Statement Before the House Committee on Education and Workforce
On Lowering Costs and Increasing Value for Students, Institutions, and Taxpayers

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July 27, 2023

Chairman Owens, Ranking Member Wilson, and esteemed Members of the subcommittee, thank you for giving me the opportunity to testify on this important topic.

The value of higher education is being viewed more skeptically right now than at any point in my lifetime. And for good reason. The disappointing reality is that too many students fail to get enough value out of their college education. In 2011, Richard Arum and Josipa Roksa published *Academically Adrift*, which documented that about 45% of college students don't improve their critical thinking or writing skills in college.[1] Other scholars' findings "closely parallel those of Arum and Roksa."[2]

Moreover, during the past few decades, costs have exploded while the benefits have not. Rising costs and stagnant benefits have naturally led more students, parents, and policymakers to ask whether college was worth it. For too many, the answer is no. But there is hope. Policy reforms could increase the value of higher education by reducing costs and holding colleges accountable.

The Decline in the Value of Higher Education

The value of something is essentially its worth relative to its price. Value is enhanced when worth increases or when the price declines. Unfortunately, value in higher education has been eroded by two trends: stagnant worth and rising prices.

Stagnant Worth

Since around 90% of college students enroll to improve their career and earnings prospects, worth in higher education is largely determined by the labor market outcomes for graduates. A college graduate earns about 80% more than a high school graduate. But while the premium increased from 40% in the 1970s to 80% by 2007,[3] it has since plateaued, remaining around 80% for the last 16 years as shown in the figure below.[4]

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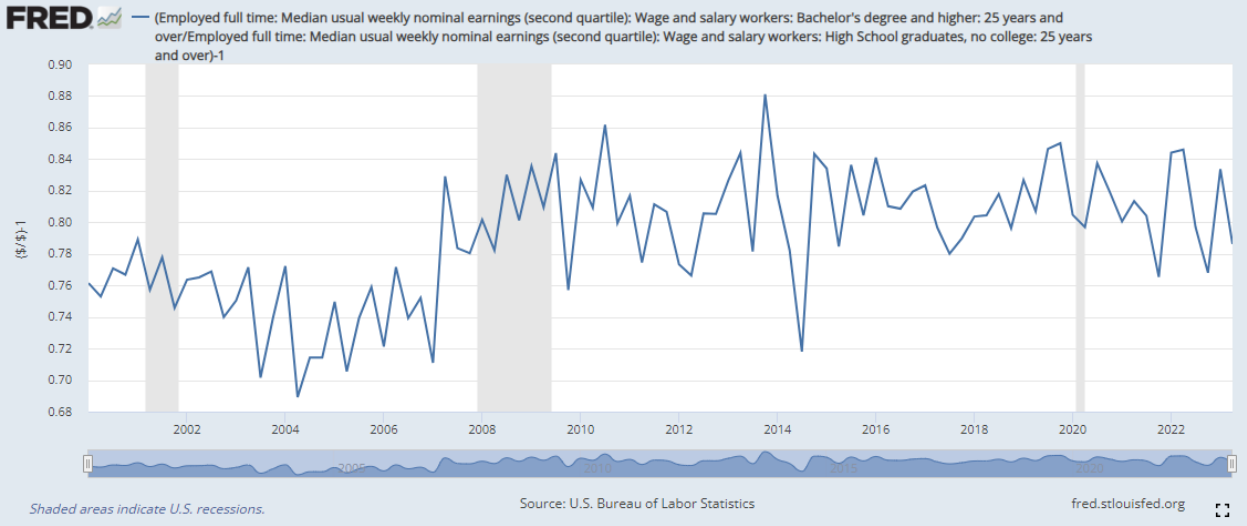
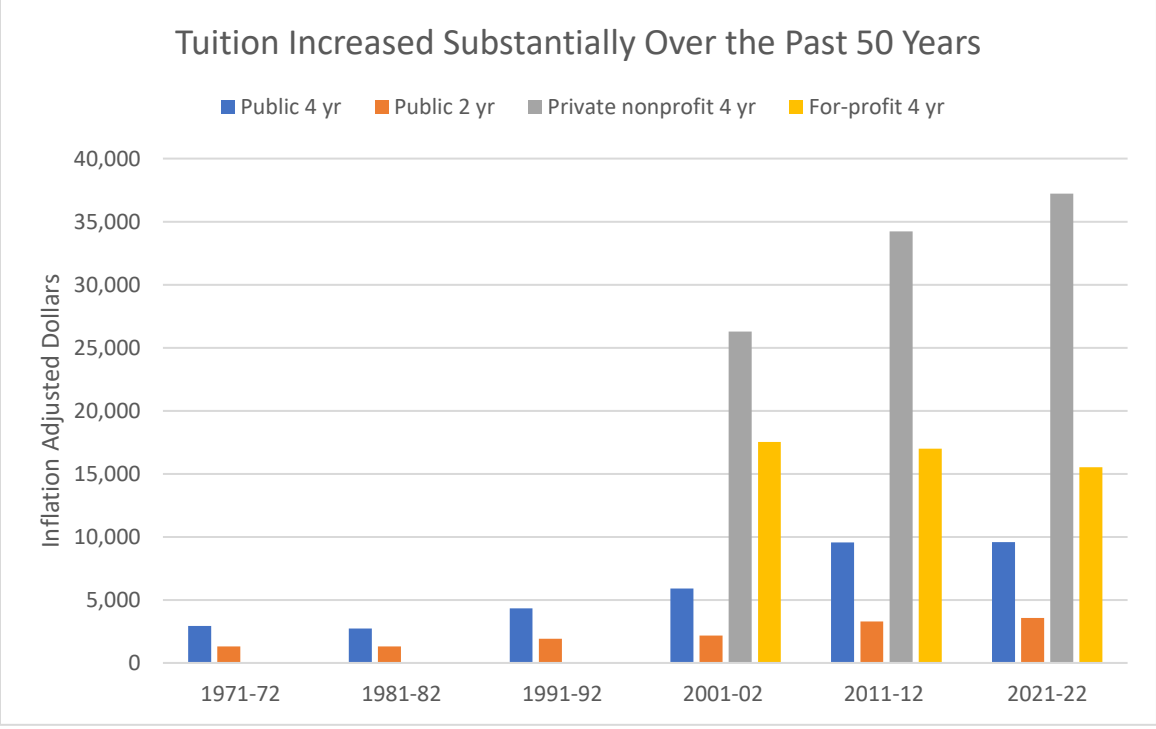
[1] Richard Arum and Josipa Roksa, *Academically Adrift: Limited Learning on College Campuses* (University of Chicago Press, 2011).
[2] Ernest T. Pascarella, Charles Blaich, Georgianna L. Martin, and Jana M. Hanson, "How Robust Are the Findings of Academically Adrift?" *Change: The Magazine of Higher Learning* 43, No. 3 (May 2011): 20-24, https://doi.org/10.1080/00091383.2011.568898.
[3] Jonathan James, "The College Wage Premium" (Federal Reserve Bank of Cleveland, 2012), https://www.clevelandfed.org/publications/economic-commentary/2012/ec-201210-the-college-wage-premium.
[4] This figure is an updated version of a figure in "Is college still worth it? Re-examining the college premium," *The FRED Blog*, July 9, 2018, https://fredblog.stlouisfed.org/2018/07/is-college-still-worth-it.



