Higher Education Finance and Cost-Sharing in the United States

(Updated April 2010)

I. Brief Description of Higher Education in the United States

Higher education in the United States is the responsibility of the states, rather than of the federal government. Thus, with insignificant exceptions (such as the military service academies), public higher education is owned and controlled by the 50 states. The federal government has two critical functions that apply equally to public and private institutions: the provision of student financial assistance, much of it in the form of federally-guaranteed and slightly subsidized loans, and the provision of much (but not all) of the research funds, particularly in the biomedical and physical sciences.

Higher (or postsecondary) education in the US is large—whether measured in absolute numbers of institutions, enrollments, expenditures, percentage of the Gross Domestic Product consumed, or in the pervasive role it plays in American society and in the “coming of age” of most American youth. There are 4,352 degree-granting colleges and universities of which about 1,685 are public (653 four year and 1,032 two year institutions) and 2,667 are private, the overwhelming majority of the latter form being private non-profit, which includes much of the most prestigious and academically-selective colleges and universities, but which also includes many of the least selective (essentially “open admissions” institutions) (NCES 2009). In addition, there are some 4000 non-degree (certificate) institutions that are private for-profit, or proprietary.

Enrollment in the fall of 2008 was over 19.5 million. Of these, approximately 80 percent are undergraduates, and 14 million are in public institutions, broken down fairly equally between four and two year institutions (primarily public community colleges). Some 3.6 million are in private not-for-profit institutions, and 1.7 million are in private for-profit institutions. (Planty et. al. 2009; Knapp et. al. 2010). As of 2007, approximately 39 percent of all 18 to 24 year olds and 46 percent of high school completers were enrolled in degree granting institutions (Planty et. al. 2009).

The first degree in US higher education is either a two-year associates degree, generally earned at a community college, with most of the credits applicable toward the four-year bachelors degree, earned at a college or university. The terms college and university are vaguely interchangeable in US higher education, with college generally referring either to an institution that does not grant a doctoral degree, or to the undergraduate (i.e., bachelors degree) programs of a university that also grants doctoral and advanced professional (e.g. medical) degrees. High school students apply for entrance to their chosen colleges or universities (public and private) in their fourth and final year of secondary school, frequently applying to multiple institutions—shopping, as it were, for the most selective, or the best financial aid package. Students are offered admission based on their applications (frequently including required essays), their academic and extra-curricular performance in high school and their scores on standard college admission examinations offered either by the College Board (the Scholastic Assessment Test, or SAT) or the ACT (formerly the American College Testing Program, offering the ACT examination)—both organizations being non-governmental, not-for-profit membership associations. Colleges and universities differ in their selectivity with high school graduation generally sufficient for admission to public community colleges, but many four year colleges also being only minimally selective.

II. Costs, or Expenditures in Higher Education in the United States

Current expenditures for 4 year public degree granting institutions in 2008 were over $207.5 billion (including over $40 billion in auxiliary enterprises and hospitals) (Knapp et. al. 2010). In 2006-07, the per student expense per full time equivalent student in public degree granting institutions was $26,062 and in private not-for-profit institutions it was $43,619 (Planty et. al. 2009). The yearly per-student expenditure increases in higher education, as in most "productivity
resistant” enterprises, are usually a bit above the average economy-wide increases, thus assuring that higher educational costs will also rise in most years at a rate slightly above the rate of inflation—and likewise for tuition.

Not only are the underlying per-student costs high in most US colleges and universities, but the share borne by parents and students--particularly prior to netting out the effects of grants and other forms of price discounting—are also higher than other countries. Four year public institutions received 18 percent of their operating revenues from tuition and fees. Private not-for-profit institutions received 36 percent and private for-profits received 88 percent of their revenues from tuition and fees (Knapp 2010). For public four year institutions average 2009-10 undergraduate tuition and other fees range from $7,020 (in state students) to $18,548 (out of state students) and dormitory and board costs amount to about $8,193 for a student living on campus. Tuition and other fees at private four year institutions average $26,273 and room and board average $9,363 (College Board 2009a).

