raising

loan limits for subsidized loans, for which students must demonstrate financial need, and expanding access to unsubsidized loans, for which students do not have to demonstrate need, the 1992 HEA reauthorization raised both the amount of low-interest debt that students could acquire, and the number of students who could acquire federally-backed debt. Unsubsidized loans existed before 1992, but were for the most part only available to independent students, the rationale being that dependent students could get additional funds from their parents. The 1992 reauthorization, however, opened up unsubsidized loans to dependent students. Since they make up about half of all undergraduates, this effectively doubled the number of students who qualified for unsubsidized loans. In addition, the 1992 reauthorization opened up unsubsidized loans to students who do not demonstrate financial need.⁶¹

The increased access to loans, together with increased need, has resulted in an increase in federal loan volume. Total volume, which had remained fairly stable in the 1970s at just under \$10 billion per year, increased sharply in the early 1980s before leveling off at about \$20 billion in AY 1987-1988. Volume remained fairly stable for the next few years, then rose again dramatically in the early 1990s. But this time loan volume did not level off, rather, it has continued to rise steadily each year for over a decade. In AY 2003-2004, more than \$55 billion was lent to students.⁶² Policymakers, financial aid officers, and students themselves agree that the HEA changes of 1992 have been instrumental in increasing student debt.

Figure 18: Federal Loan Volume for Postsecondary Students in Millions of Constant (2003) Dollars (AY 1971-1972 to AY 2003-2004)



Source: The College Board

Who is taking out federal loans?

Twice as many undergraduates work as take out loans

About 34 percent of undergraduates took out loans from the federal government in AY 2003-2004, less than half as many as the 78 percent who worked, and 44 percent had borrowed federal loans at some point during their undergraduate education. If what stands out about students who work is the number of hours worked by those who can least afford academically to do so, what stands out about borrowing is almost the opposite: with few exceptions, at-risk students are *less* likely to borrow than students who are not at-risk and are *more* likely to work long hours. The decision to work long hours rather than take out loans is not "either/or." Some students work long hours and also borrow, some choose one method of financing their education but not the other, and some choose neither. But many undergraduates do appear to exhibit an "I'll work my way through school so I won't have so much debt to pay off" approach to higher education. The Advisory Committee on Student Financial Assistance, an independent committee which advises Congress, reports that the financial aid package for low-income students at public universities now includes about \$8,000 per year in loans. For students who are unsure of their academic success, confronting a potential debt of roughly \$30,000 if it takes them four years to graduate, and \$50,000 if, as is often the case, it takes them six, can be a risky gamble.⁶³ Student aid researcher John Lee describes students' attempt to minimize their financial liability as "hedging their bets" through numerous cost-cutting strategies such as: delaying enrollment; attending low-cost, low-resource community colleges; attending part-time; working excessive hours; and occasionally "stopping out" of school. Lee speculates that these students behave in ways that are economically rational to them, discounting the significant financial returns from higher education by the probability of their success in completing a four-year degree, and then weighing that against the size of the debt they may face.⁶⁴ Unfortunately, each bet-hedging tactic has been associated with a lower likelihood of earning a degree.

With perhaps one exception, borrowing by institution type tends to follow patterns which intuitively make sense based on costs. For example, undergraduates at more expensive four-year private institutions are more likely to borrow than students at more moderately-priced four-year public institutions (54 percent versus 43 percent). But they are not significantly more likely to borrow, and the median amount borrowed in AY 2003-2004 by undergraduates in the two sectors differed by only \$325. Students at two-year public institutions are considerably less likely to borrow (11 percent), perhaps because these schools tend to cost less than four-year schools and because part-time attendance is more common there. Students at proprietary schools, which seldom offer institutional grants, are the most likely to take out a federal loan (72 percent) and they take out larger amounts (\$6,624) than

students at four-year institutions, although as a group proprietary students do not borrow as much overall, perhaps due to the prevalence of short-term programs. Women are a bit more likely to borrow than men (35 percent versus 32 percent), and dependent undergraduates are more likely to borrow than independent (36 percent versus 31 percent).

African-Americans were the most likely to borrow of any ethnicity — 42 percent took out a federal loan in AY 2003-2004 and 56 had ever borrowed — and Asians, at 23 percent, were the least likely. About 29 percent of Hispanic undergraduates borrowed, only 5 percentage points less than the percent of Whites, but the median total amount they had ever borrowed (\$6,624) was a good deal lower than for Whites (\$7,375), and, in fact, was the lowest of all ethnic groups. The lower total loan amount is probably due more to cost-cutting strategies — 50 percent of Hispanic undergraduates⁶⁵ attend two-year public institutions and 66 percent attend less than full-time/full-year, versus 42 percent and 56 percent, respectively, of Whites⁶⁶ — than to a cultural aversion to loans. A recent report found that most of the disparities in the willingness of different ethnic groups to take on student loan debt were attributable to socioeconomic factors — that is, after controlling for the parents' marital status, educational level, and other variables, "a good deal of the barrier to using educational loans to access higher education appears to be economic rather than cultural in character."⁶⁷ The report further found that differences in the tendency for students of different ethnicities to borrow seem to be contributing to enrollment differences between Whites and Hispanics, though not necessary to enrollment differences between Whites and other groups.⁶⁸

Not surprisingly, the percent of undergraduates taking out loans decreases as income rises. Among dependent students, this variation is not great: 39 percent of dependent undergraduates whose parents make under \$30,000 per year borrowed, just 9 percentage points higher than the 30 percent of those whose parents make \$90,000 or more. Among independent undergraduates, the proportion of low-income students (those making under \$15,000) who borrowed was also 39 percent, but this dropped to 19 percent for those making \$45,000 or more. The greater variation among independent students, combined with the fact that half of independent undergraduates work full-time,⁶⁹ indicates that they are probably more likely than dependent students to substitute work for loans.⁷⁰

Table 6: Percent of all U.S. undergraduates who took out a federal loan in AY 2003-2004, percent who ever borrowed on federal loans for undergraduate education, and median amounts borrowed, by institutional and student characteristics

