



Philosophy of Financial Aid Need Analysis

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Introduction

The philosophy of need analysis provides principles that guide the design of financial aid formulas that evaluate a family's ability to pay for college. Need analysis calculates the shortfall between total college costs and ability to pay. Need-based financial aid is awarded to bridge this gap, thereby eliminating financial need as a barrier to college access and success.

This paper presents an overview and detailed guide to the philosophy of need analysis. After discussing the goal of need analysis and reviewing the history of need analysis, it presents nine important principles of need analysis. This is followed by an explanation of the snapshot philosophy and how changes in financial and demographic circumstances are considered relative to the snapshot.

Next, the paper defines financial need in terms of discretionary income and discretionary net worth. Discretionary income is defined as the income that remains after mandatory expenses, such as basic living expense allowances and allowances for taxes, are subtracted. The income protection allowance is an example of a basic living expense allowance.

Financial need may be reduced by the receipt of financial aid, such as estimated financial assistance. The types of financial aid that are not subtracted from financial need are often arbitrary, such as certain education tax benefits, military student aid and unsubsidized loans. The inclusion of private scholarships in estimated financial assistance causes scholarship displacement, preventing students from making full use of the scholarships they've won.

There are several other problems with need analysis. The complexity of financial aid forms and formulas is a barrier to college access and success, as is the verification process. There is a tension between simplification and the accuracy of financial aid formulas. But, even with increased complexity, need analysis formulas are not all that accurate, in part due to several arbitrary design decisions that miss the mark. This causes need analysis, as currently implemented, to be a rationing system and not a true assessment of ability to pay.

Inadequate grant funding means that most colleges do not meet full financial need. The average unmet need now exceeds \$10,000. The focus at some institutions has shifted away from helping low-income students, with merit aid increasing faster than need-based aid. Setting a minimum expected family contribution, whether at zero or a higher amount, caps the amount of financial aid a low-income student can receive. Some financial aid award letters make it harder to evaluate college affordability by blurring the distinction between grants and loans.

A better understanding of the principles of need analysis will lead to improvements in assessments of ability to pay for college, enabling more students to enroll in and graduate from college.

Executive Summary

The overall goal of financial aid need analysis is to make it possible for all students to pursue a college education, regardless of family income and ability to pay. Need analysis measures the family's financial strength, allowing college financial aid to be awarded based on the student's financial need.

The philosophy of need analysis seeks horizontal and vertical equity, where families with similar financial circumstances qualify for similar amounts of financial aid and lower-income students qualify for more financial aid. The current actual financial aid formulas fall short of these goals.

This paper presents nine principles of need analysis. It discusses the snapshot philosophy and how changes in an applicant's financial and demographic information are handled. It defines financial need based on discretionary income, independently of college costs and available financial aid funds.

This paper also discusses flaws in financial aid forms and formulas, including:

- Scholarship displacement prevents students from making full use of the scholarships they won.
- Complexity of financial aid forms and formulas is a barrier to college access.
- Verification is also a barrier to college access, by repeatedly requiring low-income students to prove that they are poor.
- Some family resources are double-counted by financial aid formulas as both income and assets.
- There are cliff effects in financial aid formulas that cause big changes in aid eligibility when there are small changes in income and assets.
- Perceived and actual penalties for savings in financial aid formulas discourage families from saving for college.
- Financial aid formulas protect retirement plans, small businesses and the family home, but not college savings plans.
- Financial aid formulas do not consider unsecured consumer debt, including student loans, as an offset to cash flow and assets.
- Financial aid formulas do not allow the expected family contribution (EFC) to go below zero, even for students who live below the poverty line. Some financial aid formulas have higher minimum contributions.
- Most colleges do not meet full financial need. Most of the colleges that claim to meet full need do so by changing the definition of financial need. Yet, total funding for institutional merit and non-need grants is about 50% greater than total funding for institutional need-based grants.
- The high-cost / high-aid model and the lack of adequate grant funding discourages low-income students from applying to colleges with a high sticker price.
- Low-income students must pay a greater share of total income to attend a community college than middle-income students pay to attend a private, non-profit 4-year college.
- Most financial aid packaging philosophies require low-income students to borrow, even though the prospect of debt has a chilling effect on their enrollment. Low-income students and their families may also have a cultural sensitivity to borrowing.
- The FAFSA does not facilitate proactive outreach to students to encourage financial aid appeals.
- Financial aid award letters often blur the distinction between grants and loans, misleading families about the true cost of college
- Average unmet need has doubled in the last decade, and now exceeds \$10,000 per year.
- Scholarships and grants are considered taxable income if they are used to pay for housing, meal plans and other living expenses.

This paper also discusses approaches to financial aid simplification, past and present.

The Goal of Financial Aid Need Analysis

The purpose of financial aid need analysis is to eliminate money as a barrier to college access and success. A lack of money should not prevent a student from pursuing a postsecondary education.

This idea is a recurring theme in speeches by political leaders.

In our democracy, every young person should have an equal opportunity to obtain a higher education, regardless of his station in life or financial means.

- President John F. Kennedy, February 6, 1962

Every man, everywhere, should be free to develop his talents to their full potential - unhampered by arbitrary barriers of race or birth or income.

- President Lyndon B. Johnson, February 5, 1968

No one should be held back from realizing their potential by fears that they will not be able to afford to go to university or that they will graduate with unmanageable levels of debt.

- Gordon Brown, Britain's Prime Minister, July 5, 2007

In the United States of America, no one should go broke because they chose to go to college.

- President Barack Obama, January 27, 2010

History of Financial Aid Need Analysis

John Monro of Harvard University created the first financial aid need analysis formula in 1953. His system for measuring the financial need of financial aid applicants separated the total cost of education from the student's and parents' resources. His formula was based on 15% of the family's net income, minus \$100 per child in public school and \$200 per child in private school.

The College Board created the College Scholarship Service (CSS) in 1954 to produce a single financial aid application form. CSS created the Parent's Confidential Statement (PCS) in 1956 and the Married Student Statement (MSS) in 1961. The Married Student Statement later became the Student's Financial Statement (SFS). Centralized processing of financial aid applications started with the 1960-61 award year.

ACT developed a separate form, the Family Financial Statement (FFS).

The Higher Education Amendments of 1972 (P.L. 92-318) created the Basic Educational Opportunity Grant (BEOG), which later became the Federal Pell Grant. This legislation specified a formula for determining eligibility for the grant.

In 1974, the National Task Force on Student Aid Problems identified the multitude of financial aid forms as a source complexity. The goal was to create one form and one methodology for evaluating financial need. This led to the Uniform Methodology.

In 1976, CSS created a single financial aid application form, the Financial Aid Form (FAF), to replace the PCS and SFS forms. The FAF was accepted by the U.S. Department of Education in 1977 for determining eligibility for the BEOG.

The Higher Education Amendments of 1986 (P.L. 99-498) created the Congressional Methodology (CM), encoding the need analysis formula into law. It required the use of a base year for income and established a minimum student contribution. The legislation also created the Simplified Needs Test.

The Higher Education Technical Amendments Act of 1987 (P.L. 100-50) added Automatic Zero EFC. It also changed the need analysis formula to exclude the family's principal place of residence from assets, in part because the interest rates on home mortgages had risen into the double digits.

The Higher Education Amendments of 1992 (P.L. 102-325) created the Free Application for Federal Student Aid (FAFSA). It also merged the Pell Grant Formula with the Congressional Methodology to yield the Federal Methodology (FM). The FAFSA is a free form. It replaced the FAF and FFS, which required families to pay a fee. The minimum student contribution was eliminated, allowing a calculated EFC of zero.

