THE REAL PRICE OF COLLEGE:  
HOW USING THE NEGATIVE EXPECTED FAMILY CONTRIBUTION CAN BETTER SUPPORT STUDENTS

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PROJECT BACKGROUND

For decades, the shortcomings of financial aid have frustrated students and colleges alike. Flaws in the design and delivery of financial aid, including how “need” is defined and subsequently calculated, contribute to its diminishing efficacy. Subsequently, students’ financial need—defined as the gap between their resources and their cost of attending college—has continued to go unmet. Nearly three in four students have unmet financial need, with serious equity implications that result in greater unmet need for students of color. Further, the current Expected Family Contribution (EFC) formula omits several important factors, resulting in significant underrepresentation of unmet financial need.

The Hope Center is working to identify whether a more effective approach for assessing need, and ultimately delivering aid, could be developed within the existing federal financial aid framework under Title IV. Six Texas institutions, four community colleges and two regional public universities, are participating in an innovative Lumina Foundation–funded initiative addressing that question: Amarillo College, West Texas A&M University, El Paso Community College, the University of Texas at El Paso, Dallas County Community College District, and San Jacinto College.

The project is designed to better understand the financial needs of students, to help institutions more effectively communicate the reality of college costs to students, and to ensure that financial aid data is utilized to effectively support students. We seek improved ways to assess demonstrated financial need using existing data elements of the Free Application for Federal Student Aid (FAFSA). For example, institutions can calculate and use negative EFC to determine which students have the greatest financial need, and use that information to direct support to them. Our research shows that many students are facing food and housing insecurity, even with the help of financial aid. The hidden financial need revealed by negative EFC partially explains why so many of those students—even with the support of financial aid programs—continue to struggle to provide for their basic needs.
INTRODUCTION

The Expected Family Contribution, provided after completing a FAFSA, has been a longstanding source of confusion for students and their families. The EFC number determines how much financial aid a student is likely to receive. The use of “expected” in the term gives the impression that students and families have to pay that amount towards higher education costs, regardless of whether such an expectation is realistic. In reality, EFC is used as an indexing figure, to determine eligibility for federal, state, and institutional financial aid; students with smaller EFCs receive more financial aid than students with larger ones. This disconnect—between what most applicants assume the EFC is used for and what the U.S. Department of Education says it is actually used for—complicates college planning for families and students, demoralizes students it is intended to help, and undermines federal and state investments in financial aid.

Current calculation guidelines impose a $0 EFC floor, even though the formula can return a negative value. This artificial minimum for student need results in a large group of students being assigned $0 EFCs. And since students who have a $0 EFC are designated as those with the greatest financial need, an artificial plane of “need” is created, with no variation. As almost a third of financial aid applicants have a $0 EFC, this indicator fails to do what it was designed for, namely identify the students with the greatest need. Previous work shows that a large proportion of students would have a negative EFC if the guidelines allowed for it. Accurately reporting the negative EFCs would do a better job indicating which students have the greatest financial need.

The new Student Aid Index (SAI), created under the Consolidated Appropriations Act of 2021 that goes into effect in 2023, aims to fix some of the issues with the EFC. The most evident change—the removal of “expected” from the name—should make it clearer that the purpose is to determine how much aid a student is eligible for, not how much they will be expected to contribute. Clearer messaging to students will hopefully reduce confusion around unrealistic EFCs. Another welcome change in the SAI will be the calculation of values as low as -$1,500, meaning students could receive up to $1,500 of financial aid in excess of their institution’s Cost of Attendance (COA). Negative SAI is the first step in recognizing that many students have more financial need than the current $0 EFC floor represents.

The negative SAI of up to $1500 is only a first step. Our research (discussed below) shows that many students have negative EFCs much larger than $1,500, suggesting that the full negative value should be calculated and provided to colleges, even if it is not ultimately used for federal or state aid purposes.

EFC—and in time the replacement SAI—is central to how much need-based aid a student can receive, with students unable to receive more than COA minus their EFC. To effectively meet a student’s demonstrated need, something promised by some well-endowed institutions, aid must cover their full need, including any negative amount.