Institutional and student characteristics	Took out a federal loan in AY 2003-2004 (excludes PLUS loans)	Median federal loan in AY 2003-2004	Ever borrowed on federal loans for undergraduate education (excludes PLUS loans)	Median total amount ever borrowed on federal loans for undergraduate education
Total	34%	\$5,005	44%	\$7,000
Institution type				
Four-year public	43%	\$5,165	53%	\$8,750
Four-year private	54%	\$5,490	63%	\$9,674
Two-year public	11%	\$2,625	23%	\$4,534
Proprietary	72%	\$6,624	83%	\$6,625
Class level				
First-year student	30%	\$3,189	38%	\$3,937
All other	36%	\$5,499	48%	\$10,124
Gender				
Male	32%	\$5,124	42%	\$7,249
Female	35%	\$5,000	46%	\$6,891
Race/ethnicity				
White	34%	\$4,999	44%	\$7,375
African-American	42%	\$5,297	56%	\$7,250
Hispanic	29%	\$4,708	40%	\$6,624
Asian	23%	\$4,959	33%	\$7,125
Age (as of Dec. 31 of AY)				
Under 24	36%	\$3,500	44%	\$6,125
24-29	38%	\$6,191	57%	\$9,883
30 or older	26%	\$6,624	37%	\$8,833
Dependency status				
Dependent	36%	\$3,500	44%	\$6,124
Independent	31%	\$6,250	45%	\$8,780
Income of dependent student's parents				
Under \$30,000	39%	\$3,667	46%	\$6,125
\$30,000-\$59,999	40%	\$3,500	48%	\$6,125
\$60,000-\$89,999	38%	\$3,500	45%	\$6,124
\$90,000 or more	30%	\$3,500	37%	\$6,124
Income of independent student (includes spouse's if any)				
Under \$15,000	39%	\$5,505	53%	\$8,563
\$15,000-\$29,999	39%	\$6,147	53%	\$8,120
\$30,000-\$44,999	29%	\$6,224	43%	\$9,122
\$45,000 or more	19%	\$6,625	32%	\$9,937

Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

At-risk students are less likely to borrow than non-at-risk students

With few exceptions, students who are at-risk of leaving school before completing a degree are less likely to take out loans than students who are not at-risk, although whether this reflects a wise choice (in that it reduces debt for students who may not complete), or an unwise choice (in that it reduces their chances to complete), depends on the student and his or her goals. In AY 2003-2004, 29 percent of at-risk undergraduates took out a federal loan, versus 44 percent of those who were not at-risk. In fact, the more at-risk a student is, the less likely he or she is to borrow, although it should be noted that at-risk students are more likely to enroll in less-expensive programs and to enroll part-time, factors which reduce the need for loans.

Of all at-risk characteristics, the greatest variation in loan-taking is by attendance status: almost one-half of students enrolled full-time for at least nine months (i.e., full-time/full-year) take out loans, versus one-fourth of those enrolled less than full-time/full-year.⁷¹ This should come as no surprise, as part-time students, once they are enrolled, are less likely to need money for school than full-time students. However, two questions arise, particularly in light of the fact that more than half of undergraduates attend part-time: To what extent do students attend part-time because they don't have enough money to attend full-time? And is a part-time attendance/no-loans strategy the wisest choice for students wishing to complete a degree?

Table 7: Percent of all U.S. undergraduates who took out a federal loan in AY 2003-2004, percent who ever borrowed on federal loans for undergraduate education, and median amounts borrowed, by at-risk characteristics and parents' highest education level

At-risk characteristics	Took out a federal loan in AY 2003-2004 (excludes PLUS loans)	Median federal loan in AY 2003-2004	Ever borrowed on federal loans for undergraduate education (excludes PLUS loans)	Median total amount ever borrowed on federal loans for undergraduate education
Total	34%	\$5,005	44%	\$7,000
Index of risk				
Not at-risk	44%	\$3,624	50%	\$6,125
At-risk	29%	\$5,499	42%	\$7,500
Number of at-risk characteristics				
One	33%	\$4,500	43%	\$6,958
Two or three	29%	\$6,087	43%	\$8,875
Four or more	27%	\$5,250	40%	\$6,625
Attendance pattern				
Full-time/full-year	48%	\$5,499	54%	\$7,624
Less than full-time/full-year	24%	\$4,403	38%	\$6,625
Delayed enrollment after high school				
Did not delay enrollment	36%	\$4,664	46%	\$7,000
Delayed enrollment	29%	\$5,386	41%	\$7,000
Has dependents				
Did not have dependents	35%	\$4,500	45%	\$6,702
Had dependents	30%	\$5,699	43%	\$7,493
Single parent student				
Not a single parent	34%	\$4,900	44%	\$7,050
Single parent	35%	\$5,499	48%	\$6,625
High school degree type				
High school degree	35%	\$5,000	46%	\$7,200
GED or other equivalency	33%	\$5,039	43%	\$6,624
Parents' highest education level				
Bachelor's degree or higher	32%	\$5,000	42%	\$7,265
Some postsecondary education	35%	\$5,161	46%	\$7,213
High school or less (first-generation student)	35%	\$4,999	46%	\$6,750

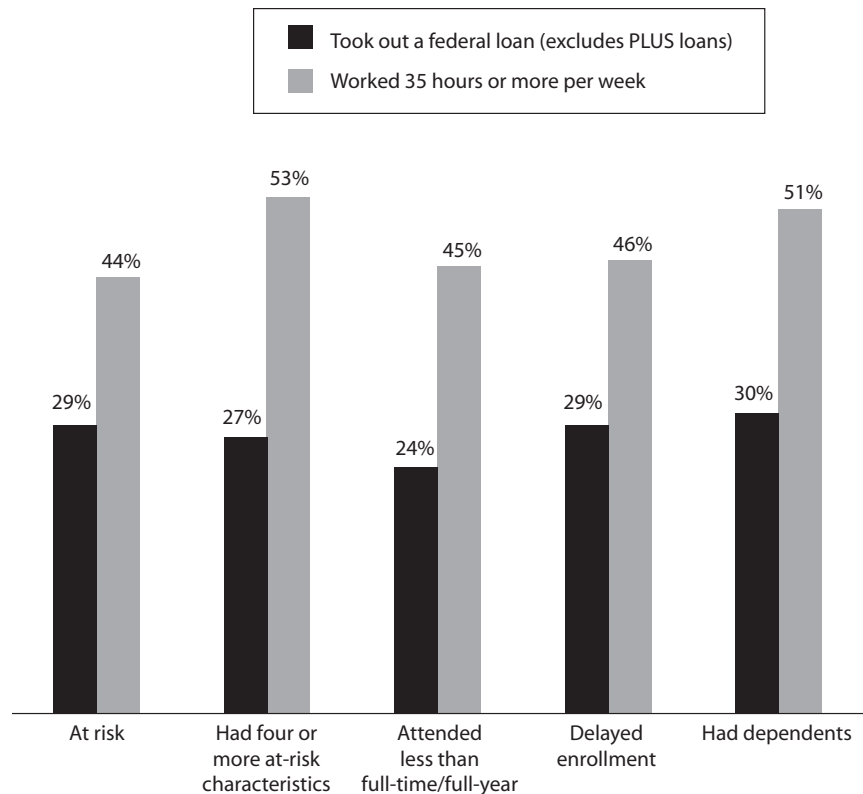
Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

At-risk students are less likely to borrow than they are to work

In addition to being less likely to borrow than non-at-risk students, at-risk students are, almost without exception, more likely to work long hours, although, again, it's hard to tell which is the cause and which is the effect. Full-time work causes people to be at-risk, but the opposite may also be true — that is, people who are already at-risk may be more likely to work full-time. At any rate, at-risk students in general tend to exhibit a work-over-loans approach to education, and students who are not at-risk exhibit the opposite:

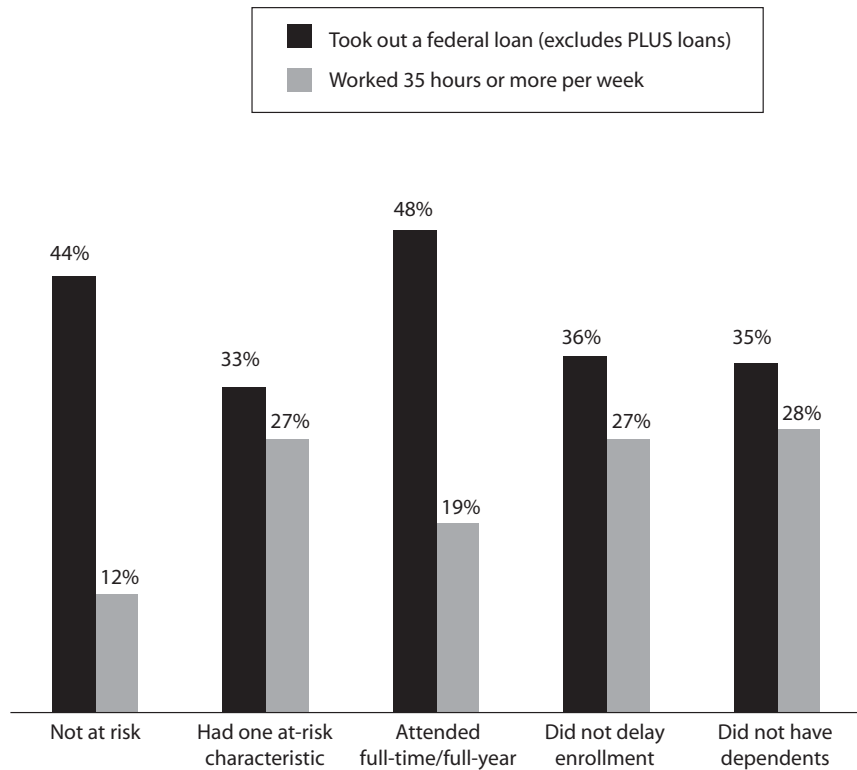
- Among at-risk students, 44 percent work full-time and 29 percent borrow. Among non-at-risk students, 12 percent work full-time and 44 percent borrow.
- Among those who delayed enrollment after high school, 46 percent work full-time and 29 percent borrow. Among those who did not delay enrollment, 27 percent work full-time and 36 percent borrow.
- Among students who attend less than full-time/full-year, 45 percent work full-time and 24 percent borrow. Among students who attend full-time/full-year, 19 percent work full-time and 48 percent borrow.⁷²

Figure 19: Percent of At-risk Undergraduates Who Borrowed on Federal Loans and Percent Who Worked Full-time While Enrolled, by Characteristic (AY 2003-2004)



Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

Figure 20: Percent of Non-at-risk Undergraduates Who Borrowed on Federal Loans and Percent Who Worked Full-time While Enrolled, by Characteristic (AY 2003-2004)



Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

At-risk students whose primary responsibility is school are less likely to borrow

Two-thirds of working undergraduates define their primary role as “a student working to meet expenses” rather than “an employee enrolled in school.” Two things should be noted about those who consider their primary role to be student:

- Even in this group, those who are at-risk exhibit a work-over-loans approach to funding their education and those who are not at-risk exhibit a loans-over-work approach;
- At-risk students whose primary role is student are more likely to borrow and less likely to work full-time than at-risk students overall, but they still tend to exhibit a work-over-loans approach to their education.⁷³

Table 8: Percent of U.S. undergraduates who took out a federal loan in AY 2003-2004 and percent who worked 35 or more hours per week while enrolled, by at-risk characteristics and parents' highest education level: All, and those whose primary role is student

At-risk characteristics	All undergraduates		Undergraduates who consider their primary role to be student	
	Took out a federal loan in AY 2003-2004 (excludes PLUS loans)	Worked 35 or more hours per week while enrolled	Took out a federal loan in AY 2003-2004 (excludes PLUS loans)	Worked 35 or more hours per week while enrolled
Total	34%	34%	39%	27%
Index of risk				
Not at-risk	44%	12%	46%	15%
At-risk	29%	44%	33%	35%
Number of at-risk characteristics				
One	33%	27%	33%	28%
Two or three	29%	48%	34%	39%
Four or more	27%	53%	33%	43%
Attendance pattern				
Full-time/full-year	48%	19%	50%	18%
Less than full-time/full-year	24%	45%	27%	36%
Delayed enrollment after high school				
Did not delay enrollment	36%	27%	40%	23%
Delayed enrollment	29%	46%	34%	37%
Has dependents				
Did not have dependents	35%	28%	39%	24%
Had dependents	30%	51%	37%	40%
Single parent student				
Not a single parent	34%	32%	39%	25%
Single parent	35%	51%	37%	42%
High school degree type				
High school degree	35%	34%	39%	27%
GED or other equivalency	33%	42%	37%	34%
Parents' highest education level				
Bachelor's degree or higher	32%	27%	36%	23%
Some postsecondary education	35%	35%	39%	28%
High school diploma or less (first generation student)	35%	41%	42%	32%

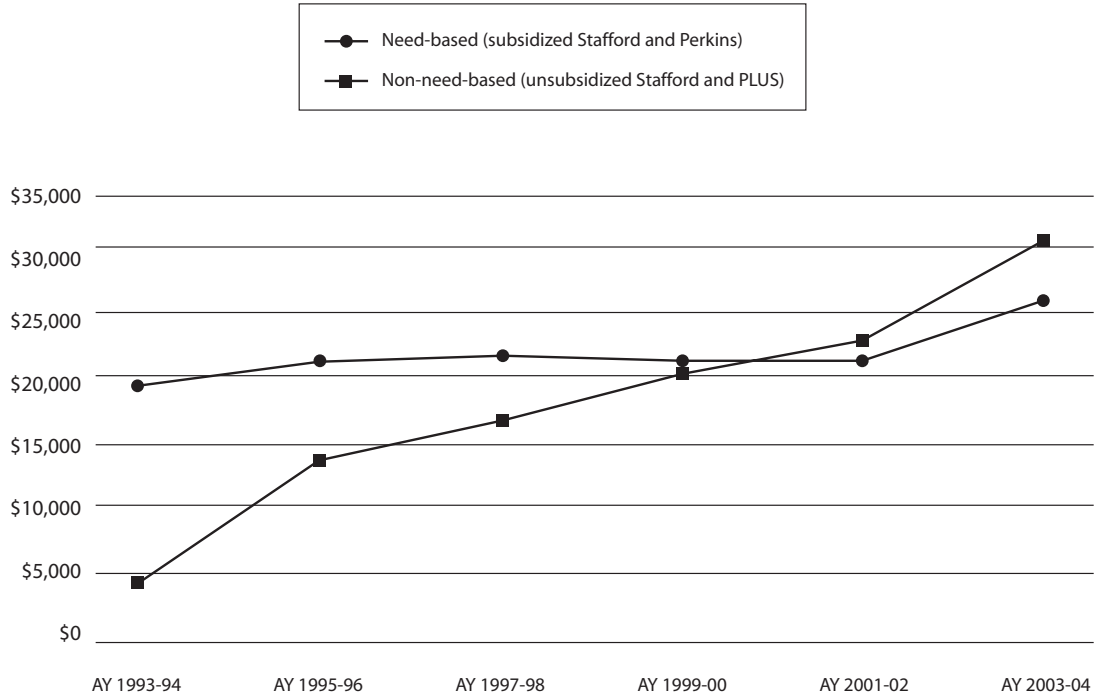
Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