CSS created the CSS/Financial Aid PROFILE form (later known as the CSS Profile) and the Institutional Methodology (IM) for colleges that wanted a more detailed financial aid formula for awarding their own financial aid funds.

The online FAFSA, known as FAFSA on the Web, became available starting with the 1997-1998 award year. The development of the online FAFSA was instigated by Leo Kornfeld and Mark Kantrowitz.

The Higher Education Amendments of 1998 (P.L. 105-244) authorized limited data sharing between the U.S. Department of Education and the Internal Revenue Service (IRS).

The Deficit Reduction Act of 2005 (P.L. 109-171) added the small business exclusion to the FAFSA.

The College Cost Reduction and Access Act of 2007 (P.L. 110-84) simplified the federal need analysis methodology by eliminating Worksheet A from the FAFSA. It also increased the auto-zero EFC income threshold from \$20,000 to \$30,000 and indexed it to inflation.

Bulk distribution of paper FAFSAs ended with the 2008-2009 award year. Use of FAFSA on the Web had increased enough that most FAFSAs were submitted online.

The Higher Education Opportunity Act of 2008 (P.L. 110-315) authorized the creation of an EZ FAFSA and experimentation with prior-prior year need analysis. The EZ FAFSA was never established as a separate form.

The IRS Data Retrieval Tool became available starting with the 2009-2010 award year.

The Consolidated Appropriations Act of 2012 (P.L. 112-74) reduced the auto-zero EFC income threshold from \$32,000 to \$23,000.

Starting with the 2017-18 award year, the FAFSA switched from using prior-year (PY) income and tax data to using prior-prior year (PY) income and tax data. This allowed more applicants to use the IRS Data Retrieval Tool.

In 2018, the U.S. Department of Education released myStudentAid, an App version of the FAFSA, for the 2019-2020 FAFSA. The App is available on Apple and Android devices. The U.S. Department of Education also redesigned the online FAFSA with a responsive user interface that resized automatically to fit the screen size of desktops, tablets and smartphones.

In 2020, the auto-zero EFC income threshold increased to \$27,000 for the 2021-2022 FAFSA.

Principles of Financial Aid Need Analysis

The evaluation of a student's financial need is guided by several key principles

- **The purpose of financial aid is to make it possible for the family to pay for college.** In effect, financial aid is used to recruit low-income students who otherwise could not afford to pay for college.
- **Families have the primary responsibility for paying for their children's college education.** Federal, state and institutional aid will supplement but not replace the family's own financial resources. The government and colleges contribute only when the family is unable to pay for college. After all, who has the greater responsibility for paying for a child's college education: the family or the taxpayer?
- **Financial aid is awarded based on *ability to pay*, not *willingness to pay* for college.** Financial aid formulas distinguish between needs and wants. Financial aid formulas consider the family's discretionary income and assets to be available to pay for college costs. Vertical equity requires that financial aid should decrease as ability to pay increases.
- **Financial aid is not intended to subsidize lifestyle choices.** Again, need analysis is based on needs, not wants. Luxuries are not really necessary.
- **Financial aid formulas should provide a standardized assessment of ability to pay.** The assessment of ability to pay should be standardized. Horizontal equity requires that families with similar financial circumstances should have to pay similar amounts. The evaluation of ability to pay should be consistent and fair. The annual cost of attendance should also be standardized, comprehensive and reasonable.
- **Ability to pay is evaluated independently of college costs and available financial aid funds.** A family's financial strength should not depend on the type of college or the generosity of the college's financial aid budget.
- **Financial aid should be based on an evaluation of the family's documented financial resources, including income and assets.** Need analysis emphasizes the family's discretionary cash flow, as opposed to wealth. The need analysis process relies on documentation of income and assets to ensure accuracy and fairness. Need analysis often involves a holistic review of the family's complete financial situation.
- **No double dipping.** Need-based financial aid should not exceed the full college cost of attendance. Students can receive financial aid for the same expense only once.
- **Special circumstances are addressed through professional judgment.** Since financial aid formulas cannot address all exceptional situations, applicants can appeal for more financial aid based on documented special circumstances. College financial aid administrators may use their professional judgment to make adjustments based on the financial impact of the special circumstances on the family's ability to pay.

Snapshot Philosophy

Need analysis assesses the family's ability to pay based on a specific point in time. It does not evaluate how the family's ability to pay has changed over time.

The intent of need analysis is to predict the family's ability to pay during the academic year. But, because need analysis must be based on what is, not what might be, it is based on a current snapshot of the family's financial strength.

However, income and assets are assessed based on different points in time. Income and taxes are based on two-year-old information from the prior-prior year. Asset information is based on current information as of the date the financial aid application is submitted.

Use of a base year is intended to serve as a proxy for the family's finances during the upcoming academic year.

Income and tax information is based on federal income tax returns because this ensures the information is verifiable and, therefore, more likely to be accurate.

Prior-prior year information is used instead of prior-year information in part because of timing considerations. Use of prior year information would have required applicants to estimate their income and tax information, yielding less accurate results. The prior-prior year is the most recent year for which actual federal income tax returns are available. Most applicants will have already filed their federal income tax returns by the start date for filing financial aid application forms. The change also aligns the financial aid application process with the college admissions calendar.

Changes in Financial and Demographic Information

Financial information should be accurate as of the date the application for financial aid is filed. But, a snapshot isn't always accurate. While financial and demographic information is often stable, it does occasionally change. The use of income information from the prior-prior year may yield an inaccurate estimate of ability to pay if family income has changed or is volatile, such as occurs during a natural disaster, including a pandemic, or when a wage earner is unemployed or self-employed.

To ensure consistency in the evaluation of ability to pay, changes in application information are limited to four main types of changes.

- **Corrections** can occur when the original application information was not accurate as of the application date. A correction changes the financial information to be accurate as of the date the application was filed. Errors may be corrected at any time. Corrections are mandatory.
- **Updates** involve changes that occur after the date the financial aid application is submitted. On the Free Application for Federal Student Aid (FAFSA), allowable updates are limited to changes in dependency status, household size and the number of children in college. Changes in household size and number in college can occur only if the application is selected for verification. Dependency status can be updated at any time, other than when due to a change in the student's marital status. Updates are mandatory if these requirements are met.

- **Adjustments** can occur when special circumstances affect the family’s ability to pay for college. Adjustments are allowed only through an exercise of professional judgment by the college financial aid administrator when the family appeals for more financial aid. Adjustments must be based on a case-by-case review of adequate documentation of special circumstances. Special circumstances involve differences, such as changes from the base year to the current year and circumstances that differentiate the family from the typical family. Changes in income can be caused by job loss, furloughs, pay cuts and natural disasters. They can also be caused by the previous income being atypical, such as including one-time events that are not reflective of ability to pay during the award year. Examples include receipt of a big bonus and unusual capital gains. Changes in income can be addressed by switching to any 12-month period, such as an estimate of income during the current year or the academic year. If the family income is volatile (changing every year), such as might occur with self-employed individuals, colleges might use an average of the past 3-5 years of income instead. Adjustments are optional, subject to the discretion of the financial aid administrator.
- **Overrides** change the student’s dependency status from dependent to independent in unusual circumstances. Dependency overrides are rare and generally involve a dissolution of the family relationship or situations in which it is unsafe for the student to have contact with his or her parents, such as an abusive home environment, abandonment, or incarceration or institutionalization of both parents. Parents refusing to contribute, complete the financial aid application forms, participate in verification or pay for college are not sufficient justification, even in combination, for a dependency override.

What Is Financial Need?