For example, a student with a $0 EFC at an institution with a COA of $20,000 currently needs $20,000 in support to have their full need met. If, however, their true EFC is negative $5,000, then they actually need $25,000 in support.
CALCULATING NEGATIVE EXPECTED FAMILY CONTRIBUTION

Negative EFC not only provides a more accurate picture of a student’s ability to pay for college costs, but also can be calculated relatively easily. The calculation can be made using FAFSA data provided by students, if they are independent for financial aid purposes, or by students and their parents, if the student is considered dependent. Several parent and student-directed FAFSA questions are automatically set to zero if the data is a negative, including those regarding:

- Adjusted gross income
- Net worth of investments
- Net worth of business and/or investment farm
- Total contribution from assets
- Total contribution from adjusted available income
- Total contribution from parents’ and students’ overall contribution sections of the EFC formula guide

By using the raw value for each of these items, rather than the truncated value, the negative EFC can be calculated. Figure 1 illustrates how using negative EFC reveals financial need hidden under the surface by official calculations. This is based on the average net price/unmet need at two-year public institutions.¹⁰

FIGURE 1 | NEGATIVE EFC AND HIDDEN FINANCIAL NEED

Need = COA - EFC
Unmet Need = Remaining financial need after grants and scholarships, otherwise known as net price"
SIZE AND SCOPE OF NEGATIVE EFCS

We worked with the six participating institutions to compute the negative EFCs for all their financial aid applicants in the 2018–19 academic year. We found that a very high percentage of students at the participating institutions would have negative EFCs. Specifically, at four of the six institutions, more than 70% of financial aid applicants had a negative EFC. Students with children and Pell Grant eligible students are especially likely to have a negative EFC, suggesting that their true financial need is currently understated.

TABLE 1 | MEDIAN NEGATIVE EFC AND PERCENTAGE OF STUDENTS WITH A NEGATIVE EFC, BY DEPENDENCY STATUS

<table>
<thead>
<tr>
<th>Dependency Status</th>
<th>Median Negative EFC</th>
<th>% Below $0</th>
<th>% With Negative Greater Than $1,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent</td>
<td>$10,328</td>
<td>70</td>
<td>63</td>
</tr>
<tr>
<td>Independent, no dependents</td>
<td>4,382</td>
<td>49</td>
<td>40</td>
</tr>
<tr>
<td>Independent, with dependents</td>
<td>$4,139</td>
<td>79</td>
<td>67</td>
</tr>
</tbody>
</table>

Source: Administrative data provided by Real Price of College project participants. Data is drawn from 2018–19 financial aid applicants at participating colleges.

Notes: The number of financial aid applicants (n) is 130,024. Percentages are calculated as the unweighted averages of students in each dependency group.

The new SAI, with its potentially negative value, will ameliorate some of the challenges faced by students with unmet need and unrealistic EFCs. However, our analysis shows that many of those with the greatest financial need—particularly dependent students and independents with children—will remain underserved because they have negative EFCs much greater than -$1,500 (Table 1). In fact, most negative EFCs are greater than $1,500. While the formula for SAI will be somewhat different than the current EFC formula, the changes do not seem likely to substantially alter these results. Since unmet need is more than $14,000 for students at four-year institutions and almost $10,000 for students at two-year institutions, true student financial need is significantly underrepresented by both formulas. 

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HOW NEGATIVE EFC CAN BE USED TO SUPPORT STUDENTS

Negative EFC can be used at both the college and state level to provide better support to students. At the state level, a full negative EFC may provide a more accurate measure for directing state funding to institutions. There may, for example, be a significant difference between an institution that enrolls many Pell Grant–eligible students who only qualify for the minimum Pell Grant and an institution that enrolls many students with zero EFCs, which are likely actually negative.

Negative EFC could also be a more effective tool for measuring equity within and across institutions. Currently many institutions compare graduation rates for Pell Grant–eligible students to the rate for the overall student body. Given the large number of students with negative EFCs, comparing Pell Grant–eligible to non-Pell Grant–eligible students may lead to inaccurate understandings of which students need the most support. The large number of students with negative EFC suggests significant variation of true financial need among Pell Grant recipients. Using Pell versus non-Pell eligible students to assess equity gaps without considering negative EFC likely understates inequities. Additionally, this allows some institutions to game accountability measures, by enrolling more students who fall just under the Pell Eligibility threshold. Using negative EFC data when considering how student financial need impacts graduation and retention rates, GPAs, and other measures of success will provide institutions more detailed information on which students need the most help and how well those students are currently being served.

