

Federal Financial Aid for Higher Education: Programs and Prospects

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Federal Financial Aid for Higher Education

Abstract

In recent years, Congress has augmented traditional financial aid programs for higher education with tax-based subsidies. The tax subsidies can be very helpful to middle-income students who may not have been eligible for aid through traditional channels, but may be worth little or nothing to students from low-income families. This paper reviews financial assistance for higher education available through both traditional spending programs (grants, loans, and work-study) and tax assistance (credits, deductions, and tax-preferred savings plans). It summarizes recent research findings on the effectiveness of this aid and interactions among the various programs. It also discusses the role of future tax and fiscal policy choices in determining the level and nature of resources available for higher education needs.

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Section 1. Introduction

The federal government has played a leading role in encouraging students to obtain higher education. After World War II, the “GI bill” helped millions of veterans attend college. The Higher Education Act of 1965 and the Basic (now Pell) Grants program of 1972 provided aid to students from low-income families. Subsidized student loans became available on a widespread basis in the 1980’s.

Over the past decade, higher education initiatives have shifted from spending programs to tax subsidies. Recent tax changes for higher education include the HOPE credit, the Lifetime Learning Credit, Section 529 plans for college saving, education IRAs, and the deduction for higher education expenses. Except for modest increases in the maximum Pell Grant and a broadening of the population receiving loan subsidies, virtually all of the new federal resources directed at higher education have been provided through the tax code and have been directed at students from middle- and upper-income families.

The evolution of federal education policy raises several concerns. First, trends in the labor market, college enrollment, and college costs suggest that both the need for and the benefits of higher education subsidies may have grown. The acquisition of higher education is broadly and appropriately viewed as a key mechanism for enhancing worker productivity, wages, and living standards. Despite the substantial private, and perhaps social, benefits of college attendance, enrollment rates have remained substantially lower among students from low- and moderate-income families than among students from high-income families. The continuing differential in enrollment rates limits both economic mobility and economic growth. The shift toward subsidizing education through the tax code, the dramatic growth in tuition at public universities, and the migration toward merit-based rather than need-based state and institutional awards, may all be exacerbating the gap in enrollment rates.

Second, the proliferation of so many different forms of assistance for higher education leads naturally to questions about redundancy, and overlapping or contradictory provisions. The net effects of the sum of the programs may be quite different from what could be expected from each program individually. Thus, analysis of federal education needs to proceed in an environment that examines the net effects of all the programs, taken together.

Third, the future of higher education policy has become increasingly intertwined with the status of federal tax and fiscal policy. Growing budget deficits fueled by tax cuts and spending on defense and entitlements, will create strong pressure to reduce education subsidies in the future. A variety of tax issues, from the scheduled repeal of the estate tax in 2010 to the projected explosive growth of the alternative minimum tax, will also adversely affect prospects for resources flowing to higher education.

This paper addresses a variety of issues regarding federal subsidies for college attendance. Section 2 provides background material on trends in earnings, enrollment, and aid, and identifies alternative policy motivations for subsidizing the costs of

attending college. Section 3 describes the major federal programs available to subsidize higher education costs before, during, and after postsecondary education for individuals.¹ Sections 4 and 5 examine the non-trivial interactions among the various federal programs and compare the ability of different types of aid to deliver benefits. Section 6 discusses how the evolution of aggregate tax and fiscal policy is likely to play a key role in determining both the level and nature of resources available for future federal support for higher education. Section 7 offers a brief conclusion.

Section 2. Background

To understand the role of federal subsidies, it is important to examine trends in college enrollment, the costs and returns to higher education, and the role of financial aid in expanding access to higher education. In addition, this section examines the rationale for a federal role in assisting education.

Earnings, enrollment, and aid

College-educated workers enjoy substantially higher earnings than other workers. In 1997, the average college graduate earned about two-thirds more than a similar high school graduate (Bogges and Ryan 2002). Even people who attend some college generally earn more than those who never attend.² On average, students with some college education earn 11 percent more than their peers with only a high school degree (Smith et al. 1997). Furthermore, the wage differential between those with a college education and those without one has increased markedly over the past two decades.³ This increase has contributed to a surge in demand for college education.

After remaining relatively flat or even dipping slightly during the 1970s, college enrollment rates have increased since 1980 (see figure 1). Between 1970 and 1999, enrollment rates for 18- to 24-year-old high school graduates from the lowest income quartile increased from 46 percent to 57 percent based on a survey conducted by the College Board. In the highest income quartile, enrollment rates increased from 79 percent to 85 percent. Although these data suggest a slight narrowing of disparities in

¹ A significant amount of aid is provided by direct state government subsidies to public universities and institutions and private aid from endowments or other sources of funding. These types of aid are not addressed in this analysis. For a discussion of trends in state appropriations for higher education, see Kane, Orszag, and Gunter (2003).

² Although researchers continue to debate the size of the effect, most economists agree that a “sheepskin” effect exists: Earning a degree raises earnings by more than would be expected based purely on the years of schooling involved. The returns to attending college, however, are high even for nongraduation years.

³ See Katz and Autor (1999) for a discussion of wage trends.

enrollment rates by income over time, other data suggest the opposite.⁴ In any case, differentials in enrollment rates remain substantial. One recent study, for example, suggests that high school graduates from the highest income quartile are 66 percent more likely to attend college than those from the bottom income quartile (Mortenson 1999). Differences in academic preparation do not fully explain this disparity (Ellwood and Kane 2000).

The high cost of college education may be one reason for disparate enrollment rates. As early as 1964, Congress recognized this possibility with the passage of the Economic Opportunity Act, which created the college work-study program.⁵ In 1965, Congress enacted the Higher Education Act (HEA), providing Education Opportunity Grants and subsidized loans to low- and middle-income students, as well as continuing the college work-study program. In 1972, Basic Grants, later named Pell Grants, were enacted.⁶ The programs enacted in the HEA and ensuing legislation still represent the major forms of direct financial assistance for higher education.

Since the late 1970s, college tuition has increased dramatically—much faster than income growth for the typical family. Between the 1980–81 academic year and the 1990–91 academic year, the inflation-adjusted cost of attendance at postsecondary institutions increased by 16.6 percent at public two-year institutions and 61.2 percent at private four-year institutions, while inflation-adjusted median family income increased only 9.4 percent (figure 2). The cost of attendance at four-year institutions also increased faster than income in the 1990s, but the differential was smaller than in the 1980s. During the 1990s, median family income grew by 12.9 percent. Over the same time period, the cost of attendance at public and private four-year institutions increased 30.2 and 30.6 percent, respectively. The cost of attendance at public two-year institutions grew 10.6 percent in the 1990s, slightly less than median income (Snyder and Hoffman 2003; U.S. Census Bureau 2003). The College Board reports that, in 2003, average tuition and fees were \$19,710 at private four-year colleges, \$4,694 at public four-year colleges, and \$1,905 at public two-year colleges.⁷

⁴ Kane (1995) reports that “the gap in enrollment rates between the lowest income youth and the top three-quarters of the income distribution grew by 12 percentage points between 1980 and 1993.” It is possible that this trend was reversed in the mid- to late 1990s, explaining the different results. One difficulty in evaluating trends by income level, however, involves the definition of household income used in different government surveys. For example, students who are children of high-income parents are often counted separately from their parents. Since such students are likely to have relatively low income, the statistics would record them as from a low-income household. This problem may have changed in significance over time, distorting the relative time trends.

⁵ This followed legislation enacted in 1944 and 1958 that subsidized educational expenses for World War II veterans and provided loans to students seeking degrees in math, science, engineering, or modern foreign languages, respectively.

⁶ Other measures, such as the State Student Incentive Grant program (now known as LEAP), were also enacted in this legislation, which provided matching grants to states to assist low- and middle-income students. These programs are not discussed in detail here. Rather, this paper excludes state aid from discussion and instead focuses on programs administered more directly by the federal government.

⁷ All numbers are adjusted using the CPI-U-RS. Data come from the College Board. By comparison, if college prices had increased by the rate of inflation since 1981, average tuition and fees in 2002 would have

Total financial aid from all sources has also increased substantially, but the mix of aid has changed. Financial aid increased by 137 percent over the past decade alone, after adjusting for inflation, to \$105.1 billion in the 2002–03 academic year. During this period, however, grant aid increased by 87 percent while loan aid increased by 173 percent, continuing a shift toward loan aid that started in the mid-1970s. (In these calculations as well as others in this paper, a dollar of loan aid is counted as equivalent to a dollar of grant aid, even though the implicit subsidy in the two is clearly quite different.) As a result of the relatively rapid growth in loan aid, federal and nonfederal loans now constitute over half (53 percent) of all aid while federal, institutional, and other grants constitute less than one-third (31 percent) of all aid (The College Board 2003). As figure 3 shows, the remaining 16 percent of aid includes state grants and education tax credits, federal campus-based aid (such as direct grants to universities), and other federal programs (such as Leveraging Educational Assistance Partnerships, or LEAP, and military and veterans' aid).⁸

The last new student aid program under the HEA was enacted in 1992, when Congress added the Direct Loan program. (The HEA was most recently reauthorized in 1998. Congress did not add any major new student aid programs, though it did enact GEARUP, a program designed to increase college aspirations in middle and early high school students. Modest scholarships are available for GEARUP students.) Since 1992, assistance for postsecondary education has followed the path of other social assistance programs and migrated from the expenditure side of the federal budget toward the tax side. This trend reflects a variety of political forces, but does little to help low-income families, who typically do not owe federal income tax and therefore do not benefit from tax provisions unless they are refundable. Figure 4 shows a timeline for federal programs affecting student financial aid.

In addition to failing to assist low-income families, tax-based subsidies for education create substantial complexities—both in choosing among the plethora of options available once a student is enrolled and in financial planning ahead of time. But the programs appear valuable to middle-class families who have had only limited access to traditional means-tested grant programs. Middle-class and upper-income students also now receive the lion's share of "institutional grants," which tend to be awarded on some sort of merit scale rather than need. These institutional grants accentuate the shift of assistance from low-income families to families with higher income. In fact, while the percentage of students in the lowest income quartile receiving institutional aid has grown only modestly from the early 1990s to 2000, aid for those in the highest income quartile has grown substantially (figure 5). In the 1992-1993 academic year, about one-third of students in the highest income quartile received institutional aid. By 2000, this number had grown to over half.

been \$6,835 at private colleges, \$1,519 at public four-year colleges, and \$739 at public two-year colleges. Since faculty compensation is such a substantial share of college costs, however, one would expect tuition to increase faster than inflation in periods during which highly educated workers enjoyed rapid real wage gains, as occurred during the 1980s and 1990s.

⁸ Education tax credits include the Hope Credit and the Lifetime Learning Credit.

The Rationale for Subsidizing College

The standard economic rationale for federal assistance to higher education is to correct a market failure. There are several possible classic market failures. First, a well-educated workforce may produce benefits to society at large that are not captured in the additional wages a worker can expect to earn. These benefits include social and scientific innovations, which increase productivity and foster economic growth for the population as a whole (rather than just the innovator). Increases in education are also associated with reduced reliance on the social safety net, reduced crime rates, and greater civic participation (The Institute for Higher Education Policy 1998). Absent a subsidy, then, people may under-invest in education because their private return is smaller than the social return.

Second, future wages are not secure collateral for loans. Although education appears to be a good investment for many students because it will pay high returns in the form of increased wages over a lifetime, liquidity constraints and the inability to use future wages as collateral mean that the interest rate charged for education loans, without a subsidy or federal guarantee, would be too high from a societal point of view. Furthermore, without government intervention, these credit market imperfections would likely pose particular problems for lower-income students. Although students from higher-income families may be able to finance their investment out of existing assets, either directly or by using them as collateral, low-income students are often deemed poor credit risks.

Third, the existence of financial aid itself heavily penalizes saving among those who might be eligible for aid—basically, most of the middle class (Feldstein 1995). Thus, offsetting subsidies for college saving may be warranted as a way to prevent an inefficiently low level of saving among middle-income families with children.

In addition to correcting market failures, the government has historically chosen to subsidize higher education on equity grounds. To advance equality of opportunity, the government has sought to ensure that all people have the opportunity to attend some type of postsecondary schooling. Because attendance costs are prohibitive for many low-income families, absent a subsidy, the lack of access to higher education would perpetuate wealth and income inequalities from generation to generation.

Section 3. Federal Programs That Subsidize College Attendance

The government subsidizes three kinds of education expenditures: the savings accumulated for college before a student enrolls, the costs incurred while a student attends college, and the costs carried over from college after a student completes his or her education. This section describes the various subsidies available from traditional spending programs and the more recently enacted tax programs before, during, and after college.

Subsidizing Education Savings prior to College Enrollment

Policymakers use the tax system not only to collect revenue to finance government programs, but also to influence behavior. Tax subsidies for higher education are intended in various ways to reduce the cost of attendance and increase enrollment.

