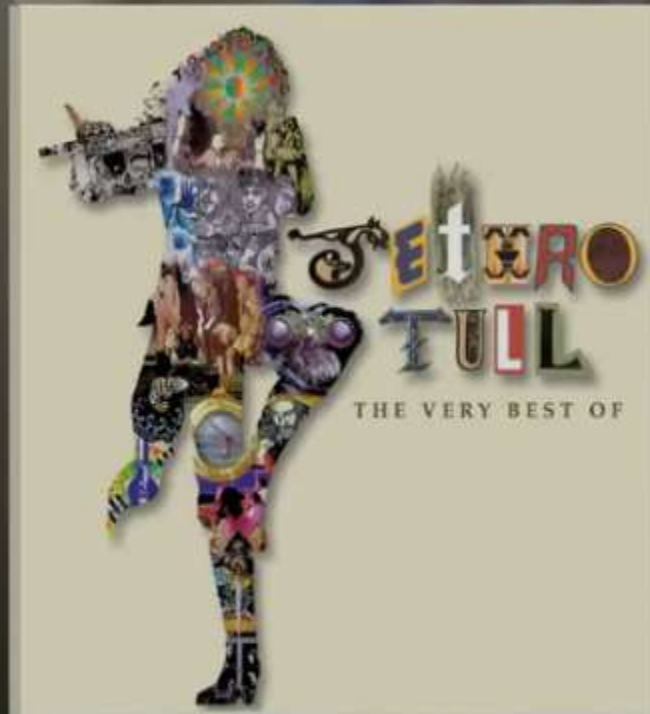


NAVIGATING THE EMERGING REVOLUTION IN OCCUPATIONAL EDUCATION... TIME TO STOP LIVING IN THE PAST.



Living In The Past
(2001 Remastered Version)

Jethro Tull

The Very Best Of Jethro Tull

Presenters:

Keith G. Tatarelli, J.D.

Professor Linda Plackowski



PLEASE PRETEND YOU'RE FASCINATED



3 “Eye Opening” Chapters



I. WHY DOES COLLEGE COST SO DAMN MUCH? {A History Lesson}

II. THE STATUS QUO WILL NOT LAST... “Things fall apart; the center cannot hold.” – Yeats {The Second Coming}

III. THE EMERGING REVOLUTION IN HIGHER ED.



ONCE UPON A TIME...



People paid for college by working summer jobs!!!