Table 1
Higher Education Expenses Borne by Parents and Students in the United States
Academic Year 2009-10

<table>
<thead>
<tr>
<th></th>
<th>Public Universities</th>
<th>Private Universities</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
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<tr>
<td>Instructional Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special “One-Time” or</td>
<td>$40</td>
<td>$40</td>
</tr>
<tr>
<td>“Up Front” Fees</td>
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<tr>
<td>Tuition Fees</td>
<td>$7,000</td>
<td>$15,000</td>
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<tr>
<td>Other Fees</td>
<td>$2,000</td>
<td>$2,000</td>
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<tr>
<td>Books and Other</td>
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<td>$1,000</td>
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<tr>
<td>Educational Expenses</td>
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<tr>
<td>Subtotal Expenses of</td>
<td>$10,040</td>
<td>$18,040</td>
</tr>
<tr>
<td>Instruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Living</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lodging</td>
<td>0</td>
<td>$6,000</td>
</tr>
<tr>
<td>Food</td>
<td>$1,100</td>
<td>$4,100</td>
</tr>
<tr>
<td>Transportation</td>
<td>$1,300</td>
<td>$800</td>
</tr>
<tr>
<td>Other Personal Expenses</td>
<td>$1,200</td>
<td>$1,200</td>
</tr>
<tr>
<td>Subtotal Expenses of</td>
<td>$3,600</td>
<td>$12,100</td>
</tr>
<tr>
<td>Student Living</td>
<td></td>
<td></td>
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<tr>
<td>Total Cost to Parent</td>
<td>$13,640</td>
<td>$30,140</td>
</tr>
<tr>
<td>and Student</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Low Public: In-state student, living at home with parents
High Public: Out of state student, living in dormitory or shared apartment
Low Private: Living in dormitory
High Private: Living in an apartment

These expenses are deemed a family, or parental, financial responsibility, at least for the traditional-age, “dependent," student through the baccalaureate degree—but only to the limit of what the parents are deemed able to pay by a calculated Expected Family Contribution (EFC). This EFC is established by the Congress, and is the basis for awarding the federal need-based, or means-tested Pell Grants, as well as for calculating eligibility for federally guaranteed and partially subsidized student loans. The EFC, calculated either by the federal methodology, or through similar (but somewhat more financially demanding) private needs analysis systems such as the College Board's College Scholarship Service (CSS), is then subtracted from the estimated total expenses to yield an institution- and family-specific financial need.
This remaining financial need, then, must be filled by some combination of:

(a) Federal grants and governmentally-sponsored student loans;
(b) state scholarships and grants, such as the New York State's Tuition Assistance Program;
(c) institutional financial assistance, which is especially prevalent in the better-endowed private colleges and universities;
(d) Discounting, especially relevant in less selective institutions, and which is necessary simply to bring in a class (that is, which has little or no true opportunity cost to the college);
(e) student earnings, from summer or term time employment (which a majority of US students use to fill the financial "gap"); and/or
(f) additional family resources, such as relatives, or family borrowing;

III. Student Financial Assistance in the US

The US financial assistance system may be more accurately described as a non-system, albeit somehow implicitly coordinated. This system, or non-system, consists of independent sources of grant, loan, and work study assistance from the federal government, the fifty state governments, most colleges and universities (through their endowments and associated foundations), hundreds of corporate and local philanthropic funds that have financial aid as one of their programs areas, and a wide range of guaranteed and partially subsidized student loans.

In the 2007-08 academic year, 76 percent of the 2.9 million full time students in public and private institutions received some sort of financial aid including federal, state and institutional grants and federal and other loans. Of those students in 4 year public institutions, 77 percent received financial aid with 273,956 students receiving federal grants and 430,024 receiving federal loans (Knapp et. al. 2010). In 2008-09, financial aid per full-time equivalent student was $10,185 including $5,041 in grant aid and $4,585 in federal loans (College Board 2009b).

The role of the federal government in the "system" has been described by Johnstone (1995) as two-fold. First, it makes up, through grants and loan subsidies, what low and middle income families can neither afford, nor are able or willing to borrow, in order to bring at least moderate-tuition, state-sponsored public education within reach of any student who is willing also to contribute through term-time and summer earnings and loans. Second, it also makes minimally-subsidized or unsubsidized student loans widely available, and in sufficient amounts, to bring higher-priced private higher education within reach for the student whose parents have contributed up to a reasonable limit, often with considerable indebtedness or depletion of assets, who are also willing to assume substantial student indebtedness.

