

Date: November 2, 2011
Subject: Is Undergraduate Education America's Next Economic Bubble?

Introduction and Summary

The Occupy Wall Street protestors have added to already significant public discussion and debate about whether higher education will be the next 'bubble' to burst, wreaking further havoc on a very slowly recovering American economy. An internet search for higher education bubble yields a flood of results and a striking convergence of position among widely disparate sources ranging from persistent critics of inclusive, modern higher education like the American Enterprise Institute, the National Association of Scholars, and high profile libertarians like Peter Thiel or Glenn Reynolds, to more progressive sources like The Nation, The Huffington Post, and the Atlantic, to major mainstream outlets like the New York Times, and the Chronicle of Higher Education. Such widespread agreement might lead one to conclude that higher education is an imminent economic bubble. However, this brief proposes that **the 'bubble' metaphor, though effective at capturing public attention in an economic climate characterized by fear and uncertainty, is ultimately inaccurate, misleading, and harmful.** It is inaccurate because it overlooks dramatic differences among types of institutions (two-year and four-year, public and private, non-profit and for-profit, undergraduate and graduate and professional, top tier and lower tier).¹ While eye-popping \$50k+ annual price tags and stories of bachelor's degree recipients with six figures of debt are certainly concerning, they do not represent the average student experience in the United States, where **two thirds of all undergraduates are enrolled in public institutions** (where the average published tuition in 2011-12 is \$8,244 at a four-year institution and \$2,963 at a two year institution), where **one third of students finish a BA with no education debt**, and where, **among those who do borrow, the average education debt at graduation among both public and private institutions is just over \$23,000.** The bubble metaphor is misleading because it obscures the real threats to the sustainability of a large, high quality, inclusive and affordable higher education system in the United States, including questions of institutional cost containment, student access, the balance between public funding and tuition, and the fair distribution of costs by household income. And it is harmful because it is most likely to dissuade newer participants who have the most to gain from the **benefits of higher education, including lower unemployment rates for graduates and double the lifetime earnings received by workers with only a high school diploma.**

Ultimately, **not only is a college degree an asset that cannot be bought and sold by speculators**, but also we have every reason to believe that **the value of a higher education over a lifetime remains high compared to the price**, even after decades of substantial price increases. Additionally, while data clearly show that the amount of debt assumed by students to attain degrees is increasing, both due to cost increases as well as cost-shifting as result of declining public subsidy, they provide no basis for arguing that current levels of debt are too high compared to expected return or at what level such a ceiling might emerge. These issues are discussed in greater detail below.

What is a Bubble and Why is Higher Education Not One?

Many have noted apparent similarities between the housing market prior to its collapse and higher education today, including an unquestioned society-wide value of the need for the good, the provision of large market subsidies and incentives and readily accessible credit, spiking prices over a sustained period of time, and potentially diminishing returns as the ratio of increased earnings and employment to debt burden shifts. This has fueled speculation that higher education is a "bubble," with too many Americans seeking degrees, and bringing forth the specter of a massive default on student loan debt that poses a grave threat to the economy and the future of millions of young Americans.

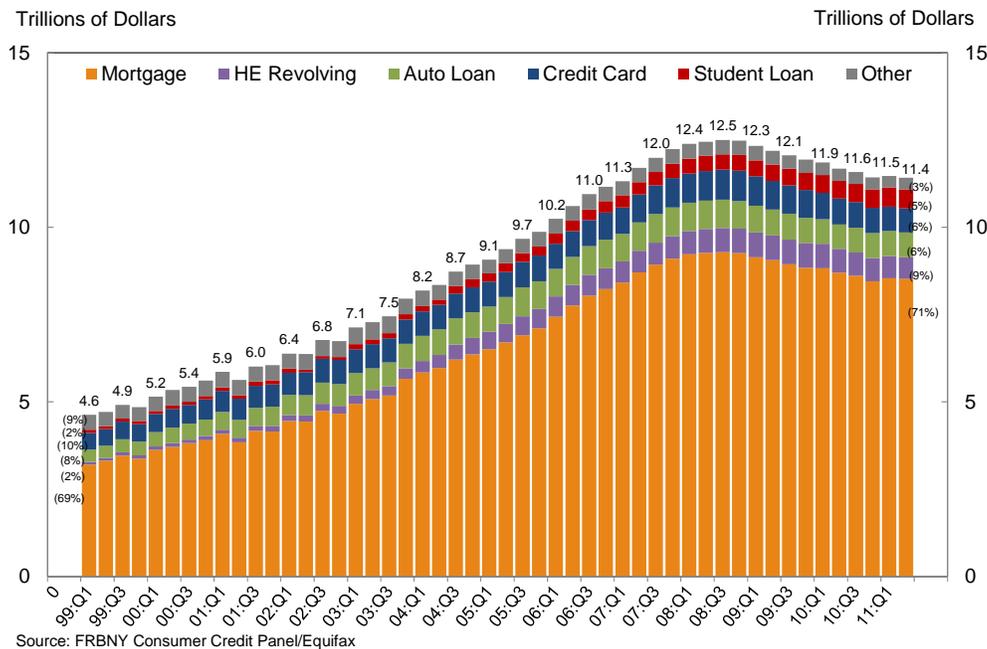
¹ Because much of the discussion about the higher education bubble centers on the question of whether too many Americans are pursuing a BA, this brief is primarily concerned with undergraduate education at traditional non-profit four year institutions in the US. Specific issues in the two year sector, in graduate/professional education and in the for-profit sector warrant separate analyses.