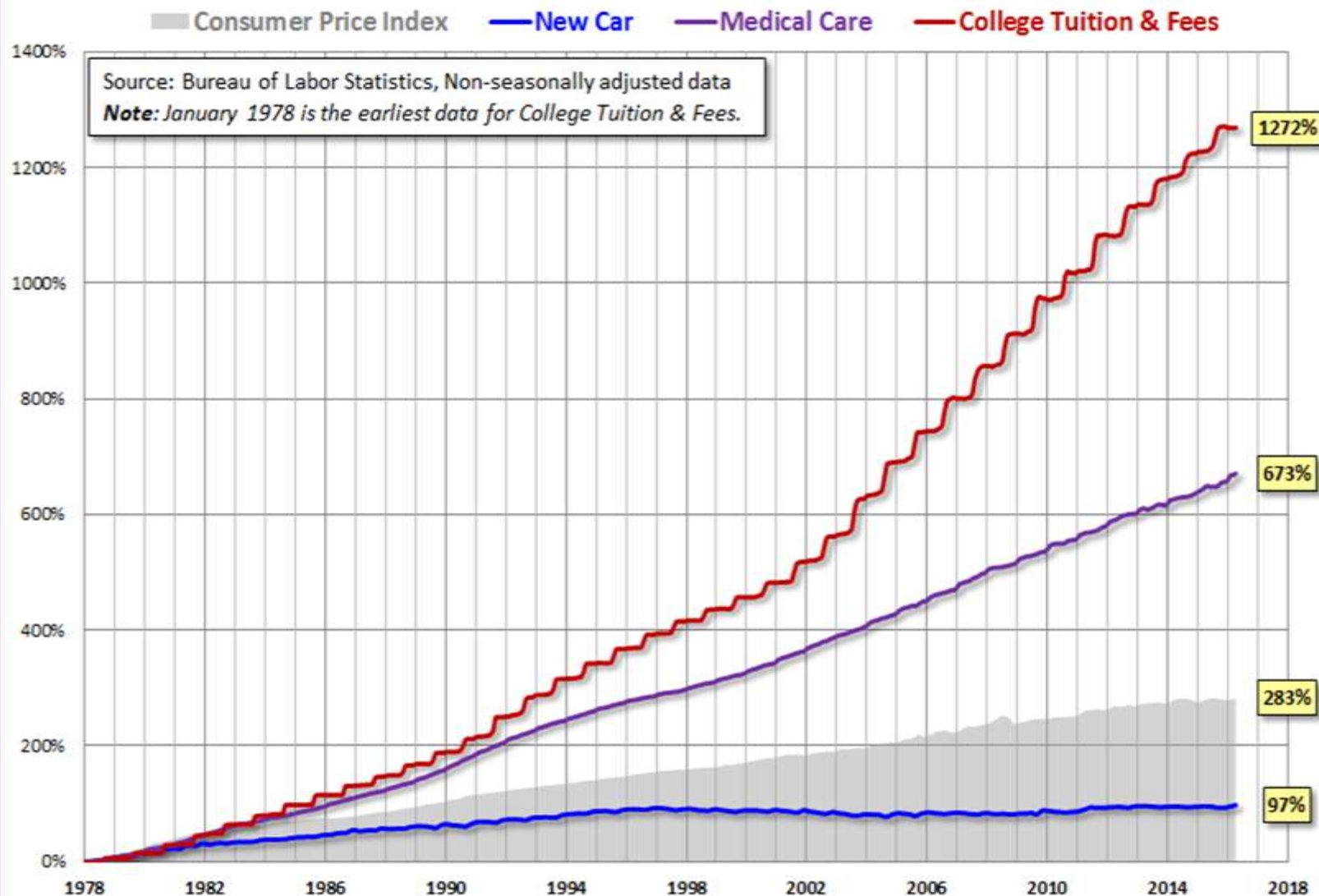
Some Interesting Inflation Comparisons

dshort.com

June 2016

Data through April

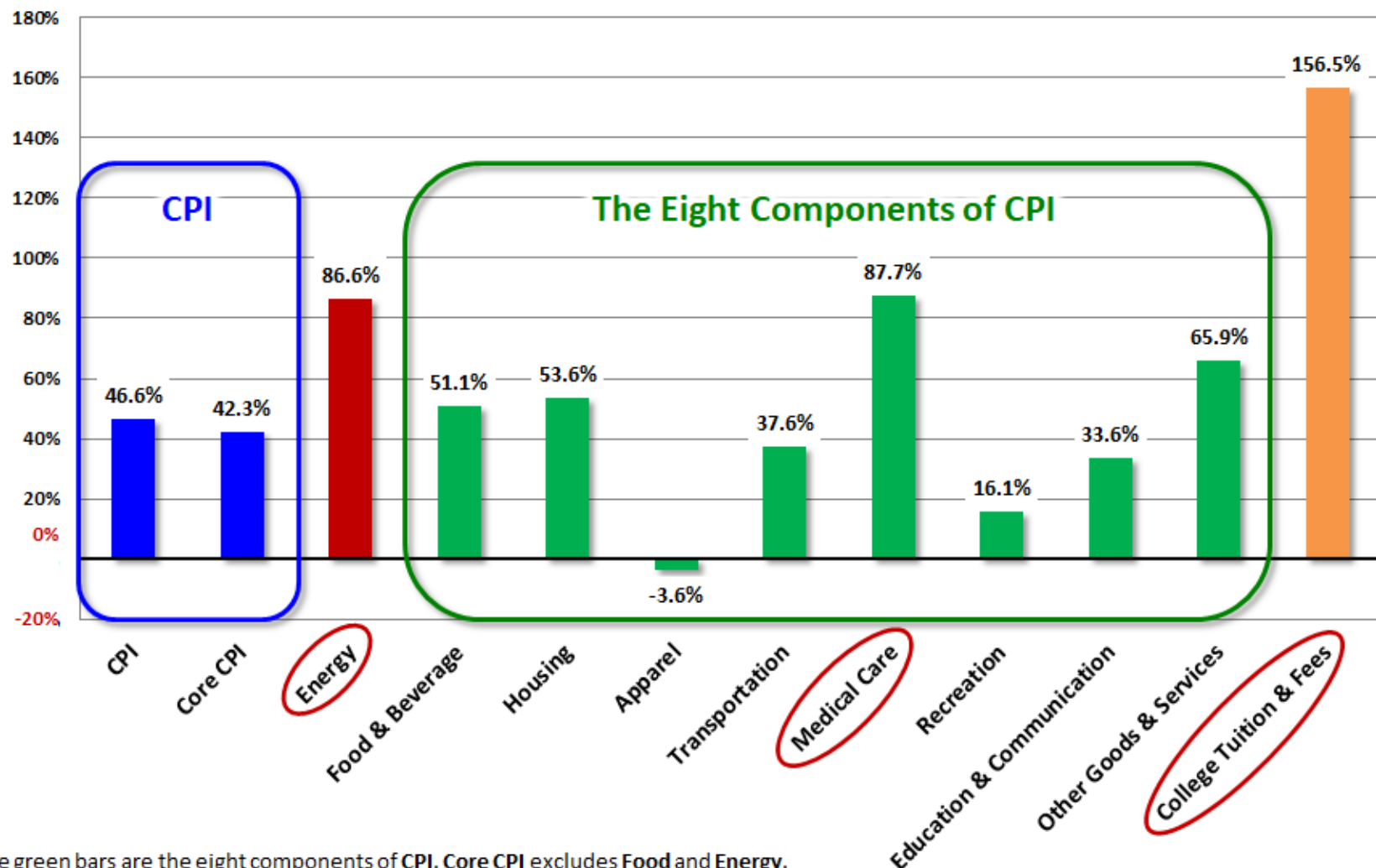
Consumer Price Index in Gray



Inflation Since 2000

Inside the Consumer Price Index

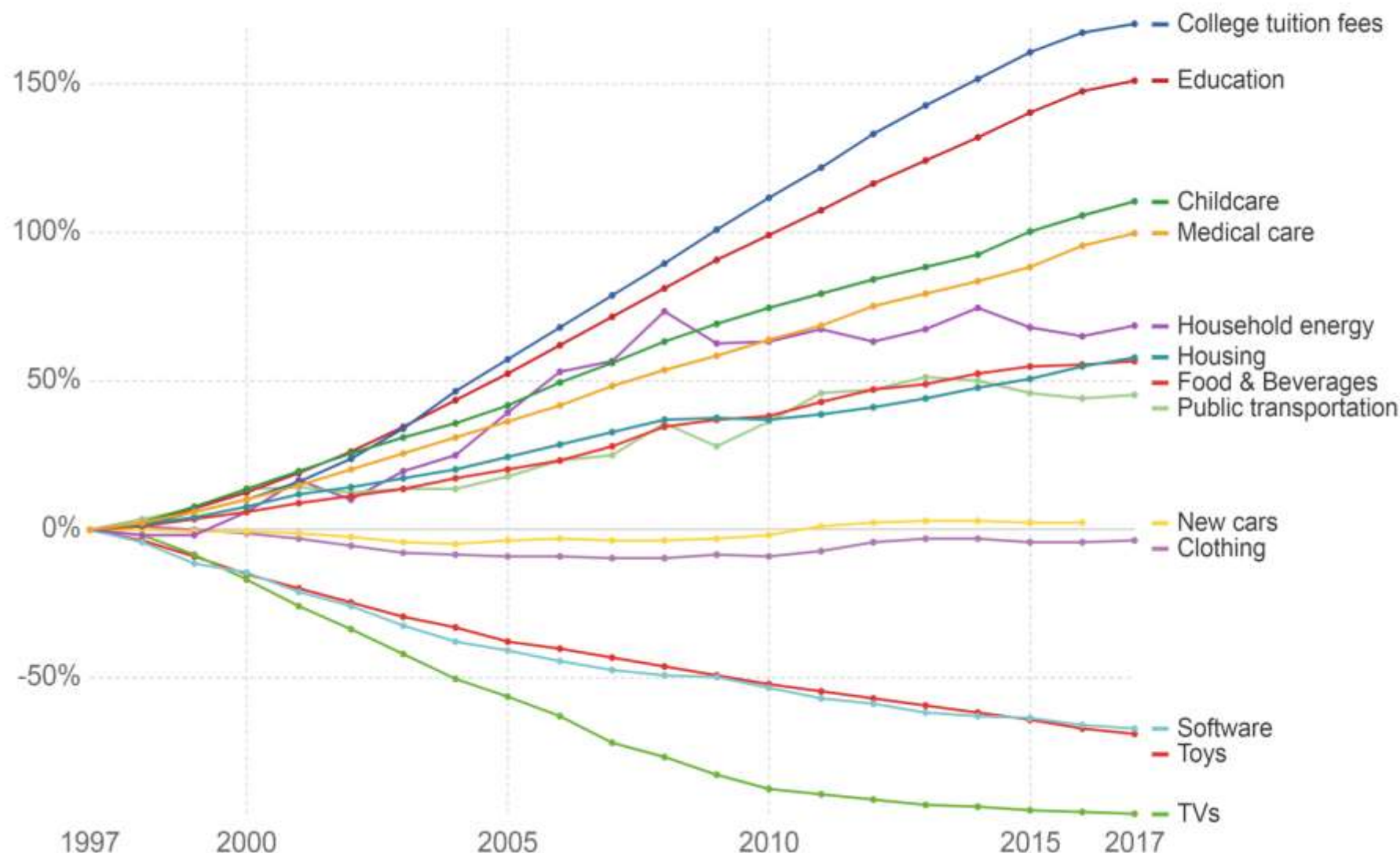
dshort.com
December 2017
Data through November



The green bars are the eight components of CPI. Core CPI excludes Food and Energy.
Energy is a major subcomponent of Transportation and a minor subcomponent of Housing.
College Tuition & Fees is a subcomponent of Education & Communication.

Price changes in consumer goods and services in the USA, 1997-2017

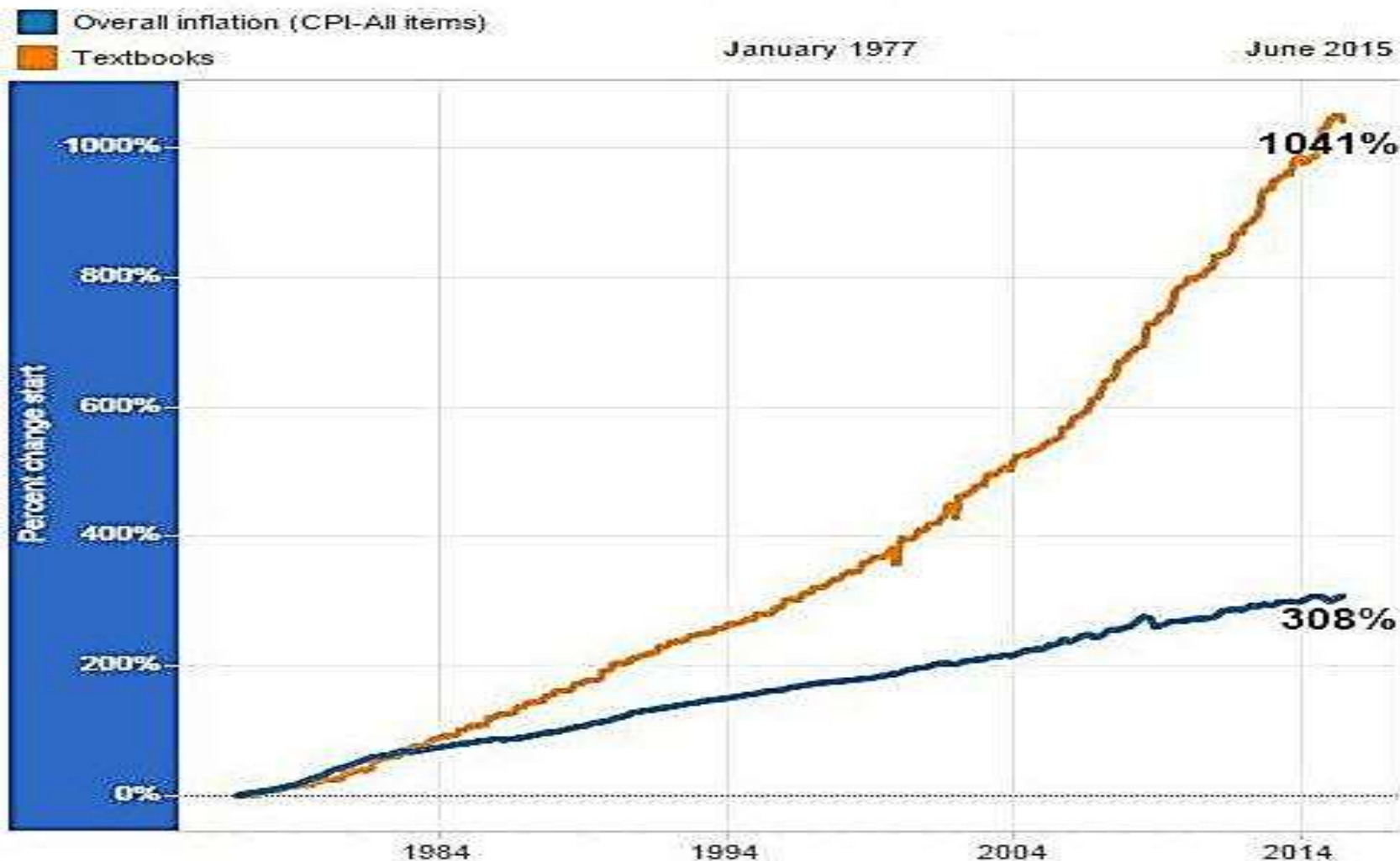
Price change in consumer goods and services in the USA, measured as the percentage change since 1997. Data is measured based on the reported consumer price index (CPI) for national average urban consumer prices.



Pricey textbooks

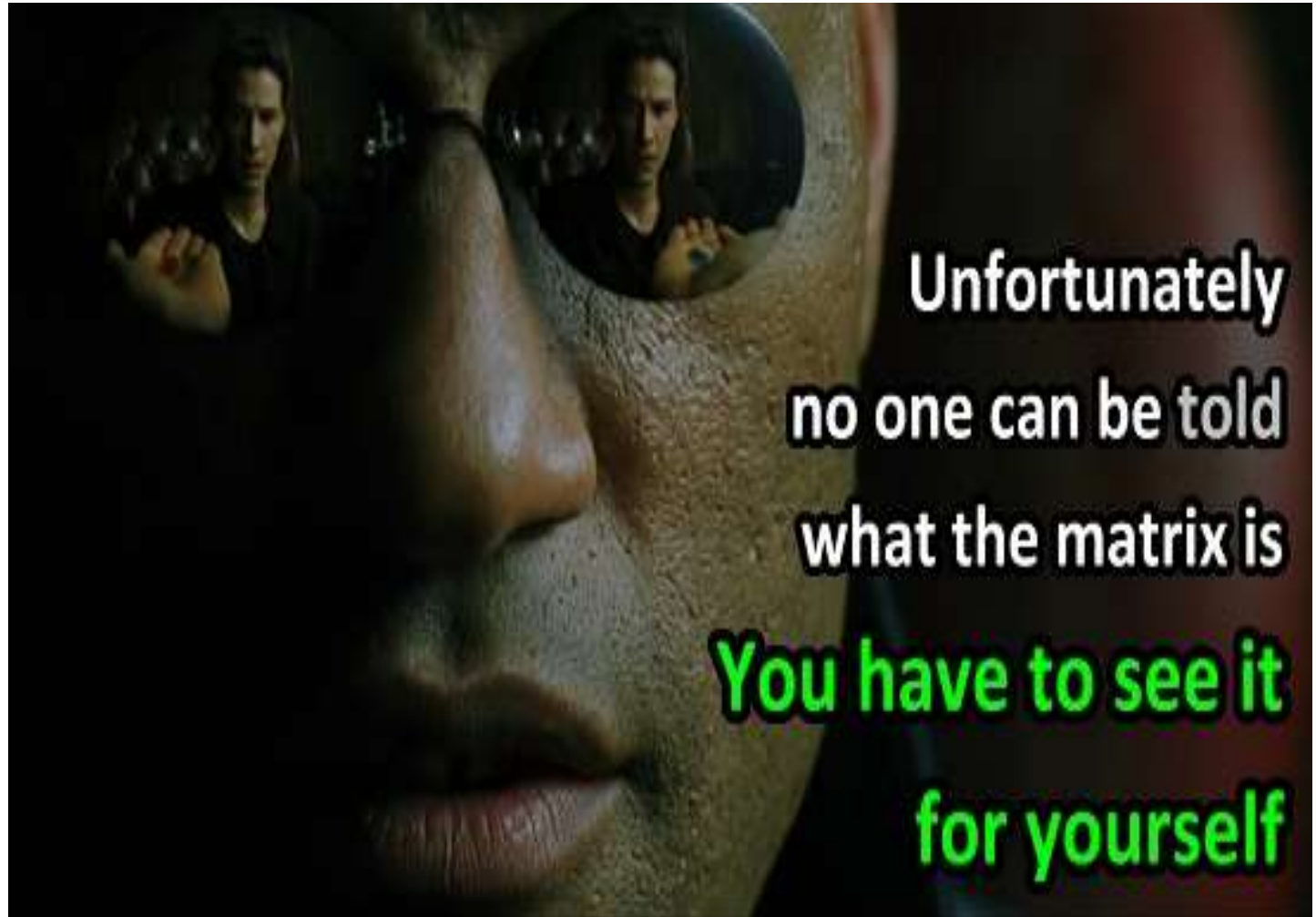


Since 1977, textbook prices have risen at more than triple the overall rate of U.S. inflation. Use the filter to choose a date range to track textbook price inflation. (SOURCE: BLS)



Textbook prices have risen higher than overall inflation for the past three decades. NBC News

I. So... Why Does College Cost so Damn Much???



The “How and Why” are Largely Misunderstood



**FIRST Lesson (ECON 101) –
WHEN YOU SUBSIDIZE
SOMETHING YOU GET (LOTS
- MUCHO) MORE OF IT!!!**





Lesson # 2 CHAIN REACTION

“Once you intervene, the distortions created lead to yet MORE ... ALWAYS”. – *KG Tatarelli* channeling James Madison

ROUND 1



The American Servicemen's Readjustment Act of 1944 a/k/a
THE G. I. BILL

“For the nation's colleges and universities, it provided a long and profitable boom. In 1940, only 4.6 percent of the population had attended college for four years or more, according to the Education Department, compared with 23.2 percent of the population in March 1991.”

“The G.I. Bill provided the biggest boon, though, to two-year colleges. By 1947, there were 328 community colleges in the nation, up from just 58 three years earlier; enrollment in these institutions -- which provided the bulk of job-training opportunities for returning veterans -- ballooned to 500,000 in 1947 from 251,290 in 1944, according to the American Association of Community Colleges.”