In other words, the worth of college, in terms of the boost in earnings potential for college graduates, has been stagnant.

Rising Prices

But the price of attending college has risen rapidly over the past few decades. As shown in the figure below, 50 years ago, published tuition and fees in today's inflation-adjusted dollars at public four-year colleges was under $3,000. Over the past half century, it has more than tripled to over $9,000.

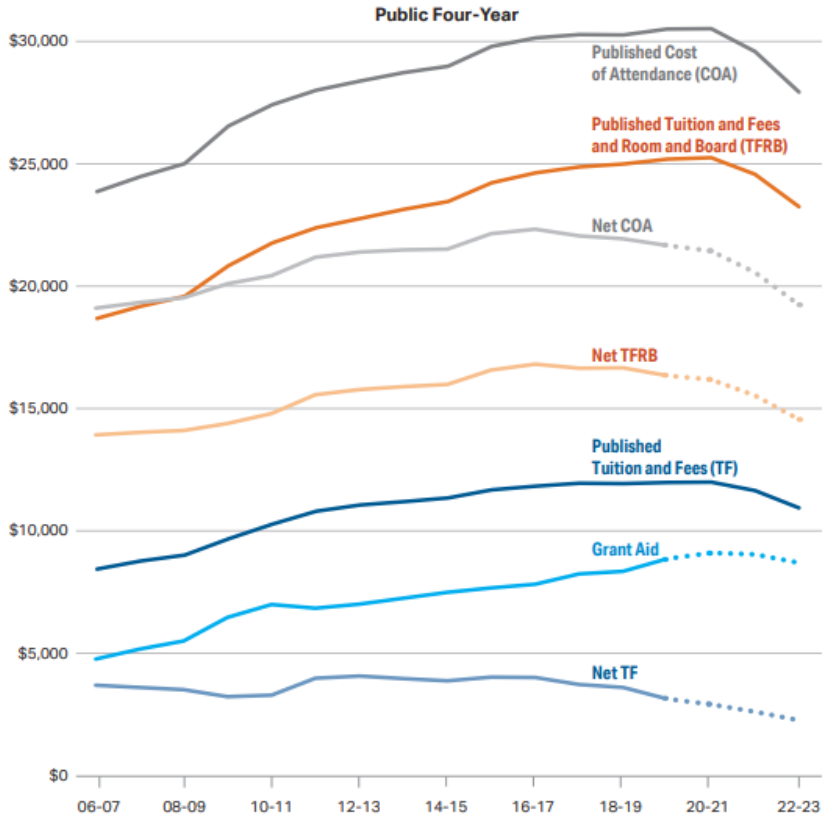


Source: Digest of Education Statistics and Texas Public Policy Foundation.