Financial aid formulas calculate ability to pay independently of college costs and available financial aid funds.

Financial aid is intended to provide funding to cover financial need, which is the shortfall between total college costs and the family’s ability to pay. It is defined as the difference between the college’s cost of attendance (COA) and the expected family contribution (EFC).¹

$$\text{Financial Need} = \text{COA} - \text{EFC}$$

The cost of attendance includes tuition and fees, room and board, books, supplies and required equipment, transportation, miscellaneous personal expenses, dependent care costs and disability-related expenses

The expected family contribution is a measure of the family’s ability to pay. It is based on the income and assets of the student and parents, family size, number of children in college and the age of the custodial parent(s).

Ability to pay is calculated by assessing a portion of the family’s discretionary income and discretionary net worth.

¹ The Consolidated Appropriations Act, 2021 renamed the Expected Family Contribution (EFC) as the Student Aid Index (SAI) starting with the 2023-24 FAFSA, which has subsequently been delayed until the 2024-25 FAFSA.

What Is Discretionary Income?

Discretionary income, also known as available income, is how much income is potentially available to pay for college. Financial aid formulas assess a portion of discretionary income.

Discretionary income is what remains after income is used to pay for non-discretionary expenses. Discretionary income is a measure of the family's cash flow.

To calculate discretionary income, start with the adjusted gross income (AGI) from the federal income tax returns. Add back in untaxed income and benefits, such as retirement plan contributions. Untaxed income and benefits are exclusions from income that are discretionary in nature, such as voluntary retirement plan contributions. The sum of AGI and untaxed income is the total income.

$$\text{Total Income} = \text{Adjusted Gross Income (AGI)} + \text{Untaxed Income}$$

Basing the expected family contribution (EFC) on total income prevents applicants from artificially reducing their income by temporarily increasing their retirement plan contributions. This does not penalize them for contributing to retirement, it just doesn't give them an advantage from doing so.

Total income is reduced by need-based financial aid that was included in income, such as the taxable portion of scholarships and grants and taxable earnings from Federal Work-Study and other need-based student employment programs. This prevents need-based financial aid from affecting financial need.

Given total income, the next step is to calculate discretionary income by subtracting allowances for required or mandatory expenses from total income.

$$\text{Discretionary Income} = \text{Total Income} - \text{Mandatory Expenses}$$

A similar approach is used with income-driven repayment plans that base the monthly loan payment on a percentage of discretionary income. The income-driven repayment plans simplify the calculation of discretionary income by using definitions of mandatory expenses based on the poverty line. They subtract a multiple of the poverty line from AGI. These formulas also use AGI instead of total income and don't consider assets.

$$\text{Discretionary Income} = \text{AGI} - 150\% \text{ Poverty Line}$$

Since discretionary income is available to pay for college costs, the financial aid formulas count a large portion of discretionary income as paying for college, leaving the rest for the family's other priorities.

Mandatory vs. Discretionary Expenses

Mandatory expenses are based on needs, not wants. Mandatory expenses are involuntary. There is no choice in the how the family spends the money.

Mandatory expenses include non-discretionary expenses like:

- Federal, state and local income taxes
- FICA taxes (Social Security and Medicare taxes)
- Basic living expenses that provide a minimal standard of living

- The employment expense allowance, which is an allowance for the increased costs for two-income households, such as expenses for childcare, housekeeping, transportation and meals away from home
- Child support obligations (paid)

Discretionary expenses are optional expenses, anything that is not mandatory. You will not die or go to jail if you don't spend the money. Lifestyle choices are an example of discretionary expenses, which can include mobile phones, cable TV, penthouse apartments and other luxuries.

What Is the Income Protection Allowance?

The income protection allowance (IPA) is an example of a basic living expense allowance. The poverty line is another example of a basic living expense allowance.

The income protection allowance is a modest allowance for basic living expenses based on 1967 Bureau of Labor Statistics (BLS) consumption data updated annually for inflation. The income protection allowance is calculated based on household size and the number of children enrolled in college at the same time.

The income protection allowance includes food, housing, transportation, clothing and medical care. The breakdown was specified in Dear Colleague Letter GEN-98-2 as follows:

- 30% Food
- 22% Housing
- 9% Transportation
- 16% Clothing and Personal Care
- 11% Medical Care
- 12% Other Family Consumption

Reductions to Financial Need

Financial need is reduced by the receipt of financial aid.

Thus, financial need is formally defined as the cost of attendance (COA) minus the annual expected family contribution (EFC) minus estimated financial assistance (EFA).

Estimated financial assistance (EFA) includes scholarships, grants, loans and national service education awards.

Some forms of financial assistance are arbitrarily excluded from estimated financial assistance, so the receipt of these forms of aid does not reduce financial need. The following tax benefits and government funds are not included in EFA.

- American Opportunity Tax Credit (AOTC)
- Lifetime Learning Tax Credit (LLTC)
- Tax-free distributions from 529 college savings plans, prepaid tuition plans and Coverdell education savings accounts
- Veterans' education benefits such as the G.I. Bill
- Special combat pay
- Vocational rehabilitation funds
- Amounts included in the calculation of the EFC
- Amounts used to replace the EFC (except to the extent they exceed the EFC), such as unsubsidized federal loans and private student loans

Benefits that are already considered in the financial aid formula are also excluded from estimated financial assistance, so that the receipt of these forms of financial aid aren't counted twice.

In addition, certain types of untaxed income and benefits are not counted in untaxed income. These include certain child tax credits, welfare benefits, the earned income tax credit and untaxed Social Security benefits. In addition, the tax credit on special fuels and the foreign income exclusion are also not counted in untaxed income.

EFA Causes Scholarship Displacement

Scholarship displacement is an example of estimated financial assistance (EFA) reducing financial need.

Scholarship displacement prevents students from making full use of the scholarships that they have won.

If a student wins a private scholarship, their financial need is reduced. For example, if a student has \$2,500 in institutional grants, then wins a \$1,000 private scholarship, some colleges reduce the institutional grant to \$1,500 instead of reducing unmet need or the student's debt or work burden.

But, average unmet need is now over \$10,000 based on data from the National Postsecondary Student Aid Study (NPSAS), so there should be no overawards except for the largest scholarships. Only 0.9% of undergraduate students receive scholarships over \$10,000 each year, and only 0.1% over \$25,000, based on NPSAS data.

Instead, scholarship displacement is caused by institutional policies that mandate maintaining a constant gap of unmet need for all students receiving financial aid.

Federal overaward regulations almost never lead to scholarship displacement. The Federal Pell Grant is a form of first-dollar financial aid. It is never reduced, not even if there is an overaward. Only campus-based aid, such as Federal Work-Study (FWS) and the Federal Supplemental Educational Opportunity Grant (FSEOG), and federal student loans are subject to overaward restrictions.

Some state grants and state promise programs are last-dollar financial aid programs. This requires the state funds to be reduced first if the student is overawarded. In some cases, state rules consider a student to be overawarded based on just tuition and textbook expenses, even if the total financial aid funds fall short of covering the cost of attendance. For example, a student might be left with room and board expenses after the cost of tuition and textbooks is covered.

Scholarship displacement is just one of many flaws in need analysis.

Complexity Is a Barrier to College Access

The complexity of financial aid forms is a barrier to college access.

The Free Application for Federal Student Aid or FAFSA is used to apply for need-based financial aid from the federal and state governments and most colleges and universities. The FAFSA has 106 numbered questions, more questions than appear on federal income tax returns.²

Some students do not file the FAFSA or complete verification because of the complexity of the financial aid application process. Low-income students are leaving billions of dollars on the table. About 2 million students would have qualified for a Pell Grant in 2015-16, but did not file the FAFSA. Of them, 1.2 million would have qualified for the maximum Pell Grant. About 10% of those who do not file the FAFSA say that they did not file the form because the FAFSA is too much work.