“50 Years Later, the Value of the G.I. Bill Is Questioned”, William Celis 3d, New York Times, June 22, 1994. <http://www.nytimes.com/1994/06/22/us/50-years-later-the-value-of-the-gi-bill-is-questioned.html?pagewanted=all>

IT DIDN'T TAKE LONG FOR COLLEGE ADMINISTRATORS TO REALIZE THERE'S THIS NEW REVENUE SOURCE WHICH COULD BE TAPPED. EXPAND THE STUDENT BODY... AND RAKE IN THE DOUGH!!!





Higher Education Act of 1965



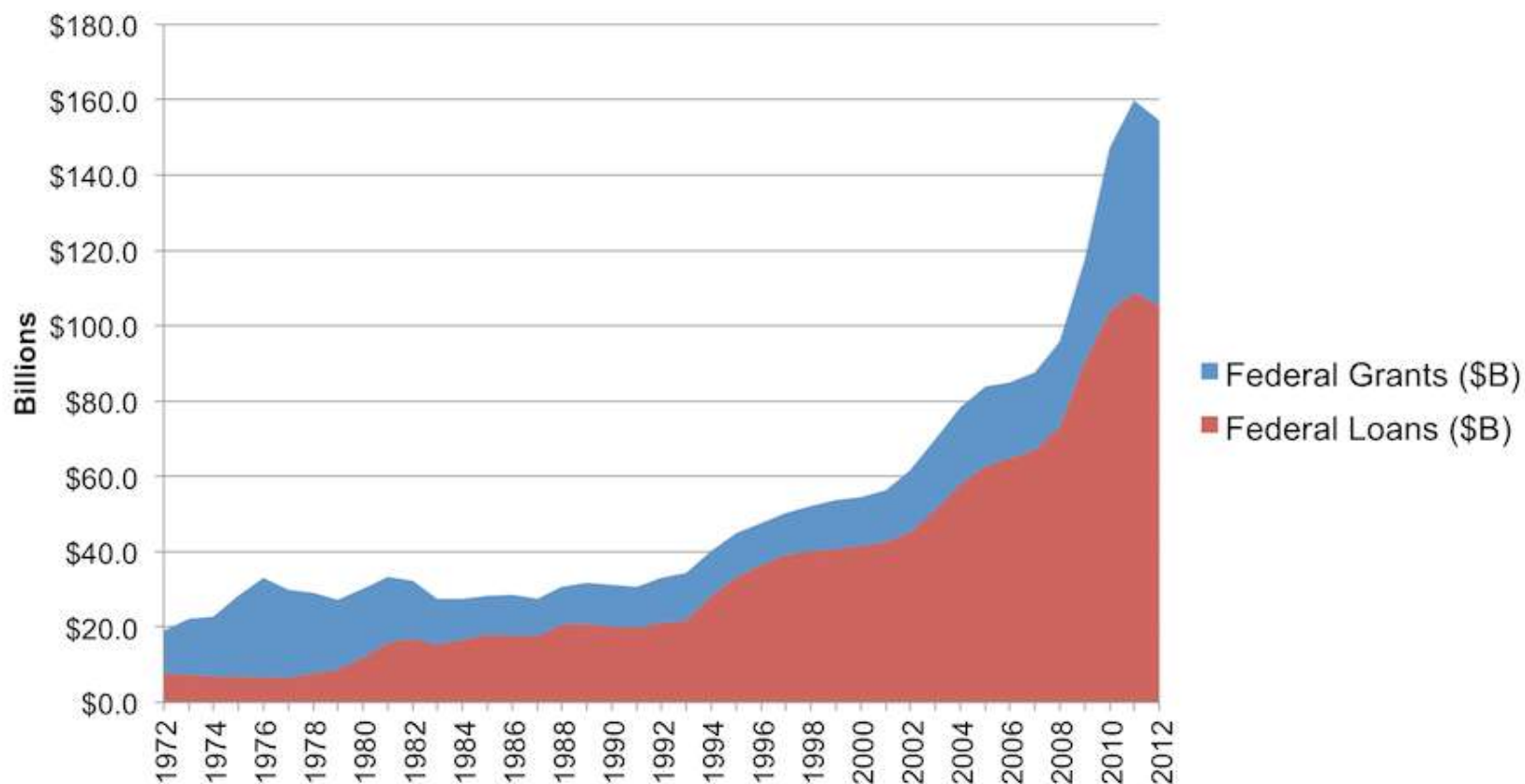
REAUTHORIZED AND AMENDED

MANY TIMES SINCE 1965

- 1968 – Appropriations (\$\$\$) grew rapidly (especially Pell Grants and GSL – Guaranteed Student Loan(s)).
- 1972 – Created Sallie Mae as a publicly chartered private corporation to increase liquidity and capital availability in the GSL program.
- 1976 - Students without high school degrees became eligible for federal assistance so long as they had the "ability to benefit" from postsecondary training.
- **ETC., ETC., ETC.,**



Annual Federal Student Loans and Grants (Billions)

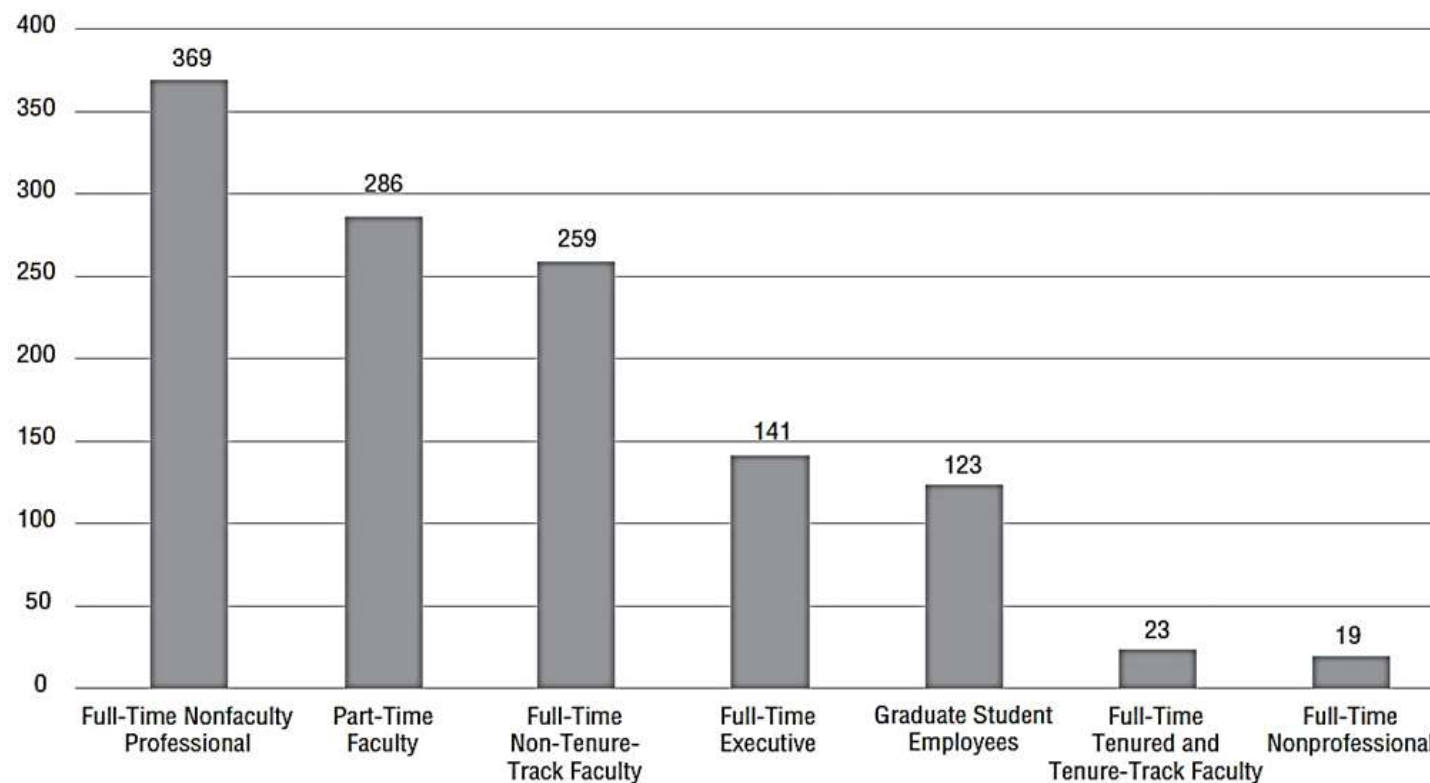


BUT WAIT... THERE'S MORE...



FIGURE 1

Percentage Change in the Number of Employees in Higher Education Institutions, by Category of Employee, 1975 and 1976 to 2011



Note: Percentage growth is from 1975 for full-time faculty members and from 1976 for all other categories. In 1976, graduate student employees included both full- and part-time employees; in 2011 all graduate student employees were defined as part-time employees.

Source: For 1975 and 1976, National Center for Education Statistics, *Fall Staff in Postsecondary Institutions, 1993* and *Digest of Education Statistics, 2001*. For 2011, National Center for Education Statistics, IPEDS Human Resources Survey 2011–12, Fall Staff component. Provisional data file. Tabulation by John W. Curtis.

FACULTY and NONFACULTY

“... new administrative positions—particularly in student services—drove a 28-percent expansion of the higher-ed work force from 2000 to 2012. The report was released by the [Delta Cost Project](#), a nonprofit, nonpartisan social-science organization whose researchers analyze college finances.”

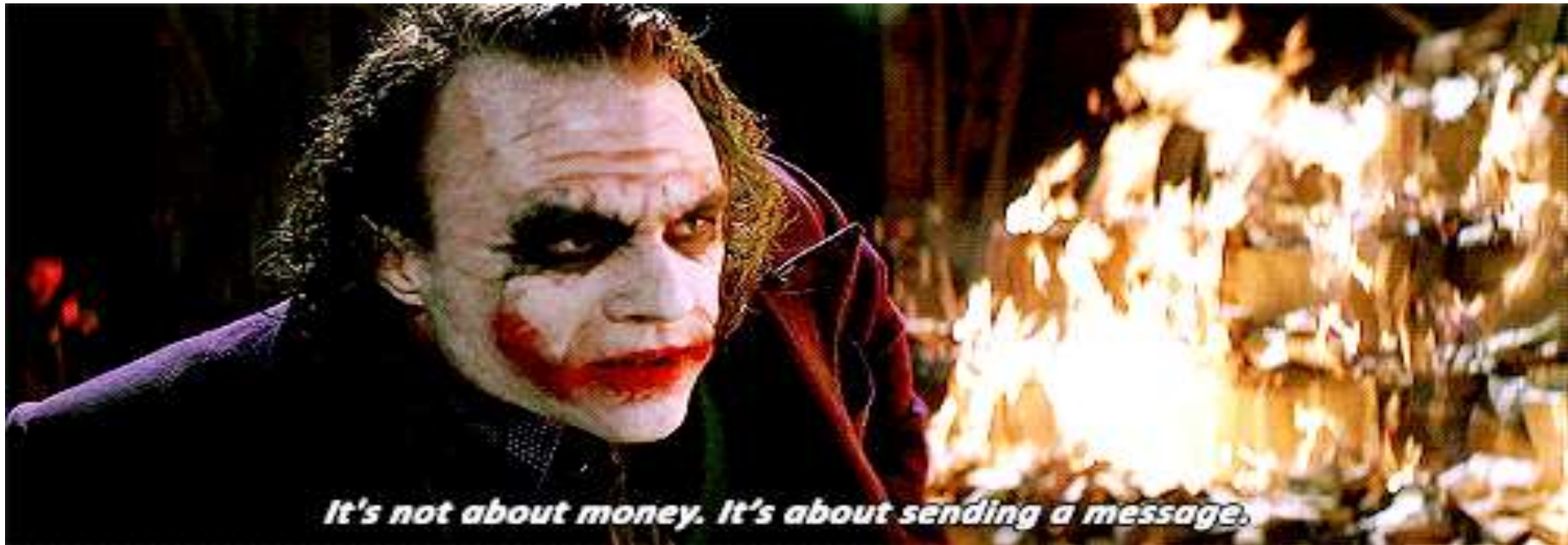


“...from 1987 until 2011-12—the most recent academic year for which comparable figures are available—universities and colleges collectively added 517,636 administrators and professional employees, or an average of 87 every working day.”