However, these published or sticker prices can overstate costs for students and parents because financial aid programs often reduce the costs for students and parents.

The College Board's Trends in College Pricing series tracks both published prices, as well as the net prices, which subtract any grant aid the student receives.[5] Net prices provide the best measure of how much college really costs students and parents, and one of the College Board's figures showing net prices for public four-year colleges is reproduced below (the trajectories for public two-year colleges and private nonprofit four-year colleges are similar).

FIGURE CP-9 Average Published and Net Prices in 2022 Dollars, First-Time Full-Time In-State Undergraduate Students at Public Four-Year Institutions, 2006-07 to 2022-23



The story told by net prices is slightly better, in that the overall level of prices is lower due to the grant aid. But the trend is similar, showing a substantial increase over time.

The combination of these two trends has been detrimental to the value of higher education. Since prices have risen, worth needs to rise even faster to maintain value. But worth, in terms of labor market

[5] Jennifer Ma and Matea Pender, "Trends in College Pricing and Student Aid 2022" (College Board, 2022), https://research.collegeboard.org/media/pdf/trends-in-college-pricing-student-aid-2022.pdf.

returns, has been stagnant while prices have risen, leading to a decrease in the value of higher education.

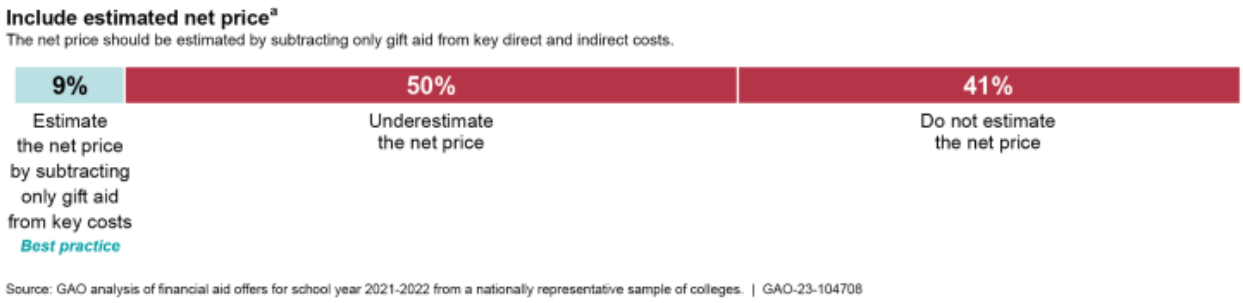
How Reducing Prices Can Increase the Value of Higher Education

One way to increase value in higher education is to lower prices. Lower prices would increase value even if quality remains unchanged (or even if worth declines at a slower pace than prices).

To figure out how to decrease prices, it is insightful to analyze why prices increased in the past.

Part of the reason may be due to borderline fraudulent behavior by many colleges when it comes to telling students the cost of enrolling. As the figure (reproduced from a recent Government Accountability Office report) below documents, 91% of colleges obscure or mislead students about the cost of attending.[6]

Figure 7: Estimated Extent to Which Colleges Do Not Estimate a Net Price in Financial Aid Offers