Economist Charles Kindleberger provides one of the most widely cited definitions of a bubble: *A bubble may be defined loosely as a sharp rise in price of an asset or a range of assets in a continuous process, with the initial rise generating expectations of further rises and attracting new buyers – generally speculators interested in profits from trading in the asset rather than its use or earnings capacity. The rise is usually followed by a reversal of expectations and a sharp decline in price often resulting in financial crisis.*²

Given this definition, **an analogy between higher education and the consumption of other goods, such as real estate, is fundamentally flawed because there is no resale market: degrees, once earned, cannot be resold or traded or foreclosed upon.** Therefore there is no way to enter the higher education ‘market’ as a speculator to profit from future price changes. Price alone is insufficient information to determine whether a bubble exists, no matter how steeply or quickly it rises. Instead, the relationship between the current price of something and its long-term value is far more instructive. Rising prices and even rising debt levels are not signs of a bubble unless the good being purchased is ultimately worth far less than its market value; in higher education, there is no evidence to suggest that this is the case.

Another problem with the bubble analogy between housing and higher education is that the total amounts of mortgage debt and education debt are on completely different scales. Although student loan debt at graduation has been growing, and is on track (according to the Federal Reserve Bank of New York) to close in on \$1 trillion and surpass credit card debt, it still comprises only five percent of total household debt (up from two percent in 1999), and is completely dwarfed by housing-related debt, which takes up 71 percent.

Total Debt Balance and its Composition



Prices Have Risen Steadily Above Inflation, as has Financial Aid, While Public Funding has Declined

It is true that, on average, published prices for higher education have been rising above inflation steadily for decades. For example, the **list price of tuition and fees at public four-year institutions rose, on average, 4.5 percent above**

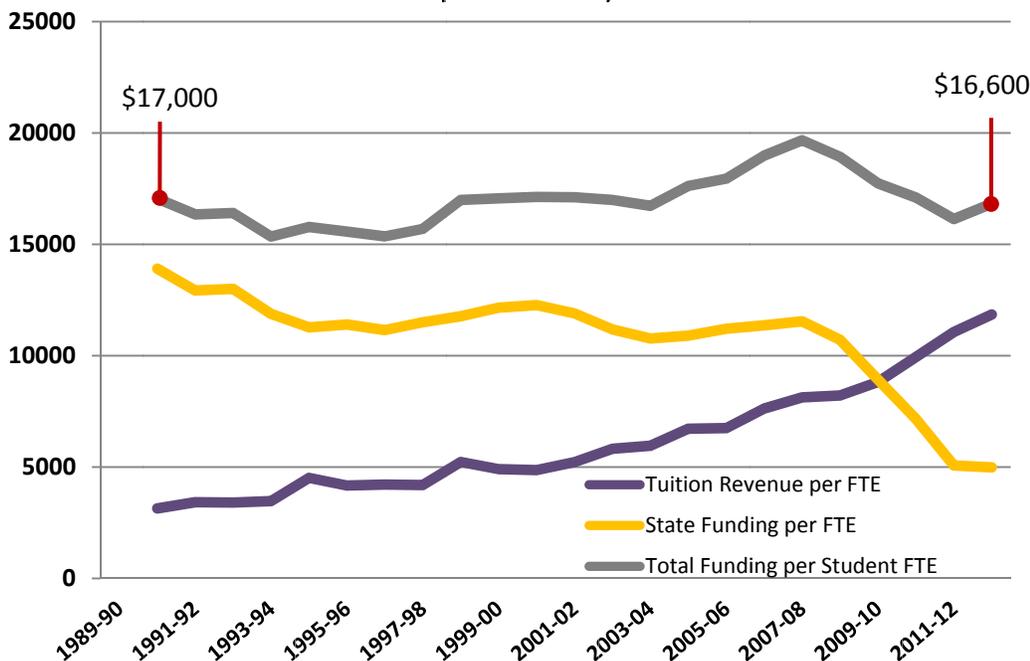
² Found in Volume 1, page 281, or accessed online (with an account) here: dictionaryofeconomics.com