“New Analysis Shows Problematic Boom In Higher Ed Administrators”, Jon Masrcus, Huffington Post, June 2, 2014. http://www.huffingtonpost.com/2014/02/06/higher-ed-administrators-growth_n_4738584.html

UC Berkeley's Office for Diversity and Inclusion employs a staff of 150 whose salaries total over \$18 million



“Top Public Universities Pay Diversity Officers an Average Salary of \$175k”, Tim Ciccotta, Breitbart.com, July 17, 2017 <http://www.breitbart.com/tech/2017/07/17/top-public-universities-pay-diversity-officers-an-average-salary-of-175k/>



“You can’t blame faculty salaries for the rise in tuition. Faculty salaries were "essentially flat" from 2000 to 2012...”

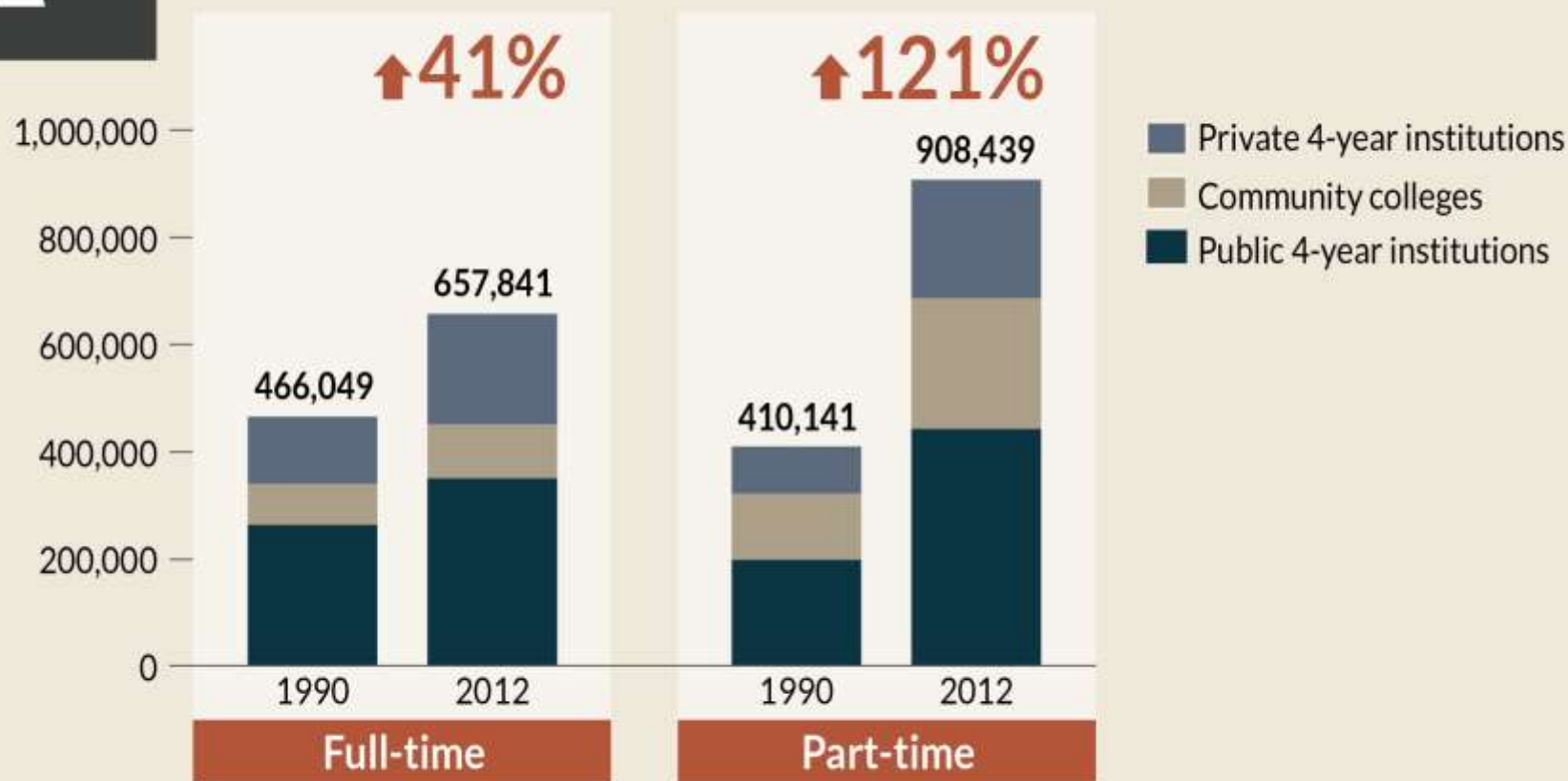
“Administrator Hiring Drove 28% Boom in Higher-Ed Work Force, Report Says”,
Scott Carlson, The Chronicle of Higher Education, Feb. 5, 2014.

<http://www.chronicle.com/article/Administrator-Hiring-Drove-28-/144519>



Increased Reliance on Part-Time College Faculty

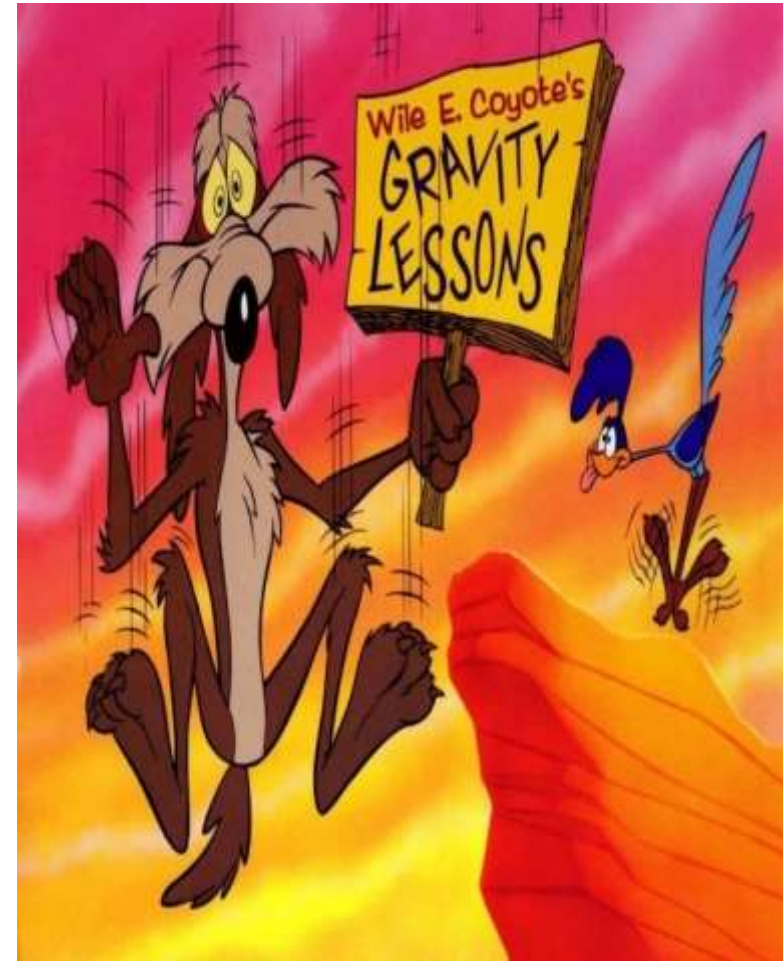
Full-time versus part-time faculty and instructors, 1990-2012



Note: Part-time faculty includes graduate instructors/assistants

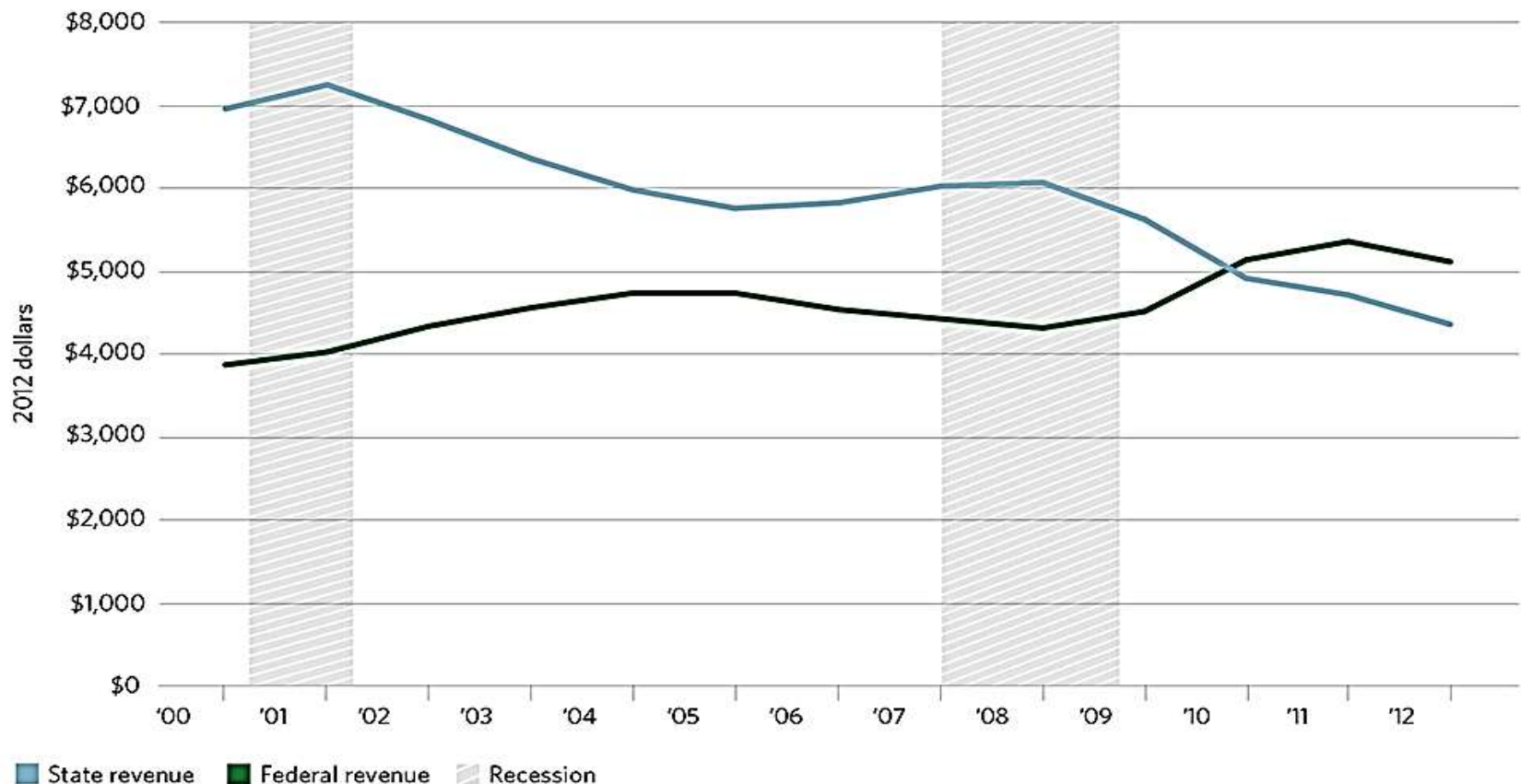
Source: *Labor Intensive or Labor Expensive? Changing Staffing and Compensation Patterns in Higher Education*, 2013
Delta Cost Project at American Institutes for Research

AS FOR STATE FUNDING....