The institutions in this project have told us during project meetings that knowing students’ negative EFC values will help them direct support to those with the greatest need. San Jacinto College is considering how to use negative EFC data to help identify students who may qualify for public benefits such as the Supplemental Nutrition Assistance Program (SNAP). El Paso Community College plans to use the data as part of reevaluating how they calculate Cost of Attendance for students. Additionally, colleges can use the information to generate increased philanthropic giving by showing donors that student financial need is greater than official calculations might suggest, something that the University of Texas El Paso has told us this data will help with.

RECOMMENDATIONS

The new Student Aid Index, with its -$1,500 floor, is a welcome change that will provide better information on student financial need. However, it does not go far enough. The federal government, institutions, and states should have a full understanding of the true amount students need to pay for and succeed in college, and that means having a full picture of their negative EFC/SAI. This knowledge will help institutions better direct additional supports to students; help states determine which institutions are best supporting students with the greatest financial need; identify which institutions are improving the academic success of students with significant financial need; and provide better metrics for performance-based funding initiatives.
IMMEDIATE OPPORTUNITIES

• Students with negative EFCs are especially likely to encounter emergencies because their financial needs are systemically understated and under-supported. Emergency aid provides one avenue of relief for students who need additional financial support to succeed in college. We do not recommend the use of FAFSA data in awarding emergency aid, but in this case, it provides evidence of how many students need additional support. Congress should create a permanent federal emergency aid fund that students can access through their institutions. It should ensure aid is not limited to only those students who are eligible for federal financial aid, and it should distribute funds using a headcount formula for distribution to institutions.

• States should consider how to improve the equitable apportionment of state higher education funding so that it targets students with the greatest need based on total enrollment. Currently student need is largely determined by Pell Grant-eligibility and EFC. States should go beyond these metrics and utilize actual EFC/SAI values, including full negative calculations, to better determine which institutions enroll and support students with the greatest financial need. Mandating that institutions including such calculations as part of their state reporting would provide those states with better data to make their funding decisions, and represent a first step in improving equity of funding across institutions.

• Although the new -$1,500 SAI does not go into effect until 2023, institutions should start considering how they will use the new information to support students with negative SAIIs. Institutions can start today, by calculating negative EFCs for their students. To assist institutions, we have provided a short guide explaining how to compute negative EFC.

OPPORTUNITIES UNDER THE FUTURE SAI

• The U.S. Department of Education should provide institutions with the full negative SAI for all students. This actual negative value will already be being calculated under the new formulation, so providing it should present minimal additional work. Possessing these true values will help institutions direct additional support to the students with the greatest financial need, above and beyond the newly created -$1,500 SAI.

• The Education Department should provide clear guidance to institutions on how to use negative SAI in practice. These guidelines should include, but need not be limited to, the following:

  • Proactively inform students about how to apply for professional judgement appeal if something changes in their financial situation; such appeals should consider a student’s full negative SAI.
  • Provide information to students with negative SAI about public benefits, as a way of connecting them with support beyond traditional financial aid.
  • Direct the award of scarce campus-based funds such as SEOG dollars to the students with the greatest financial need.
  • Ensure students with the greatest financial need are provided with information on additional support services, such as free public transit programs, emergency aid, and subsidized childcare.
CONCLUSIONS

As the federal government, states, and institutions work toward improving support for students, all three desperately need better data on which students require the most financial support. Current official calculations of student financial need fail to accurately capture both how much support students truly need, and which students have the greatest need. Official unmet need is already high, and for those students who have a negative EFC, it is even higher. This gap is likely contributing to the large number of students facing basic needs insecurity. The new Student Aid Index allowing a negative of up to $1,500 is a good first step in determining which students are most in need of support. However, as our work shows, many students have negative EFCs much greater than $1,500. Providing the full breakdown of negative EFC/SAI to institutions will provide for improved understanding of which students need support and help to more accurately assess where equity gaps exist. Encouraging institutions and states to use this information to better target support to students could help start to close equity gaps in higher education.