The CSS Profile,³ which is used to apply for institutional financial aid from about 200 mostly private colleges and some scholarship programs, is even more complicated. The CSS Profile has more than twice as many questions (241+) as the FAFSA.

Verification Is a Barrier to College Access

Verification is also a barrier to college access.

The verification burden disproportionately falls on low-income students, since Federal Pell Grant recipients are more likely to be verified. Low-income students are three times more likely to be selected for verification than middle- and high-income students, perhaps because they are more likely to receive Federal Pell Grants. Low-income students with an automatic zero EFC (as opposed to a calculated zero EFC) are four times more likely to be selected for verification than middle- and high-income students with an automatic zero EFC. Just how many times does a low-income student have to prove that they are poor?

Problems with using the IRS Data Retrieval Tool and getting an IRS Tax Return Transcript also serve as barriers to college access.

Applicants who use the IRS Data Retrieval Tool are less likely to be selected for verification, since any data element that is transferred from the IRS is assumed to be accurate. So, the IRS Data Retrieval Tool has the potential to improve college access. But, many low-income students can't use it. The IRS Data Retrieval Tool requires the address on the FAFSA to match the address on the federal income tax return. Low-income students are often unable to use the IRS Data Retrieval Tool because they fall below the income thresholds for filing a federal income tax return or because they are more likely to be homeless or to have moved since they filed their prior-year income tax returns.

The IRS Get Transcript tool⁴ requires the student to have a mobile phone and either a credit card, auto loan or mortgage. Low-income students can't satisfy these requirements, even to obtain an IRS Verification of Non-Filing Letter, which colleges require for awarding of federal student aid funds.

² The Consolidated Appropriations Act, 2021, simplifies the FAFSA, reducing the number of questions to about three dozen. The changes are effective with the 2023-24 FAFSA, but full implementation has been delayed until the 2024-25 FAFSA.

³ <https://cssprofile.collegeboard.org/>

⁴ <https://www.irs.gov/individuals/get-transcript>

Flaws in Financial Aid Formulas

Financial aid formulas double count some funds as both income and asset. For example, gifts to the student may get counted twice, once as untaxed income and once as an asset. Student earnings may get counted twice as well.

There are cliff effects in the financial aid formulas due to income thresholds. Cliff effects can cause big changes in eligibility for need-based financial aid when parent income crosses the \$50,000 threshold for the simplified needs test. The simplified needs test is a simplified version of the federal need analysis methodology that is used to calculate the expect family contribution based on the FAFSA.

The financial aid formulas do not really measure ability to pay. Instead, they are a student aid index that is used as a rationing system. Inadequate grants and scholarships lead to gapping (which leaves the student with unmet need) and meeting need with student loan debt. Some colleges give grants to students who need them the most, while others give everybody a small grant. Many colleges award grants that are not based on financial need.

There is both a perceived and an actual penalty for saving in the financial aid formulas. This discourages some families from saving for college. But, even small amounts of savings can significantly increase the likelihood that a low-income student will enroll in and graduate from college. The benefit is so large that several states contribute to the 529 college savings plans of newborn children and match the contributions of low-income parents.

The FAFSA does not ask a question about special circumstances. This makes it more difficult for students and their families to appeal for more financial aid because many are unaware of the opportunity to ask for a professional judgment review. At many colleges, the appeals process is reactive instead of proactive. There is little or no outreach to students whose ability to pay might be affected by special circumstances.

A possible solution would be to add a question to the FAFSA about the most common special circumstances, such as “Has anyone in your family experienced job loss or a pay cut in the last two years?” or “Is your family’s ability to pay for college affected by any unusual financial circumstances?”

Flaws in the Philosophy of Financial Aid and Need Analysis

There are several flaws in the philosophy of financial aid and need analysis.

Is the goal of financial aid to allow the student to attend a *specific* college or *any* college? Since financial need is the difference between the cost of attendance and the EFC, financial need is greater at higher-cost colleges. But, the decision to attend a higher cost college is a discretionary choice that diverts financial aid funds to wealthier students. Should financial aid cover a high-cost college? The student’s first-choice college? Or the least expensive college? College access is more important than college choice, but the financial aid formulas place the same priority on college access and college choice.

Students at community colleges receive only 10.5% of institutional grant money, despite representing 39.1% of college enrollments, while students at private non-profit 4-year colleges receive 35.3% of institutional grant money, despite representing only 15.1% of college enrollments. This data is based on the 2015-16 National Postsecondary Student Aid Study (NPSAS).

Similarly, students who enroll at colleges that cost less than \$8,000 and colleges that cost \$24,000 or more each represent about a quarter of total college enrollments (26.0%), based on data from the 2015-16 NPSAS. But, the students at the less expensive colleges get only 6.1% of institutional grant funds while the students who enroll at the more expensive colleges get more than half of institutional grant funds (57.2%).

There is a tradeoff between the complexity of the financial aid form and formula and the accuracy of assessments of the family's financial strength. A longer financial aid form yields a more precise measurement of ability to pay for college, but the increased complexity can also deter some students from applying for financial aid.

Should need analysis be designed to enable low-income students to afford to enroll in college or to prevent wealthy students from getting more financial aid than they deserve? Increases in the complexity of financial aid forms and formulas are often aimed at preventing wealthy students from looking like they are poor. Isn't it worthwhile to allow a few wealthy students to receive extra financial aid, if it allows more low-income students to enroll in and graduate from college?

Financial aid formulas do not consider unsecured consumer debt as an offset to assets or loan payments as an offset to cash flow. For example, the FAFSA does not consider outstanding education debt as affecting ability to pay. It ignores the impact of unsecured debt on the family's cash flow.

Financial aid award letters can be misleading. Some financial aid award letters blur the distinction between grants and loans, increasing the likelihood that the student will borrow more than they can afford to repay. Colleges also use confusing language, lack adequate disclosures and do not provide a full breakdown of direct and indirect college costs. These financial aid award letters are really *marketing* documents, not *counseling* documents.

Flaws in Financial Aid Need Analysis

Financial aid formulas are often the result of a series of arbitrary design decisions.

The financial aid formulas used by the FAFSA and CSS Profile are based on assessments of income and assets, while the income-driven repayment plans consider just income. To some extent, assets do not add new information because there is a strong correlation between income and assets. However, the families of minority students are less likely to have accumulated wealth, so including assets in the financial aid formula tends to penalize wealthy white students, but only slightly.

The FAFSA excludes only certain assets. The FAFSA excludes the market value of qualified retirement plans (such as 401(k), IRA and pension plans), the family's principal place of residence and small businesses owned and controlled by the family. Congress did not want to force families to sell their home or business to pay for college, so certain types of assets are excluded from need analysis. But, differences in excluded assets reflect differences in family wealth and financial strength. Perhaps the FAFSA should exclude consideration of all assets, so that there is no actual or perceived penalty for saving.

Financial aid formulas draw a distinction between student assets and parent assets, even though most student assets come from the parents. The financial aid formulas assume that student income and student assets are used exclusively to pay for college and assess them at a higher rate than parent income and assets. For example, the FAFSA assesses student assets at a flat 20% rate and parent assets

on a bracketed system up to a maximum of 5.64%. The CSS Profile assesses student assets at 25% and parent assets at up to 5%. The financial aid formulas calculate separate student and parent contributions, which are combined to yield the expected family contribution. Financial aid formulas should instead base the analysis of ability to pay on the family assets – the sum of student and parent assets – instead of distinguishing according to ownership of the assets. Low-income students sometimes have a job as the primary wage-earner for their family. Since 2000, the federal need analysis formula considers this by allowing a parent's negative adjusted available income to reduce the student's income.