State Funding for Higher Education Declined in Recent Years While Federal Funding Grew

Federal and state revenue per full-time equivalent student flowing to higher education institutions, fiscal years 2000-12, adjusted for inflation



Sources: Pew's analysis of data from the Delta Cost Project Database (May 2015), based on original data from U.S. Department of Education, National Center for Education Statistics' Integrated Postsecondary Education Data System

TABLE 1

Largest Cuts to Higher Education Since Recession (FY 08-14)	
Louisiana	-41%
Alabama	-39%
Pennsylvania	-37%
South Carolina	-36%
Arizona	-36%
Idaho	-33%
New Hampshire	-33%
Florida	-32%
Nevada	-31%
Oregon	-29%
<i>Young Invincibles' Analysis of State Higher Education Executive Officers' SHEF Report</i>	

TABLE 2

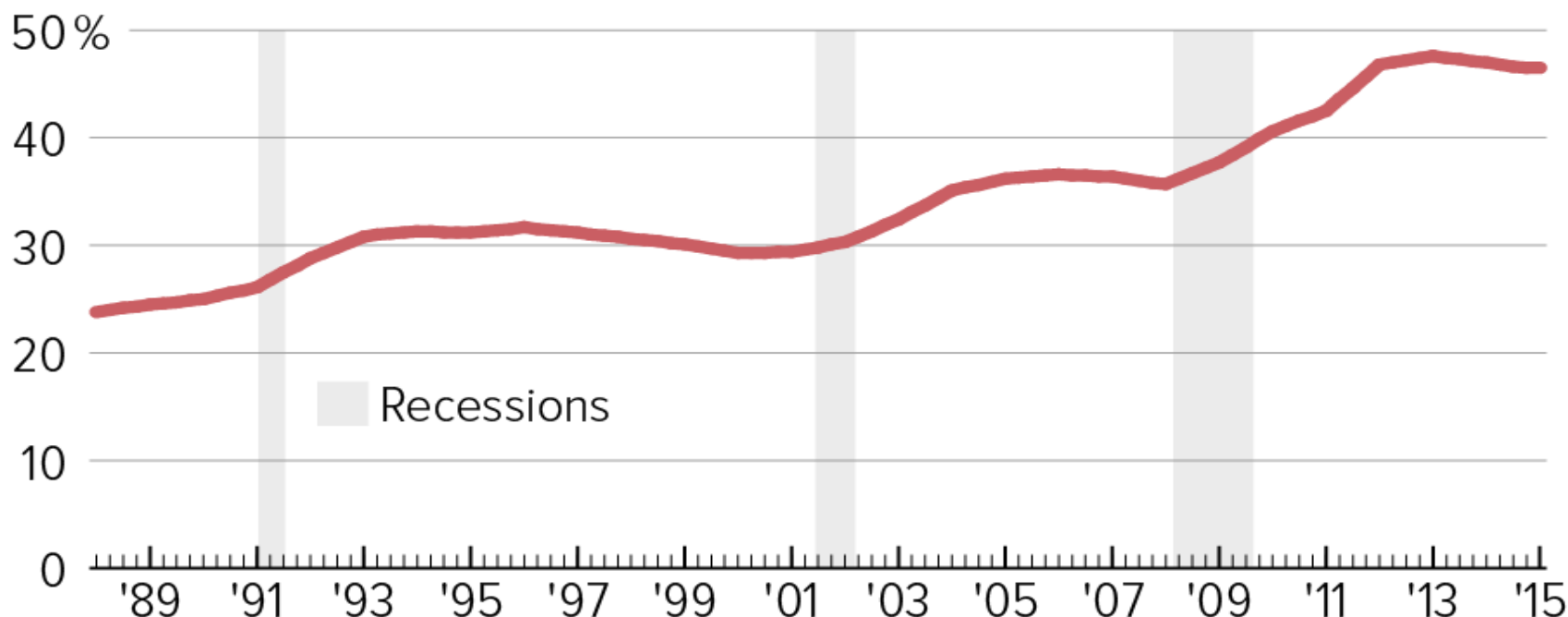
Smallest Cuts to Higher Education Since Recession (FY 08-14)	
North Dakota	38%
Alaska	6%
Indiana	-4%
New York	-5%
Montana	-5%
Wyoming	-5%
Nebraska	-6%
Arkansas	-6%
Illinois	-9%
Vermont	-11%
<i>Young Invincibles' Analysis of State Higher Education Executive Officers' SHEF Report</i>	

1. Illinois technically spends more money per student since 2014, but this is largely due to pension investments, and direct aid to institutions has decreased. See Young Invincibles' report here: <http://younginvincibles.org/wp-content/uploads/2015/04/IL-budget-2015-FINAL.pdf>

“States Are Slacking on Higher Ed Spending”, Lauren Camera, usnews.com, Jan. 7, 2016. <https://www.usnews.com/news/articles/2016/01/07/states-spending-less-on-higher-education-today-than-before-recession>

Students Funding Larger Share of Education Funds After Recessions

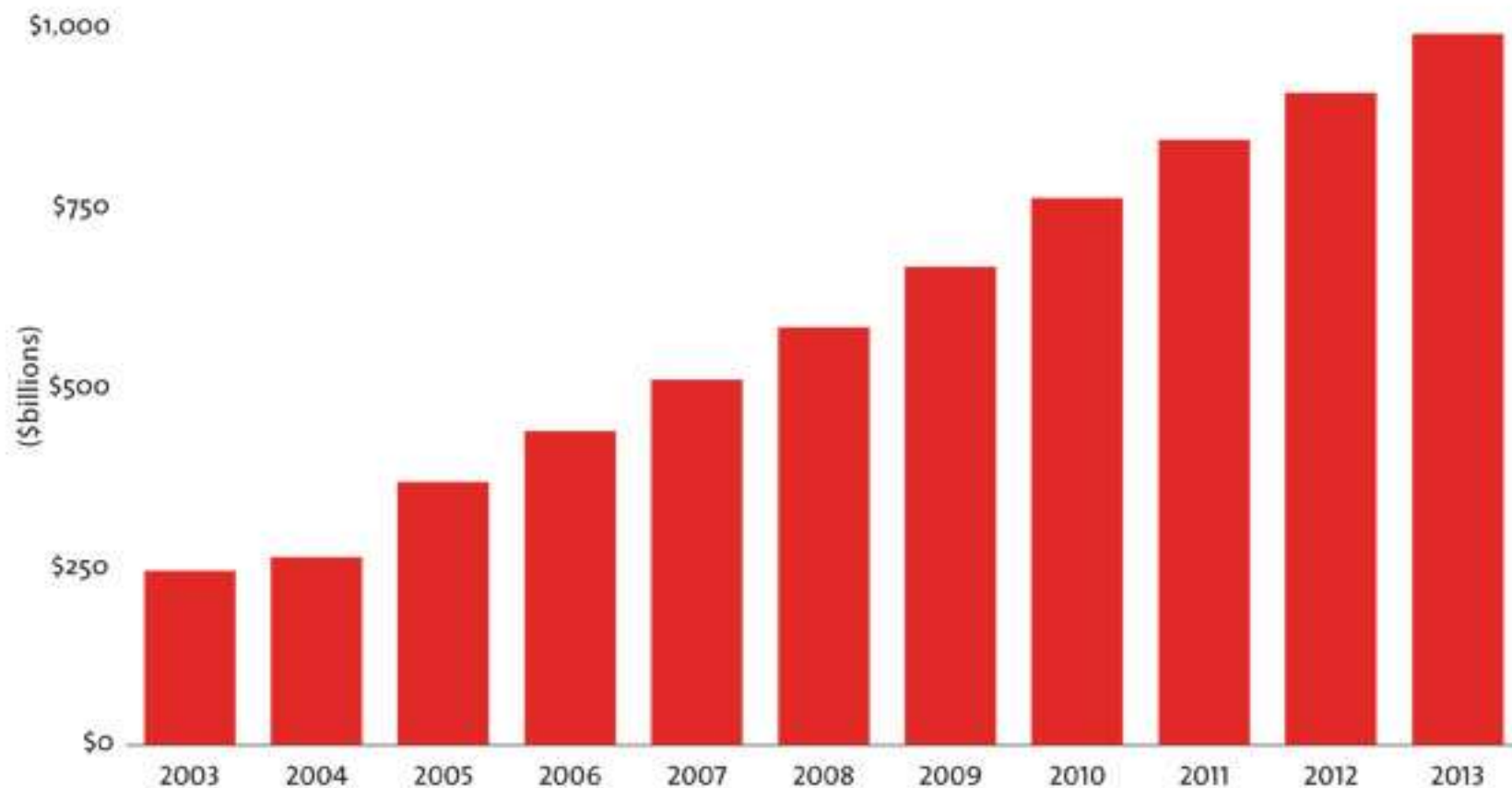
Tuition as a percent of “total educational revenue,” 1988 -2015



Source: State Higher Education Financing FY2015, State Higher Education Executive Officers Association. Total educational revenue is the sum of educational appropriations and net tuition revenue excluding any tuition revenue used for capital and debt service. It measures the amount of revenue available to public institutions to support instruction (excluding medical students).

Big Debt on Campus

Student loan debt has nearly quadrupled in the past 10 years.