Three primary tax vehicles provide an incentive for increasing college saving before a student enrolls: Coverdell Education Savings Accounts, Section 529 plans, and the Education Savings Bond program. For families with incomes below specified limits, Coverdell Education Savings Accounts provide tax-free buildup of funds and no taxes on withdrawals from an account if the funds are used to pay for school expenses. Original limits to these accounts were quite modest (\$500 per student, per year) but have grown over time (to \$2,000 per student, per year). Section 529 plans provide much larger opportunities to save for college on a tax-advantaged basis. These plans come in two basic forms—prepaid tuition plans and savings plans—although many plans have elements of both. Investments grow tax-free and distributions from the plan used to pay for college expenses are also tax-free. Beyond these federal benefits, many states offer additional tax benefits. Finally, the Education Savings Bond program exempts interest earned on certain bonds if the proceeds are used to pay for college.

Coverdell Education Savings Accounts

Education Individual Retirement Accounts (Education IRAs), later renamed Coverdell Education Savings Accounts, provide a tax-preferred method of saving for college by exempting tax on earnings in the account if the withdrawal is used to pay for qualified educational expenses. (In other words, the earnings in the account are untaxed both while they accumulate and after the funds are withdrawn, as long as the withdrawal is used for educational expenses. The contributions to Coverdell accounts are made with after-tax dollars, so the tax treatment is similar to a Roth IRA if the withdrawal from the Coverdell is used for eligible expenses.) Such expenses include room and board for students attending more than half time. The 1997 legislation initially set the contribution limit at \$500, but the 2001 Economic Growth and Tax Relief Reconciliation Act (EGTRRA) increased the limit to \$2,000.⁹ The 1997 legislation also limited Coverdell accounts to funding tuition and fees for postsecondary school, but EGTRRA expanded the allowable uses to include primary and secondary educational expenses, as well as room and board expenses for students attending postsecondary education on at least a half-time basis.

Tax-preferred contributions phase out for single-filing contributors with modified adjusted gross income (AGI) between \$95,000 and \$110,000 (\$150,000 and \$160,000 for joint filers).¹⁰ Individuals ineligible to contribute because their AGI exceeds the limits

⁹ EGTRRA also relaxed the penalty on excess contributions to allow for the return of excess contributions before the beginning of the sixth month of the next taxable year, rather than the previous deadline of the end of the taxable year in which the contributions are made.

¹⁰ AGI consists of income net of certain deductions including some education expenses, student loan interest, IRA deductions, alimony paid, and moving expenses.

can, however, transfer assets to their child and have the child contribute to his or her own Education IRA. If distributions from an Education IRA are not used to pay for qualified education expenses, the portion that represents earnings may be subject to income taxes and a 10 percent penalty, although this penalty may be waived in certain circumstances. If assets are not distributed or transferred by the beneficiaries' attainment of age 30, earnings will become taxable.

Section 529 Plans

The Small Business Job Protection Act of 1996 formally created Section 529 plans, which allow individuals to prepay college tuition for a student or contribute to a savings account specifically for higher education expenses. Under the 1996 law, only state governments could establish a Section 529 plan. The 1996 law also granted Section 529 plans a tax deferral on earnings in the accounts and did not impose any income limits.

Congress increased the value of Section 529 plans in 1997, particularly for taxpayers ineligible for other subsidies because of income limitations, by exempting assets in these plans from the estate tax and providing contributions favorable gift tax treatment by treating them as completed gifts (even though the account owner remains in effective control of the assets). The same legislation also added room and board expenses as qualified higher education expenses if the student was attending school more than half time. In addition, many state-sponsored Section 529 plans allow some exclusion from state income taxes for money invested in a state-sponsored Section 529 plan.

EGTRRA substantially expanded the tax benefits for Section 529 plans. It replaced the tax-deferral on earnings in Section 529 plans with tax-deferral plus complete tax exemption for distributions used to pay for higher education expenses. In other words, like Coverdell accounts, Section 529 plans are now similar to Roth IRAs as long as withdrawals are used for higher education expenses. Contributions are made with after-tax dollars, but accumulations and subsequent withdrawals are tax-free as long as they finance higher education expenses. As with all provisions in EGTRRA, these provisions will expire in 2010 unless extended.

If 529 plan assets are not used to pay for the beneficiary's college expenses, the account owner may face a tax penalty when distributions are taken (the penalty is 10 percent on all distributions not taken for qualified expenses). This penalty does not apply, however, if a designated beneficiary dies or becomes disabled. Typically, it does not apply if the designated beneficiary receives a scholarship that decreases his or her financial need below the balance in the account. Owners of 529 plans can also avoid the penalty by changing the beneficiary to another family member; if the withdrawals are used to finance college expenses for the new beneficiary, no penalty is due.

EGTRRA also allowed private institutions to offer these plans starting in 2004. This could greatly increase the number of plan options available to taxpayers.

Education Savings Bonds

The Technical and Miscellaneous Revenue Act of 1988 created the Education Savings Bond program. This program allows interest earned on a series EE bond issued after 1989 to be exempt from tax, subject to income limits, if the bond proceeds are used for educational expenses. Series I bonds, which provide coupon payments indexed to inflation, were created in 1998. Eligibility for the Education Savings Bond program is limited by a taxpayer's income. In the 2002 tax year, this benefit phased out for taxpayers with modified adjusted gross income between \$57,600 and \$72,600 (\$86,400 and \$116,400 for joint filers). The income thresholds are adjusted annually for inflation.

Subsidizing Education Costs While Attending College

A variety of tax and spending programs can offset costs associated with attending postsecondary school. Indeed, the period of college attendance offers the largest number of support programs, encompassing both traditional spending programs and more recent tax programs. The three primary types of spending programs are grants, loans (both subsidized and unsubsidized), and employment assistance (work-study). The Hope and Lifetime Learning credits provide tax credits designed to offset college costs, and the deduction for student expenses allows students to deduct from their income costs associated with attending college. In addition, some IRA distributions can be used to finance higher education expenses without incurring the standard penalty for pre-retirement withdrawals.

In general, grants, subsidized loans, and work-study are targeted toward low-income students, and unsubsidized loans and tax credits are targeted toward middle-income students. Grants, tax credits, the student expense deduction, and work-study can be considered "obligation free" aid since they do not require repayment. Loans do require repayments, although they may still involve subsidies on a present-value basis. Interest on subsidized loans does not accumulate until after a student finishes school, whereas interest on unsubsidized loans accumulates when the student borrows the money and even "unsubsidized" loans benefit from the federal guarantee described below. Students often receive a package that includes multiple forms of aid, rather than relying exclusively on one type of aid.

In the 2000–01 academic year, approximately 6,600 degree- and non-degree-granting postsecondary education institutions were eligible to participate in HEA student aid programs. These institutions enrolled an estimated 15.9 million students in the fall of 2000 (Stedman 2003b).

Pell Grants

The Basic Grant program, now known as Pell Grants, was enacted in 1972 and awards grants to low-income students. Additional aid for students with exceptional need may be available via the Supplemental Educational Opportunity Grant (SEOG) program (see below). The Pell Grant program is extremely progressive: In 2000, nearly 45 percent of

dependent recipients had total parental income of less than \$20,000 and 47 percent of independent recipients had total income of less than \$10,000 (Stedman 2003b).¹¹

There are no formal income thresholds for the Pell Grant; instead, students are eligible if their estimated family contribution (EFC) falls below an annually determined amount. (See box 1 for a description of the EFC.) All students who meet the eligibility requirements receive a Pell Grant, although the program is not a true entitlement. Instead, award amounts are limited based on annual appropriations. Those with the smallest EFC receive the largest awards, up to a legislated maximum. Those with the largest EFC but still qualifying for a Pell Grant receive a \$400 minimum grant.

Since the 1979–80 academic year, Pell Grant appropriations have failed to provide funding for the maximum awards authorized under the HEA. The HEA no longer provides authority to the secretary of education to reduce awards if there is a shortfall in appropriated funds, but does allow the department to use funds from the upcoming fiscal year to meet the current year’s award costs, because Pell Grant appropriations are available for two fiscal years (Stedman 2003a). The department can also seek a supplemental appropriation to meet Pell Grant program costs.

According to the Department of Education, in recent years the number of Pell Grant applicants and recipients has grown faster than historical trends would have suggested (U.S. Department of Education 2003b). Approximately 23 percent of all undergraduates in the 1999–2000 academic year received a Pell Grant (Stedman 2003b). The Department expects that in the 2002–03 academic year, a larger percentage of undergraduates will receive Pell Grants because of increased applications from eligible students.

Funding for the Pell Grant program increased over the past decade in real dollars, from \$7.44 billion in the 1991–92 academic year to \$9.95 billion in 2001–02. The maximum appropriated award also increased after adjusting for inflation, from \$3,127 in 1991–92 to \$3,750 in 2001–02 (The College Board 2002). The maximum appropriated Pell Grant award has nonetheless failed to keep pace with increases in average tuition, room, and board for students attending all types of postsecondary institutions (figure 6).

Supplemental Educational Opportunity Grants

The Supplemental Educational Opportunity Grants (SEOG) program, previously called the Education Opportunity Grants (EOG) program, provides grants for undergraduate students with “exceptional” financial need who have not received a prior bachelor’s or first-professional degree (34 CFR 676.10).¹² Institutions determine a student has

¹¹ The Middle Income Student Assistance Act of 1978 expanded eligibility for Pell Grants, allowing students with higher incomes to qualify. Middle-income student eligibility for the Pell Grant program continued in the early 1980s, despite budget problems that forced Congress to reduce the maximum Pell Grant award (Mortenson 1999).

¹² First-professional degrees signify the completion of academic requirements for beginning practice in a given profession and a level of skill beyond that normally required in bachelor’s degree. First-professional degrees are awarded in the fields of dentistry, medicine, optometry, osteopathic medicine, pharmacy, podiatric medicine, veterinary medicine, chiropractice, law and theology professions.

exceptional financial need based on estimated family contributions and need. Students who receive Pell Grants are given priority for SEOGs. Unlike Pell Grants, SEOGs are not guaranteed to those with financial need. Rather, students receive grants based on the availability of funds at the institution they are attending. These grants are not transferable to other institutions. Institutions must match at least 25 percent of the federal award of SEOG funds. Adjusting for inflation, federal funding for SEOG has fluctuated throughout the decade from a low of \$630 million in the 2000–01 academic year to a high of \$722 million in the 1992–93 academic year (The College Board 2002).

Guaranteed Student Loans (Stafford Loans)

The Guaranteed Student Loan (GSL) program, later renamed the Federal Stafford Loan Program, provides access to loans for low-income students to finance educational expenses. These GSL loans differ from their precursor NDSL loans (which were later renamed Perkins loans) in two basic ways. First, GSL loans are provided to individuals by banks and subsidized by the federal government. In contrast, NDSL loans are allocated to universities and supplemented with matching university funds and collections from previous borrowers. Second, different maximum amounts apply to the two types of loans.

Stafford Loans, available to undergraduate and graduate students, are guaranteed by the federal government, allowing them to be offered at low interest rates. They may be further subsidized for low-income students, in which case the federal government pays the interest on the loan while the student is enrolled in school. For unsubsidized loans (established in 1993), interest accruing on the loan while the student is in school is added to the loan balance to be repaid after separation from school. Unsubsidized Stafford Loans are available to all students who apply, whereas subsidized loans are awarded based on need. Borrowing with Stafford Loans is limited based on school expenses, year in school, dependency status, and annual and cumulative caps.¹³ Figure 7 shows the increase in Stafford Loan borrowers from the 1992–93 academic year to the 2002–03 academic year. The greatest growth occurred in unsubsidized loans. In real terms, the average amount of subsidized Stafford Loans remained stable, but the average amount of unsubsidized Stafford Loans grew (figure 8). Congress is currently considering increasing the limits on these loans, since they are below the total cost of attendance at most schools.

Stafford Loans have a variable market-based interest rate that cannot exceed 8.25 percent. The Stafford Loan interest rate for the 2003–04 academic year is at an historic low of

¹³ Stafford Loan limits for dependent undergraduates are \$2,625 for first-year students, \$3,500 for second-year students, and \$5,500 for remaining years, with a cumulative limit of \$23,000. Stafford Loan limits for independent undergraduates and dependent undergraduates whose parents were denied a Parent Loan for Undergraduate Students (PLUS) loan (defined below) are \$6,625 for first-year students, \$7,500 for second-year students, and \$10,500 for remaining years, with a cumulative limit of \$46,600. The cumulative limit for undergraduates is \$23,000. Graduate students can borrow up to \$18,500 per year, although only \$8,500 can be subsidized. The cumulative limit for undergraduate and graduate education is \$65,500 (\$138,500 if an independent undergraduate or dependent undergraduate whose parents were denied a PLUS loan).

3.42 percent. Under 2002 legislation, however, Stafford Loans made on or after July 1, 2006, will have a fixed interest rate of 6.8 percent.

Box 1. Federal Determination of Student Need

All Title IV programs except unsubsidized Stafford Loans and PLUS loans require students to demonstrate financial need. This is determined by calculating the difference between the cost of attendance and the estimated family contribution (EFC). The cost of attendance is reduced for all programs except the Pell Grant program by scholarships and other aid (U.S. Department of Education 2003a). The EFC attempts to measure the student's ability to pay for postsecondary expenses based on a formula codified in the HEA that includes the student's income, assets, and tax liability; the parent's after-tax income and assets (excluding pension and housing wealth); the number of other postsecondary students in the family; and other measures of a student's ability to contribute to his/her college costs. In general, total financial aid cannot exceed the cost of attendance.