The financial aid formulas do not allow the EFC to go below zero, even when the applicant is living below the poverty line. This is partly motivated by an arbitrary design decision that financial aid should not exceed the college's cost of attendance, that financial aid should be limited to paying for college costs. But, low-income students cannot fully benefit from a college education when they are struggling to survive. Many are homeless and food insecure. The financial aid formulas also count certain government benefit programs when evaluating ability to pay, such as unemployment income.

Because financial aid formulas do not allow the EFC to go below zero, low-income students tend to cluster at a zero EFC. Nearly two-thirds (63.4%) of Federal Pell Grant recipients and 39.1% of all undergraduate students have a zero EFC. Almost all students (94.6%) who are living below the poverty line have a zero EFC. There is no differentiation among students who are living below the poverty line, so there are some low-income students who have greater financial need than what is expressed by the financial aid formula. Setting a minimum EFC at zero caps the amount of financial aid that low-income students can receive. Some colleges have a minimum student contribution or summer work expectation that sets a minimum EFC greater than zero, even for low-income students. This is not a realistic assessment of ability to pay for students who are experiencing extreme financial distress.

Dependency status is prone to manipulation. Parent financial information is ignored if the student is an independent student. Independent students include students who are married, have dependents other than a spouse, are veterans, are in a legal guardianship, are or were in foster care, or are emancipated minors. This provides a strong incentive for fraud.

Custodial parent status is also prone to manipulation. When a student's parents are divorced or separated, only one parent's financial information is required on the FAFSA. This provides an incentive for parents to choose the parent with the lower income as the custodial parent. The custodial parent is the parent with whom the student lived the most during the 12 months ending on the date the FAFSA is filed. On the other hand, students whose parents are divorced or separated are less likely to enroll in college and less likely to graduate. So, perhaps directing extra financial aid to these students isn't really a big flaw?

The focus on cash flow means that the ability of a family to pay for college is cut in half when there are two children in college instead of just one. The federal need analysis methodology divides the parent contribution by the number of children in college. So, accidents of birth can yield big differences in financial aid. For example, families with a set of twins get more financial aid than families with a pair of singletons, even though both families have the same number of children. This is a consequence of the FAFSA's focus on measuring cash flow as opposed to wealth.

Financial aid formulas sometimes go through gyrations to try to prevent fraud and manipulation of the EFC, such as preventing retirement plan contributions from influencing the EFC or the recent scandal

involving sham legal guardianships.⁵ Financial aid formulas are also prone to manipulation, such as paper losses and income/asset shifting, no matter how detailed the financial aid formula becomes.

Financial aid formulas evaluate ability to pay one year at a time. Using the same EFC for four years would yield a more predictable college cost burden, but would not reflect increases in income and improvements in ability to pay.

Progressive assessment of available income uses a bracketed scale to assess a greater percentage of discretionary income as income increases. For example, the parent contribution used by the FAFSA assesses 22% to 47% of parent adjusted available income. But, this is not necessary when the financial aid formula is based on discretionary income, since the ratio of discretionary income to total income increases as income increases. Also, the assessment percentages of student and parent assets are likewise arbitrary.

The tables in the financial aid formulas are based on old data, adjusted for inflation. The use of inflationary adjustments does not reflect real changes over time. For example, the mix of basic living expenses in the income protection allowance has changed in ways that are not captured by inflationary adjustments. Health care is a much bigger part of the family budget today than it was in 1967, when the income protection allowance was added to the federal need analysis methodology. Similarly, the financial aid formula assumes that 12% of the family's reportable assets can supplement income each year, even though interest rates are much lower today than in the past.

Problems with Awarding and Packaging Philosophies

A college's awarding or packaging philosophy specifies the mix of grants, work and loans, as well as the amount of unmet need.

Most of the growth in institutional gift aid nationwide over the last several decades has been in the form of merit-based aid, not need-based aid. Only 40% of institutional grants are based on financial need. A third of institutional grants go to students with family income of \$100,000 or more.

Very few colleges meet full financial need. Most colleges leave a gap of unmet need. This gap has doubled in the last 15 years and now exceeds \$10,000 annually.

Even when a college meets full need, most colleges do not have enough grants in the financial aid budget to meet full need. Almost all colleges leave students with a debt and work burden. But, student loans must be repaid, usually with interest, so they do not reduce the cost of college. Among the six dozen colleges with "no loans" financial aid policies, half claim to meet the student's full financial need of all students, but most redefine financial need to include a minimum student contribution (sometimes presented as a summer work expectation). A minimum student contribution sets a floor on the EFC, even for zero EFC students.

Total institutional grant funding based on merit (including grants that are not based on financial need) is 51% greater than total institutional grant funding based on financial need, even though most colleges do not meet full financial need. Institutional merit aid has grown faster than institutional need-based aid for decades.

⁵ <https://www.propublica.org/article/university-of-illinois-financial-aid-fafsa-parents-guardianship-children-students>

Need-based financial aid recruits students based on ability to pay, while non-need-based financial aid recruits students based on willingness to pay.

Preferential packaging gives a better mix of grants vs. loans to students the college is trying to recruit. Since student loans aren't really financial aid, this means that some students get a much lower net price than others, even though the students have a similar ability to pay for college. The net price is the difference between a college's cost of attendance and gift aid, such as grants and scholarships. Colleges rarely use preferential packaging to award more grants to students with greater amounts of financial need. Often, colleges award "merit" scholarships to students with the least amount of financial need.

Financial aid policies concerning overawards and gapping are often discarded when colleges award athletic scholarships. This reflects misplaced priorities. The athletic department budget often comes at the expense of financial aid to needy students who are not athletes.

The high-cost/high-aid model involves a higher sticker price (cost of attendance), which can discourage low-income students from applying for admission.

Many colleges use a self-help level, which sets a threshold that the student's debt and work burden must exceed before they can receive grants. Self-help levels require every low-income student to borrow. Many low-income students are unable to borrow enough to cover the self-help level and other college costs, as they are ineligible for parent and private loans.

Student employment creates a caste system on college campuses. Low-income students are forced to work in the cafeteria or dining hall, serving food to their wealthier peers. Student employment and student loans are just another form of indentured servitude. Many low-income students are already working while in school, so additional student employment increases the odds that they will drop out of college. If student employment is good for students, then why don't most colleges require wealthy students to work?

Emergency aid can cause an overaward if it is provided by a third-party source – such as a private scholarship provider – instead of the college, reducing eligibility for need-based financial aid. Colleges can adjust the cost of attendance to compensate for their own emergency aid, while third-party providers of emergency aid cannot.

Front-loading of grants gives a better mix of grants vs. loans during the freshman year as opposed to subsequent academic years. It is effectively a form of bait and switch, misleading families about college affordability. More than half of colleges practice front-loading of grants.

