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Higher Education Student Debt & Tuition Costs

Abstract

U.S. higher education tuition costs have risen at nearly double the rate of inflation over the past forty years. In 2012, student loan delinquency rose to 12% and surpassed credit card delinquency rates as the top category of consumer debt delinquency. Meanwhile, recently enacted federal policies advocate for increased higher education accessibility, affordability and attainability, but simultaneously promote educational institutions to increase spending with funds fueled by student debt. The growth of \$136.8 billion in student loan delinquency has triggered decreasing participation in non-student debt markets by people with student loan debt. Fortunately, Americans continue to enroll in colleges at record rates, but the debt burden has become overly taxing on many students because the U.S. household income levels have remained stagnant or declined in recent years. Investing in higher education is still a wise economic decision even with increased higher education tuition rates, college graduate debt levels, and stagnant median U.S. household wages. The fundamental educational expenses associated with teaching students have not increased significantly beyond inflation over the past twenty years, yet a market failure has emerged with unrestricted institutional spending, record high student debt levels and ever-increasing tuition rates. Moving forward, federal higher education policies need to promote environments where individual university officials and state governments are encouraged to mutually work toward a common goal of long-term fiscal responsibility and educational opportunity.

Document Type

Thesis

Degree Name

M.A.

Department

Economics

First Advisor

Tracy Mott, Ph.D.

Keywords

Higher education, Student debt, Tuition cost

Subject Categories

Economics | Education Economics | Higher Education

Publication Statement

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HIGHER EDUCATION STUDENT DEBT & TUITION COSTS

A Thesis

Presented to

the Faculty of Social Sciences

University of Denver

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

K. Harrison Maloy Jr.

March 2018

Advisor: Dr. Tracy Mott

Author: K. Harrison Maloy Jr.
Title: HIGHER EDUCATION STUDENT DEBT & TUITION COSTS
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Abstract

U.S. higher education tuition costs have risen at nearly double the rate of inflation over the past forty years. In 2012, student loan delinquency rose to 12% and surpassed credit card delinquency rates as the top category of consumer debt delinquency. Meanwhile, recently enacted federal policies advocate for increased higher education accessibility, affordability and attainability, but simultaneously promote educational institutions to increase spending with funds fueled by student debt. The growth of \$136.8 billion in student loan delinquency has triggered decreasing participation in non-student debt markets by people with student loan debt. Fortunately, Americans continue to enroll in colleges at record rates, but the debt burden has become overly taxing on many students because the U.S. household income levels have remained stagnant or declined in recent years. Investing in higher education is still a wise economic decision even with increased higher education tuition rates, college graduate debt levels, and stagnant median U.S. household wages. The fundamental educational expenses associated with teaching students have not increased significantly beyond inflation over the past twenty years, yet a market failure has emerged with unrestricted institutional spending, record high student debt levels and ever-increasing tuition rates. Moving forward, federal higher education policies need to promote environments where individual university officials and state governments are encouraged to mutually work toward a common goal of long-term fiscal responsibility and educational opportunity.

Table of Contents

Chapter One: Higher Education In The United States.....	1
A Brief History of Higher Education.....	1
The Increasing Cost of Higher Education.....	6
Household Income Stagnation	16
The Continued Value of Higher Education	18
Student Loan Debt Levels.....	20
Chapter Two: Federal Higher Education Policies	26
Recent Federal Programs & Policies	26
The Impact of Federal Student Aid.....	29
A Higher Education Market Failure	33
Chapter Three: Public Four Year Universities.....	37
The University of Nebraska.....	37
The University of Colorado	45
U.S. Higher Education Revenues & Expenses	47
Chapter Four: Summary.....	52
Concluding Remarks.....	52
References.....	54

List of Figures

Figure 1.1	Enrollment in Higher Education: 1950-1991.....	4
Figure 1.2	College Tuition and Fees vs. CPI.....	7
Figure 1.3	Percentage change in college sticker price against other consumer areas, 1999-2010.....	9
Figure 1.4	Median Family Income vs. Higher Education Types, 1970-2010.....	10
Figure 1.5	Published Tuition and Fees Relative to 1984-85.....	11
Figure 1.6	Tuition Increases vs. Type of Higher Education.....	12
Figure 1.7	State Funding for Higher Education Declined in Recent Years While Federal Funding Grew, 2000-2012.....	14
Figure 1.8	Balance Between Federal and State Higher Education Funding.....	15
Figure 1.9	Real Median Household Income in the United States.....	17
Figure 1.10	Tuition and Fees and Room and Board.....	17
Figure 1.11	Real Median Household Income in the United States.....	18
Figure 1.12	Earnings Disparity.....	19
Figure 1.13	Life-Cycle Wage Profiles.....	20
Figure 1.14	Nonmortgage Balances, 2004-2014.....	23
Figure 1.15	Percent of Balance 90+ Days Delinquent, 2004-2015.....	24
Figure 2.1	Federal Higher Education Tax Expenditures.....	30
Figure 2.2	Federally Sponsored Lending Grew Sharply in Recent Years.....	31
Figure 3.1	Data from General Operating Budgets, University of Nebraska.....	39
Figure 3.2	Major Federal Funding Stream Distributed Differently Across States.....	40
Figure 3.3	Data from General Operating Budgets, University of Nebraska.....	42
Figure 3.4	Data from General Operating Budgets, University of Nebraska.....	43
Figure 3.5	Federal and State Investments in Higher Education.....	48

Chapter One: Higher Education In The United States

A Brief History of Higher Education

Numerous economic variables contribute to today's higher education environment, and it's important to first understand key elements of the higher education market before addressing federal policies and case studies. The post-World War II era marked the beginning of a rise in higher education enrollment and tuition costs in the United States that continues to this day. Today's prospective college students face an increasingly difficult financial decision when considering whether or not to pursue higher educational opportunities. Public four-year college tuition and fees in 2014 are 3.25 times higher than the rates in 1984, including adjustments for inflation and the consumer price index.¹ The history of U.S. higher education reveals important political influences on current federal educational policies and how national support for higher education transformed over the past few decades.

The U.S. higher education system evolved from early religious institutions established in the pre-colonial era. Groups of early American settlers, driven largely by motivations of religious freedom, established limited educational practices within the clergy. The birthplace of American schooling largely focused on religious education and

¹ "Published Tuition and Fees Relative to 1984-85, by Sector." The College Board. 2015. Accessed June 22, 2015. <http://trends.collegeboard.org/college-pricing/figures-tables/published-tuition-fees-relative-1984-85-sector>.

growing young puritan ministers. The oldest university in the U.S., Harvard University, “graduated about 70% clergymen in the 17th century, 45% in the 18th, and by the latter half of the 19th century, only 10%”.²

From the revolutionary era through the antebellum period, educational institutions slowly evolved from their religious beginnings into schools teaching liberal arts and broader occupations expanding to doctors, lawyers and engineers. In 1862, President Abraham Lincoln signed the Morrill Land-Grant Act which prescribed 30,000 acres of land, or the proceeds of its sale, to be used towards establishing and funding educational institutions. The U.S. Code, Title 7, Chapter 13 on *Agricultural and Mechanical Colleges Subchapter 1- College-Aid Land Appropriation* stated:

[...] each State may claim the benefit of this subchapter, to the endowment, support, and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.³

Thirty years later congress approved a second Morrill Act in 1890 by providing an additional \$15,000 for colleges, old or new, provided the colleges did not segregate admissions based on race.⁴ This law, primarily targeted at the former confederate states, influenced civil rights movements and foreshadowed emerging national sentiments.

² Kaufman, Clare. "The History of Higher Education in the United States." <http://www.worldwidelearn.com/education-advisor/indepth/history-higher-education.php>.

³ "United States Code 7, Title 7, Chapter 13, Subchapter 1, Section 304." Cornell University Law School. Accessed June 16, 2015. <https://www.law.cornell.edu/uscode/text/7/304>.

⁴ "United States Code 7, Title 7, Chapter 13, Subchapter 1. Chapter 841" Cornell University Law School. Accessed June 16, 2015. <http://legisworks.org/sal/26/stats/STATUTE-26-Pg417a.pdf>.

Education-based federal policies continue in modern times as congress applies the idea to other laws such as the sea grant, urban grant, space grant, and sun grant colleges.

Perhaps the most significant contribution to today's higher education fiscal environment was the *Serviceman's Readjustment Act of 1944*; known popularly as the 'G.I. Bill' that provided over 9 million veterans approximately \$4 billion in educational funds over a five year period from 1944-1949.⁵ The G.I. Bill fueled student enrollment rates which nearly doubled from 1.5 million in 1940 to 2.7 million in 1950.⁶ These trends in enrollment continued for the next several decades doubling again in the 1960s, and, in the 1970s, the student college population reached five times the size of 1951.⁷ Not only did the GI Bill extend access to higher education, but the bill established hospitals, provided low interest mortgages, and granted stipends covering tuition and living expenses for veterans attending college or trade school.⁸ This government stimulus provided a surge to the existing educational structure along with several other secondary effects, including increasing teacher and faculty demand, among others.

⁵ "G.I. Bill." 1991. Accessed July 7, 2015. <http://www.history.com/topics/world-war-ii/gi-bill>.

⁶ See note 2 above.

⁷ Gumport, Patricia, Maria Iannozzi, Susan Shaman, and Robert Zemsky. "The United States Country Report: Trends in Higher Education from Massification to Post-Massification." January 17, 1997. Accessed August 6, 2015. <http://citizing.org/data/projects/highered/Trends in HE from Mass to Post-Mass.pdf>.

⁸ See note 5 above.

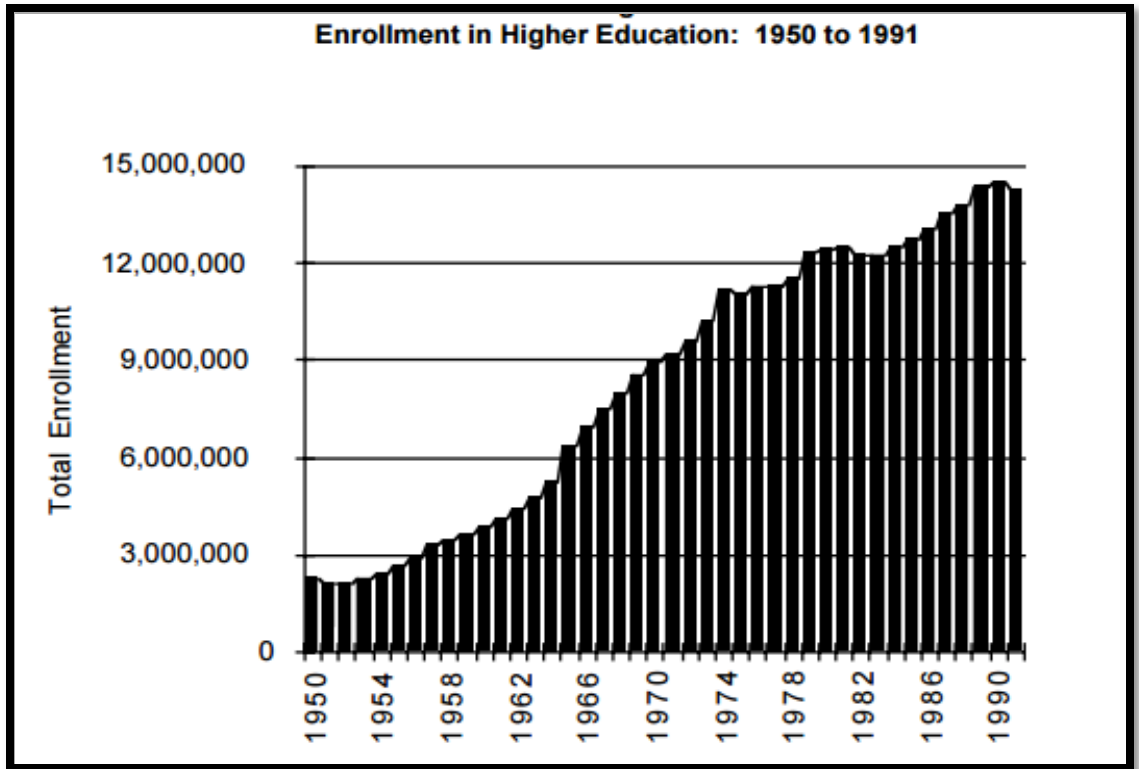


Figure 1.1 Enrollment in Higher Education: 1950-1991. Data from U.S. Department of the Commerce, Bureau of the Census, Current Population Survey, "The United States Country Report: Trends in Higher Education from Massification to Post-Massification." January 17, 1997. Accessed August 6, 2015. [http://citizing.org/data/projects/highered/Trends in HE from Mass to Post-Mass.pdf](http://citizing.org/data/projects/highered/Trends%20in%20HE%20from%20Mass%20to%20Post-Mass.pdf).

In 1946, President Harry Truman, the only U.S. president of the 20th century not to graduate from college, appointed a commission to investigate higher education in the U.S. that advocated for policies of broader educational participation and expanded universal access to higher education.⁹ The commission's findings revealed an important mindset with the nation's expectations about college attendance by expanding the role of community colleges and fostering the federal government's role in supporting the functions of higher education in a democracy.¹⁰

⁹ Hutcheson, Philo. "The Truman Commission's Vision of the Future." *The NEA Higher Education Journal*, 2007. Accessed August 25, 2015. http://www.nea.org/assets/img/PubThoughtAndAction/TAA_07_11.pdf.

¹⁰ Ibid.