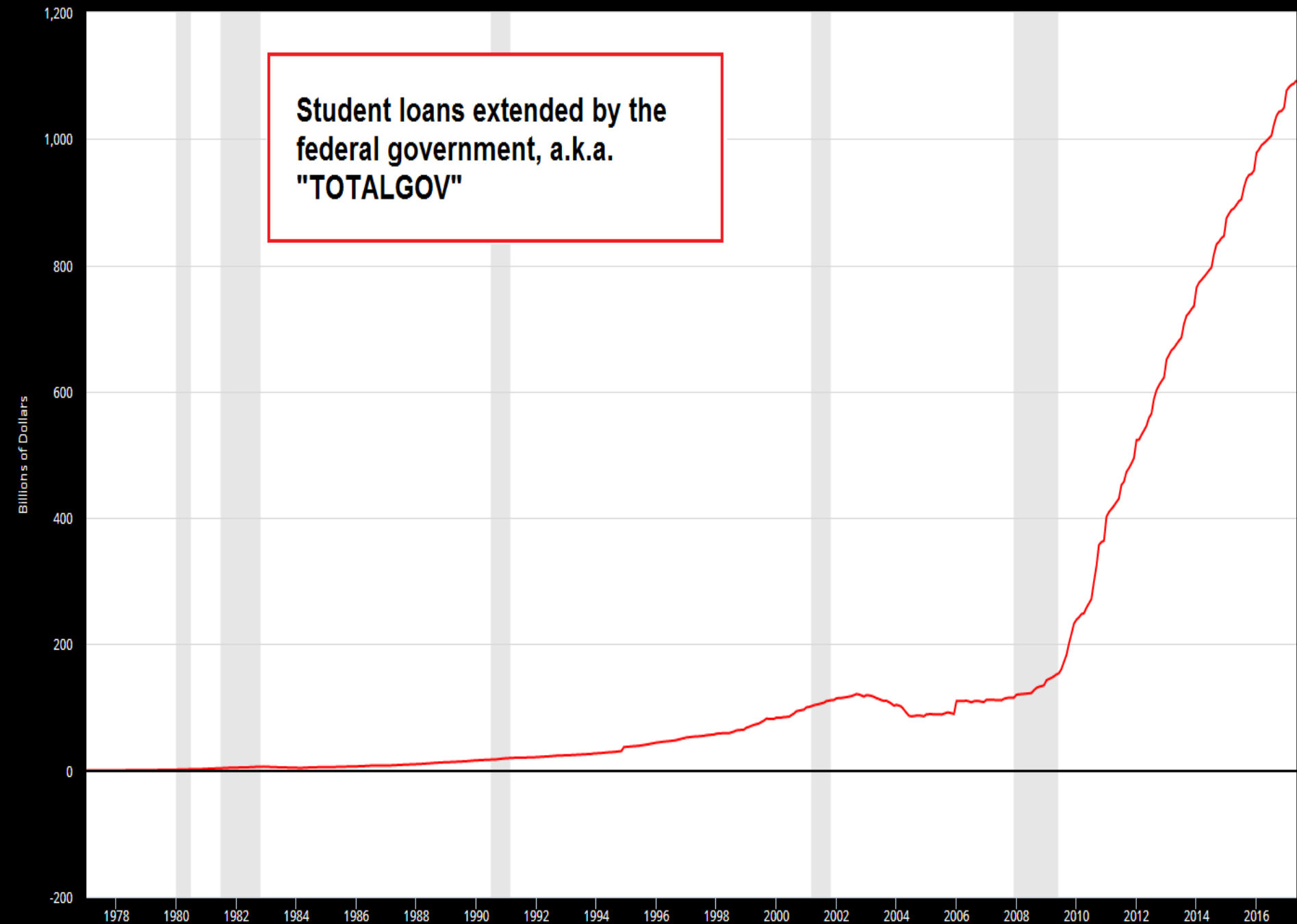
Source: Federal Reserve Bank of New York

Mother Jones

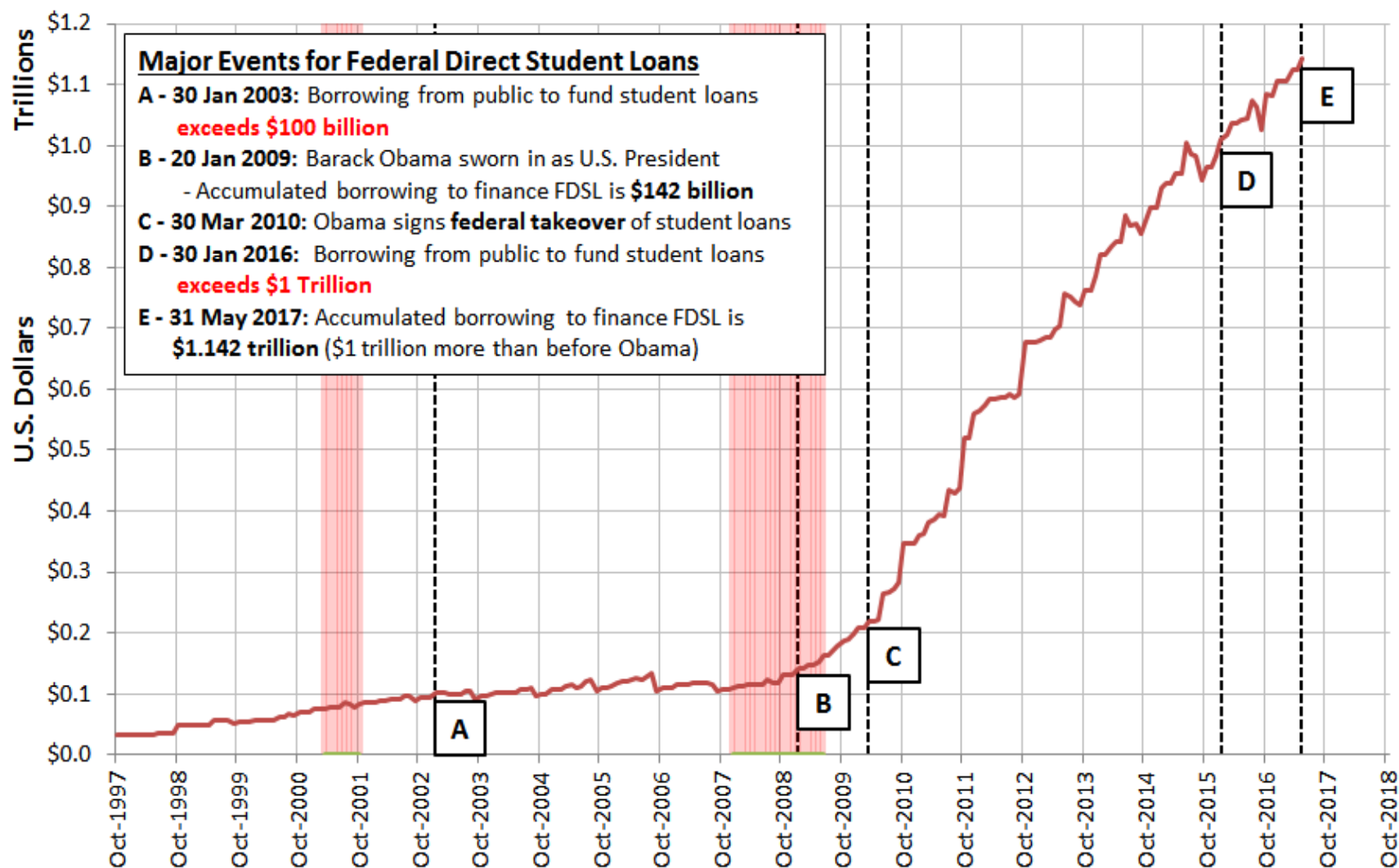
Source: Federal Reserve Bank of New York

Mother Jones

2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013



Money Borrowed by the U.S. Government to Finance the Federal Direct Student Loan Program, FY 1998 through FY 2017



Source: U.S. Treasury Department, Monthly Treasury Statements

Vertical Red Bands indicate National Bureau of Economic Research recession periods

© Political Calculations 2017



Shaded areas indicate U.S. recessions

**HOLY MOLY BATMAN... IS THAT WHY COSTS
HAVE EXPLODED?? ?????**

DUH!





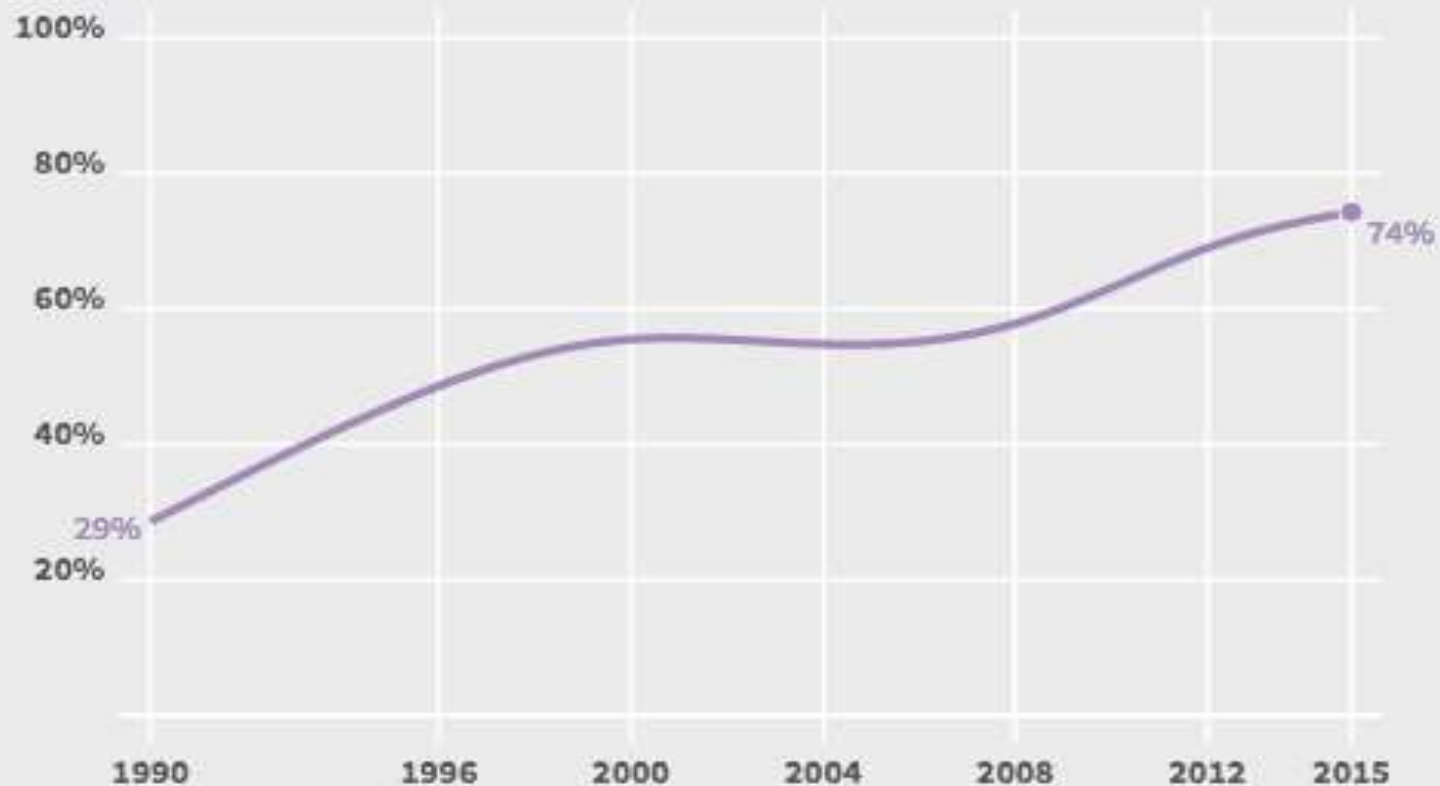
II - THE STEADFAST BELIEF THAT “YA GOTTA” GO TO COLLEGE TO GET A DECENT JOB IN ORDER TO MAKE A DECENT INCOME HAS (ALREADY) BEEN UNDERMINED.

AS FOR STUDENT LOANS...



Student Debt Rising As Wage Growth Stalls

Since 1990, median debt has nearly tripled as a share of the typical recent college grad's annual wages



Sources: Brad Hershbein of the W.E. Upjohn Institute for Employment Research, Mark Kantrowitz, Federal Reserve Bank of New York, U.S. Department of Education

Notes: Median debt at graduation for bachelor's degree recipients only. 2015 figure is a projection. Median wages for graduates aged 22 to 27, full-time workers only, with a bachelor's degree only. Figures expressed in constant 2015 dollars, adjusted using U.S. Bureau of Labor Statistics, Consumer Price Index.