Under the HEA, a variety of formulas exist to determine a student's EFC, depending on whether a student is a dependent student, an independent student without dependents (other than a spouse), or an independent student with dependents. In general, students without family assets can be considered under a simplified formula, and students from families that were not required to file an income tax return in the previous year are eligible for an automatic zero EFC. Additionally, an institutional financial aid administrator can use professional judgment to adjust a student's EFC on a case-by-case basis to allow for special circumstances.

Parent Loans for Undergraduate Students

In the 1980 HEA reauthorization, Congress created a new loan program, the Parent Loans for Undergraduate Students (PLUS) program. PLUS allows parents at all income levels to borrow money to meet the educational expenses of a college-going child. The loans require interest payments throughout their term and may be denied to those with poor credit histories. The interest rate on PLUS loans cannot exceed 9 percent. The PLUS loan interest rate for the 2003–04 academic year is 4.22 percent.

Under 2002 legislation, PLUS loans made on or after July 1, 2006 will move to a fixed interest rate of 8.25 percent or 7.9 percent, depending on whether the loan was issued under the Federal Family Educational Loan program or the Direct Loan program. Before the 2002 legislation was enacted, lenders criticized as unworkable the legislated formula for calculating interest that was scheduled to begin in July 2003. They threatened that, unless the interest-calculating formula was changed, they might not be able to participate in parent and student loan programs because these loans could have returns less than the cost of funds on them. Because the government subsidizes loans in the Federal Family Education Loan program, it must make payments to lenders when market interest rates

are higher than the legislated interest rates. By increasing the legislated interest rate, the federal government limits its exposure. Similarly, in the Direct Loan Program, where the government provides the loans, increasing the interest rate will improve the amount of repayment income anticipated by the government. These interest rates likely could change again if market rates become sufficiently different from legislated rates.

Borrowing through the PLUS program increased dramatically over the decade. Most of this growth can probably be explained by the growth in college costs, because the only limit on the amount of PLUS loans is the student's costs of attendance less the amount of financial assistance (figure 8).

Federal Work-Study Program

As part of the War on Poverty, the 1964 Economic Opportunity Act created the Federal Work-Study Program (work-study) to provide employment assistance to college students in need of part-time jobs (see figure 4). The work-study program provides part-time jobs to both undergraduate and graduate students based on financial need. Jobs may be either on or off campus, but off-campus jobs must be in the public's interest and, if for a for-profit firm, must be academically relevant to the student's degree. The federal share of work-study wages generally cannot exceed 75 percent.¹⁴ Schools must use at least 7 percent of their work-study allocation to support students in community service jobs. In the past decade, the federal share of aid from the work-study program increased 24 percent in real terms, from \$976 million in 1991–92 to \$1,215 million in 2001–02. In 2001–02, approximately one million students participated in work-study programs (The College Board 2002).

Hope Scholarship and Lifetime Learning Credits

The federal government also provides subsidies for college expenses through the income tax system. While student assistance through the tax system is a relatively new phenomenon, proposals for tax subsidies for higher education were made even before the HEA was enacted. Tax assistance proponents encouraged President Johnson to promote tax credits to families with college students, but he supported grant aid instead. President Carter resisted efforts to transform the Title IV programs into a tuition credit system, arguing that grants and loan programs were more equitable than tax credits. President Reagan's 1981 budget proposals called for replacing the federal student aid system with tax credits (The Institute for Higher Education Policy 1997). After a modest start in 1988 (with education savings bonds), tax subsidies gained prominence in the Clinton administration, which enacted a host of new tax incentives in 1996 and 1997.

An explicit goal of the Taxpayer Relief Act of 1997 (TRA97) was to make the first two years of postsecondary education universal and reduce the financial burden of a college education on middle-class families. Thus, TRA97 expanded obligation-free aid for postsecondary education to middle- and upper-middle income families through two new

¹⁴ The federal share cannot exceed 50 percent if the student is employed by a private for-profit employer.

credits: the Hope Scholarship Credit (Hope Credit) and the Lifetime Learning Credit (LLC). Both are intended to subsidize the cost of attending school by allowing a portion of a student's expenses to be offset by a tax credit (table 1). The Hope Credit, first available for expenses incurred in 1998, can be claimed for any student in the family for the first two years of postsecondary education. The student must be enrolled at least half-time while pursuing a recognized education credential. The credit for each student is 100 percent of the first \$1,000 of qualified expenses and 50 percent of the next \$1,000 of qualified expenses. Beginning in 2002, the limit on expenses eligible for the credit is adjusted annually for inflation.

The LLC, first available for expenses paid after July 1, 1998, can be claimed for any number of years and for any qualified expenses, including those incurred by graduate and professional students and people upgrading skills or changing careers. Only one LLC may be claimed per tax return. Starting in 2003, the LLC equals 20 percent of expenses up to \$10,000 per household. Prior to that, expenses were capped at \$5,000. A student may take advantage of only one credit in a single year.

Both credits begin to phase out for single taxpayers with a modified AGI of \$40,000 (\$80,000 for married taxpayers). The thresholds are adjusted for inflation beginning in 2002. The credit completely phases out once modified AGI reaches \$50,000 (\$100,000 for married taxpayers). Neither the Hope Credit nor the LLC is refundable, so low-income households do not benefit from them. Taxpayers cannot claim a credit for any portion of educational expenses paid with certain tax-free funds, including scholarships, Pell Grants, employer-provided educational assistance, veterans' educational assistance, and withdrawals from a Coverdell account or Section 529 plan. Eligible expenses are limited to tuition and required fees; room and board expenses do not qualify. In addition, a student's Hope Credit is reduced by receipt of a Pell Grant. For example, if a student is responsible for \$1,250 in tuition and fees and receives a Pell Grant of \$800, the student is eligible for a tax credit of \$450.

The Joint Committee on Taxation estimated in 1997 that the credits would cost \$25.8 billion over the first four years of their existence. IRS data show that the actual cost of the credit for this same period was only \$18.3 billion, approximately 71 percent of the initial estimate. The less-than-universal take-up rate may result from a lack of knowledge among some eligible families about the credits. The Office of Management and Budget estimates FY 2003 tax expenditures for the Hope Credit will be \$3.52 billion; expenditures for the LLC will be \$2.25 billion.

Education Expenses Deduction

EGTRRA created a temporary "above-the-line" deduction as an alternative to the Hope and Lifetime Learning credits.¹⁵ In tax years 2002 and 2003, the maximum deduction is \$3,000 for taxpayers with AGI less than \$65,000 (\$130,000 for joint filers). In tax years 2004 and 2005, the deduction increases to a maximum of \$4,000 for these taxpayers, and

¹⁵ An "above the line" deduction can be taken regardless of whether a person itemizes deductions or takes the standard deduction.

to \$2,000 for taxpayers with AGI between \$65,000 and \$80,000 (\$130,000 and \$160,000 for joint filers). No deduction is available after the 2005 tax year. Taxpayers can choose to take either the deduction or one of the credits available, but not both. Certain other payments for post-secondary educational expenses are also excluded from income – an equivalent tax subsidy to a deduction. Payments by employers for education expenses up to \$5,250 made through a qualified education assistance program are tax-free, as are employer provided education directly related to an employee’s job. In addition, most scholarship aid is tax-free.

IRA Distributions

In 1997, Congress exempted early IRA withdrawals—withdrawals before the owner reaches age 59 ½—from the normal 10 percent penalty, if the withdrawn funds pay for qualified educational expenses. These expenses include room and board if the student attends on at least a half-time basis. No income limits were imposed on this provision, allowing upper-income individuals—especially those who had taken advantage of the tax system’s incentives for retirement planning—to receive benefits. However, given the tax advantages of an IRA in saving for retirement, most taxpayers will find less expensive sources of financing for college expenses, including federal student loans and home equity loans (Kane 1999).

Subsidizing College Costs after Completing School

The main subsidy available after a student completes his or her schooling is the student loan interest deduction. Prior to the Tax Reform Act of 1986, student loan interest (like other forms of personal interest) had been fully deductible for taxpayers who itemized deductions. When the 1986 act eliminated deductibility for most personal interest, student loan interest became nondeductible. TRA97 partially reversed this by making required student loan interest deductible for certain low-income people for a period of 60 months. EGTRRA liberalized the student loan interest deduction by eliminating the 60-month limit and the limit on required interest payments to allow for all interest payments—both required and voluntary—for an unlimited period. These changes eliminated complexity in determining when the 60-month period ended and the portions of paid interest that were required versus voluntary payments. EGTRRA also increased the income phaseout thresholds by \$10,000, expanding the benefits to somewhat higher-income taxpayers.

Section 4. Interactions among Tax and Spending Programs

Tax and spending programs interact in complex ways. It is frequently unclear which program is most beneficial to families planning for college, and often unknowable until a student applies for aid. For example, because parents cannot predict the future perfectly, they do not know whether their child will attend college. If the child does not attend college and parents have invested in a Coverdell or Section 529 account, they may have to pay penalties on withdrawals not used for higher education. As a result, parents may end up paying more tax than they would have if they had saved money in a different kind

of account. In addition, because parents do not know their future financial situation—and how expensive a college their child will choose to attend (both used in calculating financial need)—saving while a child is young may negatively affect financial aid possibilities later. Recent work by Susan Dynarski shows the implicit tax on some forms of savings imposed through the financial aid rules can be particularly steep for some families (2003a).

Another source of complexity is that families must follow a complicated set of guidelines to ensure that they do not violate any rules of paying for college with the various vehicles. This section discusses three sources of complexity. First, different types of saving are treated differently in the determination of financial aid eligibility. Second, the definitions of qualified expenses, maximum contributions, and student differ across programs. Third, tax credits cannot be used to offset expenses paid with tax-free funds.

Savings Are Treated Differently

The saving vehicles for educational expenses are not treated uniformly under the federal student aid programs. Some savings incentives, such as Section 529 plans, are treated as parental assets. Others, such as Coverdell accounts, are treated as student assets. Because the financial aid formula implicitly taxes student assets much more heavily than their parental assets, how a person chooses to save could significantly affect a student's eligibility for aid.

Qualified Expenses, Maximum Contributions, and Students Defined Inconsistently

The various tax assistance programs define qualifying educational expenses, students, and other eligibility requirements differently. Eligible expenses in the Hope or Lifetime Learning Credit (LLC) and Education Savings Bond program are limited to tuition and required fees. In contrast, Coverdell accounts, Section 529 plans, and student loans allow these expenses plus room and board expenses. The Hope Credit can only be used to subsidize expenses associated with the first two years of college, whereas the LLC has no set time restriction. Some programs restrict qualification to full-time students, whereas other programs allow part-time students to qualify. (See appendix 1 for a detailed description.) How much money can be contributed in a given year also varies across different accounts. People can contribute no more than \$2,000 per year to Coverdell accounts, but are under no explicit annual contribution limits with Section 529 plans. Who benefits from each program also differs based on a student's or family's income. All of this, combined with the opacity of the federal financial aid forms themselves, can make the financial aid system difficult to navigate.

Expenses Cannot Be Counted as Tax-Free Twice

Beneficiaries of various programs must be careful to not double count expenses. If a student uses tax-advantaged funds, the expenses paid for by those funds cannot be claimed as expenses for the Hope or Lifetime Learning credits. For example, if a student

uses a distribution from a Coverdell account to pay tuition expenses, he or she cannot also claim those expenses for the Hope Credit. At times, this restriction requires complex accounting schemes in order for people to maximize their benefit (Davis 2002).

Section 5. Comparing Traditional Student Aid and Tax Aid

More than 70 percent of undergraduate students and their families receive federal aid through either the traditional student aid system or the tax system (U.S. General Accounting Office 2002). This section compares traditional aid and tax subsidies along seven dimensions: (1) the direct beneficiaries of the aid; (2) the timing of the aid; (3) the complexity associated with obtaining the aid, and the fraud that could result; (4) the effects of aid on school enrollment; (5) the certainty of aid; (6) total spending on the various aid programs; and (7) institutional incentives.

Direct Beneficiaries of Aid

Tax and spending programs aimed at financing postsecondary school are designed to benefit different groups of people. Grants and subsidized loans tend to benefit lower-income students and their families, whereas subsidized loans and tax programs tend to benefit middle-income students and their families. Tax programs provide little benefit to lower-income students and their families because the tax subsidies are not refundable—that is, they are not available to people who do not have income tax liabilities to offset.¹⁶

Eligibility for most spending programs depends on a student's expected family contribution, or EFC. This formula, which takes into account the resources available to the student to finance college and the cost of college, provides the greatest benefit to students with the least ability to pay. Those in most need of financial assistance are eligible for grant aid, most notably in the form of a Pell Grant, while those with a greater ability to pay but still in need of financial assistance receive subsidized and unsubsidized loans, as well as employment assistance, to meet college expenses.

In contrast, eligibility for tax programs depends on the student's or family's AGI in the tax year that college expenses were incurred. This measure does not take into account extenuating circumstances that might affect ability to pay for college, such as significant health expenses or having multiple children from the same family attending college. The EFC formula takes both of these circumstances into account.