Other significant contributions to the current U.S. higher education environment include: the Brown vs. Board of Education ruling in 1954 that declared public schools separating people based on race unconstitutional, the rise of feminism movements during the 1960s and 1970s that led to an increased emphasis on higher educational opportunities for women, the 1975 Congressional passing of Public Law 94-142 that requires an appropriate education for all handicapped children, and the Title IX Education Amendments of 1972 that requires access to programs not to be restricted based on gender.¹¹ This collection of laws and rulings resulted in the permanent expansion, improved equity and increased access to the U.S. higher educational system.

The most recent changes to modern education include the introduction of ever-changing information technologies which infuse classrooms and incorporate online educational opportunities; technologies emerge both as single entities and overarching integrating elements to schools. Computers, tablets and other devices open the vastness of the internet and exponentially expand educational opportunities. The U.S. Department of Education states:

New technology supports both teaching and learning, technology infuses classrooms with digital learning tools, such as computers and hand held devices; expands course offerings, experiences, and learning materials; supports learning 24 hours a day, 7 days a week; builds 21st century skills; increases student engagement and motivation; and accelerates learning.¹²

¹¹ Gelbrich, Judy. "American Education: The Second Half of the 20th Century." Oregon State University School of Education. 1999. Accessed May 14, 2015. <http://oregonstate.edu/instruct/ed416/ae8.html>.

¹² "Use of Technology in Teaching and Learning." U.S. Department of Education. Accessed September 18, 2015. <http://www.ed.gov/oii-news/use-technology-teaching-and-learning>.

As educational institutions and U.S. federal policies target changes in the education system, technology will be used to help alleviate burdens and create efficiencies within all tiers of schooling.

The evolution of U.S. higher education identifies significant achievements and addresses how federal policies fostered the support and progression of students. Data collected over the past ten years show that the current higher education environment places an increasing burden on students in the form of debt. The student debt problem has continued to increase in recent years and needs to be addressed at the state and national levels. As demonstrated throughout U.S. educational history, federal policies and state government involvement offer promising solutions to foster higher education development.

The Increasing Cost of Higher Education

Since the surge of students after the Second World War, tuition fees have constantly risen and far outpaced other consumer goods. The following graph illustrates the real, inflation-adjusted increases of college tuition fees, medical care, and new home prices since 1978:

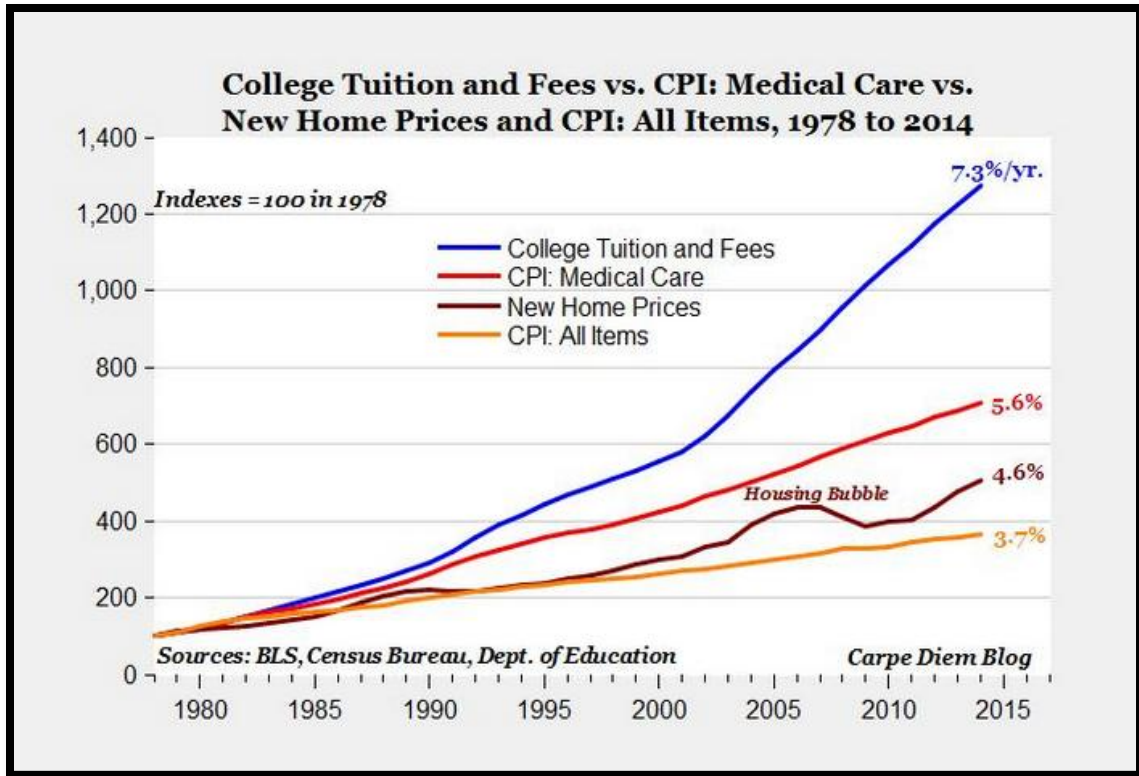


Figure 1.2: College Tuition and Fees vs. CPI. Data from Bureau of Labor Statistics, Department of Education. photo source: <https://www.aei.org/publication/debt-fueled-bubbles-bubbles-bubbles-first-home-prices-now-higher-education-and-taxi-medallions/>

Harvard University published an article in 1975 informing students of tuition price increases to an annual rate of \$5,350, a \$325 rise from the 1973-1974 rates.¹³ In 2015, Harvard charged students \$43,938 per year for tuition and fees.¹⁴ The College Board, a non-profit organization established to expand access to higher education, produces detailed education-based research and statistics to help influence and inform federal policy decisions. At a national level, the College Board assesses tuition and fees for 2014-2015 in the following areas: public four-year in-state: \$9,139 per year; public

¹³ "Faculty Announces Raise In 1974-75 Tuition, Fees." March 5, 1974. Accessed May 8, 2015. <http://www.thecrimson.com/article/1974/3/5/faculty-announces-raise-in-1974-75-tuition/>.

¹⁴ "Harvard University." U.S. News and World Report. <http://colleges.usnews.rankingsandreviews.com/best-colleges/harvard-university-2155?int=9ff208>.

four-year out-of-state: \$22,958 per year; and private non-profit four-year: \$31,231 per year.¹⁵ These rates, when compared to tuition fees in the late 1970s, represent annual increases ranging from 2% to 30% per year. In comparison to the average pace of inflation since the 1980s at about 3.2%, tuition costs have increased at approximately 7% per year.¹⁶

The Delta Cost Project also compiles higher education research data and conducts surveys from every college, university and vocational school that participates in federal student aid programs in order to gain insight about how colleges spend money.¹⁷ Data compiled by the Delta Cost Project from 2000-2010 indicates that tuition fees continue to rise for all types of higher education.¹⁸ The following charts illustrate data from the Delta Cost Project and the Department of Education's Integrated Postsecondary Education Data System (IPEDS). As the graph illustrates, only the health care sector rivals cost increases in higher education:

¹⁵ "Average Published Undergraduate Charges by Sector, 2014-15." The College Board. 2015. Accessed June 22, 2015. <http://trends.collegeboard.org/college-pricing/figures-tables/average-published-undergraduate-charges-sector-2014-15>.

¹⁶ Feldman, David. "Myths and Realities about Rising College Tuition." National Association of Student Financial Aid Administrators. March 23, 2012. Accessed May 25, 2015. http://www.nasfaa.org/news-item/4565/Myths_and_Realities_about_Rising_College_Tuition.

¹⁷ "The Delta Cost Project." Accessed April 8, 2015. <http://www.deltacostproject.org/about-us>.

¹⁸ Andrews, Wilson, and Dylan Matthews. "Why Is College so Expensive?" The Washington Post. August 11, 2013. Accessed May 22, 2015. <http://www.washingtonpost.com/wp-srv/special/business/cost-of-higher-education/>.

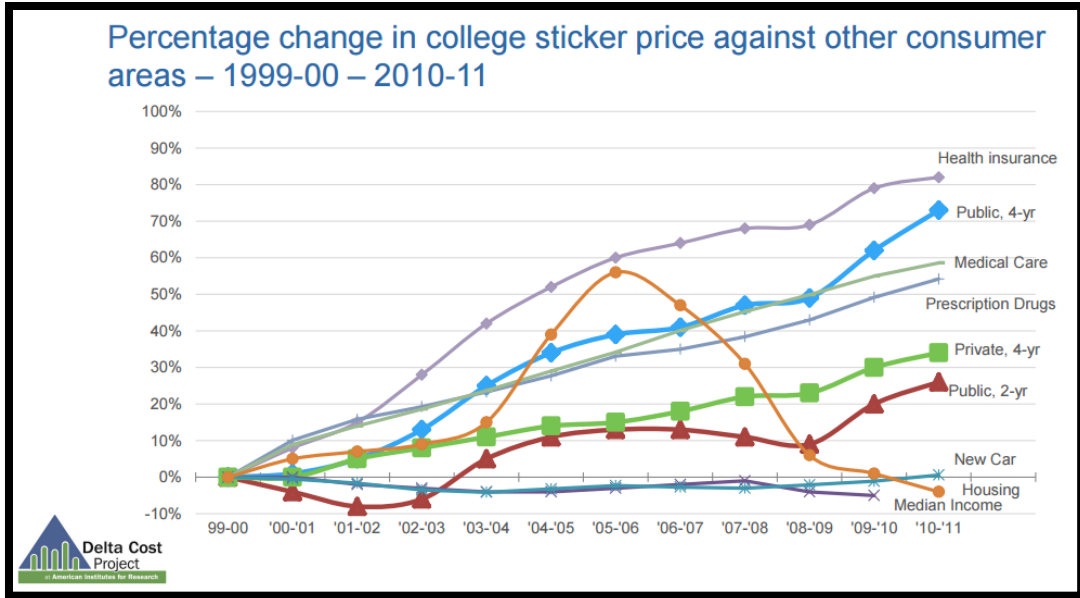


Figure 1.3: Percentage change in college sticker price against other consumer areas, 1999-2010. "The Delta Cost Project." Accessed April 8, 2015. <http://www.deltacostproject.org/about-us>.

The Delta Project also compares levels of median family income in comparison to higher education costs. Note, while the median family income rate of growth slightly decreased from 2000-2010, increases in higher education tuition rates continued to grow at far higher rates.

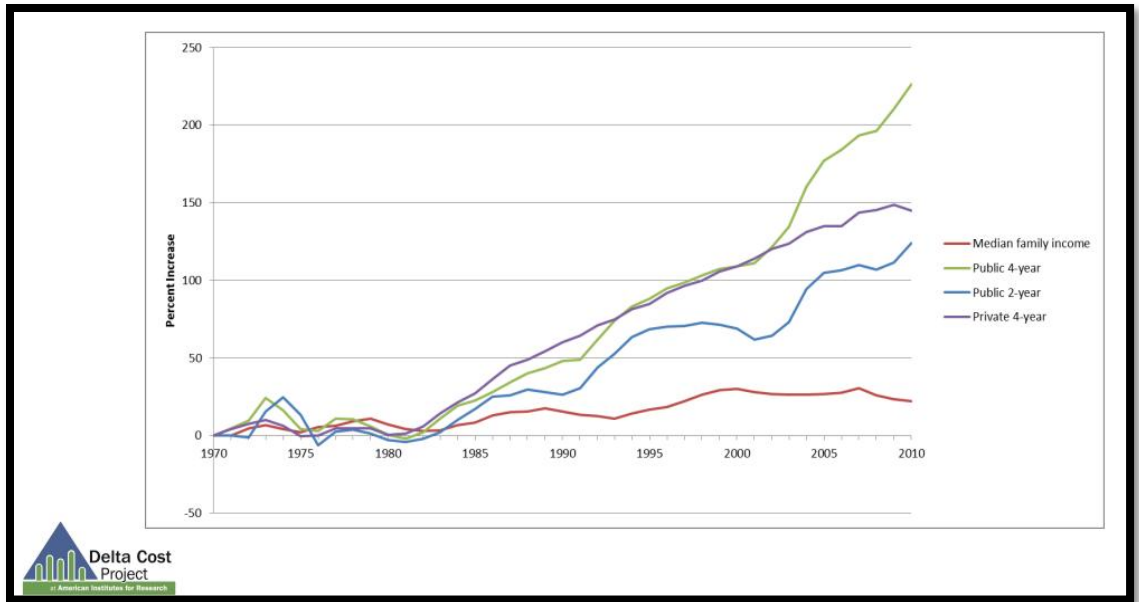


Figure 1.4: Median Family Income vs. Higher Education Types, 1970-2010. "The Delta Cost Project." Accessed April 8, 2015. <http://www.deltacostproject.org/about-us>.

As previously mentioned, rising higher education costs were not limited to the past twenty years. Tuition has risen consistently since the Second World War, when the government extended the GI Bill to war veterans. This bill triggered a cultural shift with the perception of who should attend college and supported the view that higher education provides a gateway to the middle class. The next graph, adjusted for increases in inflation and the CPI, illustrates how higher education costs have steadily increased (i.e., the cost of a public four year education in 2014-2015 is 3.25 times higher than it was in 1984-1985).¹⁹

¹⁹ "Published Tuition and Fees Relative to 1984-85, by Sector." The College Board. 2015. Accessed August 15, 2015. <http://trends.collegeboard.org/college-pricing/figures-tables/published-tuition-fees-relative-1984-85-sector>.