inflation annually from 1981 to 1991, 3.2 percent from 1991 to 2001, and 5.6 percent from 2001 to 2011.³ The consistency of these increases outpacing inflation is striking. However, two points provide greater context.

First, unlike many goods and services, due to a deep and wide historic pattern of public subsidy for institutions (via state support, non-profit status, philanthropy, research funding and more) and public and institutional subsidy for students via financial aid, **the published price in higher education bears strikingly little resemblance to either the actual cost incurred by institutions or the price paid by most students.** Student subsidies have increased steadily alongside tuition: in addition to expanded state and institutional grant aid, and philanthropic support for student scholarships, federal PELL grants have grown in size and number with 20 percent of undergraduate students qualifying for a grant in 2001 and 35 percent qualifying in 2011. Additionally, an expanded federal educational tax credit increased deductions from \$6.6 billion in 2008 to \$14.7 billion in 2009, with 26 percent of the benefit going to families making \$100,000+ per year.⁴ As a result of increased aid, while the published prices have increased dramatically, the average *net* price paid by the student is significantly lower. For example, **in 2011, the average listed tuition and fees at public four-year institutions was \$8,240, but the average net price paid was only \$2,490**, less than a third of the ‘sticker price’. Even at private four-year institutions, where listed tuition and fees averaged \$28,500, the average net price paid was less than half, at \$12,970.⁵

Second, **the origins of tuition increases at public institutions lie in a decades-long trend of reduced State support for public institutions**, dramatically accelerated by the Great Recession, not in a “bubble” of expectation and speculation. The University of Washington presents a dramatic, but sadly typical, example. The UW has lost half of its state funding in only a few years and is facing additional deep cuts, and this has shifted the burden of educational costs away from the public and onto the students and families. The figure below shows a major cause and context for these price increases at the UW—not increased spending by institutions, but rather a serious decline in state financial support.

State and Tuition Funding per FTE
(in 2013 Dollars)



³ Data for Table 4, *Trends in College Pricing*, 2011, The College Board.

⁴ *Trends in Student Aid 2011*, The College Board

⁵ Data for figure 7, *Trends in College Pricing*, 2001, The College Board

Washington State now ranks 38th in state appropriations for higher education per capita. Overall, the average state appropriations for higher education per \$1,000 in Personal Income in the US went from \$8.22 in 1990 to \$6.11 in 2010.⁶

After Accounting for Financial Aid and State Cuts, Tuition Has Still Risen Above Inflation

Even after accounting for aid increases and cuts to state support, there is no denying that the underlying and explicit cost of higher education has still been rising, and outpacing inflation. Many arguments have been made to explain this, but the public conversation is dominated by anecdotes, opinions and out-of-context statistics, and surprisingly few rigorous analyses have been conducted. According to one of few recent serious works of research on the issue, Why Does College Cost So Much?, by economists Robert Archibald and David Feldman⁷, the most common arguments are:

- *Gold Plating*: the argument that prestige-games cause an arms race between competing institutions that drives up costs through fancier buildings and dorms, and other services.
- *The Faculty Lattice and the Administrative Ratchet*: the argument that faculty members have, over time, abdicated teaching and administrative duties in order to focus on research leading to an increase in the use of expensive administrators, and a large base of non-tenure-track instructors to teach courses.
- *The Revenue Theory of Cost*: the argument that institutions will spend every penny they raise, and so controlling revenue is the only way to constrain costs.