Share of young college graduates not enrolled in college or a university and not employed, by gender, 1989–2015*

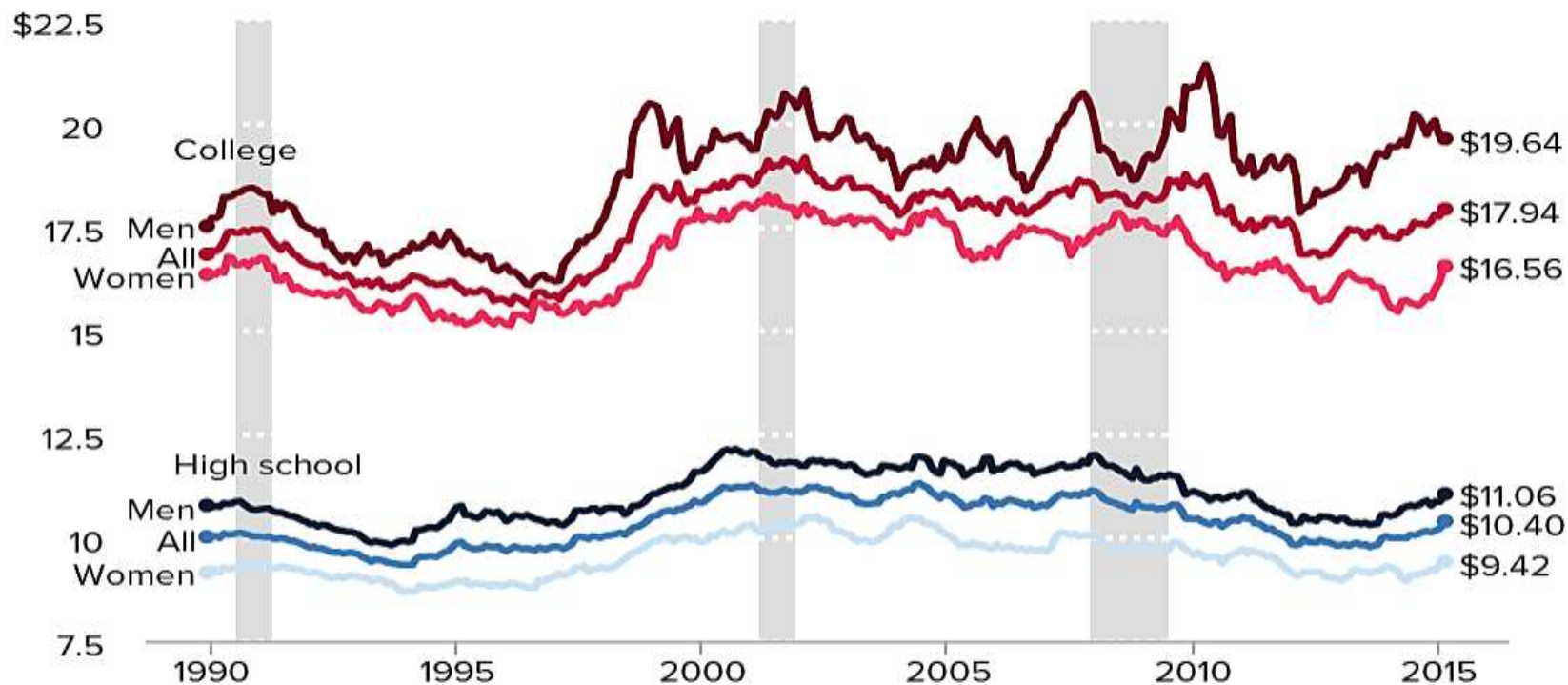


* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: Shaded areas denote recessions. Data are for college graduates (bachelor's degree only) age 21–24. "Not employed" includes those who are unemployed and those who are not in the labor force.

Source: EPI analysis of basic monthly Current Population Survey microdata

Real average hourly wages of young workers, by education, 1989–2015*



* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: Data are for college graduates age 21–24 who do not have an advanced degree and are not enrolled in further schooling, and high school graduates age 17–20 who are not enrolled in further schooling. Shaded areas denote recessions.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata

FRED

— Civilian Labor Force Participation Rate - Bachelor's Degree and Higher, 25 years and over

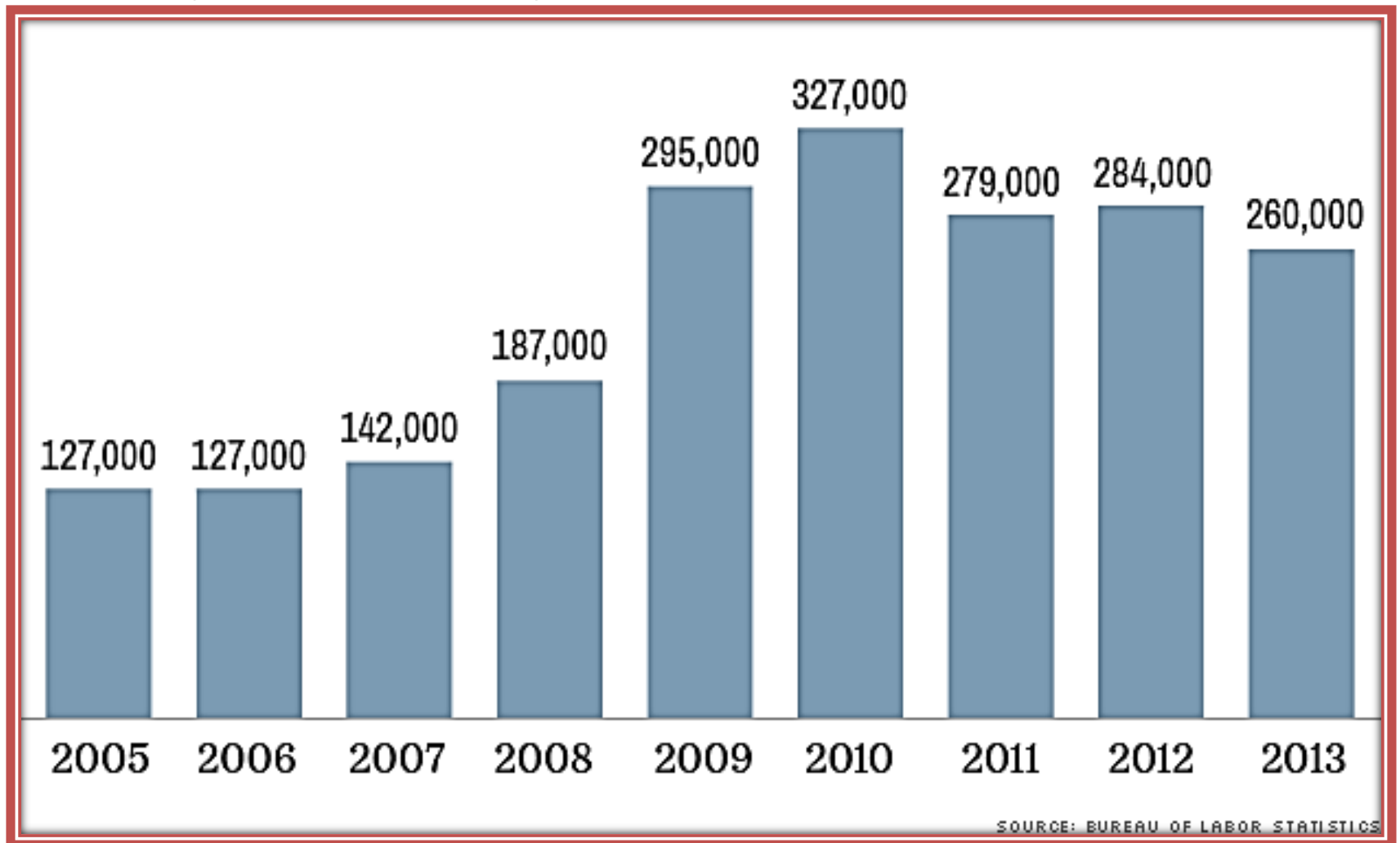


Source: US. Bureau of Labor Statistics

Shaded areas indicate US recessions - 2015 research.stlouisfed.org

**BUT... BUT THEY KEEP SAYING WE'RE IN
RECOVERY! EVERYTHING IS AWESOME!**

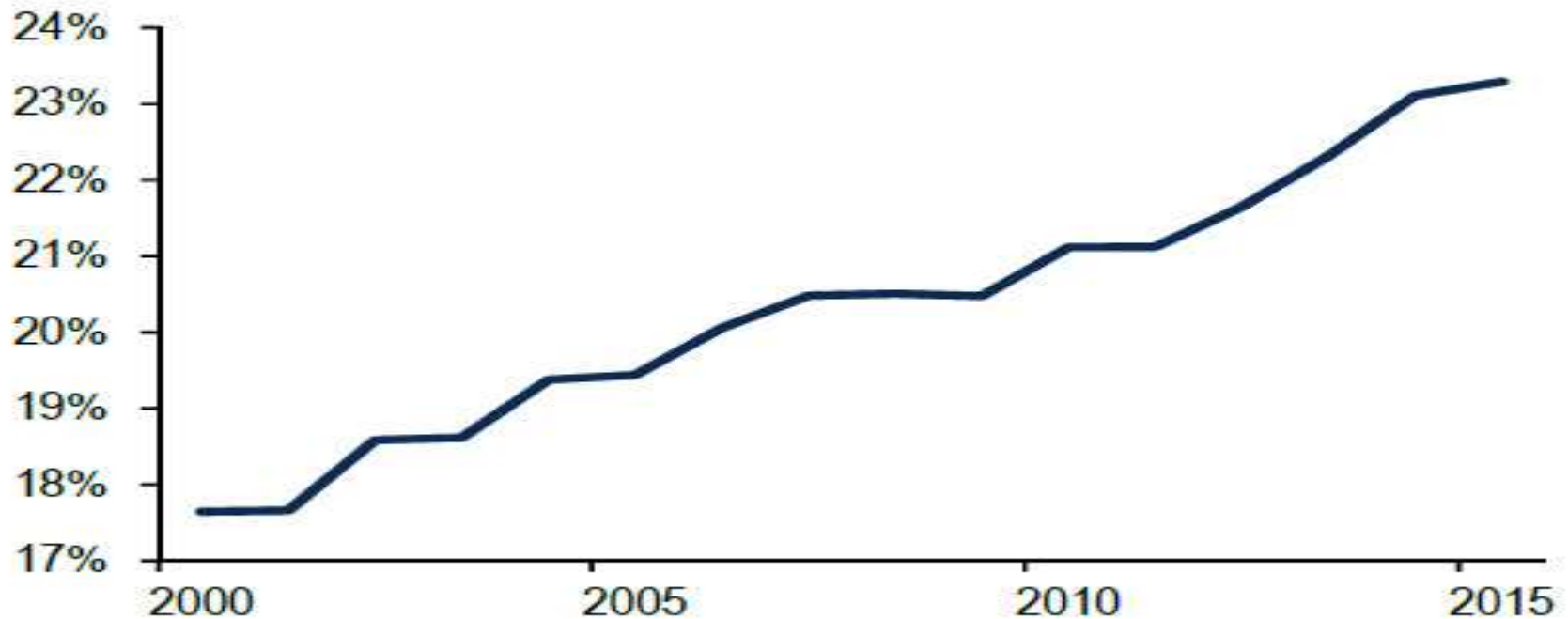
“260,000 graduates in minimum wage jobs,” CNN Money, Emily Jane Fox, March 31, 2014.



I love
listening to
lies when
I know
the truth



Chart 3: Share of low wage employees with a Bachelor's Degree or higher



Source: BofA Merrill Lynch Global Research, Bureau of Labor Statistics

From an Economic Perspective, College does not pay off for 25% of people.