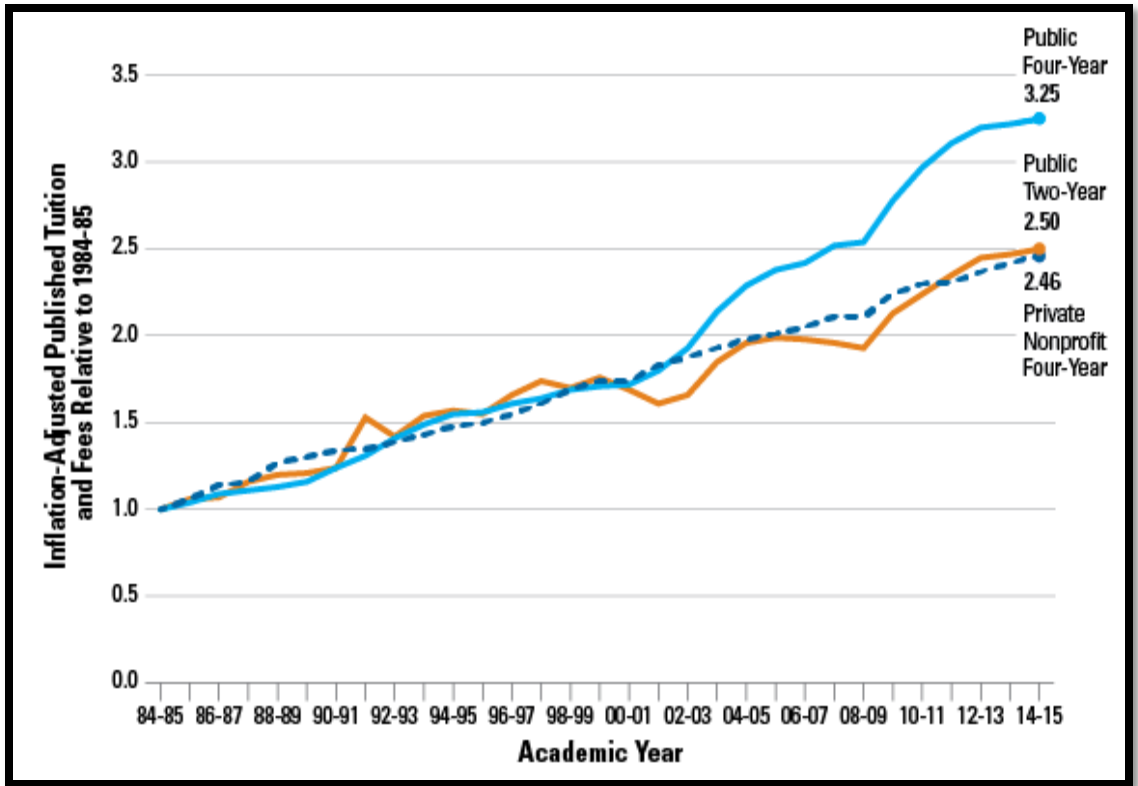


Figure 1.5: "Published Tuition and Fees Relative to 1984-85, by Sector." The College Board. 2015. Accessed August 15, 2015. <http://trends.collegeboard.org/college-pricing/figures-tables/published-tuition-fees-relative-1984-85-sector>.

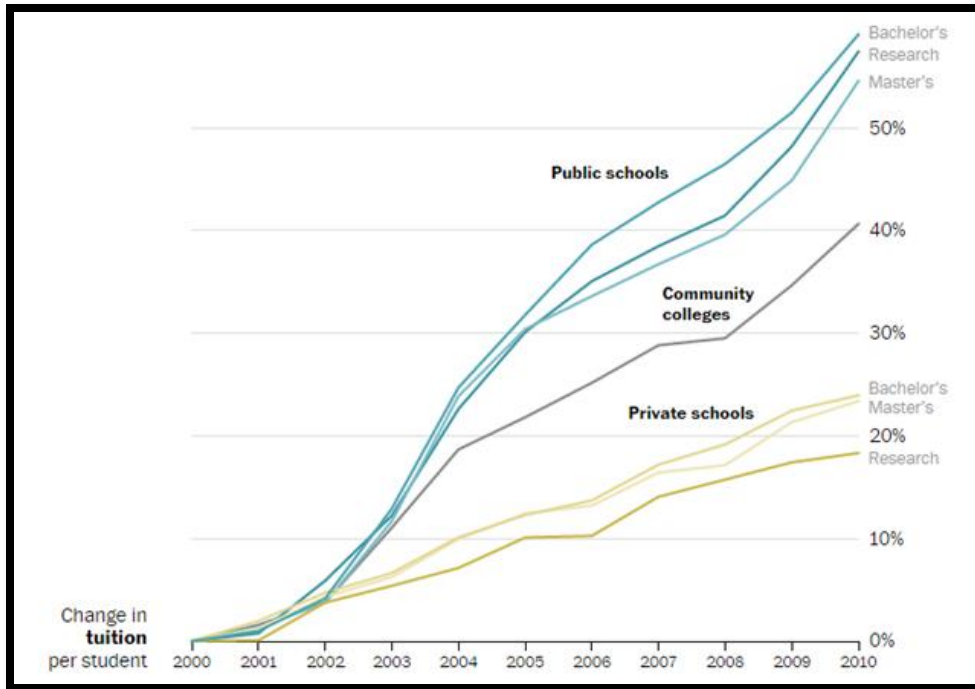


Figure 1.6: Tuition Increases vs. Type of Higher Education. Data from Delta Cost Project. "Why Is College so Expensive?" *The Washington Post*. August 11, 2013. Accessed May 22, 2015. <http://www.washingtonpost.com/wp-srv/special/business/cost-of-higher-education/>

The graph above indicates how each sector of higher education has experienced varying levels of tuition increases. Community colleges are categorized as other public schools and vary significantly from traditional public universities due to the different funding allocations from state and federal governments. Higher educational institutions largely received lower levels of state and local funding from 2000-2010; however, individual institutions dealt with funding decreases in different ways. Community colleges shifted the costs from the government to the students and lowered overall institutional spending--meaning that community colleges increased tuition rates similar to other higher education institutions, but at a lesser degree than public research universities. Data indicate that public research universities also shifted costs from the government to the students, but continued to increase overall spending. Studies also show that some

public research universities experienced an overall increase in federal funding of approximately \$5,793 per student from 2000-2010, which meant that the universities could have chosen to keep tuition rates fairly stagnant, but decided to continue raising tuition rates and increasing institutional spending.²⁰ While a small portion of increasing tuition costs for public research universities are explained by decreased funds from state or federal subsidies (i.e., cost shifting), research shows that tuition increases are driven by continued increases in educational institutional spending.

Cost shifting occurs when one group is asked to pay for the goods and services for another group of people. From an educational expense perspective, cost shifting occurs when state, local or federal funding is cut from educational institutions, but these schools continue to spend the same amount of money while transferring the cost difference to a new group (i.e., students). In several cases, schools continue to increase spending and transfer the loss of state funding revenue to students in the form of higher tuition rates. Several news sources conclude that decreases in state funding represent the primary factor for increases in nationwide higher education tuition rates; however, this reasoning is misleading and not completely accurate. While it's true that state government higher educational funding has decreased over the past ten years, federal funding actually increased at a comparable rate. Beginning in 2000, federal funding for higher education

²⁰ Matthews, Dylan. "The Tuition Is Too Damn High, Part III — The Three Reasons Tuition Is Rising." *The Washington Post*. August 28, 2013. Accessed May 15, 2015. <http://www.washingtonpost.com/news/wonkblog/wp/2013/08/28/the-tuition-is-too-damn-high-part-iii-the-three-reasons-tuition-is-rising/>.

grew by \$40 billion, while state funding declined by \$7 billion—representing a total nationwide funding of \$76 billion in federal support and \$73 billion in state support.²¹

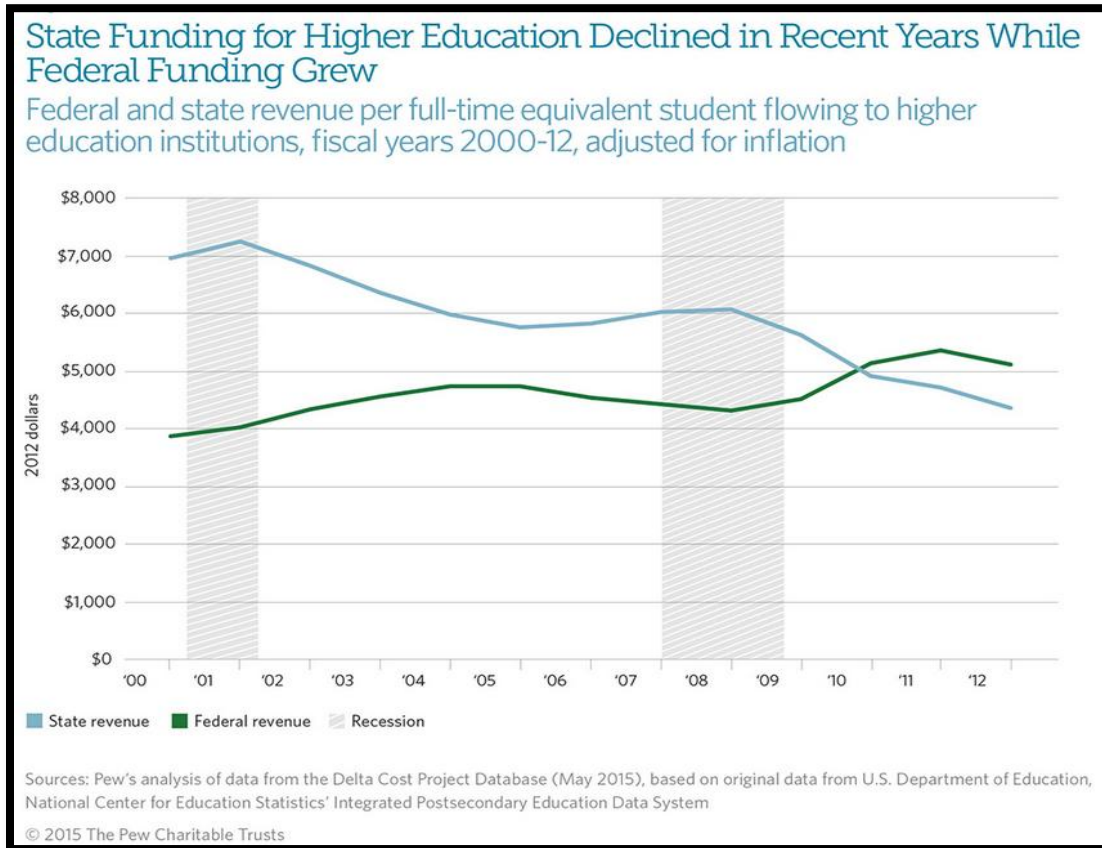


Figure 1.7: State Funding for Higher Education Declined in Recent Years While Federal Funding Grew, 2000-2012. Data from Pew's analysis of data from Delta Cost Project Database. <http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2015/06/federal-and-state-funding-of-higher-education>

State and federal higher educational funds provide different types of support for students (i.e., these funds are not directly interchangeable). Broadly speaking, federal educational funding primarily assists individual students and research projects, while state funding supports the general operation of educational institutions. Media sources

²¹ Woodhouse, Kellie. "Impact of Pell Surge." Inside Higher Ed. June 12, 2015. Accessed September 26, 2015. <https://www.insidehighered.com/news/2015/06/12/study-us-higher-education-receives-more-federal-state-governments>.

misrepresent cost shifts by citing a single reason, such as declines in state funding, as the only contributing factor toward increased higher education tuition fees. A closer comparison at spending allocations between federal and state funding sources identify specific areas of increased and decreased growth.

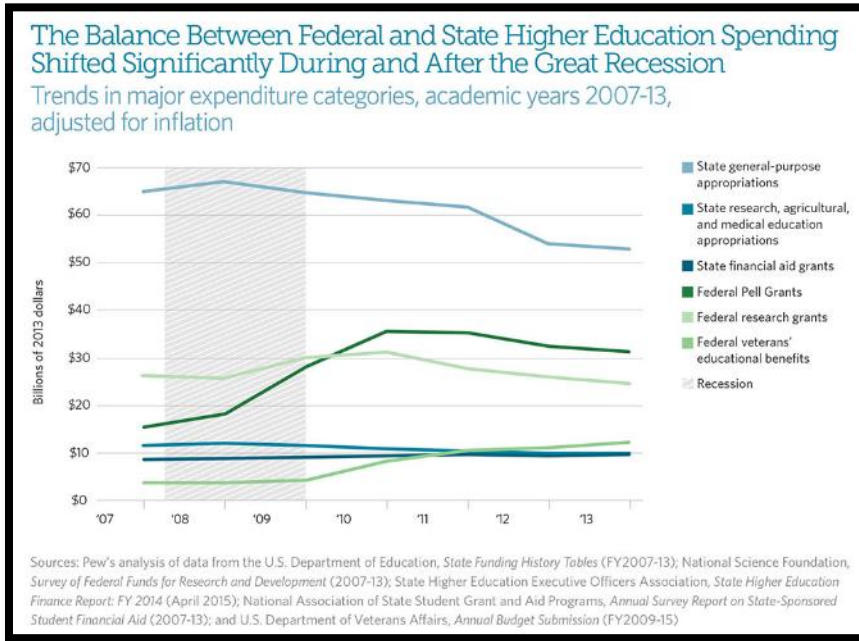


Figure 1.8: Balance Between Federal and State Higher Education Funding. Data from Pew's analysis of data from Delta Cost Project Database. <http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2015/06/federal-and-state-funding-of-higher-education>.

Federal spending experienced the most growth in the Pell Grant program (72%) and veteran's educational benefits (225%) while state spending declined in general-purpose allocations. While specific federal and state spending allocations differ, broadly speaking, both Pell Grants and veterans' benefit payments contribute toward general tuition fees. Therefore, these types of federal funds are directly interchangeable with the decrease in state funds for general-purpose allocations. Numerous online publications also cite other reasons such as administrative bloat, investments in infrastructure and technology, expanding sports programs, campus construction projects, increased

availability of grants and declines in state funding as justification for increasing tuition rates. One of the only certainties in higher education is how each individual educational institution makes unique budgeting decisions and allocates funds in considerably different ways--while also receiving varying levels of state and federal support. The complex allocation of resources makes a one-size-fits-all solution near impossible and necessitates individual solutions for each state and higher education institution.