The distributional effects of traditional aid differ substantially from the distributional effects of the tax subsidies. In the 1999–2000 academic year, about 75 percent of dependent students who received Pell and SEOG grants had family incomes of \$30,000 or less; 75 percent of independent students who received Pell and SEOG grants had incomes of \$20,000 or less (U.S. General Accounting Office 2002). By contrast, in 2000,

¹⁶ In 2003, the tax entry threshold for a two-parent family with two children was \$37,490. A family of this size is unlikely to receive any benefit from a deduction or non-refundable credit if their income is below this threshold.

only 18.5 percent of tax units who claimed an education credit had an AGI of \$20,000 or less, and 34 percent had an AGI of less than \$30,000; 17 percent of education credit claimants had an AGI that exceeded \$75,000.

As the maximum amount of the Pell Grant increases, eligibility for the Pell Grant also expands. As more middle-income students become eligible for at least the minimum Pell Grant, more students will benefit from both a tax credit and a Pell Grant. This may or may not be a desirable policy. Since amounts received under the Pell Grant may reduce the amount of eligible expenses for the purposes of the Hope credit and the LLC, increases in the maximum Pell Grant may in part merely result in shifting costs from the expenditure side of the budget (through increased Pell Grants) to the tax side (through reduced Hope and LLC tax expenditures). Furthermore, as long as the Pell Grant program remains under-funded, Pell dollars that would go to low-income students will end up going increasingly to middle-income students who have access to other forms of aid. It is important for policy makers to study the coherence of traditional student aid programs and tax programs (Hauptman and Rice, 1997).

The value of the tuition and fees deduction, tax exclusions, and the student loan interest deduction depends on a taxpayer's marginal tax rate. Those with higher marginal rates receive larger benefits. In addition, the tuition and fees deduction has higher income limits than the educational credits, so that some upper-income families who are ineligible for the educational credits can take advantage of these other tax incentives. Additionally, wealthier taxpayers who do not qualify for many of the tax incentives due to eligibility restrictions based on income can still qualify for some tax aid by providing a tax-free gift to their child, who then files taxes as an independent taxpayer. The student's AGI may be low enough to allow him or her to qualify for the tax incentives. Finally, paying tuition directly is not counted as a gift. For some very high-income taxpayers, this distinction is beneficial, since it allows them to transfer more money to their children without triggering the gift tax.

The tax-preferred savings incentives for higher education benefit those with the means to save for college. When a person chooses to open a Section 529 plan, he or she must accurately predict that the beneficiary (or at least some related beneficiary) will attend college to realize the intended tax benefit. If the intended beneficiary ultimately does not attend college, and no related beneficiary can be found to whom to transfer the account balance, a penalty is imposed. Because Section 529 plans have no income limits, they provide particularly large benefits to the wealthy, who can use these plans to shelter assets from the estate and gift tax.¹⁷ The advantages of Section 529 plans and Coverdell accounts generally rise with income. One expert calculates that for households with incomes less than \$57,000, the lower probability of having a child ultimately attend college makes a standard savings account more attractive than a Section 529 plan or a Coverdell account (Dynarski 2003b).

¹⁷ For some extremely wealthy individuals who are maximizing their use of the annual gift exemption, the income tax advantages of Section 529 plans may be smaller than the gift tax advantage from directly paying tuition when the student enrolls in college (since direct payment of tuition is not treated as a gift). In both cases, the funds would be removed from the donor's estate.

There is a great deal of “sorting out” between the two programs (Davis 2002). High-income students are ineligible for both need-based student financial aid (although they can still qualify for unsubsidized loans and are increasingly the recipients of merit-based institutional scholarships) and the educational credits and deduction. As a result, high-income students tend to use non-income-limited education savings vehicles, such as Section 529 plans. In contrast, low-income students who do not have the means to save for college are unlikely to take advantage of the education savings vehicles and may not have the tax liability or the expenses to benefit from educational credits. As a result, low-income students often rely predominantly on the student financial aid programs for assistance in accessing postsecondary education.

Some students are able to receive benefits under both the student aid programs and the tax expenditure programs. One estimate suggests that about 14 percent of undergraduates received both Title IV aid and higher education tax benefits in the 1999–2000 school year (Davis 2002). Although the maximum Pell Grants typically go to low-income individuals, modest-income students may also receive a Pell Grant, as well as an educational credit. More than half (54 percent) of families who received a Pell Grant had incomes of more than \$20,000 (Davis 2002). Presumably, some of these families may have tax liability to benefit from an educational credit. A Pell Grant, a state or institutional grant, a SEOG, or other tax-free aid, however, may reduce the amount of credit the student would be eligible to claim. A Pell Grant can also force taxpayers to face a withdrawal penalty for having remaining funds in an education savings vehicle, because the grant award requires that the taxpayer reduce eligible expenses paid with funds in these vehicles.

Timing of Aid

In the traditional student aid system, students or their families receive aid when tuition and fees payments are required. Some aid goes directly to the school to pay necessary expenses. Funds that remain after a student’s institutional bill is satisfied transfer to the student. Tax aid can occur quite some time before or after students incur expenses. In the case of savings incentives, such as 529 plans, taxpayers receive a tax benefit years before the student actually attends postsecondary school.¹⁸ Education credits and deductions are only received when a tax return is filed – possibly a year or more after expenses are incurred. The timing mismatch can reduce the effectiveness of those tax subsidies for taxpayers with little savings and limited access to credit.

Complexity Associated with Obtaining Aid, and Possible Fraud

Students and families applying for assistance through the traditional student aid system are required to complete the Free Application for Federal Student Aid (FAFSA). The FAFSA requires information about a student’s taxed and untaxed income and assets, as

¹⁸ It is possible for the owner of the 529 plan to pay a penalty on these tax-deferred savings plans, as described in the earlier section on 529 plans.

well as outside student aid. The Department of Education uses the information on the FAFSA to determine the student's EFC. The financial aid application process has been somewhat simplified and improved in recent years (Advisory Committee on Student Financial Assistance 2001). Still, the process remains complicated and can be intimidating to some applicants. The FAFSA form is particularly confusing because the calculations involved, unlike most calculations on a tax return, are not transparent. Instead, a family submits the form and is simply told what, if any, its EFC is. As Kane (1999, 23) emphasizes, "Naturally, given the mysterious nature of the 'need-analysis' machinations, this process generates a certain amount of anxiety."

Perhaps partly because of the complexity of the application process, many low-income students do not apply for federal financial aid. The Congressional Research Service conjectures that some low-income students may not know about the resources available, may mistakenly believe they are ineligible for aid, or may find the application process too complex (Stedman 2003a).

Eligibility for various forms of tax aid is also quite complex. As noted, eligible educational expenses, income limits, and other criteria differ among the educational credits, the deduction, and the savings incentives. Additionally, claiming some incentives requires maintaining additional records and completing additional tax forms to receive the benefit.

Both the student financial aid system and the tax system can inaccurately measure a student's ability to pay by providing an incentive to shift income into future years, such as deferring compensation or income from capital gains to qualify for more aid (Kane 1999).¹⁹ Such shifting may be economically inefficient.

The educational deduction and credits may end up subsidizing consumption activities with little educational value. The Lifetime Learning Credit, for example, could cause schools to offer leisure-oriented coursework. In one extreme example noted by Kane (1997), an educational institution could offer "whale watching" tours as credit toward a marine biology degree and the government could end up subsidizing the costs of these leisure activities. The IRS has no effective way of monitoring these courses and preventing taxpayers from claiming these expenses.

Saving through the tax-advantaged savings vehicles can reduce the amount a student can receive under the financial aid system. The effect is particularly pronounced with regard to Coverdell assets because the financial aid formula considers the assets in such accounts as belonging to the beneficiary (usually the student), as discussed above. In fact, for students from families at the margin of qualifying for financial aid, the returns on a Coverdell account net of income and aid tax are actually negative (Dynarski 2003a). These families would receive greater benefits if they invested in savings vehicles that were not taxed under the aid formula, such as retirement accounts or housing equity. By statute, the tax credits cannot reduce a student's receipt of Title IV financial aid. The

¹⁹ While the financial aid formula can also lead to income shifting because it relies heavily on income in the previous tax year, it also takes assets into account. See Kane (1997).

credits can nonetheless indirectly affect receipt of institutional financial aid. Institutional financial aid officers can make their own rules on how to allocate institutionally based aid, with some limitations previously mentioned in the campus-based programs). Some institutional financial officers may reduce institutional aid if they believe a student will receive an educational credit.

Finally, some students may be unaware of the available tax aid or may mistakenly believe they are ineligible. According to a survey conducted at the University of California's campuses, 27 percent of all respondents who did not claim a credit were unaware of the educational credits. The same survey also found, based on student's verbatim comments, that students misunderstood the eligibility requirements for the credits (Hoblitzell and Smith 2001).

Impact of Aid on Enrollment

A substantial number of studies have examined whether aid increases enrollment.²⁰ The evidence generally suggests that enrollment is more sensitive to grant aid than loan aid. Some recent evidence, however, shows that loan aid can affect enrollment the same way grant aid does (Dynarski 2002). Not surprisingly, most studies have found larger effects for low-income students than for higher-income students. Thomas Kane estimates that CalGrant, a program that requires students to meet income, asset, and high school grade point average thresholds, increased college enrollment among eligible students by 3 to 4 percentage points (2003). Dynarski (1999) studied the effect of the Social Security Student Benefit Program, which provided grants from 1965 to 1982 to full-time college students who were dependents of Social Security beneficiaries. She found that each \$1,000 of student benefits increased the college enrollment rate among those eligible by about 3.6 percentage points, and increased the number of years of schooling completed by about one year. Aid directed toward middle- and upper-income students may have a larger effect on what school a student chooses than on the choice of whether to attend college.

Studies consistently find a negative effect associated with increasing tuition. To the extent that students are able to see financial aid as decreasing net tuition, receipt of such aid should increase enrollment. These results are consistent across studies based on between-state differences in tuition and studies based on receipt of non-traditional financial aid (Hope Scholarship Program in Georgia and end of Social Security Student Benefit Program) (Kane 2003).

Other studies on the effects of financial aid have been mixed. Some research has indicated that enrollment of low-income students did not increase disproportionately after Pell Grants were established in 1973, perhaps because these students were unaware of the program when deciding whether to apply for college (Kane 1994 and 1999; McPherson, Schapiro, and Winston 1989).

²⁰ See Kane (1995), Heller (1997), and Dynarski (2002) for reviews of several studies.

There is little information at this time about whether the new tax incentives increase enrollment in or the affordability of higher education, mostly because these credit programs were created fairly recently. Some studies that have been conducted, however, raise questions about whether tax credits effectively increase enrollment. One analysis found that the educational credits were unlikely to produce significant increases in enrollment because tuition increases have little effect on middle- and high-income families, students who are either unprepared for or not intending to attend college, and students who cannot use the credits because their tax liability is too low (Congressional Budget Office 2000). Researchers using a microsimulation model found no evidence of increased enrollment overall three years after the education tax credits were enacted, although there was a slight increase in students age 20–24 attending four-year institutions (Long 2003).

State and local educational officers have an incentive to raise tuition in order to capture the increased financial aid, attenuating or possibly eliminating the expected positive effect of aid on enrollment (Stoll and Stedman 2002b). This is especially true of two-year institutions that charge less than \$1,500 a year because these institutions can increase tuition and, because of the Hope Credit formula, students can then write off 100 percent of the first \$1,000 and 50 percent of the second \$1,000. The California Legislative Analyst's Office specifically recommended that California raise its rates for community colleges to capture the educational tax benefits in this way (Long 2003).

Another factor that could limit any positive enrollment effect is that use of the educational credits is below expectations (Fitzpatrick and Maag 2003). One analysis found that only one-third of students eligible based on income, enrollment behavior, and educational expenses claimed the credits. A survey conducted at University of California (UC) campuses found that only 29 percent of UC students claimed a credit, with 29 percent of non-claimers at the main campus and 25 percent of non-claimers at the extension campuses reporting they were unaware of the credit (Hoblitzell and Smith 2001).

Middle-class taxpayers may also under-use the savings incentives. When GAO reported on the Education Savings Bond program in 1994, it found that few taxpayers received benefits for higher education expenses under the program. Only 6,685 tax filers in 1991 and 11,200 in 1992 used the tax exclusion for educational savings bonds. Bondholders usually hold savings bonds for 10 years before redeeming them, so the study could have been conducted too soon after the program was created to show greater effectiveness. Yet most Americans seemed uninformed about the Education Savings Bond program (U.S. General Accounting Office 1994). In addition to lack of knowledge about the savings incentives, tax incentives for expenses incurred while enrolled may cause individuals and their families to save less to meet college expenses.

Evidence suggests that those who save in Coverdell accounts and Section 529 plans are wealthier, measured in both income and net worth, and better educated than other families with children. Moreover, some evidence suggests that families with Coverdell accounts and Section 529 plans have higher incomes, education, and wealth than those who save in retirement plans. Since such high-income families are likely to save for

college even in the absence of tax incentives, it is unlikely that the Coverdell accounts or Section 529 plans change saving behavior substantially (Dynarski 2003b). Moreover, given the higher average incomes of families who save in Coverdell accounts and Section 529 plans, children from these families would likely attend college regardless of these tax-preferred savings vehicles.