Who is taking out loans that are not based on need?

Loan volume for non-need-based loans exceeds loan volume for need-based

Total federal loan volume has risen substantially in the last decade, but volume on loans for which students do not have to demonstrate need has risen even more quickly than need-based loan volume. In AY 1993-1994, \$4.5 billion in non-need-based and \$19.1 billion in need-based loans was lent to students. But early in the new century, non-need-based volume began to exceed need-based, and by AY 2003-2004 these figures were \$30.1 billion and \$26.5 billion, respectively.⁷⁴

Figure 21: Federal Loan Volume for Postsecondary Students in Millions of Constant (2003) Dollars, by Need-based versus Non-need-based Loan (AY 1993-1994 to AY 2003-2004)



Source: The College Board

Not surprisingly, the percent of students taking need-based loans decreases as income rises, from 37 percent of dependent undergraduates whose parents make under \$30,000, to 11 percent of those whose parents make \$90,000 or more. The percent of independent undergraduates taking need-based loans shows a similar pattern. However, whereas the percent of students taking need-based loans *decreases* as income rises, the percent taking non-need-based loans *increases*. Non-need-based loans can go to needy

students, but students don't have to demonstrate need, and it is almost certain that a lot of volume goes to students without need: One-fourth of dependent students whose parents make \$90,000 or more take out non-need-based loans, with the median amount taken exceeding the median amount for need-based loans in every income category.⁷⁵

Table 9: Percent of all U.S. undergraduates who took out federal need-based loans and federal non-need-based loans in AY 2003-2004 and median amounts borrowed, by dependency status and income

	Stafford subsidized (need-based)	Median subsidized loan	Stafford unsubsidized (non-need-based)	Median unsubsidized loan
Total	28%	\$2,646	21%	\$3,768
Income of dependent student's parents				
Under \$30,000	37%	\$2,625	11%	\$3,697
\$30,000-\$59,999	36%	\$2,625	13%	\$2,625
\$60,000-\$89,999	26%	\$2,625	21%	\$2,750
\$90,000 or more	11%	\$2,719	24%	\$3,472
Income of independent student (includes spouse's if any)				
Under \$15,000	38%	\$2,749	28%	\$3,977
\$15,000-\$29,999	37%	\$2,625	30%	\$3,999
\$30,000-\$44,999	26%	\$2,750	23%	\$3,999
\$45,000 or more	14%	\$3,063	17%	\$4,132

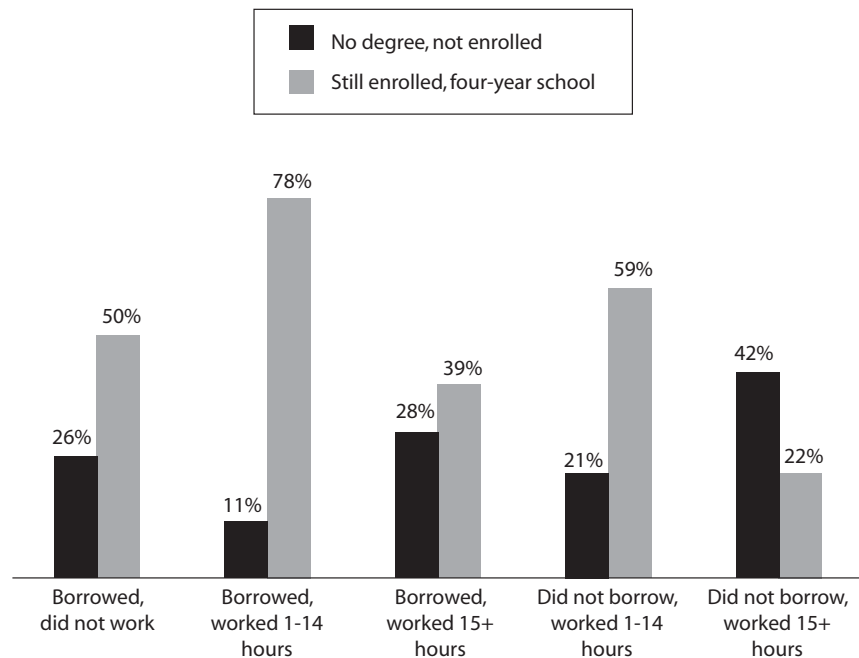
Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

What is the relationship between loans and student outcomes?

Students who borrow are more likely to persist than students who work long hours

Despite the large loan amounts, students with loans are more likely to persist in school than students who work long hours. As already shown, the students who are most likely to persist are those who work 1-14 hours per week, but, within that group, students who borrow are more likely to persist than those who don't borrow. About 78 percent of students who began postsecondary education in 1995 and who worked modest hours and borrowed their first year were still enrolled in a four-year school three years later, versus 59 percent of those who worked modest hours and did not borrow. The students who are least likely to persist are those who adopt a work/no-loans approach to their education: only 22 percent of those who worked 15 or more hours per week and who didn't borrow remained in school for three years.⁷⁶

Figure 22: Status in 1998 of Freshmen Who Entered College in 1995, by Work and Loan Choices Their First Year



Source: American Council on Education

Who is taking out private loans and who is carrying a balance on a credit card?