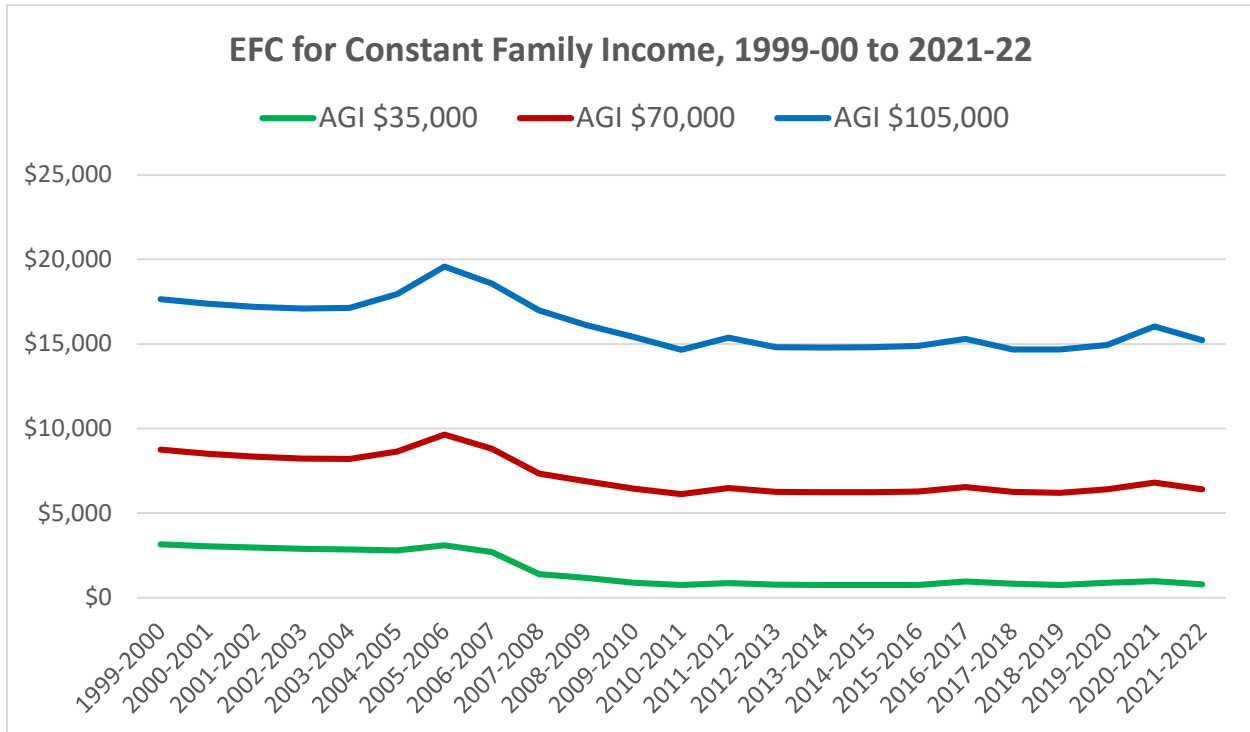
Some Financial Aid Is Taxable

If a student is seeking a degree or certificate, scholarships and grants that pay for tuition, fees, books, supplies and equipment are tax-free. But, scholarships and grants that are used to pay for living expenses, such as room and board, transportation, dependent care costs and disability-related expenses, are taxable.

Financial aid formulas do not consider the extent to which scholarships and grants are considered taxable income to the student. This prevents the student from making full use of the scholarships and grants they receive.

Trends in Need Analysis

This chart shows how the expected family contribution has changed over the last two decades. It assumes a constant family income. The green line shows the EFC for \$35,000 in income, the red line is for \$70,000 in income and the blue line is for \$105,000 in income. It is reasonable to assume constant income because household income has been flat since the late 1990s.



This chart shows very little improvement in EFC since 2010-2011. The EFC for the same income is higher now than it was 10 years ago. Most inflationary adjustments have been offset by decreases in the asset protection allowance.

Given that the EFC has not changed, the increase in college costs yields an increase in student financial need, often resulting in more student loan debt.

This chart assumes \$50,000 in parent net assets. Comparing it with similar data for families with no assets results in a small difference in the EFC until 2013-2014, when the greater cumulative decline in the asset protection allowance led to much fewer parent assets being sheltered.

This table shows the causes of big changes in the EFC. Most of the changes are due to changes in tax rates and changes in the financial aid formula.

Year	Change
2002-2003	Small drop in Federal income tax rates in 2001
2003-2004	Big drop in Federal income tax rates in 2002
2004-2005	Big drop in Federal income tax rates in 2003
2005-2006	FAFSA started updating State and Other Tax Allowances
2007	The College Cost Reduction and Access Act of 2007 eliminated Worksheet A from the FAFSA and significantly increased the income protection allowance for undergraduate and graduate students. The auto-zero EFC income threshold was also increased from \$20,000 to \$30,000 and indexed it to inflation.
2007-2008	Student asset assessment rate decreased from 35% to 20% for dependent students and from 12% to 7% for independent students with dependents other than a spouse
2013-2014	Increase in parent Income Protection Allowance
2014-2015	Added new Federal income tax bracket in 2013
2016-2017	Big drop in Asset Protection Allowance
2017-2018	FAFSA switched from Prior Year (PY) to Prior-Prior Year (PPY)
2019-2020	Big drop in Asset Protection Allowance
2020-2021	Big drop in Federal income tax rates in 2018
2021-2022	Increase in parent Income Protection Allowance and increase in state income tax allowances

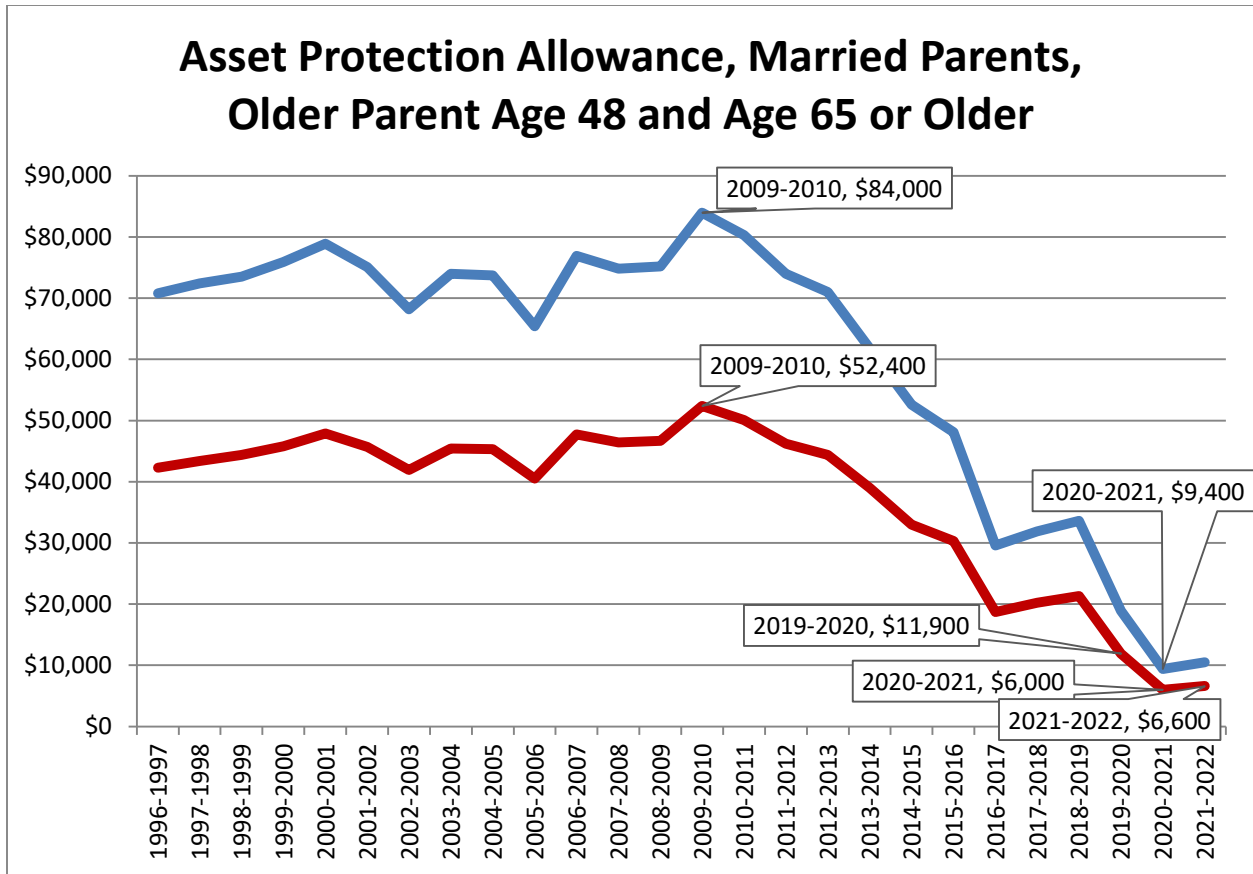
Increases in EFC are mostly due to tax cuts and big drops in the parent asset protection allowance. For example, the recent uptick in EFCs in 2020-2021 is due to the decrease in tax liability that began in 2018 due to the Tax Cuts and Jobs Act of 2017.