Certainty of Aid

The Department of Education retains control over the costs of the student financial aid programs (except the Direct Loan program and the Federal Family Educational Loan program) because these programs are included in the department's budget. The student financial aid programs compete with other social programs for limited resources. Partly because of the entitlement status of loans and the discretionary status of grant aid, Congress has not fully funded the Pell Grant program since the 1979–80 academic year, while student aid loans have ballooned. The maximum award authorized under the HEA amendments of 1998 for the 2001–02 academic year was \$5,100 while the maximum Pell Grant award that was appropriated was only \$3,750. Periodic reauthorizations of the HEA and the annual budget process provide opportunities for Congress to alter the student aid programs, sometimes leading to changes in a student's eligibility for the programs. For example, during the annual budget process in the late 1980s and early 1990s, Congress frequently rescinded the eligibility of less-than-half-time students from the Pell Grant program and the discretion of institutional financial aid officers to use professional judgment in adjusting a student's EFC. Congress also amends the student aid programs through legislation both related and unrelated to higher education. For example, in the Omnibus Anti-Drug Abuse Act of 1988, Congress required an anti-drug abuse certification from Pell Grant recipients and subjected work-study students to anti-drug abuse provisions. Legislative changes through these processes affect both a student's eligibility for financial aid and the amount of aid the student is eligible to receive.

Tax expenditures are not subject to an annual review process. Although Congress can change student eligibility under the tax expenditure programs through legislation, it tends to make such changes less frequently than with spending programs. Moreover, unlike spending programs, tax programs are not subject to periodic review—though, in the case of EGTRRA provisions, they are subject to expiration. Thus, Congress does not make wholesale changes to tax programs frequently. Typically, tax expenditures continue indefinitely until Congress rescinds or amends them.

The traditional student aid system complicates a student's ability to plan for college expenses. The EFC formula, its dependence on the cost of a particular institution, and the number of other formulas used by other sources of aid provide little clear direction to students and their families about how much aid they will receive.

The sunset provision of EGTRRA complicates matters, because it casts uncertainty on the future status of EGTRRA provisions, especially the tax preferences for savings. Thus, unless families understand when various provisions in the tax code take effect, they could find their tax benefits reduced or eliminated.

Total Spending on Various Aid Programs

Overall, the federal government still spends more money on direct spending for student aid programs than on tax expenditure programs for higher education. The 2003 appropriations for student aid programs and the president's proposed FY 2004 budget can be broken down as follows:

	FY 2003 Budget	FY 2004 Proposed Budget
Federal Pell Grants	\$11.40 billion	\$12.70 billion
SEOG	0.76 billion	0.73 billion
Work-study	1.00 billion	1.00 billion
Perkins Loans	0.17 billion	0.07 billion
FFEL	2.70 billion	5.70 billion
Direct loans ^a	<u>4.10 billion</u>	<u>(.87 billion)</u>
	\$20.13 billion	\$19.33 billion

a. The 2003 figure is positive because of a \$4.6 billion upward reestimate largely attributable to revised interest rate estimates for prior cohorts. See U.S. Department of Education (2003b).

The President's proposed FY2004 budget increases Pell Grant spending by providing a maximum award of \$4,000 to almost 4.9 million students and contains no new capital for the Perkins Loan program. The President's request for SEOG and work-study are the same as his request in the previous year and would provide grants to approximately 1.2 million and 1.0 million recipients, respectively. The President proposes to increase loan forgiveness for mathematics, science, and special education teachers, increasing the cost of the loan programs. Additionally, he proposes to reduce capital contributions to the Direct Loan programs, relying on loan repayments to provide funds for new loans (U.S. Department of Education 2003b).²¹

"Tax expenditures" are a measure of the cost to the federal government of tax subsidies. The Office of Management and Budget (OMB) estimated the outlay equivalent of FY 2003 tax expenditures for higher education at \$11.84 billion, as follows:

Program	FY 2003 Expenditures (in millions)
Hope Credit	\$4,510
Lifetime Learning Credit	2,880
Tuition and fees deduction	2,860
Student loan interest deduction	760
Coverdell Savings Accounts	120
Section 529 Plans	340
Education Savings Bonds	<u>370</u>
Total:	\$11,840

Source: Budget of the United States, 2004, Analytical Perspectives, Table 6-5

²¹ As of this writing, the House of Representatives has passed the FY2004 conference agreement, which includes funding for federal student aid programs. The Senate has not yet approved the FY2004 conference agreement.

This estimated \$11.84 billion in FY2003, however, does not include other tax advantages associated with students in higher education, including an additional exemption for the parent of a student between ages 18 and 24 (\$3.67 billion), employer-assisted education, itemized deductions for education under limited circumstances (\$610 million), and tax-free treatment of scholarships and fellowships (\$1.39 billion).

When enacting these expenditures, Congress often does not know how much a tax expenditure will cost until taxpayers begin to learn about and take advantage of the benefit. The education provisions in the Taxpayer Relief Act were projected at nearly \$100 billion over 10 years, with the two credits—the Hope Credit and the Lifetime Learning Credit—projected to cost nearly \$76 billion of the \$100 billion (Joint Committee on Taxation 1997). As previously discussed, however, use of these credits is less than anticipated, leading to a lower-than-anticipated cost and less benefit receipt for postsecondary students. In 1997, the Joint Committee on Taxation estimated that the educational credits would cost over \$7 billion a year in tax years 2000 and 2001. In the 2000 tax year, almost 7 million returns claimed educational credits, for a cost of \$4.9 billion, and in the 2001 tax year, over 7.2 million returns claimed educational credits worth \$5.2 billion. Thus, the data suggest that fewer taxpayers are making use of this aid than expected.

Institutional Incentives

The federal student aid system gives institutions an incentive to participate. In campus-based programs, institutions can leverage their own funding to secure more financial aid, attracting more students to their school. Because the federal government provides the funds for the Pell Grant and either provides the loan capital or guarantees the loan, these programs also provide a streamlined and guaranteed source of funding.

The educational credits provide incentives for some higher educational institutions to raise their tuition charges. These credits also provide incentives for institutions to decrease the financial aid available to students (Wolanin 2001). The Hope Credit in particular, because it is a relatively small percentage of overall tuition at four-year private institutions, would unlikely be used to justify tuition increases. However, the Hope and Lifetime Learning credits could give postsecondary schools a reason to decrease institutional financial aid made available to students, because students would have additional resources available for educational expenses. This could provide justification to continue shifting aid toward merit aid, which tends to favor high- and middle-income students. And private institutions, which place a premium on stretching resources as far as possible, may reduce institutional aid to students they believe are likely to receive an educational credit or deduction (Wolanin 2001).

Further, the student loan interest deduction may also increase the trend to finance more educational spending through borrowing, increasing the debt burden of college graduates by reducing the cost of borrowing for the taxpayer. The elimination of the 60-month limit on deductibility favors those with larger amounts of debt, and may provide incentives for undergraduates to take out more loans than they can sustain (Congressional Budget

Office 2000). While many are concerned with growing levels of student indebtedness, this unintended effect may only exacerbate the problem.

Section 6. Interactions Between Education Policy and Fiscal Policy

The amount and nature of resources available for federal higher education policy in the future will intricately be linked to trends and choices regarding aggregate tax and fiscal policy.

Most generally, the growing imbalance of tax and budget policy, exacerbated by the tax cuts from 2001 to 2003 and projected increases in entitlement spending, places all social spending—including that for education—at risk. Collectively, all of these pressures threaten to squeeze all forms of discretionary spending, and pose a significant risk to education funding (Gale and Orszag, 2003; Greenstein and Orszag, 2004).

Several items specific to tax policy may also directly affect resources for education. First, the 2001 tax cut phased out the federal estate tax, but only temporarily. If estate tax repeal—currently scheduled to take effect in 2010 for only one year—is made permanent, it will significantly reduce charitable contributions to educational institutions. Donors to schools and other non-profits can reduce the value of their estate by the amount of the donation, which resulted in tax savings of up to 60 cents on the dollar before EGTRRA. Donations made before death can produce even larger tax advantages, because they can also qualify for an income tax deduction and reduce the value of the ultimate estate. For that reason, many educational institutions rely heavily on bequests and gifts tied to estate planning, such as charitable remainder trusts. Research suggests that charitable bequests would fall by between 22 and 37 percent if the estate tax is eliminated. (Bakija and Gale, 2003)

Second, the extent to which middle- and upper-middle income taxpayers will receive benefits from the educational credits in future years is influenced by the alternative minimum tax. This tax, which once affected a small fraction of families, is projected to affect 11.3 percent of families with one child, 26.4 percent of families with 2 children, and over one-third of families with three or more children by 2005 (Burman, Gale, and Rohaly 2003b). After 2003, education credits are subject to reduction or elimination by the AMT. Because the AMT is not indexed for inflation, more middle- and upper-middle income taxpayers will be subject to it. As a result, the number of taxpayers in these income groups who receive benefits from the educational credits will likely fall unless the AMT exemption for personal credits continues or AMT reform occurs. It seems unlikely, however, that policymakers will allow massive numbers of taxpayers to lose eligibility for higher education tax preferences because of the AMT. Dealing with the AMT, though, is likely to exacerbate overall budget pressures discussed above, which could undermine funding for education

Finally, the steady shift of educational assistance from direct spending programs to the tax code creates another risk: tax reform could wipe out many, if not all, of the educational assistance programs in one fell swoop. The complexity documented above,

which is replicated to greater or lesser extents elsewhere in the tax code, has engendered calls for simplification. Former Ways and Means Committee Chairman Bill Archer often said that he wanted to “tear the income tax out by its roots” and replace it with a so-called flat tax with few deductions or credits. Although an argument could be made that replacing the hodge-podge of tax subsidies with expanded funding for targeted direct aid would improve both the tax and educational systems, advocates of radical tax reform seldom propose to pair it with expanded spending. Indeed, many if not most of the tax reform advocates also claim to favor much smaller government. The most recent tax reform—TRA86—eliminated the deduction for student loan interest but did not offer an offsetting increase in funding for direct aid or subsidized student loans. Thus, the migration of education assistance to the tax system makes it vulnerable to legislative changes that have no direct relation to education policy.

Section 7. Conclusion

There are several motivations for governments to subsidize the cost of education, particularly for low-income students. First, a well-educated workforce may benefit the economy. Higher levels of education raise productivity and foster economic growth, and are also associated with a reduced reliance on the social safety net. Second, although investment in education typically yields substantial rewards in the form of increased wages, this future increase in wages is not considered secure collateral for a loan. Subsidizing loans for education ensures that interest rates are not too high, from a societal perspective. In addition, subsidizing loans for education allows student who lack collateral an opportunity to borrow money that might otherwise not be afforded to them. Third, government might choose to subsidize education to advance equality of opportunity principles.

Subsidies for education come in many forms. Traditionally, individual student aid was available primarily via spending programs, most prominently grants and loans. In recent years, emphasis has shifted toward tax programs. This shift tends to benefit middle- and upper-income students more than lower-income students. This is because none of the credits are refundable, which means they are not useful for people who do not owe income taxes. This shift exacerbates the shift by states and institutions away from need-based aid toward merit-based aid. Merit aid also tends to help higher income students more than lower income students.

Tax and spending programs interact in complex ways – and it may not be possible for families to determine what program provides the best mechanism for assisting with post-secondary school costs until it is too late. For example, a family’s income can change substantially between the time a child is born and when that child goes to college. If that happens, programs that at one point seemed favorable may become less favorable. Savings for college may reduce grant aid for which a child would have been eligible absent that savings. Parents may be unable to predict whether or not a child will go to college until very close to the time the child makes the decision. If that is the case, parents may errantly save for a child in a tax-preferred plan and face a penalty *or* parents

may fail to save in a tax-preferred vehicle when, based on the child's ultimate decision, it would have been helpful.

As the interactions between tax and spending programs for education become more pronounced, it becomes more important for policy makers to consider the coherence of the policies together, rather than just within either the context of spending programs or the context of tax programs. This could reduce some of the complexity associated with having multiple programs with similar goals, targeted in different ways.

In the future, the resources available to address higher education needs will depend critically on the evolution of overall budget policy and the resolution of uncertainties regarding the estate tax and the alternative minimum tax.