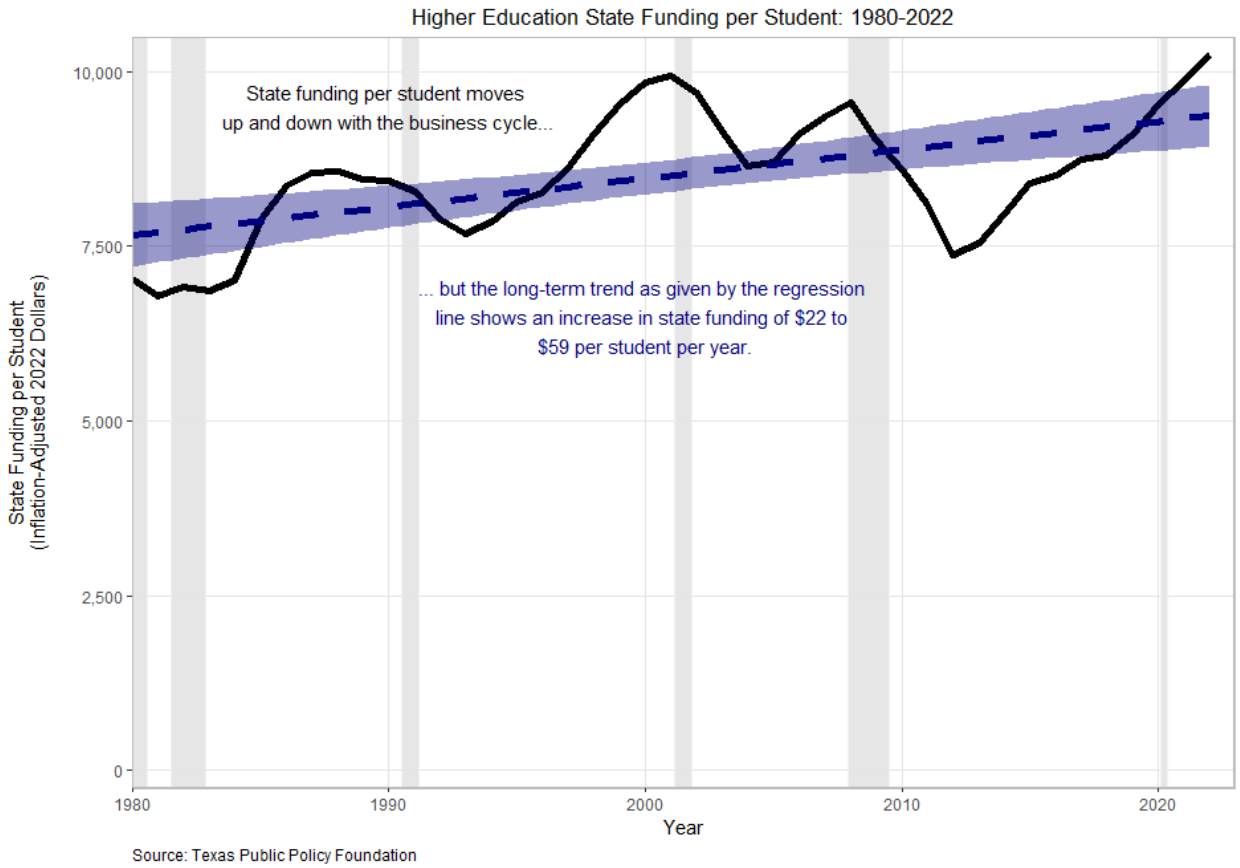


Source: GAO analysis of financial aid offers for school year 2021-2022 from a nationally representative sample of colleges. | GAO-23-104708

A common practice is to imply that student loans reduce the cost of attending, rather than giving students a method of paying that cost. Thus, one method of lowering prices might be to require price transparency. Increased price transparency would increase student and parent awareness of how much they have to pay, and their increased resistance to paying high prices would put pressure on colleges to reduce prices. One bill that would improve transparency is the *College Cost Transparency and Student Protection Act*.

But there are also more structural reasons for the increase in prices that can be addressed. There have been a host of plausible rationales offered, but most of them can explain very little of the increase in tuition. For example, many argue that tuition at public colleges has increased because states have been disinvesting in higher education by reducing funding. This is not the case. The long-term trend in state funding shows increased funding over time, not decreases, as shown in the (reproduced) figure below.[7]

[6] "Financial Aid Offers: Action Needed to Improve Information on College Costs and Student Aid" (Government Accountability Office, 2022), https://www.gao.gov/products/gao-23-104708.
[7] Andrew Gillen, "Trends in State Funding of Higher Education 1980-2022" (Texas Public Policy Foundation, Forthcoming).



If state funding is increasing over time, then decreases in state funding simply cannot be the reason for increases in tuition.

Similarly, many scholars cite Baumol's cost disease as the reason for the increase in college expenditures. According to this theory, increases in productivity elsewhere in the economy put upward pressure on wages, even in labor intensive sectors like higher education that cannot increase productivity as much. When this occurs, colleges have to increase wages to keep professors from leaving for the more productive (and therefore higher wage) sectors. This combination of low productivity growth and rising wages means that per unit costs in higher education will continually rise, putting upward pressure on tuition. However, while Baumol's cost disease does have a grain of truth to it, it cannot explain much of the increase in tuition:

> Baumol's theory could explain an increase in costs of $568 between 1999 and 2015. But expenditures per student (total expenditures/enrollment) increased from $22,946 in 1999 to $28,502 in 2015, a difference of $5,556. In other words, almost 90% of the increase in costs between 1999 and 2015 would appear to be due to something other than Baumol cost increases.[8]

[8] Andrew Gillen, "Does the Baumol Effect Explain Rising College Costs?" *Education Next*, July 18, 2019, https://www.educationnext.org/does-baumol-effect-explain-rising-college-costs.