Decreases in EFC are mostly due to changes in the financial aid formula, such as the decrease in the student asset assessment rate from 35% to 20% and increases in the parent income protection allowance.

The Asset Protection Allowance Is Disappearing

The Asset Protection Allowance shelters a portion of the parents' assets based on the age of the older parent living in the household with the student.

The Asset Protection Allowance has been decreasing since 2009-2010, but experienced big drops in 2016-2017 and 2019-2020, as shown in this chart.



The asset protection allowance is intended to cover the cost of an annuity which will supplement Social Security retirement benefits to the moderate family income level as determined by the Bureau of Labor Statistics (BLS). However, the average Social Security retirement benefit has been increasing while the moderate living standard has remained largely unchanged. As a result, the asset protection allowance has been disappearing and will eventually disappear entirely.

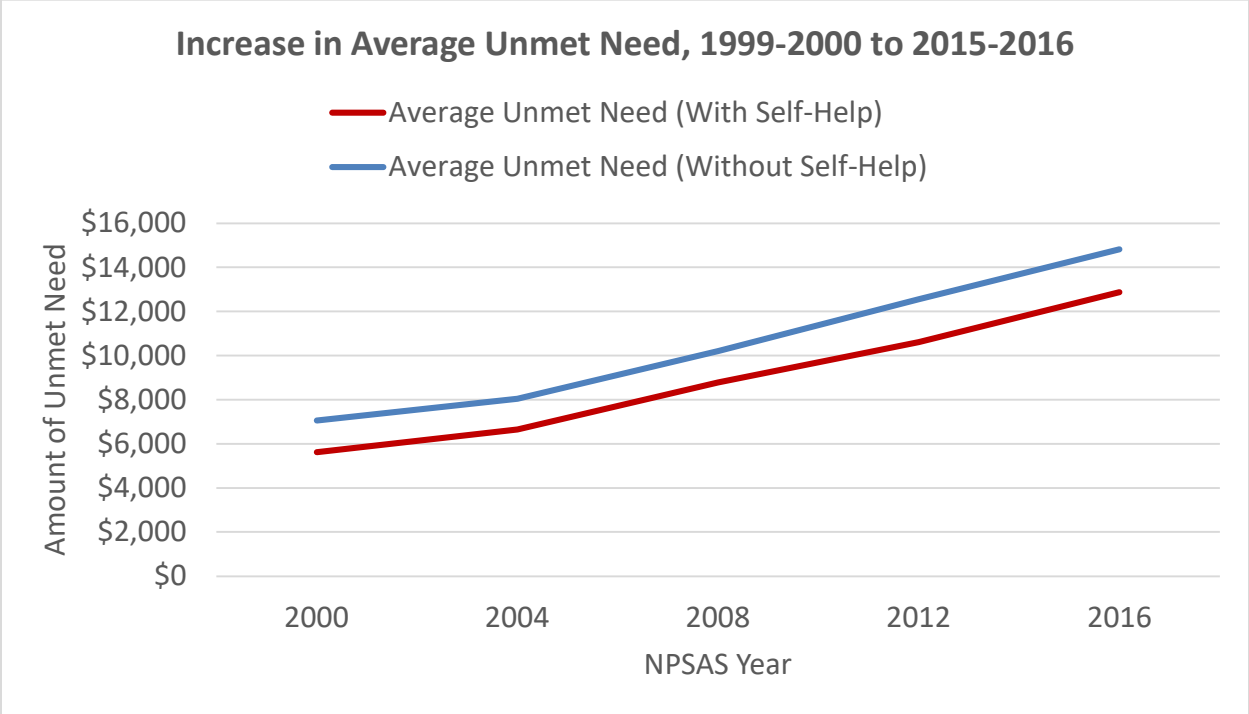
Age 48 is the median age of parents of college-age children. For these parents, the asset protection allowance has dropped from \$52,400 in 2009-2010 to \$6,000 in 2020-2021, a \$46,400 decrease. The asset protection allowance has lost more than 88% of its value.

Age 65 shows the maximum asset protection allowance.

The impact on the EFC of the decrease in the asset protection allowance has mostly been hidden by inflationary adjustments to other aspects of the need analysis formula.

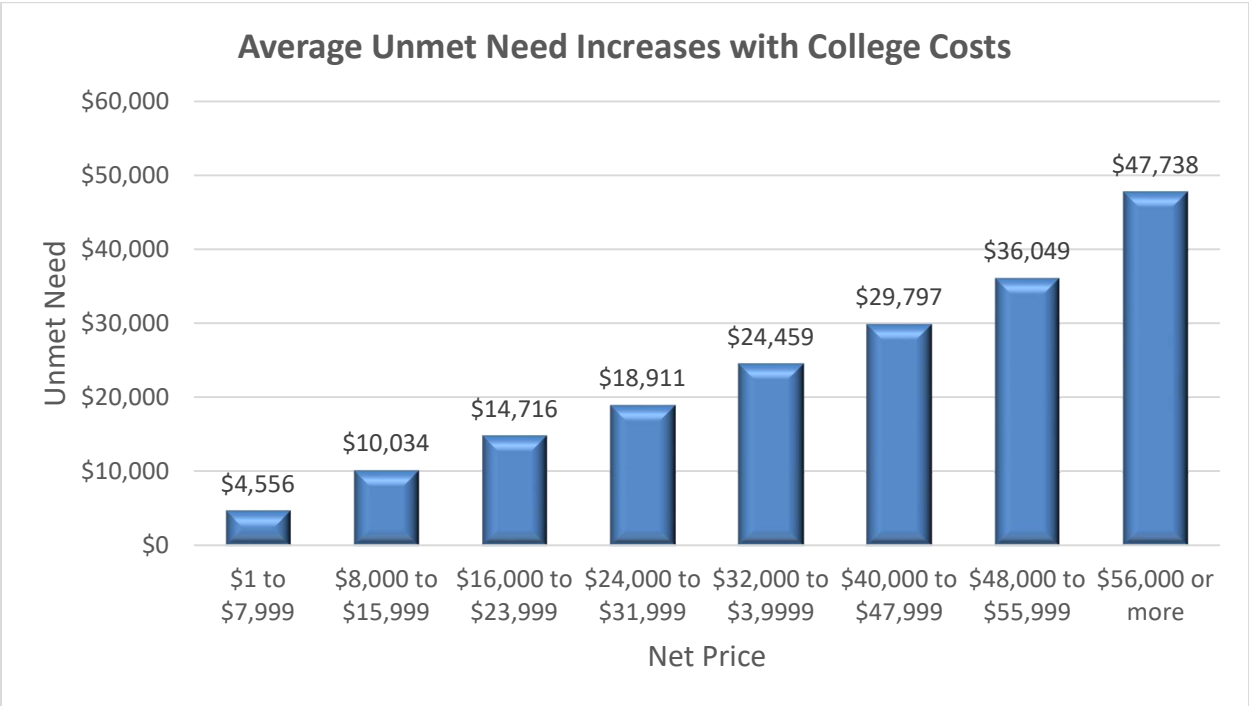
Growth in Average Unmet Financial Need

This chart shows the average unmet financial need for students in Bachelor's degree programs, based on data from the National Postsecondary Student Aid Study (NPSAS). The blue line in this graph shows unmet need if self-help aid is not counted as meeting financial need. The red line shows unmet need if self-help aid is counted as meeting need. Self-help aid includes student loans, which must be repaid usually with interest, and student employment, which must be earned through work.