Only 5 percent of undergraduates have private loans, but median amounts are large

Although volume for private loans (also called “alternative” loans) is growing, just 5 percent of undergraduates took out a private loan in AY 2003-2004. Unlike federal loans, students must be considered credit-worthy in order to borrow a private loan, which may explain in part the low percentage of undergraduates borrowing on these loans. Private loans also tend to have less favorable repayment options than federal loans. At \$4,998, the median private loan was a good deal higher than the median subsidized or unsubsidized federal loan. Borrowing patterns on private loans vary little by gender. Whites were somewhat more likely to take out a private loan than other ethnicities, but not greatly so. Undergraduates at proprietary and four-year private schools were a good deal more likely to borrow than those at four-year and two-year public schools. Interestingly, traditional undergraduates, such as dependent students and students under age 24, are more likely to take out a private loan than independent undergraduates and older students. The percent who borrowed did not vary greatly by income, but dependent undergraduates whose parents make \$90,000 or more per year took out larger loans than low-income undergraduates, regardless of the low-income student’s dependency status.⁷⁷

About 12 percent of undergraduates carry a credit card balance, but the role of credit cards is unclear

The role of credit cards in paying for college is unclear — that is, it’s not known whether students use credit cards primarily as a loan or for the sake of convenience. About 12 percent of undergraduates carried a balance on a credit card in AY 2003-2004. As with private loans, the percent with a credit card balance varied little by gender or ethnicity. Students at four-year public and private institutions are more likely to carry a balance than students at proprietary or two-year public schools, and low-income students are more likely to carry a balance than high-income students, though median credit card balances, which are self-reported by students, do not appear to be very high. Almost one-fourth of dependent undergraduates, and one-fifth of undergraduates under age 24, have a credit card balance. Data on the percent of older students and independent students with a balance are not available.⁷⁸

Table 10: Percent of all U.S. undergraduates who took out a private or alternative loan in AY 2003-2004, percent who carried a balance on a credit card, and median amounts, by institutional and student characteristics

Institutional and student characteristics	Took out a private or alternative loan	Median private or alternative loan	Had a balance on a credit card	Median total credit card balance
Total	5%	\$4,998	12%	\$1,000
Institution type				
Four-year public	5%	\$4,984	16%	\$1,191
Four-year private	12%	\$6,000	13%	\$1,000
Two-year public	1%	\$2,500	9%	\$900
Proprietary	13%	\$4,798	6%	\$998
Class level				
First-year student	5%	\$4,000	8%	\$790
All other	6%	\$4,998	13%	\$1,194
Gender				
Male	6%	\$5,000	11%	\$1,000
Female	5%	\$4,499	12%	\$1,000
Race/ethnicity				
White	6%	\$4,984	12%	\$1,000
African-American	4%	\$3,913	10%	\$1,000
Hispanic	5%	\$4,000	12%	\$1,000
Asian	5%	\$4,700	12%	\$1,000
Age (as of Dec. 31 of AY)				
Under 24	7%	\$4,975	20%	\$1,000
24-29	4%	\$4,174	NA	NA
30 or older	3%	\$4,000	NA	NA

Dependency status				
Dependent	7%	\$4,975	23%	\$1,000
Independent	3%	\$4,000	NA	NA
Income of dependent student's parents				
Under \$30,000	6%	\$4,000	27%	\$1,000
\$30,000-\$59,999	7%	\$4,818	25%	\$1,072
\$60,000-\$89,999	8%	\$5,000	24%	\$995
\$90,000 or more	7%	\$5,900	19%	\$1,000
Income of independent student (includes spouse's if any)				
Under \$15,000	4%	\$3,989	NA	NA
\$15,000-\$29,999	4%	\$4,000	NA	NA
\$30,000-\$44,999	3%	\$4,200	NA	NA
\$45,000 or more	3%	\$3,600	NA	NA

Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

At-risk undergraduates are less likely to take a private loan or to carry a credit card balance

Students who are at risk of not completing their education are less likely to take out a private loan and less likely to carry a balance on a credit card than non-at-risk students. Only 4 percent of at-risk undergraduates have a private loan, and only 8 percent carry a balance on a card, versus 8 percent and 21 percent, respectively, of non-at-risk students. It appears that at-risk students' tendency to fund their education with a "work-over-loans" philosophy extends not just to federal loans, but to private loans and credit cards as well.⁷⁹

Table 11: Percent of all U.S. undergraduates who took out a private or alternative loan in AY 2003-2004, percent who carried a balance on a credit card, and median amounts, by at-risk characteristics and parents' highest education level

At-risk characteristics	Took out a private or alternative loan	Median private or alternative loan	Had a balance on a credit card	Median balance due on all credit cards
Total	5%	\$4,998	12%	\$1,000
Index of risk				
Not at-risk	8%	\$5,000	21%	\$998
At-risk	4%	\$4,000	8%	\$1,100
Number of at-risk characteristics				
One	6%	\$4,984	21%	\$1,050
Two or three	3%	\$4,000	4%	\$1,200
Four or more	2%	\$3,000	NA	NA
Attendance pattern				
Full-time/full-year	8%	\$5,000	15%	\$998
Less than full-time/full-year	3%	\$3,963	9%	\$1,192

Delayed enrollment after high school				
Did not delay enrollment	6%	\$4,984	15%	\$1,000
Delayed enrollment	4%	\$4,000	6%	\$1,192
Has dependents				
Did not have dependents	6%	\$4,984	16%	\$1,000
Had dependents	3%	\$3,400	NA	NA
Single parent student				
Not a single parent	6%	\$4,984	13%	\$1,000
Single parent	3%	\$3,200	NA	NA
High school degree type				
High school degree	5%	\$4,998	12%	\$1,000
GED or other equivalency	4%	\$3,252	5%	\$1,100
Parents' highest education level				
Bachelor's degree or higher	5%	\$5,000	13%	\$1,000
Some postsecondary education	6%	\$4,984	13%	\$1,000
High school or less (first-generation student)	5%	\$4,000	10%	\$1,000

Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

What is median total indebtedness?

About 60 percent of undergraduates who received bachelor's degrees in AY 2003-2004 still owed on federal loans upon graduation (excluding PLUS loans owed by parents), with a median cumulative amount still owed of \$16,244. Graduates of four-year private schools were more likely to owe, and they owed larger amounts, than graduates of four-year public institutions, but, in both sectors, more than half of graduating seniors owed. African Americans were more likely to owe on federal loans than Whites and they owed larger amounts. About 77 percent of graduating African-Americans owed on federal loans, with a median of \$19,350 owed, versus 58 percent of Whites. Hispanics were more likely to owe than Whites, but the median owed was less. Nevertheless, even among graduating seniors who were Hispanic, the median owed was \$15,480. Students from low-income backgrounds were a good deal more likely to owe than students from high-income backgrounds, though they were not necessarily more likely to owe large amounts. Data on total indebtedness from all sources — federal loans, private loans, and credit cards — are not available.⁸⁰

Table 12: Percent of undergraduates receiving bachelor's degrees in AY 2003-2004 who still owed on federal loans upon graduation, and the median cumulative amount still owed, by institutional and student characteristics