Archibald and Feldman provide evidence to refute these explanation as the *primary* drivers of increasing higher education costs, and go on to analyze real prices of different goods and services over time to see if higher education prices behave similarly or uniquely compared to other industries. Their conclusions:

- The price behavior of higher education is more similar to service industries than to goods-producing industries.
- Higher education prices behave similarly to other personal services offered by highly educated providers. (notably, the cost curves for dentists, lawyers, and physicians essentially mirror those for higher education, indicating that some common causal factors might be at play).

These facts are consistent with the theory of ‘cost disease’ advanced decades ago by economists William Baumol and William Bowen, which holds that **service industry costs rise more rapidly than the cost of producing goods, leading to steady price increases that outpace inflation**. Unlike goods producers, service industries have few opportunities to increase productivity without decreasing quality **due primarily to a reliance on expensive, high-skill workers (who comprise over 80 percent of higher education employees) and cutting edge technology**.

Ultimately, college costs are complex and we need to accurately untangle their many causes so that proposed solutions and reforms can best target the right change while maintaining student access and affordability as well as academic excellence.

Whatever the Reasons for Increased Costs, the Burden Has Been Especially Heavy in the Last Decade

Rising costs alone might not explain the current degree of public concern over higher education and the fear of a ‘bubble’; critically, higher education costs have coincided with years of recession and declines in real wages, making education an ever-greater share of average household budgets. **From 2000 to 2010, average inflation-adjusted family**

⁶ *Trends in College Pricing 2011*, The College Board.

⁷ See December 2010 OPB Brief for a full book summary: http://www.washington.edu/admin/pb/home/pdf/briefs/Book-Review_College-Costs.pdf

incomes fell in all quintiles of the income spectrum: the income of the upper 20 percent of families fell 6 percent, while those in the bottom 20 percent suffered even more, with their real wages falling 16 percent on average.⁸

However, vast differences in the absolute levels of income, coupled with financial aid, mean that the share of an average family's budget going to tuition, varies widely: -1.83 percent at the lowest quintile (due to financial aid beyond tuition), 4.75 percent at the 40th percentile, 5.87 percent at the 60th percentile of income, and 4.26 at the 80th percentile.⁹ Of course no single family is exactly average and the burdens of cost are not equally borne across the income spectrum. Higher income students are paying higher tuition rates, but can more easily afford them, while low income students pay highly subsidized rates, but still take out more debt than other students.

As Costs Rise, How Much Are Students Borrowing and How Much Educational Debt Can They Afford?

Having discussed the main drivers of college costs— a major question remains: how are students paying for college? Especially, how much are they borrowing, and what are the consequences of that debt? Overall, the most recent data show that **the average undergraduate who borrows (64% of graduates) completes a BA degree with just over \$23,000 in debt.** However, this may be getting worse: Mark Kantrowitz of FinAid.org projects that average student debt will reach over \$28,500 for 2011-12 with 66.2 percent of students borrowing, which would represent a 60 percent increase in current dollars over total borrowing a decade earlier. However, debt burdens vary dramatically by the type of institution attended. National Department of Education data show that only 12 percent of public university BA graduates borrow \$30,000 or more, while 25 percent of private non-profit graduates do, and in the for-profit sector, fully 57 percent of graduates do. Similarly, **38 percent of public BA graduates finish with zero debt, while only 4 percent of for-profit graduates complete school without debt (private non-profits are in between, at 28%).**¹⁰

Additionally, debt should be considered relative to postgraduate income. Projections made by Georgetown economist Anthony Carnevale show that holding a BA results in a median lifetime income of \$2.8 million, 84 percent higher than a worker with a high school diploma.¹¹ Additionally, workers with a BA or higher have historically experienced very low unemployment rates, and even during the current crisis, they enjoy much lower unemployment rates (5.4%) compared to those with only a high school diploma (10.3%) or some college (9.2%).¹² In rough terms, this suggests that **those without degrees are nearly twice as likely to be unemployed as college graduates, and when they do find work, they are likely to earn little more than half as much as college graduates.** Total education debt for those who completed a BA at the UW as a percentage of average annual income for young adult workers with a BA in Washington ranged from 37.4 percent in 1999 to 38.6 percent in 2009. Across all institutions in the US, for those graduating with a BA, average total debt equalled 39.9 percent of the average annual income for all young adult workers in the US in 1999, and had increased to 53.4 percent by 2009.¹³ **While average debt as a percentage of annual income has increased, the rise is far less dramatic than if we only considered debt in absolute terms, and lower still if we focus on public institutions.**

⁸ Data used to create Table F-1 and Table F-3 in *Trends in Student Aid 2011*, The College Board.