Household Income Stagnation

Students and families, with influence from several variables, ultimately make the decision when deciding whether or not to obtain a college degree. From a financial perspective, household revenues and expenses significantly influence the decision. Wise families ideally begin saving years in advance in anticipation of these financial commitments. Unfortunately, economic research conducted by the Federal Reserve Bank of St. Louis details how real median household income in the United States has not kept up with the staggering increases of higher education tuition rates:

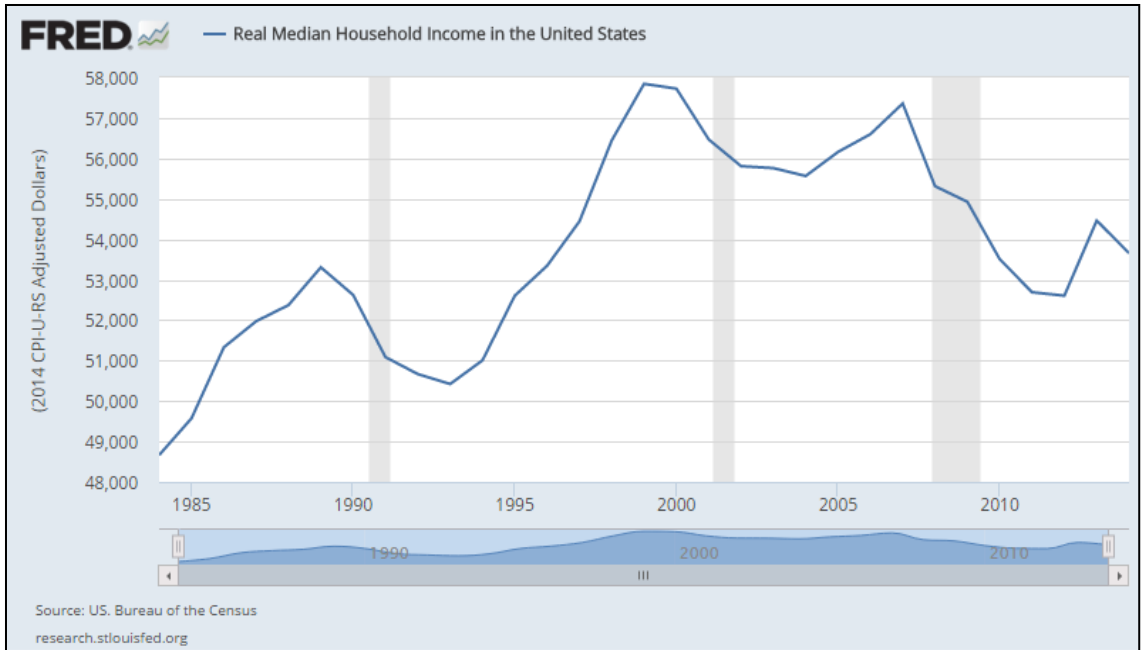


Figure 1.9: "Real Median Household Income in the United States." Federal Reserve Bank of St. Louis. October 21, 2015. <https://research.stlouisfed.org/fred2/series/MEHOINUSA672N>.

Comparing this information with the following charts illustrates significant differences in the higher educational tuition and fees versus median household income.

National Average Public Four-Year College Tuition & Fees: (in 2015 dollars)			
1985:	1995:	2005:	2015:
\$2,918	\$4,399	\$6,708	\$9,410

Figure 1.10 "Tuition and Fees and Room and Board over time, 1975-76 to 2015-16, Selected Years." The College Board. 2015. Accessed June 22, 2015. <http://trends.collegeboard.org/college-pricing/figures-tables/tuition-and-fees-and-room-and-board-over-time-1975-76-2015-16-selected-years>.

Real Median Household Income in the United States: (in 2014 dollars)			
1985:	1995:	2005:	2014:
\$49,574	\$52,604	\$56,160	\$53,657

Figure 1.11: "Real Median Household Income in the United States." Federal Reserve Bank of St. Louis. October 21, 2015. <https://research.stlouisfed.org/fred2/series/MEHOINUSA672N>.

The charts identify discrepancies between household income growth and the increase in higher education tuition rates, and help explain a portion of the rise in student debt.

The Continued Value of Higher Education

A college degree is still a wise economic decision--even while tuition rates increase, graduates assume greater amounts of debt, and median U.S. household wages stagnate. An overwhelming number of research studies verify how a four-year degree has never been more valuable and show that the pay gap between college graduates and non-graduates reached a record high in 2015.²² Benefits of higher education typically include higher income, lower unemployment, and greater job satisfaction. The following PEW Research Center chart illustrates the continuing income difference between adults with and without a college degree.

²² Leonhardt, David. "Is College Worth It? Clearly, New Data Say." The New York Times. May 27, 2014. www.nytimes.com/2014/05/27/upshot/is-college-worth-it-clearly-new-data-say.html.

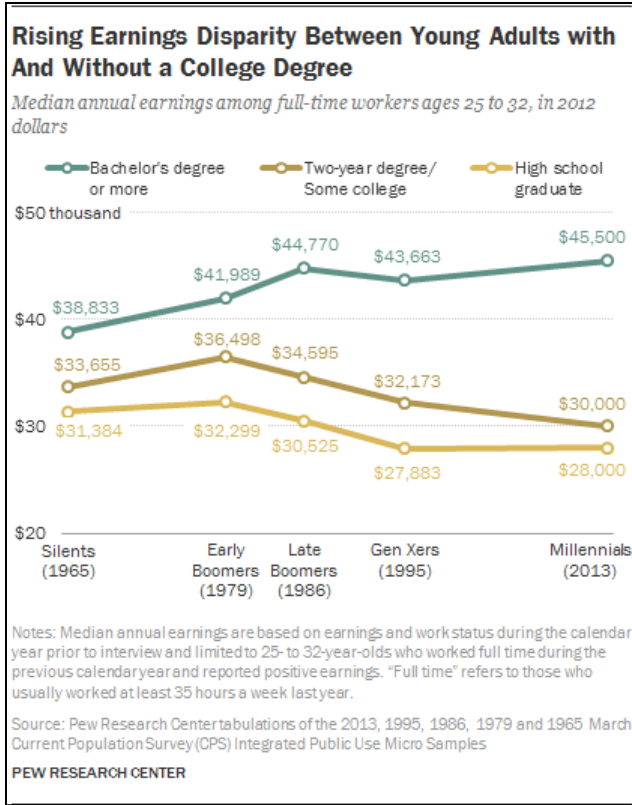


Figure 1.12: Desilver, Drew. "5 Facts about Today's College Graduates." Pew Research Center. May 30, 2014. <http://www.pewresearch.org/fact-tank/2014/05/30/5-facts-about-todays-college-graduates/>.

The following graph illustrates basic differences in lifetime earnings based on education.

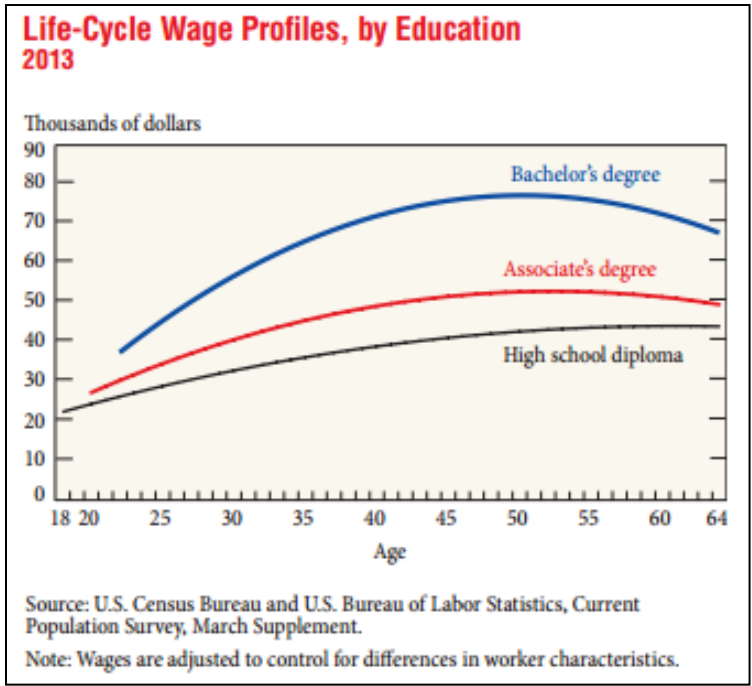


Figure 1.13: Abel, Jaison, and Richard Deitz. "Do the Benefits of College Still Outweigh the Costs?" *Federal Reserve Bank of New York Current Issues in Economics* 20, no. 3 (2014).
https://www.newyorkfed.org/medialibrary/media/research/current_issues/ci20-3.pdf.

Despite recent overall wage stagnation in the U.S., college graduates still out-earn people without degrees. When taking into consideration the average debt of a recent college graduate (approximately \$26,000), lifetime earnings of a college graduate amount to well over \$1 million more than high school graduates over the course of their working lives.²³

Student Loan Debt Levels

Student debt contributes to a larger measurement that economists refer to as household debt. Household debt impacts the macroeconomic marketplace in several

²³ Abel, Jaison, and Richard Deitz. "Do the Benefits of College Still Outweigh the Costs?" *Federal Reserve Bank of New York Current Issues in Economics* 20, no. 3 (2014).
https://www.newyorkfed.org/medialibrary/media/research/current_issues/ci20-3.pdf.

positive and negative ways. The debt benefits families by providing a means to smooth consumption over longer periods of time and supplying access to additional money during times of reduced income. A certain amount of debt is considered good for the economy because the money multiplier effect stimulates economic growth and supports a transfer of wealth to other individuals. However, once debt levels reach a certain threshold, it becomes a risk because a minor economic downturn can trigger significant problems for debt laden families. At the national level, if enough families cannot make household payments, the entire financial sector becomes exposed to these risky loans. In the case of student loans, over 90% are supported by the federal government; thereby exposing taxpayers to the risk. If student loan defaults become a problem, the government would likely assume responsibility for repaying the debt.

In the summer of 2013, student debt levels far outpaced other forms of consumer debt and reached an unprecedented level of \$1.2 trillion.²⁴ While mortgage, credit card, and auto loan debt declined over the past ten years, student loan debt continues to rise at an average rate of 10-14% per year; from \$364 billion in 2002 to \$1.19 trillion as of June 30, 2015.²⁵ The New York Federal Reserve recently noted, “In 2010, student debt surpassed credit cards to become the second largest form of household debt after mortgages whereas prior to 2008, the student debt was the smallest of household debts”.²⁶ Furthermore, both the amount of student loans and the associated loan amounts increased

²⁴ Andrews, Wilson, and Dylan Matthews. "Why Is College so Expensive?" *The Washington Post*. August 11, 2013. Accessed May 22, 2015. <http://www.washingtonpost.com/wp-srv/special/business/cost-of-higher-education/>.

²⁵ Brown, Meta, Andrew Haughtwout, Donghoon Lee, Joelle Scally, and Wilbert Van Der Klaauw. "Measuring Student Debt and Its Performance." *Federal Reserve Bank of New York Staff Reports*, no. 668 (2014). Accessed April 14, 2015. http://www.newyorkfed.org/research/staff_reports/sr668.pdf.

²⁶ See note 17 above.

over the same period. Another New York Federal Reserve report cites that between 2004 and 2012, the total number of student loan borrowers increased by 70% (23 million borrowers to 39 million); coupled with an increase of 70% in the average total balance borrowed per student (from approximately \$15,000 to \$25,000).²⁷

A comparison of student debt to mortgage debt, the leading form of consumer debt, helps gauge overall debt levels. At the end of second quarter 2015, mortgage debt in the United States totaled \$8.12 trillion, representing 69% of total consumer debt. Student loan debt, in comparison, amounted to \$1.19 trillion or 10% of the national consumer debt total.²⁸ As student loan balances continue to increase and approach \$1.2 trillion, data show an increase in both the number of borrowers and the average balance per borrower.

²⁷ Brown, Meta. "Student Debt Overview." Federal Reserve Bank of New York. August 13, 2013. Accessed April 14, 2015. http://www.newyorkfed.org/regional/Brown_presentation_GWU_2013Q2.pdf

²⁸ "Quarterly Report On Household Debt and Credit." Federal Reserve Bank of New York. August 1, 2015. Accessed August 15, 2015. http://www.newyorkfed.org/householdcredit/2015-q2/data/pdf/HHDC_2015Q2.pdf.