References

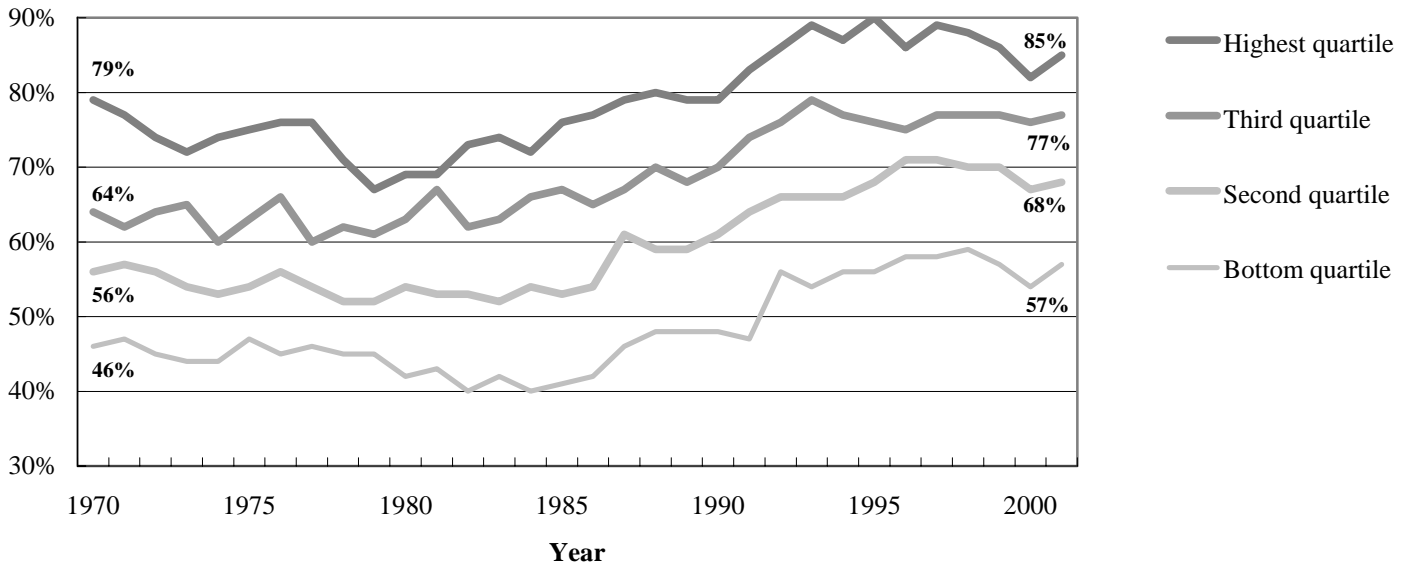
- Advisory Committee on Student Financial Assistance. 2001. *Access Denied: Restoring the Nation's Commitment to Equal Educational Opportunity*. Washington, DC: U.S. Department of Education, Advisory Committee on Student Financial Assistance.
- . 2002. *Empty Promises: The Myth of College Access in America*. Washington, DC: U.S. Department of Education, Advisory Committee on Student Financial Assistance.
- Bogges, Scott, and Camille Ryan. 2002. "Financing the Future: Postsecondary Students, Costs, and Financial Aid: 1996-1997." P70-83. Washington, DC: U.S. Census Bureau.
- Bakija, Jon M. and William G. Gale. 2003. "Effects of Estate Tax Reform on Charitable Giving." *Tax Policy Issues and Options* No. 6. www.taxpolicycenter.org.
- Burman, Leonard E., William G. Gale, and Jeffrey Rohaly. 2003a. "The Expanding Reach of the Individual Alternative Minimum Tax." *Journal of Economic Perspectives* Spring 17(2):173-186.
- . 2003b. "The AMT: Projections and Problems." *Tax Notes* July 7: 105-17.
- Congressional Budget Office. 2000. *An Economic Analysis of the Taxpayer Relief Act of 1997*. Washington, D.C.: Congressional Budget Office.
- Davis, Albert J. 2002. "Choice Complexity in Tax Benefits for Higher Education." *National Tax Journal* LV(3): 509-38.
- Dynarski, Susan. 1999. "Does Aid Matter? Measuring the Effect of Student Aid on College Attendance and Completion" Cambridge: NBER. Working Paper 7422. November.
- .2002. "Loans, Liquidity, and Schooling Decisions." Cambridge: Harvard University, Kennedy School of Government and NBER.
- .2003a. "Tax Policy and Education Policy: Collision or Coordination? A Case Study of the 529 and Coverdell Saving Incentives." Cambridge: Harvard University, Kennedy School of Government and National Bureau of Economic Research.
- .2003b. "Who Benefits from the Education Saving Incentives? Income, Educational Expectations and the Value of the 529 and Coverdell." Cambridge: Harvard University, Kennedy School of Government and National Bureau of Economic Research. July 28.
- Ellwood, David T., and Thomas J. Kane. 2000. "Who Is Getting a College Education? Family Background and the Growing Gaps in Enrollment." In *The Ford Foundation Series on Asset Building*, edited by Sheldon Danzier and Jane Waldfogel (283-324).
- Feldstein, Martin. 1995. "College Scholarship Rules and Private Saving." *American Economic Review* 85(3): 552-66.

- FinAid. 2003. "History of Student Financial Aid." *The Smart Student Guide to Financial Aid*. <http://www.finaid.org/educators/history.phtml>. (Accessed January 12, 2004.)
- Fitzpatrick, Katie, and Elaine Maag. "Subsidizing Higher Education Through the Federal Income Tax Code." *Tax Notes* July 7: 95.
- Gale, William G. and Peter R. Orszag. 2003. "The Budget Outlook: Analysis and Implications." *Tax Notes*. October 6, 2003.
- Gravelle, Jane, and Dennis Zimmerman. 1997. "Tax Subsidies for Higher Education: An Analysis of the Administration's Proposal." Document 97-581E. Washington, DC: Congressional Research Service.
- Greenstein, Robert, and Peter R. Orszag. 2004. "Federal Fiscal Policy: What's Gone Wrong and How to Fix It." In M. Green, ed., *What We Stand For*. New York: Newmarket Press.
- Hauptman, Arthur M, and Lois D. Rice. 1997. "Coordinating Financial Aid Benefits With Tuition Tax Benefits." Washington, DC: Brookings Institution.
- Heller, Donald E. 1997. "Student Price Response in Higher Education: An Update to Leslie and Brinkman." *Journal of Higher Education* 68(6): 624–59.
- Hoblitzell, Barbara A., and Tiffany L. Smith. 2001. *Hope Works: Student Use of Education Tax Credits*. New Agenda Series Vol. 4, No. 2. Indianapolis: Lumina Foundation for Education.
- Horn, Laura and Katharin Peter. 2003. *What Colleges Contribute: Institutional Aid to Full-Time Undergraduates Attending 4-Year Colleges and Universities*. NCES 2003-157. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Joint Committee on Taxation. 1997 *Estimated Budget Effects of the Conference Agreement on the Revenue Provisions of H.R. 2014, The "Taxpayer Relief Act of 1997."* Washington, DC: U.S. Government.
- Kane, Thomas J. 1994. "College Attendance By Blacks since 1970: The Role of College Cost, Family Background, and Returns to Education" *Journal of Political Economy* 102 (5) 878-911.
- . 1995. "Rising Public College Tuition and College Entry: How Well Do Public Subsidies Promote Access to College?" Working Paper No. 5164. Cambridge, MA: National Bureau of Economic Research.
- . 1997. "Beyond Tax Relief: Long-Term Challenges in Financing Higher Education." *National Tax Journal* 50(2): 335–48.
- . 1999. *The Price of Admission: Rethinking How Americans Pay for College*. Washington, DC: Brookings Institution Press.
- . 2003. *A Quasi-Experimental Estimate of the Impact of Financial Aid on College-Going*. Working Paper No. 9703. Cambridge, MA: National Bureau of Economic Research.

- Kane, Thomas J., Peter R. Orszag, and David L. Gunter. 2003. "State Fiscal Constraints and Higher Education Spending." Urban-Brookings Tax Policy Center Discussion Paper No. 12. Washington, DC: The Urban Institute.
- Katz, Lawrence F., and David H. Autor. 1999. "Changes in the Wage Structure and Earnings Inequality." In *Handbook of Labor Economics*, vol. 3., edited by Orley Ashenfelter and David Card. Amsterdam: Elsevier Science.
- Long, Bridget Terry. 2003. "The Impact of Federal Tax Credits for Higher Education Expenses. Working Paper No. 9553. Cambridge, MA: National Bureau of Economic Research.
- McPherson, Michael S., Morton Owen Schapiro, and Gordon C. Winston. 1989. "Recent Trends in U.S. Higher Education Costs and Prices: The Role of Government Funding." *AEA Papers and Proceedings* 79(2): 253–57.
- Mortenson, Thomas G. 1999. "Refocusing Student Financial Aid: from Grants to Loans, from Need to Merit, from Poor to Affluent." <http://www.naccas.org/PressRelease/SchoolsNews/refocus.asp>, reprinted from *Postsecondary Education OPPORTUNITY*.
- . 2003. *Postsecondary Education OPPORTUNITY*. <http://www.postsecondary.org>.
- Smith, Thomas M., Beth Aronstamm Young, Yupin Bae, Susan P. Choy, and Nabeel Alsalam. 1997. *The Condition of Education, 1997*. NCES 97-388. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Snyder, Thomas D., and Charlene M. Hoffman. 2003. *Digest of Education Statistics 2002*. NCES 2003-060. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Stedman, James B. 2003a. "Federal Pell Grant Program of the Higher Education Act: Background and Reauthorization." Tech. Report No. RL31668. Washington, DC: Congressional Research Service.
- . 2003b. "The Higher Education Act: Reauthorization Status and Issues." Washington, DC: Congressional Research Service.
- Stoll, Adam, and James B. Stedman. 2002a. "Higher Education Tax Credits: Targeting, Value, and Interaction with Other Federal Student Aid." Technical Report No. RL31484. Washington, DC: Congressional Research Service.
- . 2002b. "Higher Education Tax Credits and Deduction: An Overview of the Benefits and Their Relationship to Traditional Student Aid." Technical Report No. RL31129. Washington, DC: Congressional Research Service.
- The College Board. 2002. *Trends in Student Aid 2002*. Washington, DC: College Entrance Examination Board.
- . 2003. *Trends in Student Aid 2003*. Washington, DC: College Entrance Examination Board.

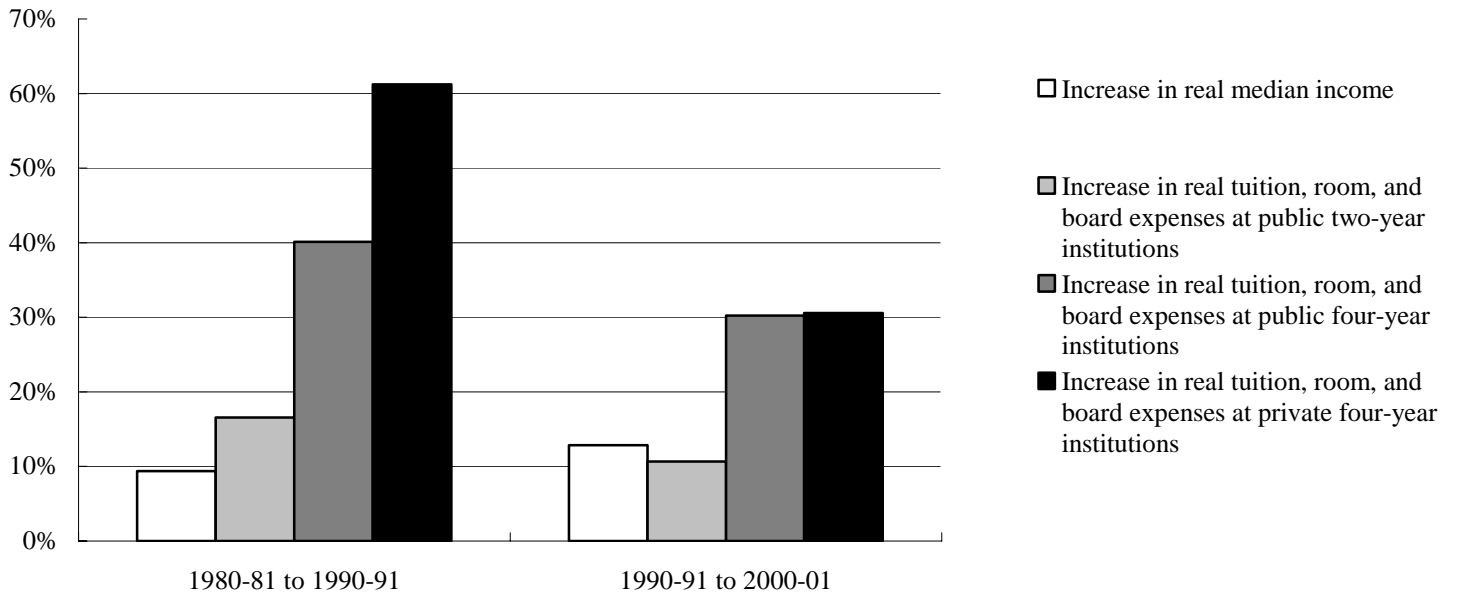
- The Institute for Higher Education Policy. 1997. *Taxing Matters: College Aid, Tax Policy, and Equal Opportunity*. Washington, DC: The Institute for Higher Education Policy.
- . 1998. *Do Grants Matter? Student Grant Aid and College Affordability*. Washington, DC: The Institute for Higher Education Policy.
- U.S. Census Bureau. 2002. “Historical Income Tables, Current Population Survey, Annual Demographic Supplement.” U.S. Department of Education, Office of Federal Student Aid. 2003a. *Federal Student Aid Handbook 2003–04*. Washington, DC: U.S. Department of Education.
- . 2003b. “Fiscal Year 2004 Education Budget Summary and Background Information: February 3, 2003.” <http://www.ed.gov/about/overview/budget/budget04/summary/edlite-section2d.html>.
- U.S. General Accounting Office. 1994. “College Savings Issues.” GAO/HEHS-95-16R. Washington, DC: U.S. General Accounting Office.
- . 2002. “Student Aid and Tax Benefits: Better Research and Guidance Will Facilitate Comparison of Effectiveness and Student Use.” GAO-02-751. Washington, DC: U.S. General Accounting Office.
- U.S. Office of Management and Budget. 2003. *Analytical Perspectives, Budget of the United States Government, Fiscal Year 2004*. Washington, D.C.: U.S. Government Printing Office.
- Wolanin, Thomas R. 2001. *Rhetoric and Reality: Effects and Consequences of the HOPE Scholarship*. The New Millennium Project Working Paper. Washington, DC: The Institution for Higher Education Policy.