Having studied higher education for many years, I've concluded that the best explanation for why costs (and therefore prices) increase in higher education is Bowen's laws. Put forward by Howard R. Bowen, there are five laws of higher education finance:

1. The dominant goals of institutions are educational excellence, prestige, and influence.
2. In quest of excellence, prestige, and influence, there is virtually no limit to the amount of money an institution could spend for seemingly fruitful educational ends.
3. Each institution raises all the money it can.
4. Each institution spends all it raises.
5. The cumulative effect of the preceding four laws is toward ever-increasing expenditure.[9]

Bowen's laws reverse the intuition policymakers should have when it comes to funding colleges. In other areas where the government wants to provide a subsidy, it is relatively straightforward to determine how much it costs to provide a good or service, and then determine how much of that should be paid by the government. Whatever subsidy is provided by the government will reduce the price to the consumer. But under Bowen's laws, government subsidies don't reduce the price to the consumer, because the subsidy allows the college to raise and spend more money. Under Bowen's laws, subsidies have the counterintuitive effect of increasing the cost of providing the good or service rather than reducing the price of the good or service for the consumer.

This pernicious outcome is most evident when colleges harvest financial aid dollars. When the government provides students with financial aid, it does so with the intention of reducing the cost of enrolling in college for those students. But once students receive this financial aid, colleges often respond strategically by raising prices or reducing the aid the college offers, which allows the college rather than the student to capture the benefits of the subsidy.

This phenomenon of college raising prices to exploit financial aid is called the Bennett hypothesis.[10] The Bennett hypothesis has been studied for close to three decades. While the early evidence was mixed, as better data and statistical methods emerged, there was a decisive turn, with almost all new high-quality studies finding evidence of the Bennett hypothesis (that colleges raise prices when students get financial aid). For example, one team of researchers found that for every $1 increase in aid, colleges tend to raise prices by 40-60 cents and reduce other aid to students by 20 cents, meaning that colleges harvest 60-80% of aid to use for their own purposes rather than allowing the aid to increase affordability for students.[11] Another set of researchers found that "prices went up approximately dollar for dollar with increases in federal loans" when the Grad PLUS program was introduced.[12]

The Bennett hypothesis is a behavioral response to a statutory relationship. Students fill out the Free Application for Federal Student Aid (FAFSA), which the Department of Education uses to estimate their expected family contribution (EFC), soon to be renamed the Student Aid Index. The EFC is then

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[9] Howard R. Bowen, *The Costs of Higher Education* (Jossey-Bass Publishers, 1980).
[10] Andrew Gillen, "Introducing Bennett Hypothesis 2.0" (Center for College Affordability and Productivity, 2012), https://files.eric.ed.gov/fulltext/ED536151.pdf.
[11] David O. Lucca, Taylor Nadauld, and Karen Shen, "Credit Supply and the Rise in College Tuition: Evidence from the Expansion in Federal Student Aid Programs" (Federal Reserve Bank of New York, 2017), https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr733.pdf.
[12] Sandra E. Black, Lesley J. Turner, and Jeffrey T. Denning, "PLUS or Minus? The Effect of Graduate School Loans on Access, Attainment, and Prices" (NBER, working paper 31291, 2023), https://www.nber.org/papers/w31291.

compared to the Cost of Attendance (CoA), which is determined by the college. In general, if a student's EFC is sufficiently below CoA, the student will receive financial aid to fill the gap. The problem is that this allows colleges to exploit aid programs by strategically changing prices. If they raise tuition by $1, CoA rises by $1, which means the student gets $1 more in financial aid. Thus, the statutory relationship is that an increase in prices will result in an increase in aid.

The behavioral response is how colleges respond to the statutory relationship. Since there is no limit to how much they can spend to improve education (Bowen's laws), colleges will face irresistible pressure to respond strategically to the statutory relationship by increasing prices.

So how can we defeat the Bennett hypothesis? Since the Bennett hypothesis is a behavioral response to a statutory relationship, we can fight it at both the behavioral and the statutory levels.

At the behavioral level, what is ultimately needed is to overcome Bowen's laws, which would entail changing the nature of competition in higher education. The low quantity and quality of information on both college costs and quality forces competition to be based on reputation and perceptions, which is a problem because under this type of competition, there is no limit to how much colleges will spend and charge. But if there was more and higher-quality information on costs and quality (e.g., value-added earning and learning outcomes), then competition would be based on value, placing market-driven limits on what colleges will spend and charge.

At the statutory level, new law could use the median cost of college (the median CoA across colleges) instead of CoA when determining aid eligibility. This would "neutralize the Bennett hypothesis… by severing the link between an increase in tuition and an increase in aid eligibility."[13] If a college raised tuition, its students would no longer automatically be awarded more aid, thereby reducing the incentive for colleges to raise prices to harvest financial aid funding. Using the median cost of college would have other benefits as well. It would dramatically improve price transparency, since students could be informed of their federal financial aid awards immediately upon completion of the FAFSA (as opposed to waiting for months for colleges to inform them of their aid offer). And it would encourage cost restraint at colleges by improving the competitive landscape, likely resulting in price reductions at some colleges.