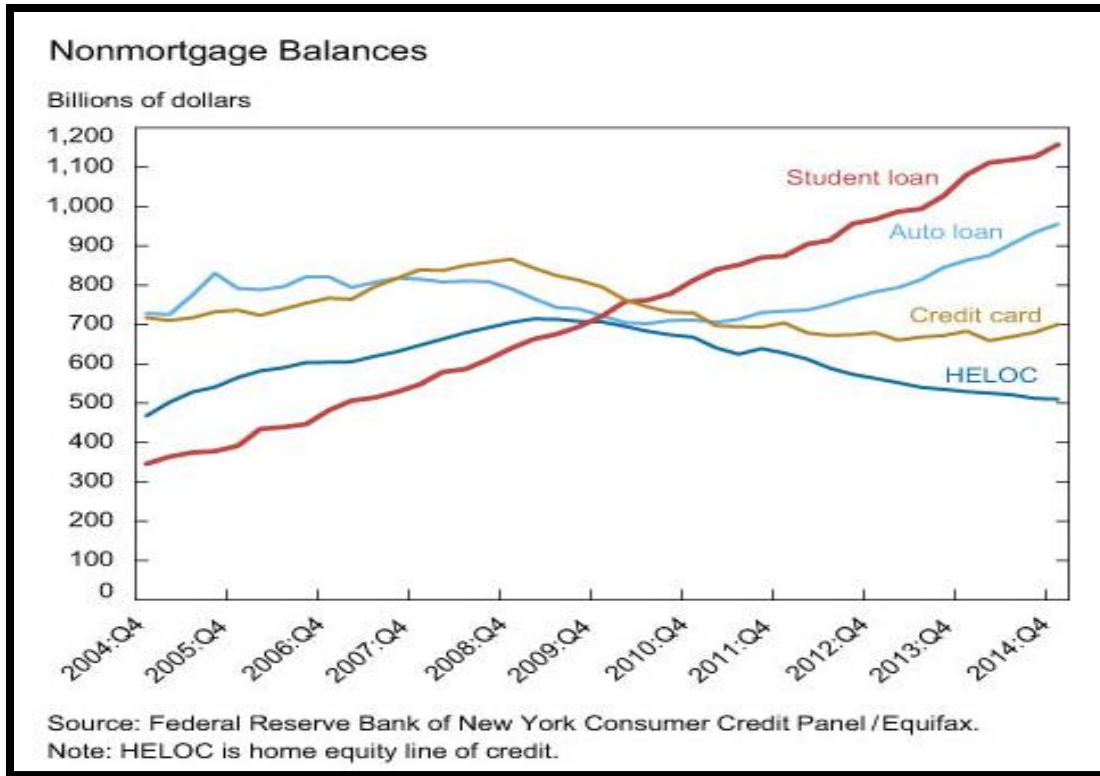


Figure 1.14: Nonmortgage Balances, 2004-2014. Brown, Meta. "Student Debt Overview." Federal Reserve Bank of New York. August 13, 2013. Accessed April 14, 2015. http://www.newyorkfed.org/regional/Brown_presentation_GWU_2013Q2.pdf

Student loan delinquency rates, measured by the New York Federal Reserve as loans 90+ days delinquent or in default, also steadily increased over the past decade; rising from 6% in 2003 to over 11% in 2014.²⁹ In 2012, student loan delinquency peaked at 12%, and surpassed credit card delinquency as the top category of consumer debt delinquency. As of second quarter 2015, the total dollar amount of student loans 90+ days delinquent versus mortgage loans delinquency amounted to approximately \$136.8 billion and \$203 billion, respectively.³⁰ Therefore, credit loss experienced with

²⁹ See note 26 above.

³⁰ See note 26 above.

delinquent student loans has grown to well over half of potential mortgage credit loss.

The following graph illustrates household debt 90+ days delinquent:

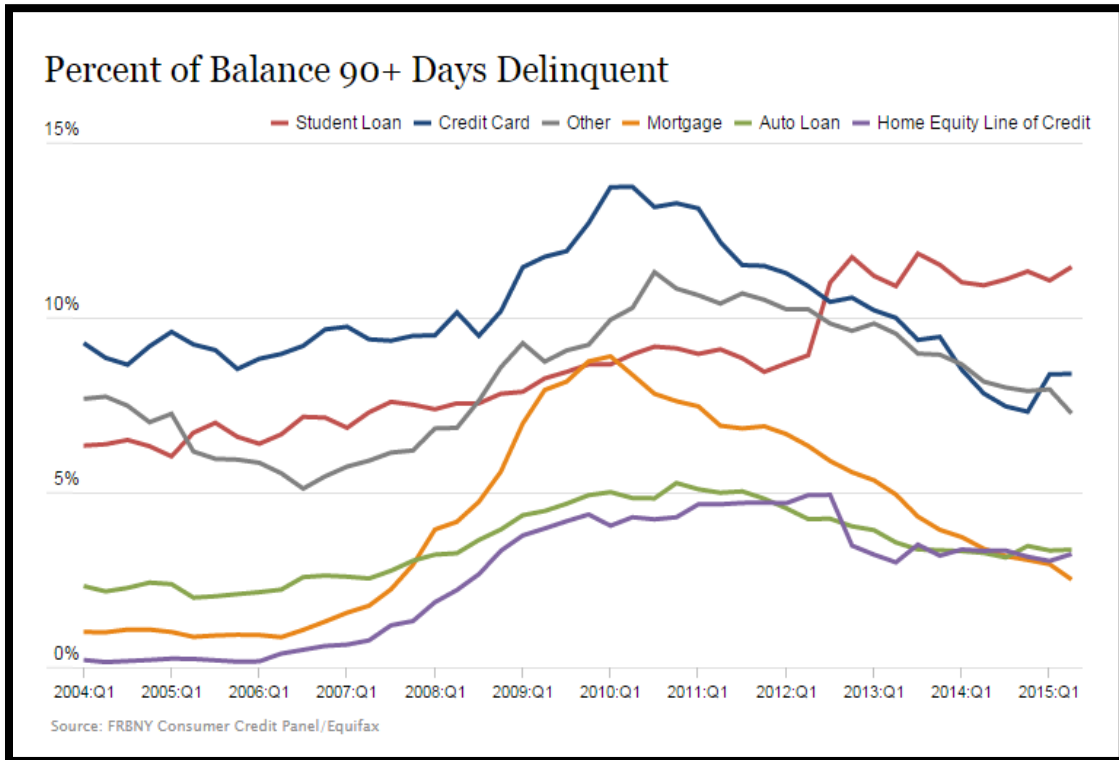


Figure 1.15: Percent of Balance 90+ Days Delinquent, 2004-2015. "Quarterly Report On Household Debt and Credit." Federal Reserve Bank of New York. August 1, 2015. Accessed August 15, 2015. http://www.newyorkfed.org/householdcredit/2015-q2/data/pdf/HHDC_2015Q2.pdf.

The growth of \$136.8 billion in student loan delinquency, admittedly on a slightly lesser scale than mortgages, must not be overlooked. Recent studies also indicate a shift in macroeconomic consumer spending trends due to the accumulation of student loan debt. When students accumulate large amounts of student debt, they decreasingly participate in non-student debt markets.³¹ Students with large amounts of debt may have

³¹ Brown, Meta, and Sydnee Caldwell. "Young Student Loan Borrowers Retreat from Housing and Auto Markets." Liberty Street Economics. April 17, 2013. Accessed June 12, 2015. <http://libertystreeteconomics.newyorkfed.org/2013/04/young-student-loan-borrowers-retreat-from-housing-and-auto-markets.html#.VgiJnctVikq>.

decreased access to credit in the auto and housing markets. The impact of increased student debt loads for younger consumers may have broader, long-term implications on the macroeconomic marketplace. In summary, complex interactions between the increasing costs of higher education, household income stagnation, the value of a college degree, and student loan debt levels altered the U.S. higher education market over the past few decades and the federal government should account for these factors while considering new educational policies.

Chapter Two: Federal Higher Education Policies

Recent Federal Programs & Policies

As previously summarized, government policies have historically shaped the higher education environment. In 2010, the White House presented an introduction of its higher education policy by citing how the United States currently ranks twelfth in four-year degree attainment among 24-36 year olds.³² In response to this statistic, President Obama set a new goal for the United States to reclaim the number one position by 2020. In an effort to provide greater security for the middle class, President Obama sought to make higher education more accessible, affordable, and attainable for all American families.

The White House openly acknowledged the current state of higher education affordability:

Tuition and fees have skyrocketed over the past decade, making it more difficult for American families to invest in a higher education for their future. Today's college students borrow and rack up more debt than ever before. In 2010, graduates who took out loans left college owing an average of more than \$26,000. Student loan debt has now surpassed credit card debt for the first time ever.³³

Upon enactment of the Health Care and Reconciliation Act of 2010, the bill expanded federal investments in Pell Grants and ended private lending of federally

³² "Higher Education." The White House. Accessed April 18, 2015.
<https://www.whitehouse.gov/issues/education/higher-education>.

³³ See note 29 above.

subsidized loans, among other changes.³⁴ Pell Grants provide low and middle income students with a non-repayable grant. The U.S. Department of Education determines students' eligibility for Pell Grants using the Free Application for Federal Student Aid (FAFSA) program. Since 2008, the Pell Grant program reached a maximum of \$5,775 per year and doubled the total amount of federal funding to more than \$40 billion.³⁵ Additionally, the "Pay as You Earn" plan caps student loan repayments at 10% of monthly income for over 1.6 million students when they enroll in an "Income Based Repayment" (IBR) plan.³⁶ The programs also provide the added benefit of balance forgiveness at the conclusion of the repayment period. For example, under the Income Based Repayment plan, if an individual makes all applicable loan payments for the duration of the 20 year repayment period, any remaining loan balance is forgiven. Federal employees may also qualify for the Public Service Loan Forgiveness Program, under which any remaining loan balance will be forgiven after 10 years of payments, instead of 20 years.³⁷

The federal government supports investment and expansion of community colleges by engaging with state governments to ensure the first two years of community

³⁴ Brown, Meta, Andrew Haughtwout, Donghoon Lee, Maricar Mabutas, and Wilbert Van Der Klaauw. "Grading Student Loans." Federal Reserve Bank of New York, Liberty Street Economics. March 5, 2012. Accessed June 10, 2015. http://libertystreeteconomics.newyorkfed.org/2012/03/grading-student-loans.html#.Vc-te_lVikp.

³⁵ "Investing in Pell Grants to Make College Affordable." The White House. Accessed September 26, 2015. <https://www.whitehouse.gov/issues/education/higher-education/investing-in-pell-grants-to-make-college-affordable>.

³⁶ See note 29 above.

³⁷ "Income-Driven Repayment Plans for Federal Student Loans." U.S. Department of Education, Federal Student Aid. 2015. Accessed May 10, 2015. <https://studentaid.ed.gov/sa/repay-loans/understand/plans/income-driven#repayment-period>.

college are free to responsible students. This effort, known as ‘America’s College Promise’ proposal may extend to over 9 million students and save them \$3,800 per year.³⁸

Additional proposed federal incentives include the “Race to the Top: College Affordability and Completion” challenge which leverages over \$10 billion in annual federal aid to colleges and universities “that do their fair share to keep tuition affordable, provide good value, and serve needy students well.”³⁹ Colleges and universities which do not act responsibly to lower tuition rates will receive less money from federal aid.⁴⁰

Furthermore, New York Federal Reserve reports emphasize a key difference between other forms of household debt:

Student debt is not dischargeable in bankruptcy like other types of debt; thus, delinquent or defaulted student loans can stagnate on borrowers’ credit reports, creating an ever-increasing pool of delinquent debt. Additionally, the measures of new delinquency in our Quarterly Report do reflect high inflows into delinquency.⁴¹

Another contrast between student loans and mortgages involves the methods of funding. Over 90% of student loans are supported by the government through various initiatives and programs, while approximately 50% of mortgage risk has been assumed

³⁸ See note 29 above.

³⁹ See note 29 above.

⁴⁰ Compton, Matt. "Everything You Need to Know About President Obama's Blueprint for College Affordability." The White House. January 27, 2012. Accessed June 18, 2015. <https://www.whitehouse.gov/blog/2012/01/27/everything-you-need-know-about-president-obamas-blueprint-college-affordability>.

⁴¹ See note 37 above.

by the private sector.⁴² The large portion of government-backed student loans results in less risk exposure for the private sector. However, student loans place an increasingly larger burden on students and expose taxpayers to funding federal aid and bailing out student loan defaults.

The Impact of Federal Student Aid

Recent government policies enacted by the Health Care and Education Reconciliation Act of 2010 increase higher education grants, create new student tax credits, support income-based repayment, and expand student loan programs. While these federal policies seek to make higher education more affordable, accessible, and attainable, they do not promote a responsible fiscal environment for educational institutions or curb ever-increasing higher education tuition costs. The government policies promote shifting the costs of higher education to students, families and potential taxpayers in the form of increased debt. A report by The Pew Charitable Trusts about federal higher education tax expenditures identifies the significant increases in federal funding for higher education:

⁴² Glowacki, Jonathan, and Leighton Hunley. "The Student Loan Debt Crisis in Perspective." Milliman. June 20, 2012. Accessed April 18, 2015. <http://www.milliman.com/insight/insurance/The-student-loan-debt-crisis-in-perspective/>.