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The views expressed in this publication are those of the authors and do not necessarily represent those of Lumina Foundation, its officers or employees.
NOTES AND REFERENCES


6 Federal Student Aid. What is my Expected Family Contribution (EFC)?

7 Goldrick-Rab, 2016; Goldrick-Rab, 2016; Goldrick-Rab & Kendall, 2016.


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Targeting support to students with the greatest need is a common practice, but without enough information it is difficult to do well. Consider that about half of all Pell Grant recipients have a zero Expected Family Contribution (EFC), but that zero EFC can be obtained many different ways, implying that students may come from very different backgrounds. A student with a negative EFC has more need than the current formula reveals and as a result, the financial aid you provide may seem like it achieves less than intended. Seeing the negative EFC helps you target those students for other supports and/or additional aid if it is available.

This short guide describes how to compute negative EFC (with an accompanying Excel spreadsheet to help), and offers ideas for how to use the resulting information.

How to Calculate the Negative EFC

First, take a look at the elements of the EFC formula that can have a value of zero:

- Adjusted gross income (FAFSA/SAR #85 for parents, #36 for student)
- Net worth of investments (FAFSA/SAR #91 for parents, #42 for student)
- Net worth of business and/or investment farm (FAFSA/SAR #92 for parents, #43 for student)
- Total contribution from assets (from parents’ and students’ contribution from assets sections of the EFC formula guide)
- Total contribution from adjusted available income (from parents’ and students’ overall contribution sections of the EFC formula guide)
- Total contribution (from parents’ and students’ overall contribution sections of the EFC formula guide)\(^1\)

In the current formula, the value of each of these items is truncated to zero. In order to compute the negative EFC, use the raw value for each of these items, rather than the truncated value. In addition, change the cap on the “adjusted available income” (Table A6 of the EFC formula guide for dependent students and Table C6 for independent students with their own dependents). Currently, parents or students are expected to contribute 22% of their adjusted available income (AAI) toward college expenses. However, if the AAI is less than -$3,409, the parent or student contribution is trimmed to -$750 (22% of -$3,409). To allow for the full distribution of negative EFCs, use the current 22% assessment rate for AAIs less than -$3,409 without using the -$750 cap. The value is supposed to be 22% of adjusted available income, but is currently not allowed to be less than (-$750) and should be changed to 22% for values less than -$3,409.

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\(^1\) This excludes two elements (income taxes paid and state and local tax allowance) that should be truncated at zero. If income is negative, the tax allowance would also be negative (increasing the EFC when families may not be receiving tax refunds).
Attached is an Excel file that includes the formulas needed to conduct your own negative EFC calculations. There are three different sheets: (1) dependent students; (2) independent students without dependents; and (3) independent students with dependents.

Enter the intermediate values from the student’s ISIR on each sheet. In several places negative values should be used if they are present. The sheet will then generate two values.

1. An EFC based on current rules. This allows for verification of the calculation by matching against the EFC imported from CPS.

2. A negative EFC. While this cannot be used for federal aid purposes, it may be more representative of a student’s true financial need and can help inform the targeting of additional supports or resources to students.

How to Use the Negative EFC

Now that the full range of EFC values is visible, how can you use this information? Here are five initial ideas.

1. Learn more about your students: Look at the full range of EFCs. What percentage of all students have negative EFCs? What percentage of all Pell recipients have negative EFCs? What percentage of all students who officially have zero EFCs, actually have negative EFCs?
   a. Do you notice any key differences between students with negative EFCs and other Pell Grant recipients? Do they differ based on age or demographic characteristics?
   b. Is this a lot of people? A few?

2. Re-examine “unmet financial need”: Using the negative EFCs, compute the amount of unmet need your students possess? How much does it increase when the negative EFC is accounted for?

3. Consider whether it is feasible to provide any additional dollars to students with negative EFCs, using FSEOG or FWS funds.

4. Think about whether students with negative EFCs might be referred to other supports, including public benefits programs and/or emergency aid. Could they be flagged for additional support in your campus’s early warning system?

5. Discuss your findings with college advancement and/or the foundation. How might this information be used to support additional fundraising?