How Accountability Can Increase the Value of Higher Education

Accountability provides another method of increasing value in higher education. By using carrots and sticks, an accountability system can reward colleges that improve worth or lower prices, while also withholding federal funding for programs that do not produce value for students and taxpayers.

Historical Accountability Metrics

There are three main accountability metrics that the federal government has used to hold colleges accountable.

[13] Andrew Gillen, "The Case for Replacing Cost of Attendance With Median Cost of College" (Texas Public Policy Foundation, 2019), https://www.texaspolicy.com/wp-content/uploads/2019/10/Gillen-Replacing-Cost-of-Attendance.pdf.

- Cohort Default Rate (all postsecondary institutions)

The Cohort Default Rate (CDR) is the percentage of a college's students who default on their student loans within three years. A college loses eligibility for Pell grants and student loans if more than 40% of students default (or more than 30% for 3 years). Established in 1990 and amended in 2008, the Cohort Default Rate is the only federal accountability mechanism that applies to all postsecondary institutions. But CDR is being rendered obsolete by the income-driven repayment plans, which all but eliminate the possibility of default, even when students are making no payments.

- 90-10 Rule (for-profit institutions)

For-profit colleges are not allowed to receive more than 90% of their revenue from federal financial aid programs. The rationale for the rule was that it would ensure that colleges passed a market test since at least some of their revenue was being paid directly by students. However, since much federal aid like Pell grants are distributed based on financial need, the rule punishes colleges that enroll a high proportion of students from low-income households. For example, students who quality for an "Auto-Zero EFC" cannot afford to pay anything out of pocket. For-profit colleges are punished for enrolling these students, when they should be rewarded. There is also concern that the 90-10 rule encourages for-profit colleges to raise prices above the maximum level of federal financial aid, because they are not allowed to restrict how much federal aid their students receive. The recent inclusion of GI Bill benefits was another mistake, since GI Bill benefits are compensation for miliary service. There is no logical reason to count GI Bill benefits in the 90% but not the pay a GI earns.

- Gainful Employment (vocational programs)

Vocational programs have in the past been subject to additional accountability requirements and the Biden administration is proposing to issue new regulations soon. The previous iteration of gainful employment (under the Obama administration) focused on eliminating aid access for programs with excessive debt, defined as debt service payments in excess of a set percentage of postgraduate earnings. The basic idea (eliminating aid for programs with excessive debt) and the method of determining excessive debt (debt relative to income) are both promising approaches. But there are two main problems with how gainful employment was implemented. First, it only applied to programs at for-profit universities and non-degree programs at public and private nonprofit universities. This selective targeting captured only around 11% of all programs that leave their students with excessive student loan debt, meaning that 89% of programs with excessive debt escaped accountability.[14] The second problem with gainful employment is the inclusion of get-out-of-accountability free carveouts for politically favored sectors. For example, under the previous iteration of gainful employment, many graduate programs would fail the main debt-to-earnings test, so a second test that allowed many of these graduate programs to pass was introduced. And the Biden administration proposes ignoring the debt of many community colleges in their proposed iteration of gainful employment. Thus, while gainful employment was good in theory, its implementation has been repeatedly botched.

[14] Andrew Gillen, "Lessons from Gainful Employment: Improvements to Replicate and a Mistake to Avoid" (Texas Public Policy Foundation, 2022), https://www.texaspolicy.com/wp-content/uploads/2022/02/2022-02-NGT-LessonsfromGainfulEmployment-AndrewGillen.pdf.

Market/Outcomes-Based Accountability Metrics

Under most current financing models, educational subsidies are largely universal, providing similar support to students in every academic field, college, or program. But some types of education have high value, while other types have low value. Paying colleges the same for low-value programs as for high-value programs leads to too many low-value programs being offered.

While the historical accountability approaches tried to weed out some of these low-value programs, they have been insufficient. Policymakers should consider augmenting/replacing them with new accountability metrics that utilize a market or outcomes-based approach.

This is the general principle behind many performance-based funding models—define an outcome of interest and base funding on a college's success in achieving that outcome. While historically performance-based funding models were neither performance-based, relying on outputs like graduation rates instead of outcomes like employment, nor funding (so called performance-based funding often amounted to a rounding error in total funding and often included a no-harm clause that ensured no college lost funding), this is gradually changing.

One of the best examples of performance-based financing is used by the Texas State Technical College (TSTC). Rather than being funded by state appropriations, like virtually all other public colleges, TSTC is instead paid based on how well it prepares students for careers. Specifically, the college is paid a share of the increase in state taxes that their students generate for the state.[15] When TSTC provides a valuable education that increases their students' earning substantially, both the state of Texas and TSTC benefit. But low-value programs that fail to increase students' career prospects are a drag on the college's finances and are quickly phased out.

Two categories of market or outcomes-based accountability metrics have significant potential to improve value: risk sharing and return on investment.