Federal Higher Education Tax Expenditures Expanded Substantially in the Late 1990s and in the Years Surrounding the Recession

Trend in value of federal tax expenditures for higher education, federal fiscal years 1990-2013, adjusted for inflation

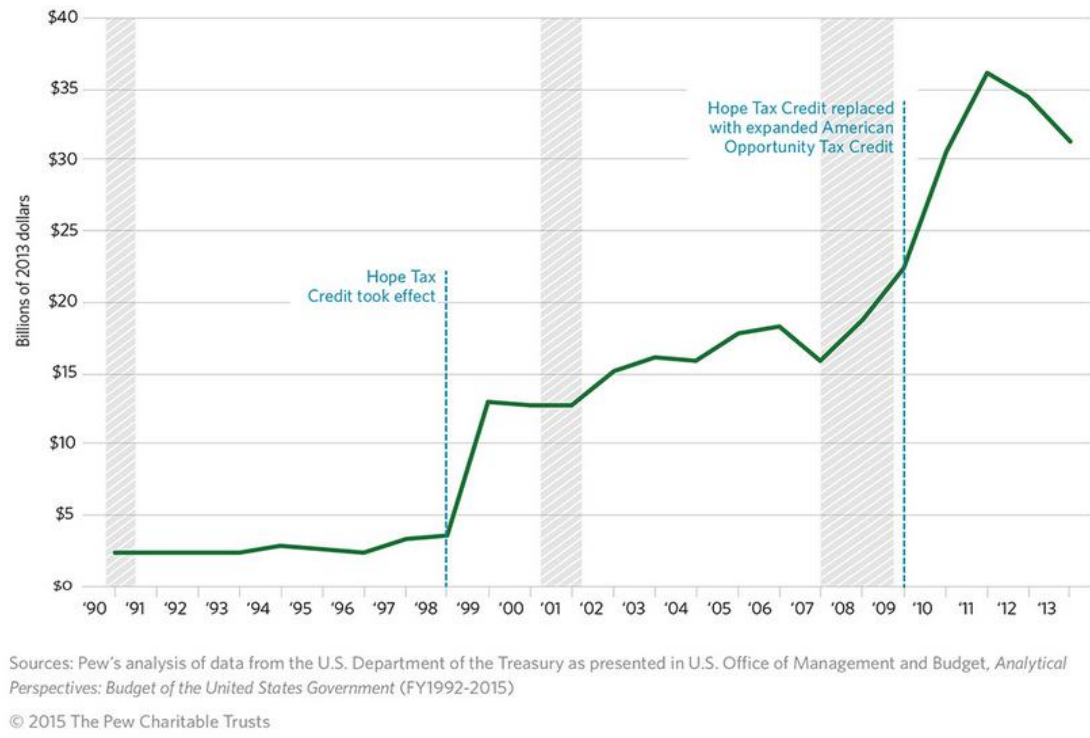


Figure 2.1: State Funding for Higher Education Declined in Recent Years While Federal Funding Grew, 2000-2012. Data from Pew's analysis of data from Delta Cost Project Database. <http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2015/06/federal-and-state-funding-of-higher-education>

Another Pew report illustrates federally sponsored student loan growth rates:

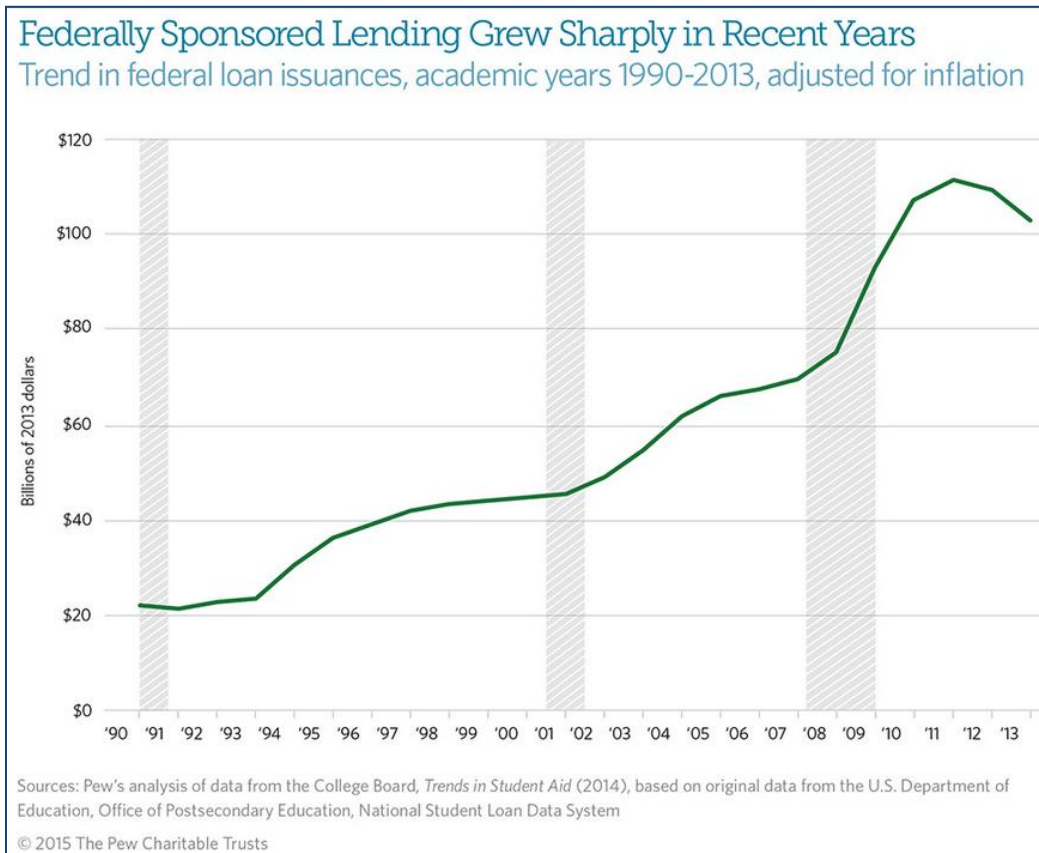


Figure 2.2: Federally Sponsored Lending Grew Sharply in Recent Years. Data from Pew's analysis of data from Delta Cost Project Database. <http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2015/06/federal-and-state-funding-of-higher-education>

These charts illustrate how federal funding has significantly increased over the decade and draw a relationship between federal policies and higher educational tuition rate increases. A recent report released by the New York Federal Reserve suggests a link between the increased credit supply to the rise in college education by relating student-level financial data and changes in the federal student aid program to identify the impact on tuition.⁴³ The study found “institutions more exposed to changes in the subsidized

⁴³ Lucca, David, 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. July 1, 2015. Accessed August 14, 2015. http://www.newyorkfed.org/research/staff_reports/sr733.pdf.

federal loan program increased their tuition disproportionately around those policy changes, with a sizable pass-through effect on tuition of about 65%.”⁴⁴ This suggests that part of the reason for substantial increases in the costs of higher education over the past decades is, in part, caused by large policy changes in the amounts of federal aid and grants. The increased student credit market transfers debt to students with no repercussion to the educational institution.

Previous presidential candidate Hillary Clinton also desired to change the higher education system by making college debt-free and reducing overall student debt levels. Her website cited how “every student should have the option to graduate from a public college or university in their state without taking on any student debt”.⁴⁵ Similar to President Obama’s initiatives, this plan is extremely laudable, but Clinton’s website offered little detail of how to fund such a policy. The website simply stated how the plan will be “fully paid for by limiting certain tax expenditures for high-income taxpayers”.⁴⁶ The website also mentioned public service initiatives and pushing employers to contribute toward student debt relief, but did not mention how to rein in tuition increases or college spending. Innovative funding initiatives will help reduce a certain amount of debt, but the most significant change that federal and state governments can make is holding higher educational institutions accountable for increases in spending. Most importantly, the plan doesn’t address the root cause of the problem; it simply provides

⁴⁴ Ibid

⁴⁵ "Making College Debt Free and Taking on Student Debt." Hillary Clinton. <https://www.hillaryclinton.com/issues/college/>.

⁴⁶ See note 44 above.

short term relief. President Trump does not currently offer details on higher education policies. A responsible and comprehensive federal solution should focus on incentivizing colleges and universities to reduce spending and tuition costs.

Information compiled over the past ten years identifies fluctuating levels of state funding (mostly decreases), increases in federal funding, and stagnant median family household incomes. Research shows how college and university expenses on teaching and core student-related services have been relatively stable over the past 15 to 20 years; however, schools chose to increase costs related to building and maintaining the latest facilities, next generation student amenities, intercollegiate athletics and non-teaching jobs.⁴⁷ Whether or not these services directly contribute to a quality education or entail unnecessary administrative bloat is up for debate; however, when colleges accept a majority of funding through government sponsored loans, these expenses should optimize learning and education, not administrative services. One of the first steps in federal higher education reform should focus on promoting state level fiscal responsibility with incentives to encourage responsible spending.

A Higher Education Market Failure

A comparison between the benefits of higher education and stagnant wages over the past thirty years reveals market inefficiencies. A market failure describes an inefficient situation when benefits do not outweigh costs. In the context of higher education, certain educational institutions provide a degree where marginal benefit

⁴⁷ Schoen, John W. "Why Does a College Degree Cost so Much?" CNBC. Accessed June 10, 2016. <http://www.cnbc.com/2015/06/16/why-college-costs-are-so-high-and-rising.html>.

exceeds marginal cost (i.e., \$30,000 student loan debt might be worth attaining a job at a Fortune 500 company). In this situation, college graduates are compensated by a satisfactory return of investment. Alternatively, certain educational institutions provide a degree where marginal benefit does not exceed marginal cost (i.e., \$30,000 student loan debt is rewarded with a minimum wage salary). In this situation, a college graduate gained a positive externality of knowledge, but was not adequately compensated for the financial burden of obtaining a degree (i.e., the degree does not support re-payment of the student debt). The marginal benefit of a higher education is measured in terms of the educational knowledge gained with a college degree. Marginal cost is measured by tuition rates. Similar to median levels of income, marginal benefits have also remained relatively stagnant over the past thirty years (i.e., students do not graduate significantly smarter than they did 20 years ago). Alternatively, marginal costs have increased significantly in the past thirty years with tuition increases. Based on this analysis, it can be argued that marginal costs do not exceed marginal benefits--depending on degree and school. Students accumulating debt with low-demand degrees will have more difficulty repaying student loans. To this point, a New York Times article recently published details about a multi-state lawsuit against Sallie Mae for predatory and subprime lending practices for student loans in which it expected default rates as high as 92%.⁴⁸

Considering the significant increases in tuition prices over the past forty years compared to the relatively stagnant levels of real median household income, the marginal

⁴⁸ Cowley, S., & Silver-Greenberg, J. (2017, April 9). Loans 'Designed to Fail': States Say Navient Preyed on Students. Retrieved from https://mobile.nytimes.com/2017/04/09/business/dealbook/states-say-navient-preyed-on-students.html?emc=edit_nn_20170410&nl=morning-briefing&nid=73145124&te=1&_r=0&referer=

benefit versus marginal cost comparison illustrates a market failure in certain sectors of higher education. The higher education market failure stems from policies that provide widespread funding to students, but do not take into consideration the marginal cost or benefit of a degree. Since these federal policies do not account for market failures in certain sectors of the higher education market, the non-discriminatory funding methods create inefficiencies in the higher education market.

With a non-efficient market, the government needs to provide incentives to reduce inefficiencies. Society greatly benefits economically from an educated population; thus, the positive externality of a well-educated population ought to be incentivized by the government. Since the government already provides several programs to promote higher education affordability, the optimal solution doesn't involve advocating for additional higher education funding methods. An optimal higher education market promotes an affordable, accessible and attainable education while also reining in higher educational institutional spending. Colleges and universities have previously demonstrated an ability to operate with fewer funds; therefore, public policies should incentivize collaboration between state governments and higher educational institutions to encourage fiscal accountability.

The current system de-couples debt accountability from the higher education system after students graduate. These incentives encourage increased tuition costs and promote higher graduation rates with no consideration of students' ability to repay debts. During the 2008 subprime mortgage crisis, housing prices were assumed to unjustifiably maintain price increases. Mortgage brokers, bankers, home buyers and rating agencies, to

name a few, provided false security to investors through misaligned investments that resulted in a massive asset bubble. The market failure and resulting recession crippled millions of Americans and cost the economy over \$8 trillion. Similar to the subprime mortgage crisis, higher education resources face a market failure. The federal government dutifully promotes higher education with the Health Care and Education Reconciliation Act of 2010 that increases higher education grants, creates new student tax credits, supports income-based repayment, and expands student loan programs. Unfortunately, without a means to enforce fiscal responsibility, higher educational institutions will continue to increase spending and take advantage of a market failure by shifting costs to students and leveraging government sponsored programs. Recent federal policies show support for the future development of higher education; however, based on the analysis of federal student aid impact and the resulting market failure, the government should reconsider key incentives within current policies to better align the marketplace.

Chapter Three: Public Four Year Universities

The University of Nebraska

A few universities around the country offer specific examples of how state governments and schools responded to changes in federal policies and highlight varying levels of potential solutions. The University of Nebraska, established in 1869 through the Morrill Land-Grant Act, took a conservative approach to increased spending over the past fifteen years. According to the University of Nebraska's 2014 Annual Comprehensive Financial Report, the University "has historically been conservative in its financial management. The State of Nebraska legislature is required to achieve a balanced budget, prohibited from borrowing, and has no outstanding indebtedness." Thus, while this university might not directly compare to all other U.S. universities, the state government and university officials provide good examples to compare and contrast with other states. University of Nebraska's 2014 Consolidated Annual Financial Report reports an overall "good" economic outlook for the school and State of Nebraska. The report cites positive net assets while also freezing tuition rate increases in recent years. Tuition rates at the University of Nebraska match the national average for public four year institutions at about \$6,480 for undergraduate residents and \$29,856 per year for nonresidents. The school website boasts the lowest tuition rates in the Big Ten and a "Best Value" college

by The Princeton Review.⁴⁹ Under this conservative fiscal construct, the state of Nebraska appropriated a 4% increase in funding for the University of Nebraska in 2014-2015. With this 4% increase, the University's Board of Regents froze tuition increases for Nebraska residents in 2014-2015 and supported a broader fiscal initiative to keep higher education costs affordable.⁵⁰ Even under a conservative fiscal construct, university policies were subject to some tuition increases. During 2012 and 2013, university officials increased tuition costs 5% and 3.75%, respectively.⁵¹ A portion of these tuition increases allowed officials to provide a 3% increase in faculty and staff salaries. Over the same time period, revenues from federal grants and contracts decreased by 7% and 8% in 2014 and 2013, respectively. This decrease in federal funding was opposite of a national trend over the same time period, when federal support largely increased. The following charts show undergraduate enrollment at the University of Nebraska-Lincoln and the associated undergraduate semester credit hour costs:

⁴⁹ "Cost & Aid." The University of Nebraska--Lincoln. Accessed September 26, 2015. <http://admissions.unl.edu/cost.aspx>.