⁹ Calculated by UW. **Sources:** College Board, *Trends in Student Aid 2011* (Average Institutional, Federal and State Grants per Full-Time Dependent Student by Parent Income); College Board, *Trends in College Pricing 2011* (Average Tuition and Fees in Current Dollars at Public Four-Year Universities (Enrollment-Weighted)); US Census Bureau Income Limits for Each Fifth All Families, 2007 (current dollars).

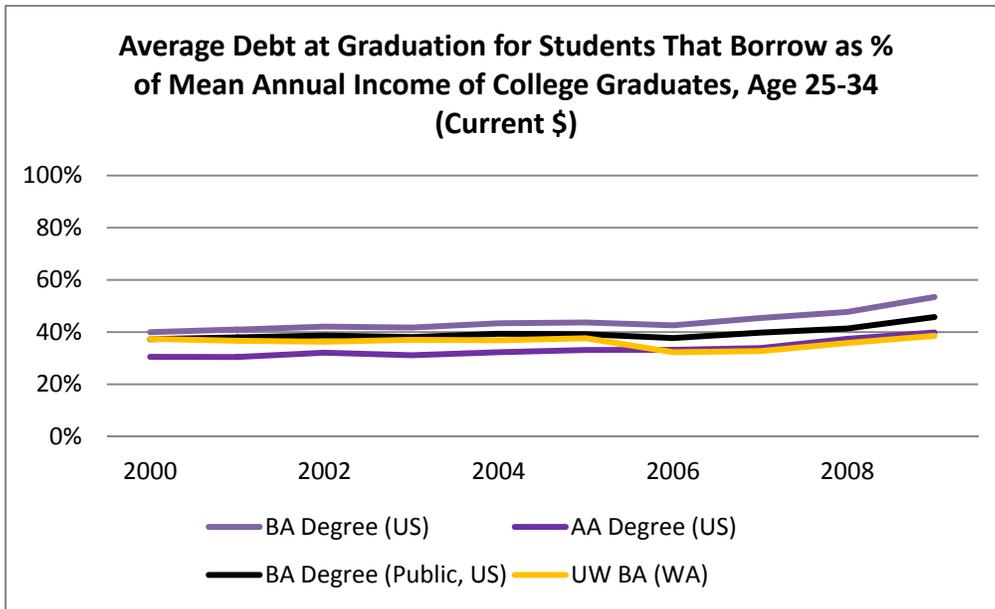
¹⁰ Data include both private and public loans but exclude Parent PLUS loans.

¹¹ *The College Payoff*, 2011: <http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/collegepayoff-complete.pdf>

¹² *Education Pays*, Bureau of Labor Statistics: http://www.bls.gov/emp/ep_chart_001.htm

¹³ Calculated by UW from the National Postsecondary Student Aid Study (NPSAS) data calculated by Mark Kantrowitz

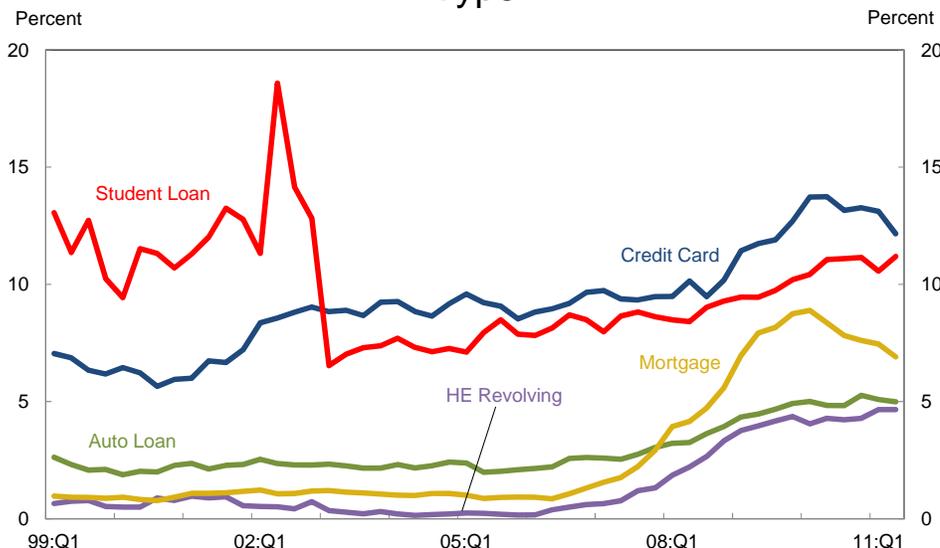
(<http://www.finaid.org/loans/>); Mean Income, age 25-34 is calculated for those with a BA and with wages and is in current dollars (From PUMS (http://www.census.gov/acs/www/data_documentation/public_use_microdata_sample/)).