Financial aid to students1 from the Federal government is mainly in one of three forms:

1. Pell Grants
2. Federally Family Education Loans, offered by banks and other private lenders and guaranteed by the federal government (Subsidized Stafford Loans, Unsubsidized Stafford Loans, PLUS Loans, Consolidation loans), and Federal Direct Loans,

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1 For students attending an institution that participates in federal Title IV Higher Education Act, Part C, financial aid programs. In order to participate, an institution must offer a program of study at least 300 clock hours in length; have accreditation recognized by the U.S. Department of Education; have been in business for at least 2 years; and have a Title IV participation agreement with the U.S. Department of Education. There were approximately 6,441 Title IV institutions in 2005-06 of which 639 were public and 2,000 were private.
carrying the same terms, but offered by participating higher educational institutions and capitalized directly by the Federal Government. (The US Government plans in 2010 to end the FFEL Program and provide all governmentally-sponsored student loans through the Direct Loan Program.)

3. Federal Perkins Loan Program, offered by colleges and universities and targeted on the especially needy (with lower interest rates) capitalized from repayments on past Perkins loans plus new appropriated federal capital.

Loans

**Federally Guaranteed Loans** (both subsidized and unsubsidized) are available through the Federal Family Education Loan (FFEL) Program, to be phased out in 2010-11 and replaced by all institutions participating in the William D. Ford Federal Direct Loan (Direct Loan) Program.

**Eligibility:**
- Means tested (subsidized loans)
- Not means tested (unsubsidized loans)
- Available to students in public and private colleges and universities
- Cover tuition fees and living costs

**Operation:**
To apply for federal and state financial aid (loans and grants), students need to complete the Free Application for Federal Student Aid. All federal grant and loan awards are determined by the FAFSA, and nearly all colleges use the FAFSA as the basis for their own financial aid awards. The federal government (Office of Federal Student Aid in the Department of Higher Education) uses data provided on the FAFSA to calculate a student’s Expected Family Contribution (EFC). The Office of Federal Student Aid creates a Student Aid Reports and sends copies to the student and to the schools that he/she has indicated on the FAFSA form. The Financial Aid Offices at the student’s chosen institutions then calculate a student’s Cost of Attendance (COA) which includes tuition, living expenses, miscellaneous fees, books, etc. COA minus EFC equals a student’s financial need, which the Financial Aid Offices then try to meet with federal grants, state grants, academic or talent scholarships, institutional grants, federal work study, and various loans.

Through 2009, schools may choose to offer their students one of two types of federally guaranteed loans: those administered through the Direct Loan program or those administered through the FFEL program\(^2\). Each institution then sends the student an award level that outlines the amount of federal, state and institutional aid that the student is eligible for and in the case of the FFEL loans a Master Promissory Note to be used when applying to one of the lenders who participate in the FFEL program. In the case of direct loans, the student must sign a MPN issued by the school or the Department of Education. All financial aid is paid through a student’s college or university and is generally first used to pay for tuition, fees and room and board. Remaining aid is paid to the student for any remaining educational expenses.

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\(^2\) Recent (March 2010) education reforms will end the FFEL as of July 1, 2010 and all new federal student loans will be lent by the government directly. The loans will be delivered and collected by private companies under performance-based contracts with the Department of Education.
Source of Capital:
The Subsidized and Unsubsidized Stafford Loans, PLUS Loans and Consolidation loans offered through the Federal Family Education Loan (FFEL) Program, due to be phased out beginning in 2010, have been capitalized through banks and other private participating lenders (frequently recapitalized through secondary markets). Loans offered through the William D. Ford Federal Direct Loan (Direct Loan) Program, to take over all federally-guaranteed loans during the 20010-11 academic year, are capitalized by the federal government via the U.S. Department of Education.

Risk:
FFEL loans: The federal government will continue to guarantee repayment in the case of default and a predetermined profit margin, paying a subsidy if the student interest rate falls below a set level. The lender must pay the federal government a loan origination fee of 3 percent and the guarantor an insurance fee of not more than 1 percent of the loan. The lender may pass on both of these fees to the borrower.

Direct loans: The federal government provides the capital and so bears most of the risk in the direct subsidized and unsubsidized loan programs, but lenders cover some of the subsidy costs through a loan fee of 3 percent, while the direct PLUS loans include a 4 percent loan fee.