- Risk Sharing or Skin in the Game

One potential accountability metric to improve value is risk sharing or skin in the game. Right now, student loans are contracts between the taxpayers and a student, who uses the money to pay the college. If the education provided is of low value, both the taxpayers and the student lose. The taxpayers are never paid back while the student is burdened by unaffordable debt for years, hounded by collections agencies, and unable to obtain an affordable mortgage or car loan. But the college, which gets paid up front, faces no repercussions and gets to keep every cent.

This perverse incentive structure allows for colleges to profit from providing low-value education that leaves both the student and the taxpayers worse off. Risk sharing could remedy this problem by aligning incentives to ensure that colleges only benefit when students and the taxpayers do too.

One version of risk sharing would have the college co-sign the loan, so that when a student is unable to repay their loan, the college makes the payment for them. As co-signers for the loan, colleges would no

[15] Erin Davis Valdez and Jorge Borrego, "Outcomes-Based Higher Education Funding: A Case Study from Texas" (American Enterprise Institute, 2022), https://www.aei.org/research-products/report/outcomes-based-higher-education-funding-a-case-study-from-texas.

longer be able to profit by offering overpriced low-value education that leaves students and taxpayers worse off. Some colleges are already using a version of this, called Loan Repayment Assistance Programs (LRAP).[16] Making LRAPs mandatory would be one way to implement risk sharing. This would require another change in the law as well. Under current law, a college cannot reduce the amount a student can borrow (unless done on a case-by-case basis), but if a college is to be a co-signer, they need to have the ability to limit borrowing, along the lines of Representative Grothman's *Responsible Borrowing Act*.

Alternatively, risk sharing could be used to ensure that the federal government doesn't lose money on student loans. The Congressional Budget Office (CBO) routinely calculates the subsidy rate for student loans, and currently estimates that loans have a subsidy rate of 17.8%, meaning that the government will lose 17.8 cents for every dollar it lends.[17] A simple version of risk sharing would make colleges pay that 17.8 cents (or at least some portion of it).

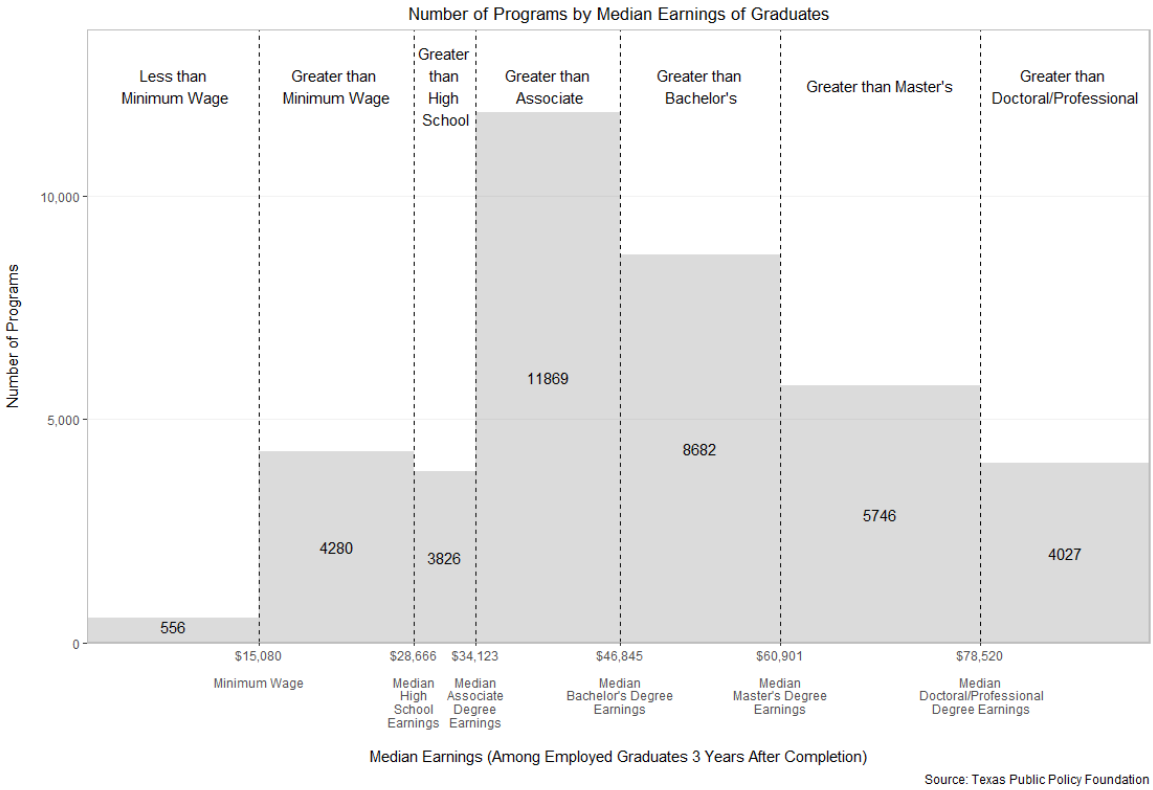
The risk sharing burden faced by any given college would vary dramatically based on the value of the programs offered. Colleges that offered only high value programs would not face much if any risk sharing. For example, even under the newly announced SAVE repayment plan, the subsidy rate for the typical graduate with a bachelor's degree in computer science or registered nursing is negative, meaning that the government doesn't lose money on these loans, and that the college would therefore not be required to make any payments to reimburse taxpayers for loses under a risk sharing system. In contrast, the typical subsidy rate for new graduates with a degree in fine and studio arts is 69%. Without risk sharing, the government would lose 69 cents of every dollar lent to the typical fine and studio arts student. But with risk sharing, the college would be on the hook for those losses, not the taxpayers.