⁵⁰ "Comprehensive Annual Financial Report." The University of Nebraska. June 30, 2014. Accessed April 18, 2015. <http://nebraska.edu/administration/business-and-finance/accounting-and-finance.html>.

⁵¹ See note 24 above.

1993 (shown in 2012 dollars)	2004 (shown in 2012 dollars)	2012
<ul style="list-style-type: none"> • Enrollment: 19,829 • In-state Credit Hour: \$102.48 • Out-of-State Credit Hour: \$279.64 	<ul style="list-style-type: none"> • Enrollment: 17,137 • In-State Credit Hour: \$174.72 • Out-of-State Credit Hour: \$518.68 	<ul style="list-style-type: none"> • Enrollment: 19,103 • In-State Credit Hour: \$216 • Out-of-State Credit Hour: \$641

Figure 3.1: Data from General Operating Budgets, University of Nebraska.

Undergraduate enrollment slightly declined for the University of Nebraska-Lincoln from 1993-2012, and the inflation adjusted costs for semester credit hours increased for residents and for non-residents. National enrollment levels increased 15% between 1993 and 2003, and continued to increase 24% from 2002-2012.⁵² While enrollment did not increase at the University of Nebraska—Lincoln campus, overall enrollment slightly increased at 1% over the past decade at the University of Nebraska Medical Center, University of Nebraska Omaha, and University of Nebraska at Kearney. The University of Nebraska’s enrollment trend was also different from national statistics, where enrollment increased at significantly higher rates. The average semester hour increases per year of 5.5% and 6.45% at the University of Nebraska Lincoln were slightly lower than the national average of 7% increase over the same time period.⁵³ The enrollment and tuition increases reveal significant differences in national trends and how overarching national policies might not support individual schools.

⁵² "Fast Facts." U.S. Department of Education, National Center for Education Statistics. 2015. Accessed June 10, 2015. <http://nces.ed.gov/fastfacts/display.asp?id=98>.

⁵³ See note 13 above.

The top revenue generating sources for the University of Nebraska include: 1) State Appropriations and Tuition, 2) Federal Grants and Contracts, and 3) Capital Grants and Gifts. Support from federal grants and contracts decreased by 7% and 8% in 2014 and 2013, respectively.⁵⁴ Federal cutbacks caused a decrease of \$20 million from 2012-2013 and \$16 million from 2013-2014 that directly cut funding to financial aid, research and discovery efforts of the university. The following graph illustrates how the state of Nebraska receives less than \$1,700 in Pell Grant dollars per full-time undergraduate student:

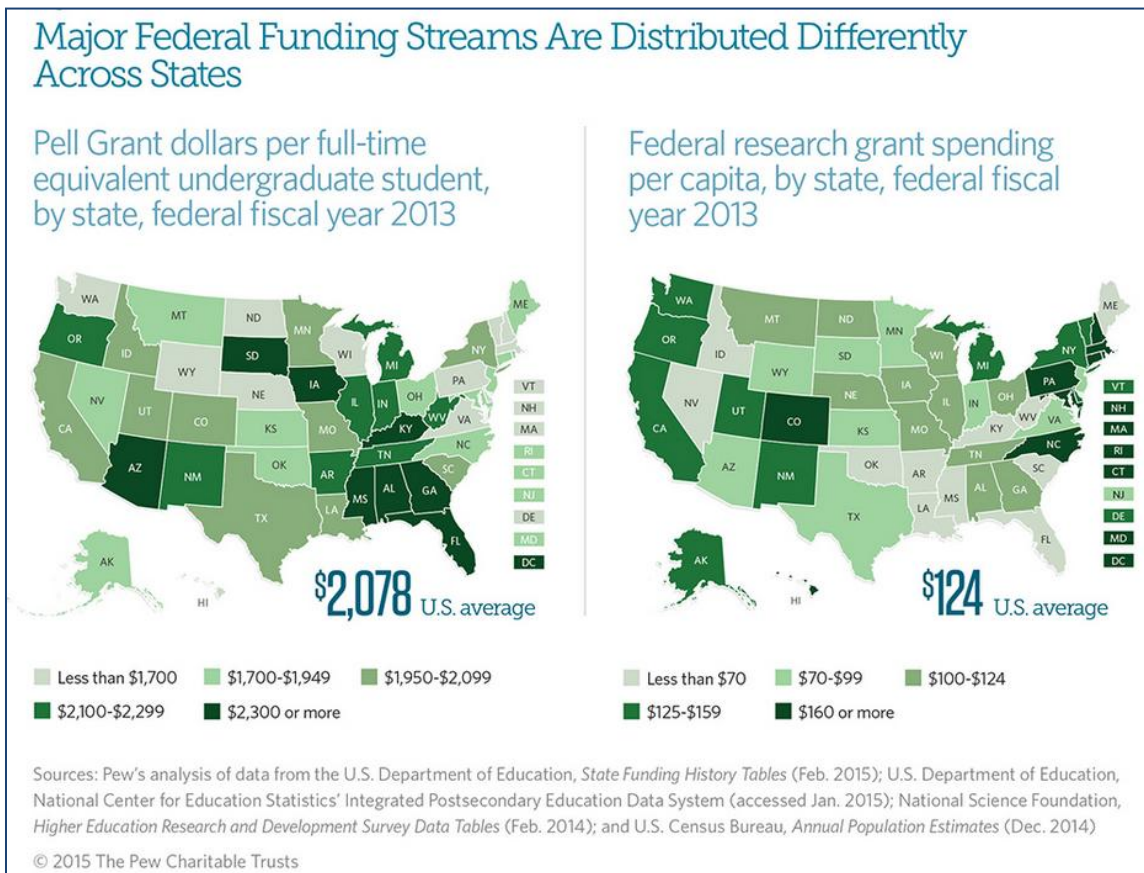


Figure 3.2: Major Federal Funding Stream are Distributed Differently Across States. Data from Pew's analysis of data from Delta Cost Project Database. <http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2015/06/federal-and-state-funding-of-higher-education>

⁵⁴ See note 24 above.

Contrary to other states, the Nebraska state government increased grants and contracts during the same time period to help offset decreases in federal educational programs (details explained below). The University also received funds from capital grants and gifts, which totaled \$105 million in 2014.

Reviewing University of Nebraska data from the Consolidated Annual Financial Reports and General Operating Budgets dating back to 1975 captures trends in the overall administration and reveals decisions which support lower tuition increases. Data from the ‘Current Funds, Revenues, Expenditures and Other Charges’ shows the following revenues since 1974:

Tuition & Fees Revenue:				
1974:	1984:	1994:	2004:	2014:
\$22, 429,704	\$45,088,606	\$102,519,426	\$168,882,000	\$347,428,000

Federal Grants & Contracts:				
1974:	1984:	1994:	2004:	2014:
\$16,028,475	\$33,144,421	\$79,970,847	\$250,092,000	\$206,506,000

State Grants & Contracts:				
1974:	1984:	1994:	2004:	2014:
\$1,449,352	\$6,972,242	\$12,484,201	\$25,770,000	\$38,490,000

Private Gifts, Grants & Contracts:				
1974:	1984:	1994:	2004:	2014:
\$3,948,963	\$19,070,769	\$51,397,495	\$77,195,000	\$11,427,000

Total Revenues:				
1974:	1984:	1994:	2004:	2014:
\$137,627,992	\$379,435,831	\$868,926,673	\$1,336,284,000	\$2,047,407,000

Figure 3.3: Data from General Operating Budgets, University of Nebraska. 1974, 1984, 1994, 2004 & 2014.

The university accounted for expenses from the following categories from 1974-1994: Instruction, Research, Public Services, Academic Support, Student Services, Institutional Support, Operations & Plant Maintenance, School of Technical Agriculture, Hospital & Clinics, and Scholarships & Fellowships. In 1994, the university restructured its accounting method to highlight operating expenses by transitioning to the following categories: Salaries & Wages, Benefits, Supplies & Materials, Contractual Services, Repairs & Maintenance, Utilities, Communications, Depreciation, and Scholarships & Fellowships. Consequently, it becomes difficult to directly compare all University programs over a forty year period due to inconsistent accounting standards.

The University of Nebraska’s General Operation Budget compares expenses between 1994, 2004 & 2014:

	Subprogram Name	1994 (shown in 2014 dollars)	2004 (shown in 2014 dollars)	2014	Percentage Change
1	Academic Affairs	\$ 7,415,775.97	\$ 15,161,325.38	\$ 19,190,102.00	158.77%
2	College of Architecture	\$ 3,573,954.83	\$ 4,197,064.85	\$ 4,792,349.00	34.09%
5	College of Arts & Sciences	\$ 56,182,727.44	\$ 69,262,842.83	\$ 70,452,479.00	25.40%
6	College of Business Admin	\$ 13,878,563.34	\$ 16,158,629.36	\$ 19,774,406.00	42.48%
7	College of Fine & Performing Arts	\$ 9,165,647.97	\$ 11,831,284.51	\$ 11,891,596.00	29.74%
11	College of Engineering & Technology	\$ 20,357,291.25	\$ 28,248,869.72	\$ 31,305,397.00	53.78%
12	Graduate Studies & Research	\$ 1,712,820.10	\$ 5,978,680.58	\$ 6,232,487.00	263.87%
14	College of Journalism and Mass Communica	\$ 2,975,538.30	\$ 4,095,304.71	\$ 4,689,746.00	57.61%
15	College of Law	\$ 6,532,182.01	\$ 7,848,105.44	\$ 9,726,973.00	48.91%
16	University Libraries	\$ 13,867,081.16	\$ 17,239,131.81	\$ 16,213,284.00	16.92%
21	Summer Sessions	\$ 6,185,871.74	\$ 4,421,551.73	\$ 4,236,048.00	-31.52%
22	Other Instruction or Research	\$ 3,487,177.19	\$ 8,185,325.79	\$ 14,466,338.00	314.84%
23	Student Aid	\$ 9,936,704.47	\$ 5,218,373.28	\$ 6,133,778.00	-38.27%
24	International Programs	\$ 793,909.03	\$ 974,402.37	\$ 1,958,908.00	146.74%
25	Instruction Budget Adjustments	\$ 9,907,130.04	\$ 11,940,666.82	\$ 23,815,783.00	140.39%
27	Television & Radio	\$ 8,518,130.28	\$ 10,333,627.91	\$ 8,340,861.00	-2.08%
28	Museums & Art Gallery	\$ 3,359,119.31	\$ 3,086,301.79	\$ 2,895,946.00	-13.79%
41	Executive Administration	\$ 1,098,927.87	\$ 1,381,881.55	\$ 1,217,663.00	10.80%
42	Student Services	\$ 9,571,792.38	\$ 35,869,781.29	\$ 29,263,664.00	205.73%
43	Business & Finance	\$ 8,462,200.20	\$ 55,348,479.52	\$ 55,647,934.00	557.61%
44	General Expense	\$ 5,617,301.20	\$ 11,156,432.77	\$ 12,132,829.00	115.99%
74	Agency Funds	\$ 7,619,929.62	\$ 1,231,099.89	\$ 457,918.00	-93.99%
75	Student Housing	\$ 23,116,503.64	\$ 38,525,624.60	\$ 39,538,403.00	71.04%
77	Intercollegiate Athletics	\$ 31,035,257.35	\$ 78,508,309.77	\$ 95,728,046.00	208.45%
79	Other Auxiliary Enterprises	\$ 29,165,873.60	\$ 15,830,660.39	\$ 10,415,125.00	-64.29%
	Campus Total (All Categories)	\$ 576,815,803.75	\$ 810,225,513.61	\$988,181,633.00	71.32%

Figure 3.4: Data from General Operating Budgets, University of Nebraska. 1994, 2004 & 2014.

The top five programs with the largest inflation adjusted increases from 1994-2014 include: 1) Business & Finance (557%), 2) Other Instruction or Research (314%), 3) Graduate Studies & Research (263%), 4) Intercollegiate Athletics (208%), and 5) Student Services (205%).

The top five programs with decreased spending from 1994-2014 include: 1) Agency Funds (-94%), 2) Other Auxiliary Enterprises (-64%), 3) Student Aid (-38%), 4) Summer Sessions (-31%), and 5) Museums & Art Gallery (-13%). As a note, the chart above attempts to collect as much information from University of Nebraska historical records, but does not represent an all inclusive list of programs due to administrative

record variations. The following programs were consolidated or combined with other sections between 1994 and 2004: Information Services, Academic Computing Support, Campus Security, and Student Services, to list a few. While the chart above presents a general guide for comparing and contrasting academic programs over the past twenty years, it does not offer a direct comparison or a comprehensive list for every university program.

The University of Nebraska financial reports reveal important differences when compared to national data. At a national level, while state funding decreased significantly and federal funding increased, the opposite effect occurred in the state of Nebraska. The University of Nebraska successfully slowed tuition rate increases slightly below national levels even though the state experienced decreased federal funding--a noteworthy accomplishment. The university attributes lower tuition rates and avoiding state funding loses to responsible state financial management that includes balancing budgets, documenting tuition freeze goals, loan borrowing prohibitions and zero outstanding debts. The State of Nebraska also holds a \$729 million balance in its cash reserves "rainy day" fund.⁵⁵ Most importantly, as cited in the Comprehensive Annual Financial Report, "University officials, residents of Nebraska, and State leadership will increasingly work together with a common vision to the future". State legislature views the university system as a vital "statewide asset and primary determinant of whether the State and its citizens will continue to progress and prosper".⁵⁶ This state-university

⁵⁵ "Comprehensive Annual Financial Report." The University of Nebraska. June 30, 2015. Accessed June 9, 2016. <http://nebraska.edu/administration/business-and-finance/accounting-and-finance.html>.