Institutional and student characteristics	Percent who still owed on federal loans (excludes PLUS loans)	Median cumulative amount still owed
Total	60%	\$16,244
Institution type		
Four-year public	56%	\$14,698
Four-year private	68%	\$17,123
Gender		
Male	58%	\$15,957
Female	61%	\$16,485
Race/ethnicity		
White	58%	\$16,059
African-American	77%	\$19,350
Hispanic	69%	\$15,480
Asian	46%	\$13,931
Dependency status		
Dependent	57%	\$14,993
Independent	64%	\$18,500
Income of dependent student's parents		
Under \$30,000	69%	\$14,027
\$30,000-\$59,999	62%	\$15,440
\$60,000-\$89,999	57%	\$14,698
\$90,000 or more	48%	\$14,604
Income of independent student (includes spouse's if any)		
Under \$15,000	73%	\$18,659
\$15,000-\$29,999	72%	\$19,480
\$30,000-\$44,999	64%	\$18,450
\$45,000 or more	47%	\$17,174

Source: U.S. Department of Education, *National Postsecondary Student Aid Study (NPSAS) 2004*

Conclusion

Three-fifths of students who received bachelor's degrees in AY 2003-2004 owed on federal loans upon graduation, with a median of over \$16,000 owed, but these are the lucky ones. Far more costly than student loan debt, for both individuals and society, are the lost opportunities of the college students who do not complete their degree because they have to work, and the high school students who do not go to college because they cannot see where

the money will come from to pay for it. The Advisory Committee on Student Financial Assistance reports that between 2001 and 2010, high unmet need will prevent over 4,000,000 college-qualified, low- and moderate-income high school graduates from attending a four-year institution, and 2,000,000 of them from attending any postsecondary institution at all.⁸¹

It is beyond the scope of this paper to examine the impact of insufficient grant aid on college access, but this much can be said: The maximum Pell Grant of \$4,050 is reserved for only the neediest of students, and, although overall Pell funding increased by 60 percent in real terms from AY 1999-2000 to AY 2003-2004, the number of recipients also increased because of rising costs, stagnant wages, and an increased population. Thus, the \$2,466 received in AY 2003-2004 by the average Pell recipient actually represented a decrease of \$24 in real terms over the previous year.⁸² Recipients of need-based state grants received an average of \$372 in AY 2003-2004, an increase of \$18.⁸³ Meanwhile, total college costs in AY 2003-2004 increased by \$762 at public four-year institutions, \$584 at public two-year institutions, and \$1,435 at private four-year institutions.⁸⁴

With costs increasing and grant aid not keeping up, students with insufficient funds must either work or borrow to pay for school. One-third of all undergraduates worked full-time while enrolled in AY 2003-2004 and another third worked between 15 and 34 hours. But students who work long hours are the least likely to persist toward completion of a bachelor's degree. Compared to students who work fewer than 15 hours per week, students who work full-time are less likely to attend a four-year school (68 percent vs. 34 percent), less likely to attend school full-time (63 percent vs. 22 percent), less likely to remain in school three years (77 percent vs. 34 percent), and less likely to receive a bachelor's degree in six years (57 percent vs. 8 percent). Outcomes for students who borrow are better, but many students cannot borrow up to the full amount needed even if they are willing to do so, as the maximum amount a student can borrow for undergraduate education is \$23,000 for dependent students and \$46,000 for independent students, which may be less than total need.⁸⁵

The American dream becomes an illusion without true social mobility. Higher education, with its ethos of meritocracy, is the most reliable engine for financial and social ascension in the United States. Financial barriers to colleges undermine our trust in these institutions and, ultimately, our faith in our society.

¹ Gary S. Becker, *The Age of Human Capital* (2002) (<http://www-hoover.stanford.edu/publications/books/fulltext/ed21st/3.pdf>).

² Becker, *ibid.*

³ U.S. Census Bureau. *The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings*. July 2002. (<http://www.census.gov/prod/2002pubs/p23-210.pdf>).

⁴ Institute for Higher Education Policy, *The Investment Payoff: A 50-State Analysis of the Public and Private Benefits of Higher*