By making sure that colleges do not profit from by offering low-value programs, risk sharing would help align the incentives of all the major decision makers – students, colleges, and taxpayers.

- Return on Investment

Another set of potential accountability metrics measure the return on investment (ROI) by tracking the benefits of an education relative to its cost. The higher the ROI, the better for the student. But negative ROI is also possible. In fact, as the figure below shows, there are almost 5,000 college programs in the country where the typical graduate earns less than the typical high school graduate, which implies a negative ROI even if the education only costs $1.

[16] Andrew Gillen, "One Way to Fix Students Loans: Mandatory LRAPs," *Minding the Campus*, May 12, 2023, https://www.mindingthecampus.org/2023/05/12/one-way-to-fix-students-loans-mandatory-lraps.
[17] "Student Loans Baseline—May 2023" (Congressional Budget Office, 2023), https://www.cbo.gov/system/files/2023-05/51310-2023-05-studentloan.pdf. The reported subsidy rate is the estimate based on the Federal Credit Reform Act (FCRA). The more appropriate fair-value subsidy rate estimate is 26%.



Preston Cooper estimated the ROI of bachelor's degree programs and found that over a quarter had a negative return on investment, meaning their cost is greater than the increase in lifetime earnings.[18]

One thing to note about calculating an ROI is that the returns should be evaluated on a value-added basis, meaning the increase in the student's earnings due to their college education rather than total earnings. Thus, if a college graduate earns $40,000 but would have earned $30,000 without going to college, the ROI should be based on the $10,000 increase in their earnings. Ideally, each student's counterfactual (non-college educated) earnings would be known and compared to their post-college earnings. However, this will often not be feasible, which leaves two reasonable methods. One is to use a specific dollar threshold, such as the typical earnings of those with less education (e.g., the counterfactual earnings for bachelor's degree recipients could be the median earnings of high school graduates). The second method is to rely on widely used measures like the poverty line. Many federal programs, including the income-driven repayment plans, establish cutoffs at 100% or 150% of the poverty line. To avoid unanticipated and counterproductive interactions with these programs, these poverty lines could be used as the counterfactual earnings.

Relative to the other potential accountability metrics, ROI metrics are much more comprehensive in determining whether an educational investment is worth it, because they account for (theoretically all) costs and benefits. Other potential metrics focus on just benefits (e.g., an earnings floor) or only the part

[18] Preston Cooper, "Is College Worth It? A Comprehensive Return on Investment Analysis" (The Foundation for Research on Equal Opportunity, 2021), https://freopp.org/is-college-worth-it-a-comprehensive-return-on-investment-analysis-1b2ad17f84c8.

of costs paid for with student loans (excessive debt or risk sharing metrics). The main hinderance to using ROI is that there is not a finite period over which to measure it. For something like a college education, which could yield benefits decades into the future, you could wait a lifetime to comprehensively sum up all the benefits, by which point any accountability carrots or sticks based on the lifetime ROI would be decades out of date.

A good approach is therefore to measure ROI several years after graduation, which is long enough to ascertain the likely ROI trajectory, but not so long that the carrots and sticks used based on the data are out of date. The metric in the recently proposed *Promoting Employment and Life-long Learning Act* strikes a good balance. The proposed metric essentially acts as an early-stage ROI by evaluating value-added earnings three years after students graduate relative to the cost of the program.

Carrots and sticks can then be applied to colleges based on these ROI metrics. For example, colleges offering high-value programs could be given performance bonuses. This would provide both a strong incentive for colleges to establish or expand existing high-value programs, as well as providing colleges with the resources to do so. In contrast, low-value programs could face sanctions, which would encourage colleges to phase out programs that don't benefit students. For example, programs with a low ROI could have higher risk-sharing burdens. If the value of a program is low enough, it should have access to the federal financial aid programs terminated.

Thank you again for the opportunity to provide this testimony, and I look forward to answering any questions you may have.

Andrew Gillen