⁵⁶ Ibid

relationship fosters fiscal responsibility and results in sustainable tuition rates with decreased student debt. Each state-university relationship at the national level is unique and budgetary management must be tailored appropriately, but the state of Nebraska provides a model for long-term planning and fiscal responsibility for other states to follow.

The University of Colorado

The University of Colorado Boulder, founded in 1876, is a part of a system of three other universities in Colorado governed by a nine member board known as the Regents of the University of Colorado. Undergraduate residents at CU-Boulder paid \$9,048 in tuition fees for the 2014-15 academic year and non-resident students paid \$31,410 over the same period. Over the past decade, CU-Boulder's undergraduate resident tuition rates increased at an average of 10.5% per year, with non-resident tuition rates increasing at an average of 4.3% over the same period. Colorado's tuition rate increases largely mirror the national average with little relief for increasing student debt levels. However, 2014 marked a shift in the state's approach to student debt when the Governor approved a College Affordability Act that provided a \$60 million (11%) increase for higher education and required a cap of no more than a 6% increase for resident tuition rates.⁵⁷

57 "Tuition and Fees Report Fiscal Year 2014-15 January 2015." Colorado Commission on Higher Education. January 2015. Accessed September 14, 2016. http://highered.colorado.gov/Publications/Reports/Budget/FY2015/2015_tuitionfeesreport.pdf.

More recently, in the spring of 2016, the Colorado Board of Regents approved tuition and mandatory fees guarantee for CU-Boulder resident students. The plan outlines a one-time tuition and fee increase of 5% for incoming freshman, which will remain locked for four years. Subsequent freshman classes will also face one-time increases, but the locked rates provide predictability by allowing students and families to budget for the next four years with no further tuition rate increases. While Colorado's efforts to cap tuition rate increases at 6% a year and provide predictable tuition rates for incoming freshman, the new policies do little to significantly decrease overall rate increases and the accumulation of student debt. The new tuition policies still allow rate increases of 4-6% per year, which will decrease rates from the previous average of 10.5% per year over the past decade at CU-Boulder, but doesn't significantly address the root cause of the problem. Current student debt levels were fueled by a national average of tuition rate increase at 7% per year. Now that Colorado has identified the problem and passed preliminary legislation to address the issue, the state government should review Nebraska's model and figure out a way to actually freeze tuition rate increases and hold schools accountable for yearly spending increases. While these new policies indicate movement in the right direction, they do little to provide substantial change to mitigate high tuition rates, student debt, and institutional spending.

U.S. Higher Education Revenues & Expenses

Universities receive funding through three main categories: 1) tuition fees & revenues, 2) federal grants & contracts, and 3) state grants & contracts. Historically, states provided substantially more funding than the federal government from 1987 to 2012; however, the margin has narrowed in recent years and now funding allocations between state and federal are comparable in amount.⁵⁸ In 1989, tuition costs represented 24.5% of public higher education revenue; while in 2010, tuition accounted for 40.6% of higher education revenue.⁵⁹ State funding historically fluctuates with the health of the economy and significantly decreased during the 2008 mortgage crisis. Although, since the economy has recovered in the past few years, state funding has still not returned to the pre-mortgage crisis levels for higher education support.

The federal government traditionally provides financial assistance to research projects and individual students, while state governments primarily fund the general operation of public institutions. According to recent PEW Charitable Trust research for 2013, the federal government spent \$75.6 billion in higher education and state government investments totaled \$72.7 billion.⁶⁰ The chart below highlights main revenue and expense categories, and the graph depicts a breakout between federal and state level spending categories.

⁵⁸ Stauffer, Anne. "Federal and State Funding of Higher Education." The PEW Charitable Trusts. June 11, 2015. <http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2015/06/federal-and-state-funding-of-higher-education>.

⁵⁹ Bidwell, Allie. "The 'New Normal' of Higher Ed Funding: Students Footing the Bill." U.S. News and World Report. August 13, 2015. Accessed June 10, 2016. <http://www.usnews.com/news/articles/2015/04/13/state-funding-for-higher-education-inches-up-colleges-still-reliant-on-tuition>.

⁶⁰ See note 37 above.

Primary Higher Education Revenues & Expenses	
<p>Revenues:</p> <ul style="list-style-type: none"> • Tuition & Fees • Federal Grants & Contracts • State Grants & Contracts 	<p>Expenses:</p> <ul style="list-style-type: none"> • Salaries, benefits & wages • Supplies & materials • Contractual services • Repairs, maintenance & utilities

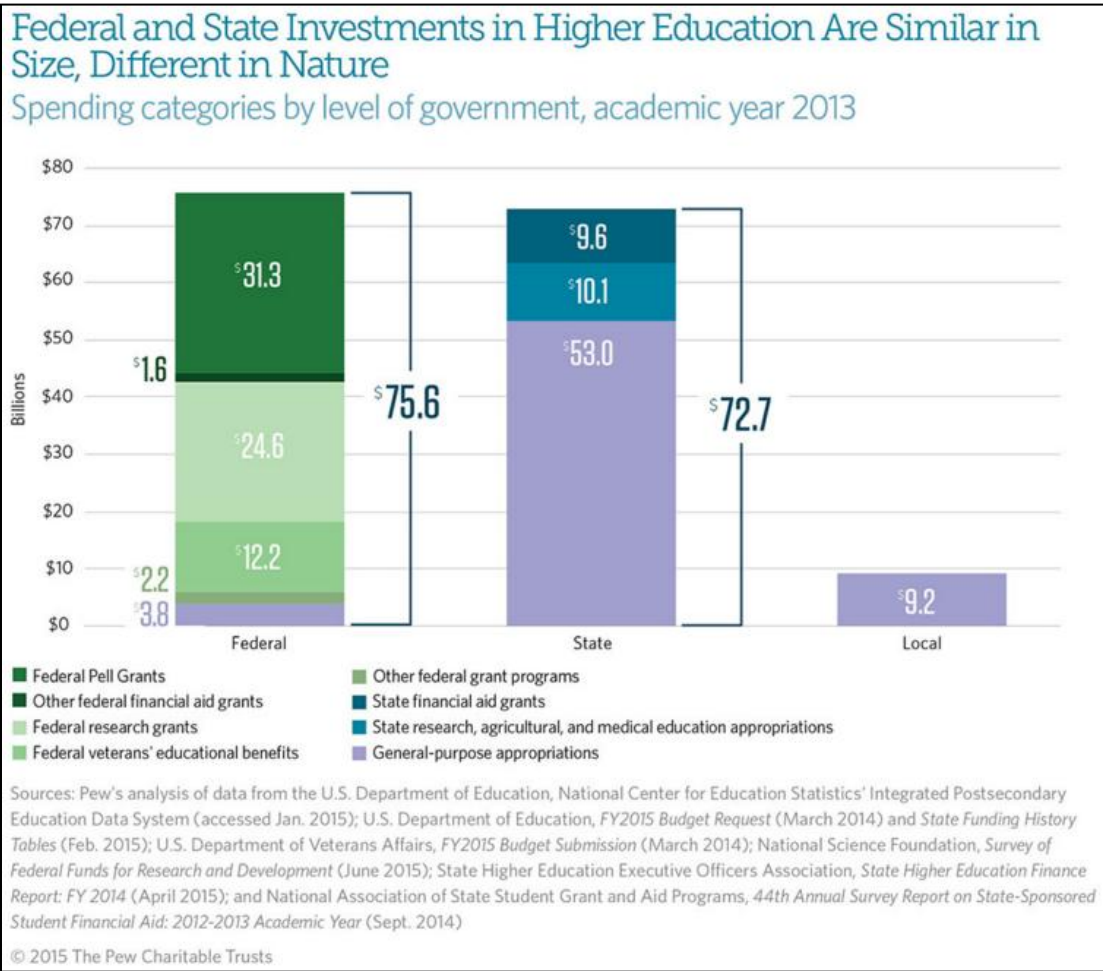


Figure 3.5: Stauffer, Anne. "Federal and State Funding of Higher Education." *The PEW Charitable Trusts*. June 11, 2015. <http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2015/06/federal-and-state-funding-of-higher-education>.

The data emphasize how each individual educational institution faces different challenges in regard to budget allocations and student tuition increases. The chart above highlights primary operating expense categories, but does not detail sub-categories or other in-depth budget information. According to Nebraska's 2014 Annual Financial Report, the university spent \$1,232,351,000 on total compensation and benefits. While operating budgets provide some budget clarification, broadly speaking, it becomes difficult to detail specifics behind such large categories. This situation creates extreme difficulty when trying to compare expense categories across multiple institutions.

Comparatively, the cost of educating an individual student has not increased significantly over the past twenty years. In fact, during this period of skyrocketing tuition rates, teaching salaries have remained relatively flat—mirroring the U.S. labor market as a whole. Contrary to popular media reports, cost shifting between state and federal governments has not resulted in widespread expense increases for colleges. Information shows that the decline in state funding has been augmented largely by increases in federal funding, and decreases at the state level are not exclusively to blame for increasing tuition rates. As a result, educational institutions made individual decisions to continue increasing spending and expenses within their budgets. Universities assign different accounting codes for similar categories, and few institutions offer easily comparable operating expenses over long periods of time. Once government funding enters internal accounting mechanisms, it becomes the individual institution's responsibility to maintain a responsible budget that protects against long-term tuition increases.

Georgia Tech recently researched the actual tuition fees needed to cover the costs for an online computer science master's degree program. The cost amounted to \$510 for a three credit class, resulting in a \$7,000 total cost for a master's degree in computer science from a nationally ranked top 10 program. The degree cost one-eighth of a similarly prestigious master's degree in computer science from Southern California (\$57,000), Syracuse (\$43,000) and Johns Hopkins (\$43,000).⁶¹ While people might view online programs as inferior, Georgia Tech professors reportedly administered the same homework assignments, mid-terms and final exams as the resident students. Professors noted high levels of online interaction between students and the ability to increase from 300 resident students to over 4,000 online students.⁶² Georgia Tech continues to offer the master's in computer science and demonstrates the real costs of an online program for the rest of the nation. Other well-known online programs continue to charge upwards of \$45,000 for similar programs.

With these vast differences in educational methods, federal policy makers face challenges when implementing a one-size-fits-all solution to reduce tuition costs and alleviate student debt. To find more Georgia Tech-type solutions, individual local governments, endowment funds and educational institutions must work to find a school specific answer. Key lessons learned from the University of Nebraska's budgets and financial reports reveal how the state government and university officials worked together to document a goal of "keeping tuition increases as low as possible and thereby

⁶¹ Carey, K. (2016, September 28). An Online Education Breakthrough? A Master's Degree for a Mere \$7,000. Retrieved from http://www.nytimes.com/2016/09/29/upshot/an-online-education-breakthrough-a-masters-degree-for-a-mere-7000.html?_r=0

⁶² Ibid

the cost of education more affordable”.⁶³ Similarly, Colorado’s Board of Regents has taken preliminary steps to acknowledge the problem, but the schools need more stringent policies to solve the root cause of the problem. The Georgia Tech Computer Science Department created a new online program with a rare display of pro-activeness and goodwill. Current federal policies do not reward Georgia Tech-type programs; they encourage universities to continue to charge as much as possible. New federal higher education policies, which seek to make higher education more affordable and accessible, should promote an environment where university officials and state governments must mutually work toward a common goal of providing citizens with fiscally responsible educational opportunities.

⁶³ See note 33 above.

Chapter Four: Summary

Concluding Remarks

While federal higher education initiatives aim to make college more affordable, accessible and attainable, national policies fail to incentivize higher education fiscal responsibility and contribute to a market failure. The costs of increased higher education spending, driven by a wide range of expenses such as cost shifting, administrative bloat, sports programs, or campus construction, are simply transferred to students in the form of debt. Increases in federal aid for colleges and universities, coupled with a massive student credit supply, has led to astronomical increases in the price of higher education. Fortunately, Americans continue to enroll in colleges at record rates, but the debt burdens have become overly taxing on many students and caused unwanted collateral effects in the macroeconomic marketplace. According to the New York Federal Reserve, people that accumulate large amounts of student debt will likely decrease, or completely retreat from, spending in non-student debt markets such as housing and auto loans.

The goal of recent federal policies to promote higher education and re-take the number one world spot for college graduates deserves support and praise; however, the implementation of mass federal aid has triggered a market failure. Higher educational institutions increase spending because of the widespread government credit available to students; thereby shifting costs from the institutions to the students in the form of debt. The federal government increased funding for higher education in the form of Pell Grants

and veterans' benefits, but states have continued to decrease general-purpose funds. The ever changing allocation of federal and state higher education support needs to be transformed into federal benefits that promote a culture of state-level fiscal responsibility. The Nebraska state government and university officials worked together to document a goal of freezing tuition costs. The Colorado University system also took steps to acknowledge a problem with increased tuition rates. Most impressively, Georgia Tech actually reduced tuition costs by over 80% for an online computer science degree. State governments are beginning slowly address the problem, but very few schools implement significant initiatives to solve root cause problems with institutional spending and increased tuition rates. Without federal incentives, colleges and universities will continue to take advantage of a market failure by maximizing spending with a disregard for student debt. The current market failure encourages colleges and universities to increase spending with funds fueled by student debt and federal aid. Marginal costs of obtaining a college degree do not always outweigh the marginal benefit—depending on program and degree. Federal policies should be restructured to incentivize schools to follow Georgia Tech's example, innovate new ways to reduce costs and increase the marginal benefit of earning a college degree. Future federal education reform should encourage collaboration between state governments, endowment funds, and university officials to decrease institutional spending, maximize new technology utilization, and reduce tuition rates.

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