Figure 1: College Participation Rates by Family Income Quartiles for Unmarried 18- to 24- Year-Old High School Graduates, 1970-2001



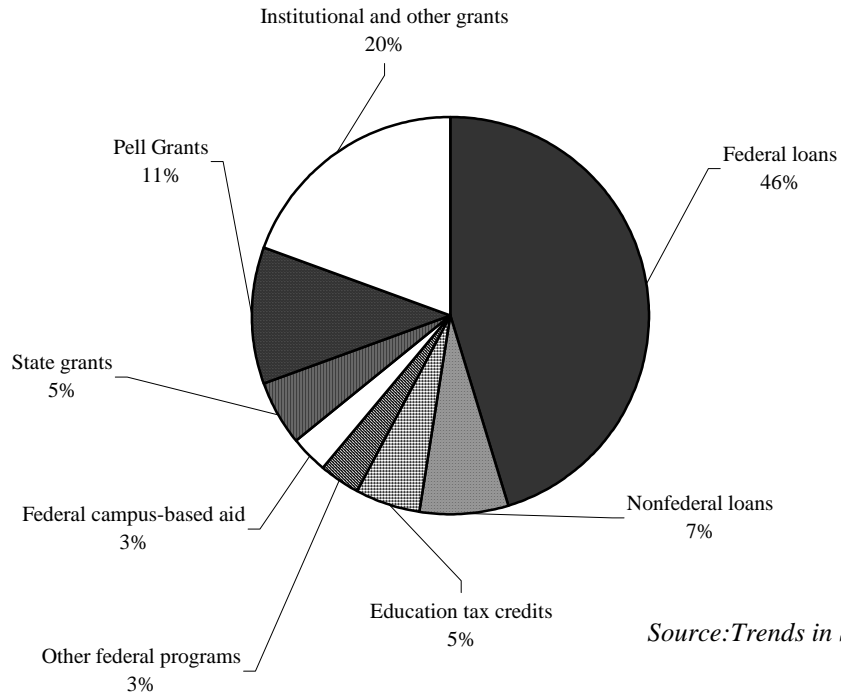
Source: Extracted from College Board (2003); Tom Mortenson (2003). Analysis based on U.S. Census data.

Figure 2: Increases in Median Income versus Average Tuition, Room, and Board Costs at Postsecondary Institutions



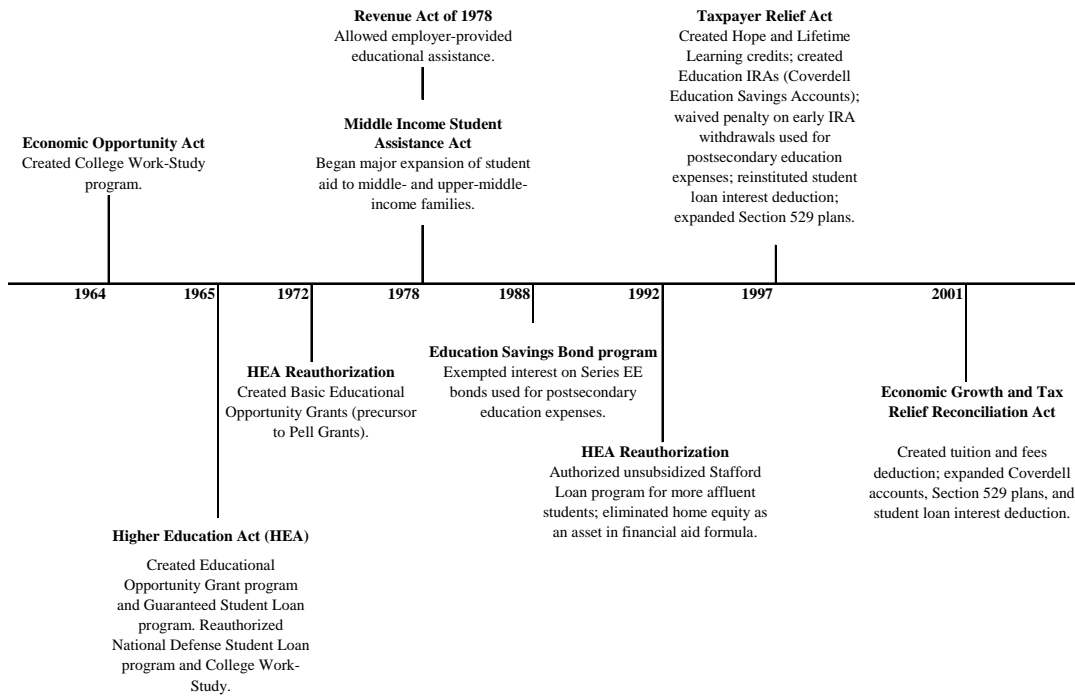
Source: U.S. Census Bureau, Current Population Survey; National Center for Education Statistics, *Digest of Education Statistics 2002*.

Figure 3: Student Aid by Source for Academic Year 2002-03



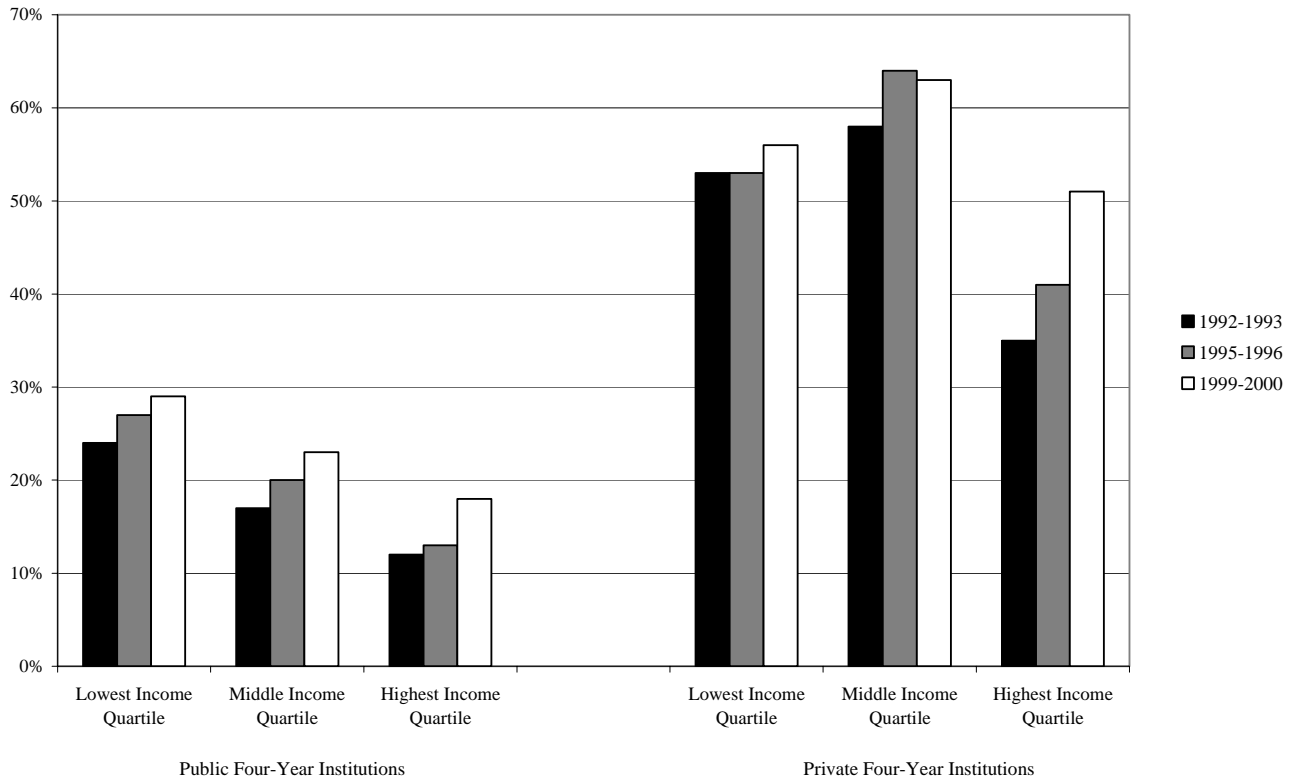
Source: Trends in Student Aid, 2003.

Figure 4: Timeline of the Development of Student Financial Aid Programs



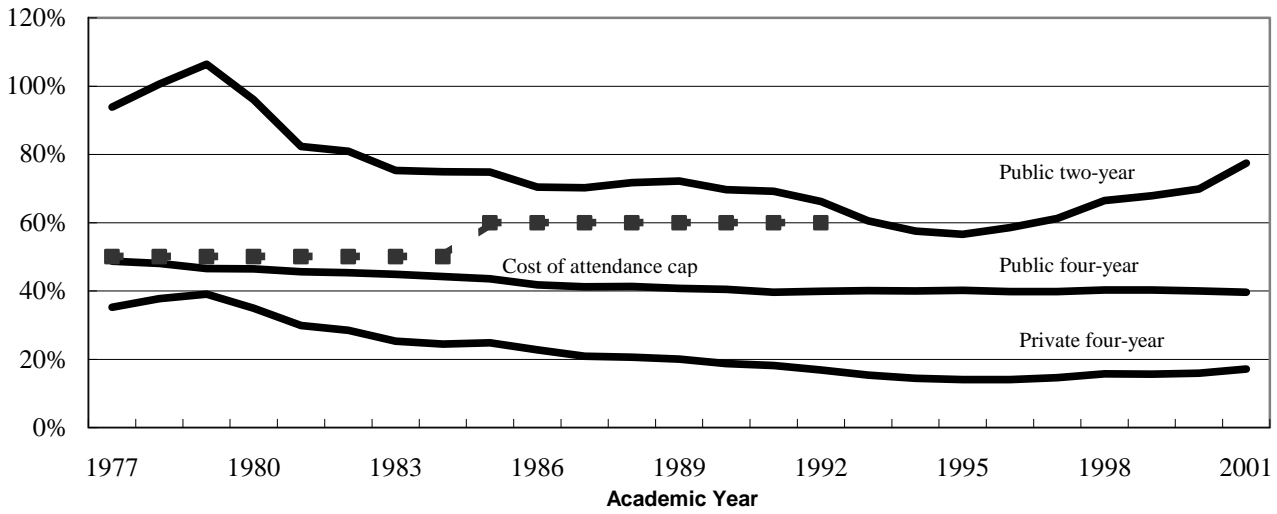
Source: FinAid, 2003. History of Student Financial Aid. <http://www.finaid.org/educators/history.phtml>

Figure 5: Percentage of Full-Time Undergraduates Receiving Institutional Aid at Four-Year Institutions by Income Quartile and Academic Year



Source: Horn and Peter, 2003.

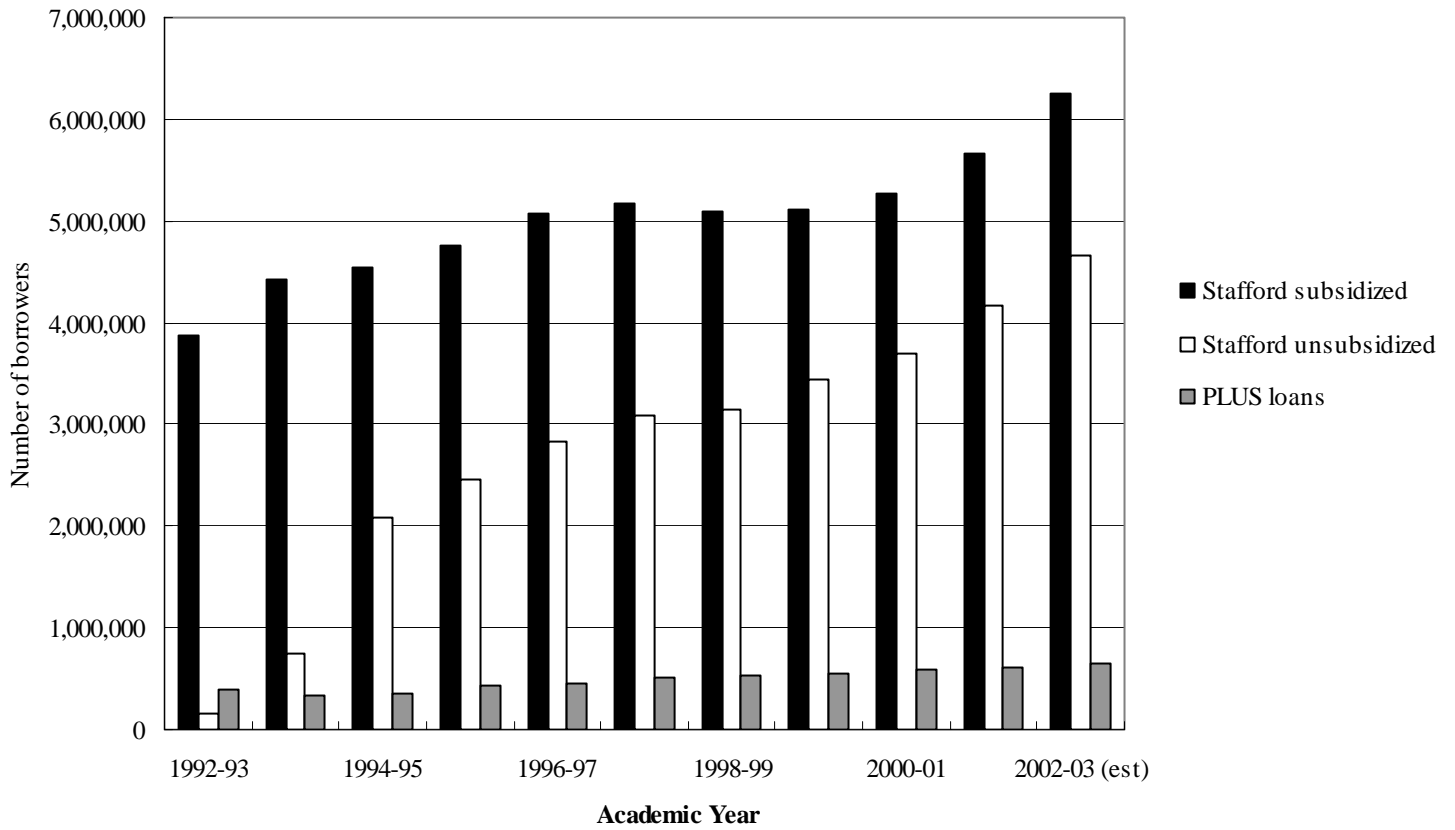
Figure 6: Maximum Appropriated Pell Grant Award as a Percentage of Average Tuition, Room, and Board Costs