-
- Education, February 2005. (<http://www.ihep.org/Pubs/PDF/InvestmentPayoff2005.pdf>).
- ⁵ Postsecondary Education Opportunity, *Research Newsletters*. "Volunteer Service by Educational Attainment," Number 127, January 2003. "Why College? Private Correlates of Educational Attainment," Number 81, March 1999. (www.postsecondary.org).
- ⁶ U.S. Census Bureau, Current Population Survey 2004, "Voting and Registration in the Election of November 2004," Table 5 (<http://www.census.gov/population/www/socdemo/voting/cps2004.html>).
- ⁷ Robert B. Archibald, *Redesigning the Financial Aid System*. The Johns Hopkins University Press: 2002.
- ⁸ *Ibid.*, p. 29.
- ⁹ *Ibid.*
- ¹⁰ Lawrence E. Gladieux and Arthur M. Hauptman. *The College Aid Quandary: Access, Quality, and the Federal Role*. The Brookings Institute and The College Board: 1995, p. 15.
- ¹¹ The Advisory Committee on Student Financial Assistance (ACSFA). *Empty Promises: The Myth of College Access in America*. June 2002. (<http://www.ed.gov/about/bdscomm/list/acsfa/emptypromises.pdf>).
- ¹² The College Board, *Education Pays 2004*. (http://www.collegeboard.com/prod_downloads/press/cost04/EducationPays2004.pdf).
- ¹³ The College Board, *Trends in College Pricing 2004*. (http://www.collegeboard.com/prod_downloads/press/cost04/041264TrendsPricing2004_FINAL.pdf).
- ¹⁴ The College Board. *Trends in Student Aid 2004*. (http://www.collegeboard.com/prod_downloads/press/cost04/TrendsinStudentAid2004.pdf).
- ¹⁵ National Association of State Student Grant and Aid Programs (NASSGAP), *34th Annual Survey Report on State-Sponsored Student Financial Aid*. May 2004. (www.nassgap.org).
- ¹⁶ NASSGAP, *35th Annual Survey Report on State-Sponsored Student Financial Aid*. May 2005. (www.nassgap.org).
- ¹⁷ Direct aid is aid that goes directly to students and does not include educational tax credits.
- ¹⁸ The College Board. *Trends in Student Aid 2004*.
- ¹⁹ The College Board, *Trends in College Pricing 2003*. (www.collegeboard.com/prod_downloads/press/cost03/cb_trends_pricing_2003.pdf).
- ²⁰ ACSFA. *Empty Promises: The Myth of College Access in America*.
- ²¹ "Real" refers to income after adjusting for inflation and most accurately reflects changes in income over time. "Median" is the point at which 50 percent of incomes are higher and 50 percent are lower. A median represents a typical income better than an average because large incomes skew the average, making it a less reliable gauge than the median.
- ²² U.S. Census Bureau, *Income, Poverty, and Health Insurance Coverage in the United States: 2004* (August 2005), Table 5, Table A-1, and Appendix B (<http://www.census.gov/prod/2005pubs/p60-229.pdf>).
- ²³ U.S. Department of Education, National Center for Education Statistics (NCES), *The Condition of Education 2002 Special Analysis: Nontraditional Undergraduates*, (<http://nces.ed.gov/programs/coe/2002/analyses/nontraditional/index.asp>).
- ²⁴ U.S. Department of Education, NCES, *National Postsecondary Student Aid Study (NPSAS): 2004* (<http://www.nces.ed.gov/das>).
- ²⁵ The College Board, *Education Pays 2004*
- ²⁶ U.S. Department of Education, NCES, *Digest of Education Statistics 2003*, Table 347 (<http://www.nces.ed.gov/programs/digest/d03/>).
- ²⁷ The College Board, *Trends in College Pricing 2001*.
- ²⁸ Includes revenue at both two-year and four-year institutions. Revenue at four-year institutions only is not available.
- ²⁹ U.S. Department of Education, NCES, *Digest of Education Statistics 2003*, Table 334.
- ³⁰ U.S. Department of Education, NCES, *NPSAS: 2004*.
- ³¹ *Ibid.*
- ³² U.S. Department of Labor. Employment Standards Administration Wage and Hour Division, "History of Federal Minimum Wage Rates Under the Fair Labor Standards Act, 1938 - 1996." (<http://www.dol.gov/esa/minwage/chart.htm>).
- ³³ Based on an estimated AY 2002-2003 student budget at public universities of \$13,779. With a minimum wage of \$5.15 per hour and 6.2 percent taken out for Social Security at a net of \$4.83 per hour, a student with no other financial aid or assets would have to work 2,852 hours per year, or 55 hours per week, to put himself or herself through school.
- ³⁴ Postsecondary Education Opportunity, "I worked my way through college. You should too," *Research Newsletter*, Number 125, November 2002. (www.postsecondary.org).
- ³⁵ Unless otherwise noted, AY 2003-2004 covers the period from July 1, 2003, to June 30, 2004.
- ³⁶ No relationship is implied with respect to income, which is based on 2002 figures, and hours worked in AY 2003-2004.
- ³⁷ U.S. Department of Education, NCES, *NPSAS: 2004*.
- ³⁸ *Ibid.*
- ³⁹ *Ibid.*
- ⁴⁰ U.S. Department of Education, NCES, *Students Whose Parents Did Not Go to College: Postsecondary Access, Persistence, and Attainment*, by Susan Choy. Washington, DC: 2001, p. 17 (<http://nces.ed.gov/pubs2001/2001126.pdf>).
- ⁴¹ U.S. Department of Education, NCES, *NPSAS: 2004*
- ⁴² U.S. Department of Education, NCES. *Profile of Undergraduates in US Postsecondary Institutions: 1999-2000*
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- (<http://nces.ed.gov/pubs2002/2002168.PDF>).
- ⁴³ U.S. Department of Education, NCES, *NPSAS: 2004*.
- ⁴⁴ The College Board, *Trends in College Pricing 2003* and *Trends in College Pricing 1999*.
- ⁴⁵ U.S. Department of Labor. Bureau of Labor Statistics, "Annual Average Unemployment Rate," (<http://www.bls.gov/cps/home.htm>).
- ⁴⁶ U.S. Department of Education, NCES, "National Postsecondary Student Aid Study (NPSAS): 1993, 1996, 2000, and 2004 (www.nces.ed.gov/das).
- ⁴⁷ U.S. Department of Education, NCES, *NPSAS: 2004*.
- ⁴⁸ *Ibid.*
- ⁴⁹ *Ibid.*
- ⁵⁰ ACSFA. *Empty Promises: The Myth of College Access in America*.
- ⁵¹ U.S. Department of Education, NCES, *NPSAS: 2004*.
- ⁵² *Ibid.*
- ⁵³ *Ibid.*
- ⁵⁴ U.S. Department of Education, NCES, *Beginning Postsecondary Students (BPS): 2001* (www.nces.ed.gov/das).
- ⁵⁵ U.S. Department of Education, NCES, *Condition of Education 2003: Student Effort and Educational Progress* (<http://nces.ed.gov/programs/coe/2003/section3/indicator21.asp>).
- ⁵⁶ U.S. Department of Education, NCES, BPS: 2001.
- ⁵⁷ U.S. Department of Education, NCES, *NPSAS: 2004*.
- ⁵⁸ U.S. Department of Education, NCES, BPS: 2001.
- ⁵⁹ Excludes students who had both types of jobs.
- ⁶⁰ U.S. Department of Education, NCES, *NPSAS: 2004*.
- ⁶¹ U.S. Department of Education, NCES, *Debt Burden: A Comparison of 1992-93 and 1999-2000 Bachelor's Degree Recipients a Year After Graduating*. March 2005 (http://tginfocus.tgslc.org/reports/External_Reports/BorrowingTrends/NCES-DebtBurden.pdf).
- ⁶² The College Board. *Trends in Student Aid 2004*.
- ⁶³ ACSFA. *Access and Persistence Quarterly*. "The Legacy of 'Empty Promises' with New Work-Loan Burden Estimates from NPSAS 2004". Summer 2005. (http://www.ed.gov/about/bdscomm/list/acsfa/acsfa_apquarterlysummer2005.pdf).
- ⁶⁴ From John Lee's presentation to the Advisory Committee on Student Financial Assistance (ACSFA), September 8, 2005, Washington, D.C.
- ⁶⁵ Excludes students who attended more than one institution.
- ⁶⁶ U.S. Department of Education, NCES, *NPSAS: 2004*.
- ⁶⁷ ECMC Group Foundation, *Cultural Barriers to Incurring Debt: An Exploration of Borrowing and Impact on Access to Postsecondary Education*. March 2003, p. 26 (http://www.ecmcfoundation.org/current_access.html).
- ⁶⁸ *Ibid.*
- ⁶⁹ No relationship is implied with respect to income, which is based on 2002 figures, and hours worked in AY 2003-2004.
- ⁷⁰ U.S. Department of Education, NCES, *NPSAS: 2004*.
- ⁷¹ *Ibid.*
- ⁷² *Ibid.*
- ⁷³ *Ibid.*
- ⁷⁴ The College Board. *Trends in Student Aid 2004*.
- ⁷⁵ U.S. Department of Education, NCES, *NPSAS: 2004*.
- ⁷⁶ American Council on Education. *Crucial Choices: How Students' Financial Decisions Affect Their Academic Success*. Jacqueline E. King. 2002. (www.acenet.edu/bookstore/pdf/2002_crucial_choices.pdf).
- ⁷⁷ U.S. Department of Education, NCES, *NPSAS: 2004*.
- ⁷⁸ *Ibid.*
- ⁷⁹ *Ibid.*
- ⁸⁰ *Ibid.*
- ⁸¹ ACSFA. *Access and Persistence Quarterly*. "The Legacy of 'Empty Promises' with New Work-Loan Burden Estimates from NPSAS 2004."
- ⁸² The College Board. *Trends in Student Aid 2004*.
- ⁸³ NASSGAP. *35th Annual Survey Report on State-Sponsored Student Financial Aid*.
- ⁸⁴ The College Board. *Trends in College Pricing 2004*.
- ⁸⁵ U.S. Department of Education, NCES, *Debt Burden: A Comparison of 1992-93 and 1999-2000 Bachelor's Degree Recipients a Year After Graduating*.
-