Minimum and maximum amounts:
- **Subsidized Stafford Loans**: Up to $3,500 for first year dependent undergraduate students, $4,500 for second year students and up to $5,500 for third and fourth year students.
- **Unsubsidized Stafford Loans**: Up to $2,000 for all students.
- **Plus Loans**: available to parents. The loan may not exceed the student’s estimated cost of attendance minus other financial aid awarded.

Range of Indebtedness:
Average student debt among those students who borrow and graduate from four year public institutions is over $17,000.

Percentage of total undergraduate students who have borrowed:
- **Stafford Subsidized**: 30 percent (2007-08)
- **Stafford Unsubsidized**: 22 percent (2007-08)
- **PLUS**: 3.8 percent (2007-08)

Repayment terms:
- **Subsidized Stafford Loans**: Government pays the interest on the loan during the in-school years and grace period. The interest rate on loans made after July 1, 2009 is fixed at 5.6 percent. Students have a six month grace period starting the day after they graduate, leave school or drop below half-time enrollment during which they do not have to make payments. Students have from 10 to 25 years to repay their loan depending on the repayment plan chosen. Under the standard repayment plan monthly payments are fixed for up to 10 years. Under the graduated repayment plan, monthly payments start off lower and gradually increase every two years. Loans must be paid off in 10 years. Under the extended fixed or extended graduated repayment plan fixed or graduated monthly payments may be extended to up to 25 years. For the income contingent repayment plan (direct loans only), the monthly payment is
adjusted each year based on annual income, family size and total amount of loan. After 25 years, any unpaid loan amount is forgiven. A hybrid fixed-schedule-income contingent student loan plan was added in 2009 under the Income-Based Repayment Option which limits loan repayments to 15 percent of the borrower’s adjusted gross income in excess of 150 percent of the official poverty line.

- **Unsubsidized Stafford Loans**: The borrower is responsible for interest on the loan. The interest rate on loans made after July 1, 2006 is fixed at 6.8 percent. Generally the interest accumulates on the unsubsidized loan and is capitalized and added to the principal balance. A student can choose to make monthly interest payments during in-school and grace periods. Repayment terms are the same as for the Subsidized Stafford Loans.

- **Plus Loans**: Interest rate fixed at 7.9 percent for direct loans and 8.5 percent for FFEL loans. Parents must begin paying the loan within 60 days after final loan disbursement. Interest is accumulated from first loan disbursement.

- **Consolidation Loans**: The interest rate for a consolidation loan is the weighted average of the interest rates of the loans that are consolidated not to exceed 8.25 percent. Consolidation loans provide access to several alternate repayment plans besides standard ten-year repayment. These include extended repayment, graduated repayment, income contingent repayment (Direct Loans only) and income sensitive repayment (FFEL only).

**Federal Perkins Loan Program**: The Federal government also makes Perkin Loan allocations to eligible institutions so that they may provide low-interest loans to needy students. Institutions must provide an additional 25 percent to the total loan allocation.

**Eligibility:**
- Means tested

**Operation:**

Students apply to the financial aid office at the school they attend. Not all schools participate in the Perkins Loan Program. Each school has its own application deadline, and serves as the loan's lender. The Perkins Loans do not have an origination fee. Because schools lend this money directly to enrolled students, the loans are usually transferred internally through a college's bursar's office.

**Source of Capital:**

Federal government and participating institutions

**Minimum and maximum amounts:**

The maximum loan amount is $4,000 per year and loans vary according to the applicant’s financial need and other financial assistance received.

**Number of students who have borrowed**

From 2000 to 2005, an average of about 725,000 students received Perkins loans worth an average of $2,100 apiece each year, according to the Department of Education. College financial aid officers say they expect this fall's numbers to drop back to levels seen in the mid-1990s—about 670,000 students receiving about $1,500 apiece in Perkins loans for the year (Clark 2008).
Repayment terms:
The loans carry a subsidized 5 percent interest rate paid by the Federal Government during in-school years and grace period. They have a nine month grace period following graduation and have a repayment period of 10 years.

Federal Grants in the US

Federal Grants include:

- **Pell Grants**: non-repayable, need based, with a maximum value in 2009-2010 of $5,350.