Source: Trends in Student Aid, 2003

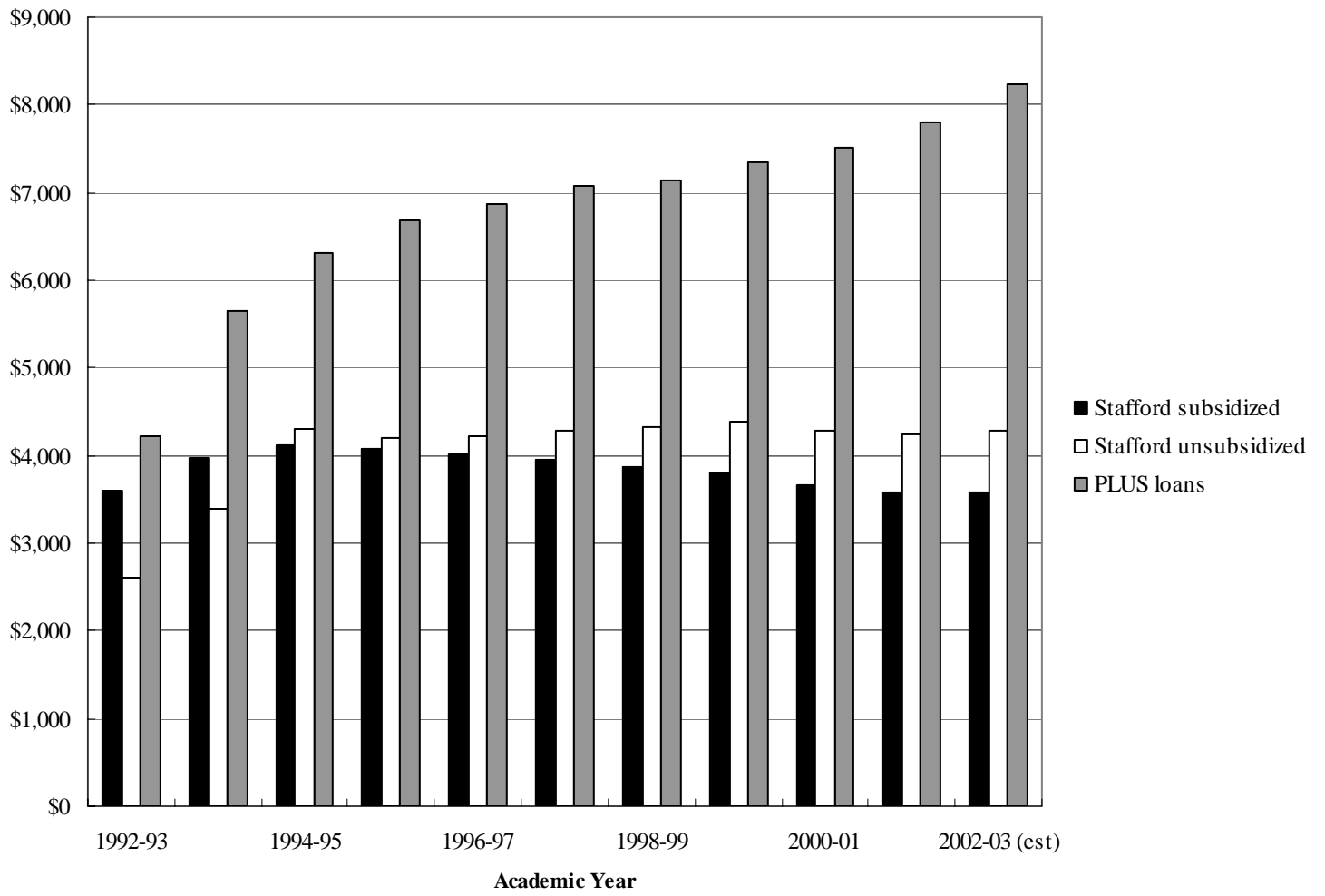
Notes: Cost of attendance is enrollment-weighted. During the 1973-1992 academic years, there was a statutory cap on the percentage of the cost of attendance that a Pell Grant could cover. From academic year 1973 to 1984 the cap was 50%; from academic year 1984 to 1992, the cap was 60%.

Figure 7: Borrowers under Federal Family Educational Loan and Direct Loan Programs from 1992-93 to 2002-03



Source: Trends in Student Aid, 2003

Figure 8: Average Amount for Loans Made under Federal Family Educational Loan and Direct Loan Programs from 1992-93 to 2002-03



Source: Trends in Student Aid, 2003

Table 1: Comparison of Education Credits –in the 2003 Tax Law

	Hope Credit	Lifetime Learning Credit
Maximum credit	\$1,500 per student	\$2,000 per return
Adjusted for inflation?	Yes	No
Maximum eligible expenses	\$2,000 per student	\$10,000 per return
Eligible expenses reduced by other tax-free education assistance?	Yes	Yes
Eligible time period	First two years	Indefinite
Must pursue a recognized education credential?	Yes	No
Enrollment status	At least half-time enrollment in postsecondary education	One or more courses at accredited institution
Income phaseout	\$51,000 for single filers (\$103,000 for joint filers) adjusted annually for inflation	\$51,000 for single filers (\$103,000 for joint filers) adjusted annually for inflation
Formula	100% of first \$1,000 50% of second \$1,000	20% of first \$10,000
Tax expenditure in FY 2003	\$3.52 billion	\$2.25 billion

Source: Fitzpatrick and Maag, 2003.

Appendix 1: Federal Student Aid Programs

	Enacting Legislation	Benefit	Eligible Expenses	Income Limitations	Benefits Reduction	Other
Federal Grants						
Pell Grant	Higher Education Act of 1972 (originally called Basic Educational Opportunity Grant)	Maximum grant amount is determined annually.	No limitations.	None. Eligible if estimated family contribution (EFC) falls below an annually determined amount.		Undergraduate students only. Can be enrolled less than half-time.
Supplemental Educational Opportunity Grant	Higher Education Act of 1965	Maximum grant amount is \$4,000 a year.	No limitations.	None. Available first for students with the lowest EFC who also received a Pell Grant.		Undergraduate students only.

	Enacting Legislation	Benefit	Eligible Expenses	Income Limitations	Benefits Reduction	Other
Federal Loans						
Stafford Loans	Higher Education Act of 1965 (originally called Guaranteed Student Loan Program)	Both subsidized and unsubsidized loans available. Variable interest rate cannot exceed 8.25 percent.	No limitations.	Subsidized loans require demonstration of financial need.		Graduate and undergraduate students attending at least half-time.
Parent Loans for Undergraduate Students (PLUS)	Higher Education Act of 1980	Unsubsidized loans available to parents. Variable interest rate cannot exceed 9 percent.	Educational costs of student covered by other financial aid, up to the total cost of attendance.	None.		Parents with adverse credit history are ineligible. Available for parents of undergraduate students only.
Perkins Loans	National Defense Education Act of 1958 (originally called National Defense Student Loan Program)	Subsidized loan with an interest rate of 5 percent.	No limitations.	Demonstration of financial need.		Graduate and undergraduate students.
Federal Employment Assistance						
Federal Work-Study	Economic Opportunity Act of 1997	Provides part-time jobs to students.	No limitations.	Demonstration of financial need.		

	Enacting Legislation	Benefit	Eligible Expenses	Income Limitations	Benefits Reduction	Other
Tax Credits						
Hope Credit	Taxpayer Relief Act of 1997	100% of first \$1,000 of expenses plus 50% of second \$1,000 of expenses. Credit limit of \$1,500 per eligible student.	Tuition and fees required for enrollment or attendance at postsecondary institution.	\$41,000 to \$51,000 for single filers (\$83,000 to \$103,000 for joint filers)	Cannot use expenses paid with tax-free aid toward eligible expenses.	Available for two years of postsecondary education only.
Lifetime Learning Credit	Taxpayer Relief Act of 1997	20% of first \$5,000 of expenses until the 2003 tax year when the credit becomes 20% of first \$10,000 of expenses. Credit limit of \$2,000 in the 2003 tax year, per eligible taxpayer.	Tuition and fees required for enrollment or attendance at postsecondary institution.	\$41,000 to \$51,000 for single filers (\$83,000 to \$103,000 for joint filers)	Cannot use expenses paid with tax-free aid toward eligible expenses.	Available for one or more courses for an unlimited number of tax years.

	Enacting Legislation	Benefit	Eligible Expenses	Income Limitations	Benefits Reduction	Other
Tax Deductions						
Student loan interest deduction	Taxpayer Relief Act of 1997	Above-the-line deduction of up to \$2,500 for interest payments of student loan debt.	Payments of interest, both required and voluntary, on student loans taken out solely to pay educational expenses and not received from a relative or through an employer plan.	\$50,000 to \$65,000 for single filers (\$100,000 to \$130,000 for joint filers)		
Tuition and fees deduction	Economic Growth and Tax Relief Reconciliation Act of 2001	Above-the-line deduction of up to \$3,000 in 2003 tax year and \$4,000 in 2004 and 2005 tax year for qualified educational expenses.	Tuition and fees required for enrollment or attendance at postsecondary institution.	\$65,000 for single filers (\$130,000 for joint filers); in 2004 and 2005 tax years, \$80,000 for single filers (\$160,000 for joint filers)		Expires after 2005 tax year.

	Enacting Legislation	Benefit	Eligible Expenses	Income Limitations	Benefits Reduction	Other
Education Savings Incentives						
Coverdell Education Savings Accounts (formerly Education IRAs)	Taxpayer Relief Act of 1997	Annual contribution limit of \$2,000 per beneficiary under age 18. Earnings on account are tax-free.	Tuition, fees, books, supplies, and equipment. Room and board expenses are eligible, up to a limit, if student is enrolled at least half-time.	\$95,000 to \$110,000 for single filers (\$190,000 to \$220,000 for joint filers)	Tax-free distribution is reduced by amount of expenses paid with tax-free aid or expenses counted toward tuition and fees deduction or educational tax credit.	Primary and secondary school expenses are also allowed.
Early withdrawal from IRA	Taxpayer Relief Act of 1997	Waives 10% penalty for withdrawals used for educational expenses.	Tuition, fees, and expenses required for enrollment at postsecondary institution.	None.	Penalty free distribution is reduced by amount of expenses paid with tax-free aid or expenses counted toward tuition and fees deduction or educational tax credit.	

	Enacting Legislation	Benefit	Eligible Expenses	Income Limitations	Benefits Reduction	Other
Section 529 Plan	Small Business Job Protection Act of 1996	Earnings on account are tax-free if used for educational expenses.	Tuition, fees, books, supplies, and equipment required for enrollment or attendance at postsecondary institution. Room and board expenses are eligible, up to a limit, if student is enrolled at least half-time.	None.	Tax-free distribution is reduced by amount of expenses paid with tax-free aid or expenses counted toward tuition and fees deduction or educational credit.	If EGTRRA provisions are not extended, after 2010, Section 529 plans will enjoy tax-deferral, not tax-exemption, of earnings on account.
Education Savings Bond Program	Technical and Miscellaneous Revenue Act of 1988	Interest on Series EE or I Savings Bonds is tax-free if used for educational expenses.	Tuition and fees required for enrollment or attendance at postsecondary institution.	\$58,500 to \$73,500 for single filers (\$87,750 to \$117,750 for joint filers)	Must reduce educational expenses by amount of expenses paid with tax-free aid or expenses counted toward tuition and fees deduction or educational credit.	