Bibliography

- Advisory Committee on Student Financial Assistance (ACSFA). Summer 2005. "The Legacy of 'Empty Promises' with New Work-Loan Burden Estimates from NPSAS 2004". *Access and Persistence Quarterly*.
(http://www.ed.gov/about/bdscomm/list/acsfa/acsfa_apquarterlysummer2005.pdf).
- Advisory Committee on Student Financial Assistance (ACSFA). June 2002. *Empty Promises: The Myth of College Access in America*.
(<http://www.ed.gov/about/bdscomm/list/acsfa/emptypromises.pdf>).
- Archibald, Robert B. 2002. *Redesigning the Financial Aid System*. The Johns Hopkins University Press.
- Becker, Gary S. 2002. *The Age of Human Capital*. (<http://www-hoover.stanford.edu/publications/books/fulltext/ed21st/3.pdf>).
- College Board. 2004. *Education Pays 2004*.
(http://www.collegeboard.com/prod_downloads/press/cost04/EducationPays2004.pdf).
- College Board. 1999. *Trends in College Pricing 1999*.
- College Board. 2001. *Trends in College Pricing 2001*.
- College Board. 2003. *Trends in College Pricing 2003*.
(www.collegeboard.com/prod_downloads/press/cost03/cb_trends_pricing_2003.pdf).
- College Board. 2004. *Trends in College Pricing 2004*.
(http://www.collegeboard.com/prod_downloads/press/cost04/041264TrendsPricing2004_FINAL.pdf).
- College Board. 2004. *Trends in Student Aid 2004*.
(http://www.collegeboard.com/prod_downloads/press/cost04/TrendsInStudentAid2004.pdf).
- ECMC Group Foundation. March 2003. *Cultural Barriers to Incurring Debt: An Exploration of Borrowing and Impact on Access to Postsecondary Education*.
(http://www.ecmcfoundation.org/current_access.html).
- Gladieux, Lawrence E., and Arthur M. Hauptman. 1995. *The College Aid Quandary: Access, Quality, and the Federal Role*. The Brookings Institute and the College Board.
- Institute for Higher Education Policy. February 2005. *The Investment Payoff: A 50-State Analysis of the Public and Private Benefits of Higher Education*.
(<http://www.ihep.org/Pubs/PDF/InvestmentPayoff2005.pdf>).
- King, Jacqueline E. 2002. *Crucial Choices: How Students' Financial Decisions Affect Their Academic Success*. American Council on Education (ACE).
(www.acenet.edu/bookstore/pdf/2002_crucial_choices.pdf).

-
- Lee, John. September 8, 2005. Presentation to the Advisory Committee on Student Financial Assistance (ACCSFA). Washington, D.C.
- National Association of State Student Grant and Aid Programs (NASSGAP). May 2004. *34th Annual Survey Report on State-Sponsored Student Financial Aid*. (www.nassgap.org).
- National Association of State Student Grant and Aid Programs (NASSGAP). May 2005. *35th Annual Survey Report on State-Sponsored Student Financial Aid*. (www.nassgap.org).
- Postsecondary Education Opportunity. *Research Newsletters*. "Volunteer Service by Educational Attainment." Number 127, January 2003; "I worked my way through college. You should too." Number 125, November 2002; "Why College? Private Correlates of Educational Attainment." Number 81, March 1999. (www.postsecondary.org).
- U.S. Census Bureau. July 2002. *The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings*. (<http://www.census.gov/prod/2002pubs/p23-210.pdf>).
- U.S. Census Bureau. 2004. Current Population Survey 2004. "Voting and Registration in the Election of November 2004". (<http://www.census.gov/population/www/socdemo/voting/cps2004.html>).
- U.S. Census Bureau. August 2005. *Income, Poverty, and Health Insurance Coverage in the United States: 2004*. (<http://www.census.gov/prod/2005pubs/p60-229.pdf>).
- U.S. Department of Education. National Center for Education Statistics (NCES). *Beginning Postsecondary Students (BPS): 2001* (www.nces.ed.gov/das).
- U.S. Department of Education. National Center for Education Statistics (NCES). 2002. *Condition of Education 2002 Special Analysis: Nontraditional Undergraduates*. (<http://nces.ed.gov/programs/coe/2002/analyses/nontraditional/index.asp>).
- U.S. Department of Education. National Center for Education Statistics (NCES). 2003. *Condition of Education 2003: Student Effort and Educational Progress*. (<http://nces.ed.gov/programs/coe/2003/section3/indicator21.asp>).
- U.S. Department of Education. National Center for Education Statistics (NCES). March 2005. *Debt Burden: A Comparison of 1992-93 and 1999-2000 Bachelor's Degree Recipients a Year After Graduating*. (http://tginfocus.tgslc.org/reports/External_Reports/BorrowingTrends/NCES-DebtBurden.pdf).
- U.S. Department of Education. National Center for Education Statistics (NCES). 2003. *Digest of Education Statistics 2003*. (<http://www.nces.ed.gov/programs/digest/d03/>).
- U.S. Department of Education. National Center for Education Statistics (NCES). *National Postsecondary Student Aid Study (NPSAS): 1993* (<http://www.nces.ed.gov/das>).
- U.S. Department of Education. National Center for Education Statistics (NCES). *National Postsecondary Student Aid Study (NPSAS): 1996* (<http://www.nces.ed.gov/das>).

-
- U.S. Department of Education. National Center for Education Statistics (NCES). *National Postsecondary Student Aid Study (NPSAS): 2000* (<http://www.nces.ed.gov/das>).
- U.S. Department of Education. National Center for Education Statistics (NCES). *National Postsecondary Student Aid Study (NPSAS): 2004* (<http://www.nces.ed.gov/das>).
- U.S. Department of Education. National Center for Education Statistics (NCES). July 2002. *Profile of Undergraduates in US Postsecondary Institution: 1999-2000*. (<http://nces.ed.gov/pubs2002/2002168.PDF>).
- U.S. Department of Education. National Center for Education Statistics (NCES). 2001. *Students Whose Parents Did Not Go to College: Postsecondary Access, Persistence, and Attainment*. (<http://nces.ed.gov/pubs2001/2001126.pdf>).
- U.S. Department of Labor. Bureau of Labor Statistics (BLS). "Annual Average Unemployment Rate." (<http://www.bls.gov/cps/home.htm>).
- U.S. Department of Labor. Employment Standards Administration Wage and Hour Division, "History of Federal Minimum Wage Rates Under the Fair Labor Standards Act, 1938 - 1996." (<http://www.dol.gov/esa/minwage/chart.htm>).



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Round Rock, Texas 78683-3100
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