Should Americans expect a Massive Student Loan Debt Default in the Near Future?

The major fear related to “bubbles” is not their gradual inflation, but their precipitous collapse. This brief has maintained that higher education does not resemble a bubble, but the question of possible widespread loan default deserves to be addressed head on. Loan default rates are increasing—**defaults in the first two years of repayment (as calculated by the Department of Education) have risen to 8.8 percent last year from 7 percent the year before.** However, once again, higher education institutions are not created equal— graduates of for-profit institutions default at the rate of 15 percent (almost twice the national average). Even with the increases in debt levels and default rates, though, credit data show that while the percent of outstanding student loan balance in delinquent status has gone up during the recession, it is still below historic levels. **A lower portion of educational debt balance is delinquent now than it was a decade ago.**

Percent of Balance 90+ Days Delinquent by Loan Type



Source: FRBNY Consumer Credit Panel/Equifax

Thus, there are no signs that massive default is imminent. Even if such a calamity were to occur, with Americans suddenly defaulting on student loans en masse, what might that look like for the American economy? Although **outstanding education loan debt is increasing and expected to pass \$1 trillion soon, it is less than one tenth the value of outstanding post-housing collapse mortgage debt**, which should dampen any discussion of potential economic damage caused by student loan debt defaults. Additionally, because **students cannot discharge education loans in personal bankruptcy** and because the federal government has the ability to garnish wages, withhold tax refunds and social security funds, among other serious repercussions, an educational loan default is rarely a long-term loss for the taxpayer unless the borrower never finds decent-paying work across his or her entire working lifespan. This is one more critical difference between real estate and higher education, undermining any ‘bubble’ comparisons.

What this does mean is that, absent unilateral federal relief, **the burden of the student loan debt lies most squarely on students’ shoulders for the rest of their lives**. This brings us back to the better question, not whether higher education constitutes a bubble about to burst, but rather: how much debt is too much, and what kinds of repayment policies best serve the long-term interests of society and students? What are the repercussions of educational debt, in terms of limits on the mobility, risk-taking, and ability for investment in businesses, homes, and families for America’s educated young adults? These are important debates with serious consequences, but in the meantime, data reassure us that the **value of a college degree over the lifetime of the student and worker is well above average current levels of borrowing**. In fact, Dr. Carnevale of the Georgetown Center argues that **the payoff for a degree is so high compared to the declining wages for those without a degree that we are likely significantly underproducing graduates**.¹⁴

If Not College, What?

It is unsurprising that after a deep recession and amidst a very slow economic recovery, increases in tuition and student debt levels are making Americans nervous, especially as an increasing number are seeking degrees (66% of all recent high school graduates now enroll in postsecondary education, compared to only 47% in 1973). And there are many serious questions about the future of higher education, including:

- Should higher education be funded as a mostly public or mostly private good?
- How does pricing affect the participation rates and enrollment patterns of different groups?
- How is the burden of education debt spread across the income spectrum?
- Are price differences between different kinds of colleges justified relative to employment and earnings payoff?
- What are the unintended consequences of current education loan repayment policies?
- How do we help students with debt for low value (e.g. for-profit or unaccredited) or incomplete degrees?
- In general, how do we maintain relative affordability and student access while also providing institutions with enough resources to maintain the quality of the education and research provided given real increase in cost?

However, widespread fears of a sudden collapse in the value of a college degree, and exhortations for Americans to reconsider applying to and attending college, are worse than misguided. Such speculation is in fact harmful in a society where **the data so clearly show that higher education has been America’s greatest mechanism for socio-economic mobility over many decades, and that a higher education now exists as the primary path to higher levels of employment, higher wages and healthcare, as well as innumerable other social, civil, and lifestyle benefits**.

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¹⁴ *The Undereducated American*, 2011: <http://cew.georgetown.edu/undereducated/>