- **Federal Supplemental Educational Opportunity Grant (FSEOG)** for undergraduates with exceptional financial need. Pell Grant recipients with the lowest expected family contributions (EFCs) will be considered first for a FSEOG grant between $100 and $4,000 a year, depending on when application is made, financial need, the funding at the school student is attending, and the policies of the financial aid office at the school.

- **Academic Competitiveness Grant** made available for the first time for the 2006-2007 school year for first year college students who graduated from high school after January 1, 2006, and for second year college students who graduated from high school after January 1, 2005. An Academic Competitiveness Grant will provide up to $750 for the first year of undergraduate study and up to $1,300 for the second year of undergraduate study to full-time students who are eligible for a Federal Pell Grant and who had successfully completed a rigorous high school program, as determined by the state or local education agency and recognized by the Secretary of Education. Second year students must maintain a cumulative grade point average (GPA) of at least 3.0.

- **The National Science & Mathematics Access to Retain Talent Grant (National SMART Grant)** is available during the third and fourth years of undergraduate study to full-time students who are eligible for the Federal Pell Grant and who are majoring in physical, life, or computer sciences, mathematics, technology, or engineering or in a foreign language determined critical to national security. Provides up to $4,000 for each of the third and fourth years of undergraduate study to full-time students.

Alternatives Sources of Student Financial Aid

Federal Work Study: Through grants to participating postsecondary schools, the program provides need-based part-time employment for undergraduate students with financial need. Schools must provide one dollar for every three provided by the government; the program encourages schools to place students in community service positions. Students are paid by the hour. Wages for the program must equal at least the current federal minimum wage but might be higher, depending on the type of work done and the skills required. The amount earned cannot exceed the student’s total FWS award. When assigning work hours, the employer or financial aid administrator considers the student’s award amount, class schedule, and academic progress.

State grants and loans: Every state offers need-based grants to its resident undergraduates. Some states have signed reciprocity agreements with other states to offer need-based grant programs to out-of-state undergraduates. Some states offer loans and others operate programs similar to the federal work-study or cooperative education programs.

Private loans: A number of banks and other private lenders have been offering loans to credit-worthy students (especially to advanced professional students and to students at expensive private colleges and universities) without governmental in-school and grace period subsidies nor governmental guarantees. The volume of private lending in reached $22.3 billion in 2007-08 in spite of these much less favorable terms than were available on the governmentally-sponsored
loans – because of limits on annual and aggregate borrowing under the federal programs and the rapidly rising costs of higher education (both tuition fees and the costs of student living), especially in advanced professional programs and especially at private universities. The liquidity crisis of 2008 brought about an abrupt change and private loan volume declined by almost 50 percent in 2008-09 to $11 billion (College Board 2009b; ). It remains to be seen if there will be an adjustment in the future.

### Table 2

<table>
<thead>
<tr>
<th>Form and Source of Aid</th>
<th>Dollars (in $Billions)</th>
<th>Percent of Total Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Loans</td>
<td>$83.9</td>
<td>47</td>
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<tr>
<td>Federal Grants</td>
<td>$24.7</td>
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<tr>
<td>Federal Work-Study</td>
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<td>Education Tax Benefits</td>
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<td>State Grants</td>
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<tr>
<td>Institutional Grants</td>
<td>$31.1</td>
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<tr>
<td>Private and Employer Grants</td>
<td>$11.9</td>
<td>7</td>
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<tr>
<td>Nonfederal Loans (state sponsored and private sector)</td>
<td>$11.9</td>
<td>7</td>
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<tr>
<td><strong>Total Funds Used to Finance Postsecondary Education</strong></td>
<td><strong>$180.2</strong></td>
<td><strong>100</strong></td>
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</tbody>
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All forms of student assistance for academic year 2008-09 were estimated by the College Board to be some $180.2 billion, as shown in Table 2.

A major trend in US student financial assistance has been the great and sudden growth in various forms of non need-based assistance from federal, state, and institutional sources. Some of this is in the form of merit-based grants. However, most non need-based assistance takes the form of tax benefits, either from the deductibility of tuition payments or from the tax deductibility of earnings from tuition savings plans. While estimates of the effective cost of these benefits are difficult and controversial, the “lost tax” cost of tax credits has been estimated by the College Board to be $6.8 billion in 2008-09.

### References