Even if self-help aid is counted as meeting need, the average unmet need has doubled from \$5,628 in 1999-2000 to \$12,880 in 2015-2016.

This chart shows average unmet need (without self-help) vs. the student's average net price. Except for the wealthiest of students, a higher net price means higher unmet need.



Financial Aid Simplification

This table shows a history of past attempts at simplifying the FAFSA.

Year	Change
1987-88	Added simplified needs test, based on AGI (AGI ≤ \$15,000), taxes paid (IRS Form 1040A required), untaxed income, household size and number of children in college.
1987-88	Added exclusion from assets for family home/farm. In the 1980s, the interest rates on mortgages and home equity loans and lines of credit were very high, making it unreasonable to expect a family to get a home equity loan to pay for college.
1992-93	Added Auto-Zero EFC. The goal of Auto-Zero EFC was to eliminate most questions on the FAFSA for students who were going to have a zero EFC anyway. Auto-Zero EFC automatically sets the EFC to zero for applicants with very low income.
1998	Authorized data sharing between the IRS and the U.S. Department of Education. The intent of data sharing was to enable the creation and use of the IRS Data Retrieval Tool, but it took more than a decade for the IRS and U.S. Department of Education to work out all the details.
2006-07	Added small business exclusion. The small business exclusion ignores the net worth of a small family business. A business is considered to be small if it has less than 100 full-time or full-time equivalent employees. A business is considered to be a family business if the family owns and controls the business. Family members do not need to be listed on the FAFSA.
2007-08	Dropped Worksheet A from the FAFSA. Worksheet A included the Earned Income Credit, additional child tax credit, TANF and untaxed Social Security benefits such as SSI.
2008	Congress authorized creation of the EZ FAFSA as a simplified form for applicants who qualify for auto-zero EFC and the simplified needs test. The intention of the EZ FAFSA was to create a separate simplified form for low-income students. It never happened.
2009-10	Added dependency status skip logic. Skip logic eliminates redundant questions.
2009-10	IRS Data Retrieval Tool became available for the first time
2011-12	Eliminated questions about enrollment status and interest in teaching.
2017-18	Switched from prior-year (PY) to prior-prior year (PPY). The switch from PY to PPY enabled more students to use the IRS Data Retrieval Tool, in addition to streamlining the application process and yielding a more timely financial aid application process, consistent with the college admissions calendar.
2024-25	The Consolidated Appropriations Act, 2021 reduced the number of questions on the FAFSA to about three dozen, effective with the 2023-24 FAFSA. The U.S. Department of Education announced on June 11, 2021 that it is delaying full implementation until the 2024-25 FAFSA.

A key goal of FAFSA simplification is to fit the FAFSA on a postcard, so that it can be completed in five minutes or less.

There are several current approaches that are intended to simplify the FAFSA.

- The IRS Data Retrieval Tool transfers taxpayer data from the IRS to the FAFSA. The IRS Data Retrieval Tool is not available for completing the CSS Profile.
- Skip logic uses answers to previous questions to eliminate subsequent questions (e.g., dependency status questions).
- The Simplified Needs Test eliminates the 6 asset questions on the FAFSA if the parents are low income. The Simplified Needs Test is not available on the CSS Profile.
- Auto-Zero EFC sets the EFC to zero if the family has very low income. Auto-Zero EFC is not available on the CSS Profile.

But, there are several flaws in current approaches to simplification. These approaches often require answering more questions, not fewer. Less than half of applicants can use the IRS Data Retrieval Tool. Applicants must answer as many as 9 additional questions to use the IRS Data Retrieval Tool and 16 additional questions to qualify for the Simplified Needs Test and Auto-Zero EFC. This increases the total number of questions answered by all applicants. Clearly, the current approaches to simplification don't simplify the FAFSA enough. There is also a cliff effect at the income thresholds for the simplified needs test and auto-zero EFC. Moreover, 15 states (CO, DC, GA, HI, IL, MN, NJ, NM, OH, OK, SC, VT, WA, WI, WY) require asset information for state grants, blocking the use of simplified formulas that drop the asset questions.

Several proposals for FAFSA simplification involve more extreme simplification by dropping more questions from the FAFSA.

- **Sensitivity analysis** drops questions from the FAFSA that have a minimal impact on the EFC or financial aid eligibility, replacing them with average values or extreme values. This approach can reduce the number of questions to about a dozen. The resulting formula yields results that are within \$500 of the EFC for most students.
- **Phaseout formulas** are similar to the income phaseouts used on federal income tax returns. For example, a student might qualify for the maximum Federal Pell Grant when the parents' adjusted gross income (AGI) is 150% of the poverty line. The Federal Pell Grant eligibility gradually decreases as AGI increases until it reaches zero when AGI reaches 250% of the poverty line. This approach depends on just three variables: AGI, family size and geographic location.
- If income-driven repayment is good enough to determine ability to repay student loans after college, why not use a similar formula for determining ability to pay during college? For example, the EFC could be defined as 15% of **discretionary income** divided by the number of children enrolled simultaneously in college (NIC), where discretionary income is the amount by which AGI exceeds 150% of the poverty line. $EFC = 15\% (AGI - 150\% PL) / NIC$

The phaseout formula and modified income-driven repayment formula both enable the creation of a table that maps from income and family size (and number in college) to Federal Pell Grant eligibility.

Most other federal means-tested benefit programs use much simpler eligibility tests that require AGI below a percentage of the poverty line, typically 130%, 150% or 185% of the poverty line. These include

Head Start, LIHEAP, Medicaid, CHIP, Supplemental Security Income (SSI), Free and Reduced-Price School Lunch, Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), Legal Services Corporation, Job Corps and bankruptcy fee waivers. Eligibility for education tax benefits are similarly based on only the taxpayer's income. So, why does the FAFSA have to make eligibility for the Federal Pell Grant so complicated?

Moreover, the complexity of the financial aid formula does not really yield a more accurate assessment of ability to pay. Insisting on a more detailed financial aid form chases after a false sense of precision.

Simplification requires leadership in convincing Congress, the states and the colleges of the need for simplification. Otherwise, simplification of the FAFSA may cause the states and colleges to introduce their own financial aid forms. This will increase confusion and complexity for students and their families.

Congress took a big step toward FAFSA simplification in the Consolidated Appropriations Act, 2021 by dropping many questions from the form. Nevertheless, the simplified FAFSA does not address problems with the asset protection allowance and other aspects of the financial aid formula. Verification may remain a barrier for many low-income students.