Annual Wage by Education, 1970-2013

Thousands of dollars

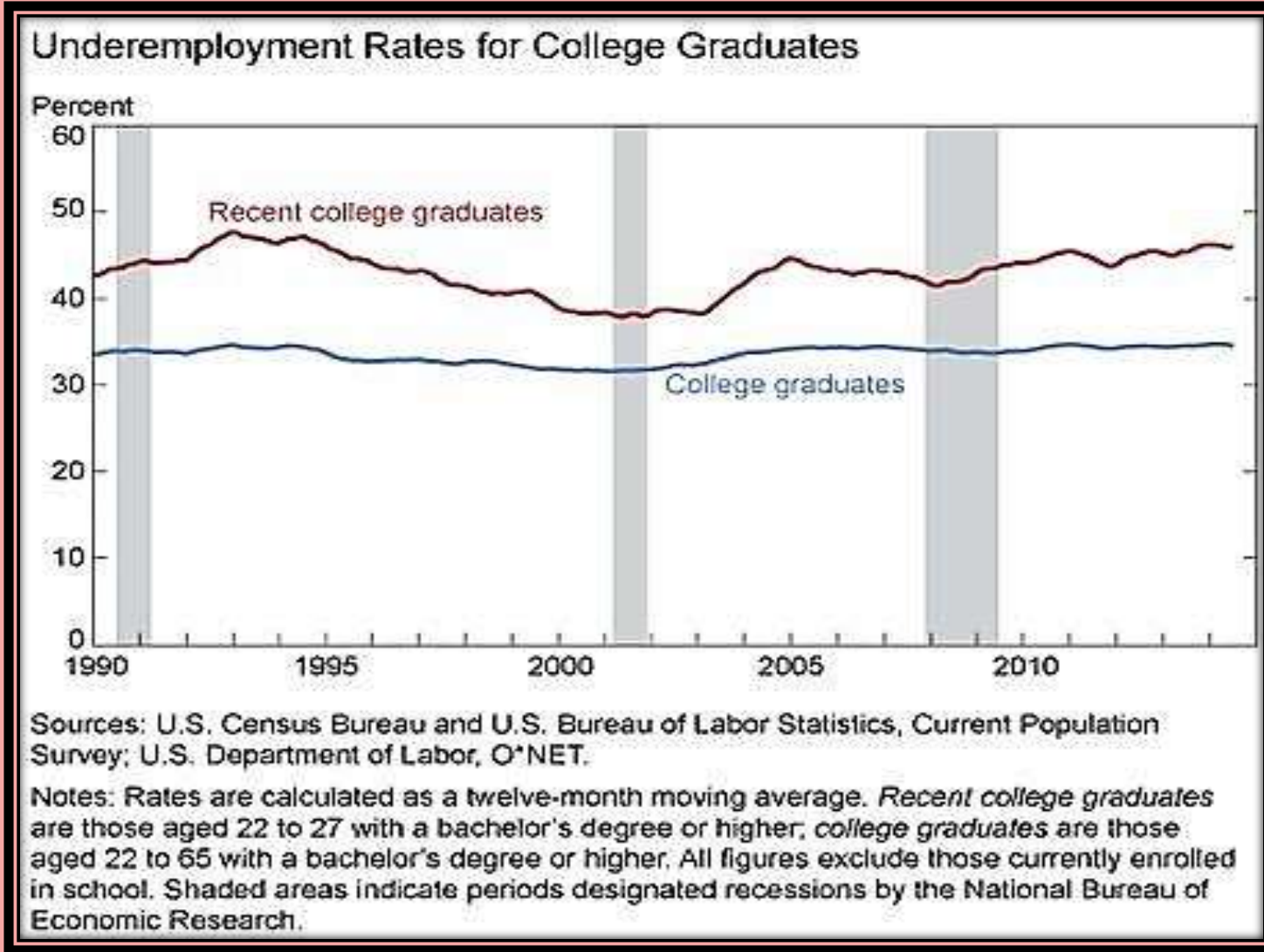


Source: U.S. Census Bureau and U.S. Bureau of Labor Statistics, Current Population Survey, March Supplement; U.S. Bureau of Labor Statistics, consumer price index.

Notes: Dollar figures are expressed in constant 2013 dollars. Shaded areas indicate periods designated recessions by the National Bureau of Economic Research.



UNDEREMPLOYMENT A BIG PROBLEM



Still Underemployed

The U.S. faces a persistent problem of college grads in jobs where a degree isn't needed

■ Recent Graduates ■ All Graduates

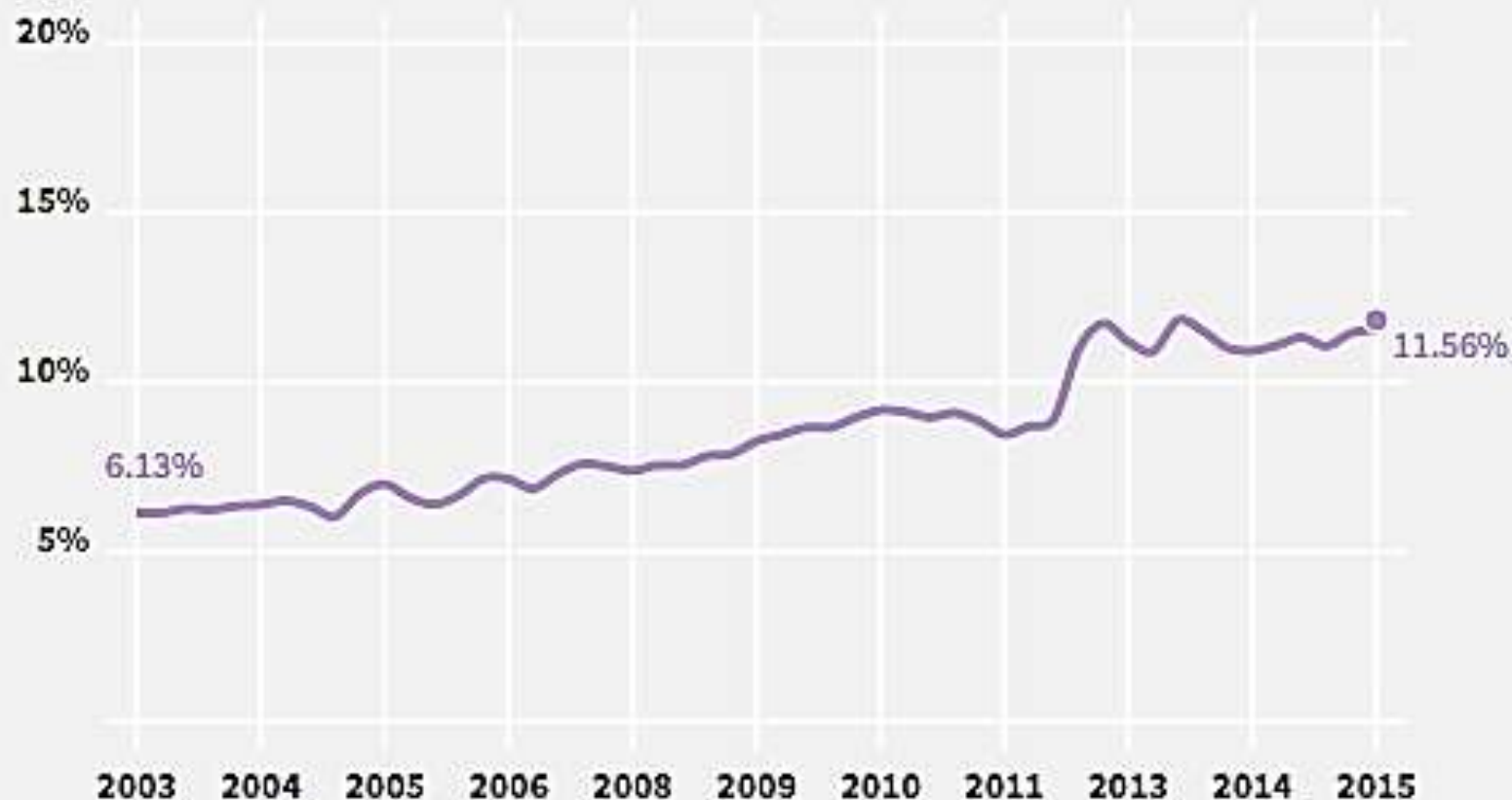


WE'VE LOST THE NARRATIVE



Student Loan Distress

The share of student debt at least 90 days late has nearly doubled over the past 12 years

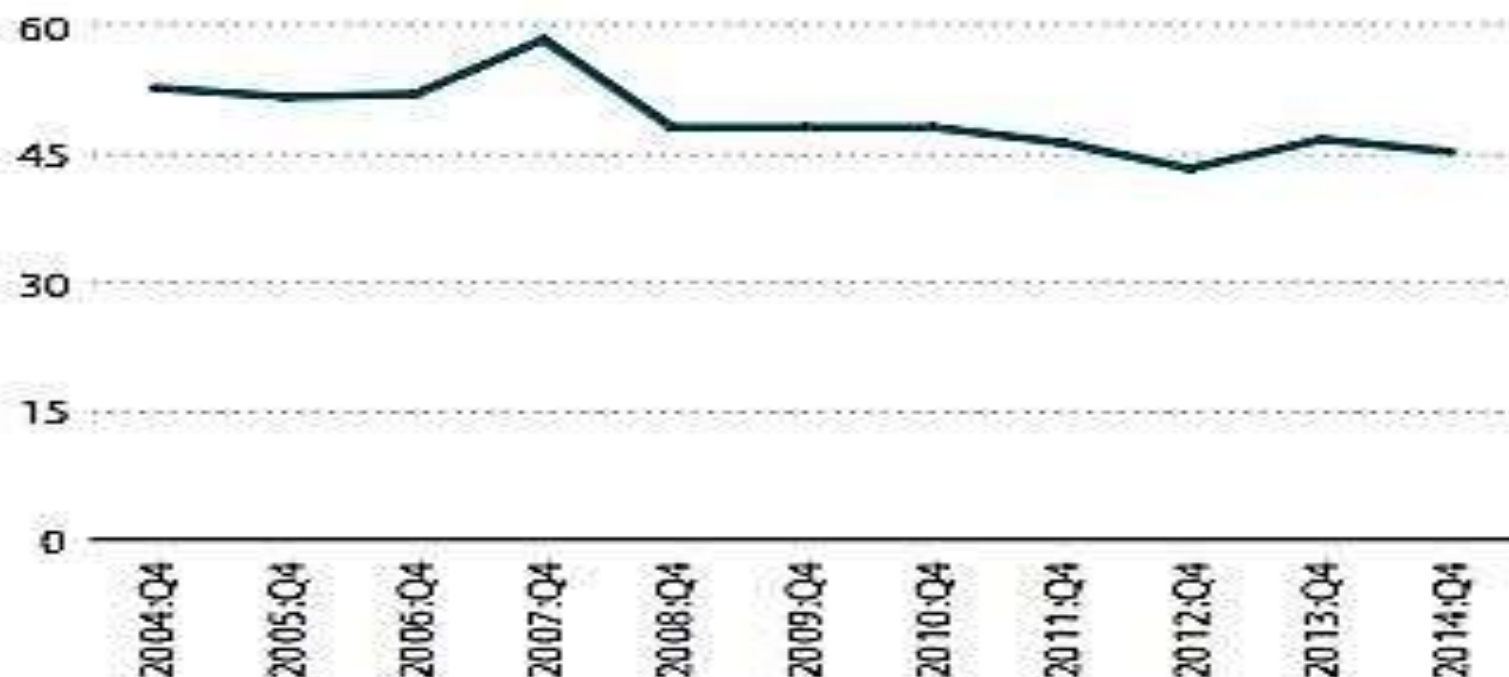


Source: Federal Reserve Bank of New York

Notes: Rates are derived from loan balances, not borrower count

Student Loan Borrowers Not In Repayment*

Percent



NOTE: The "Not In repayment" rate is calculated as

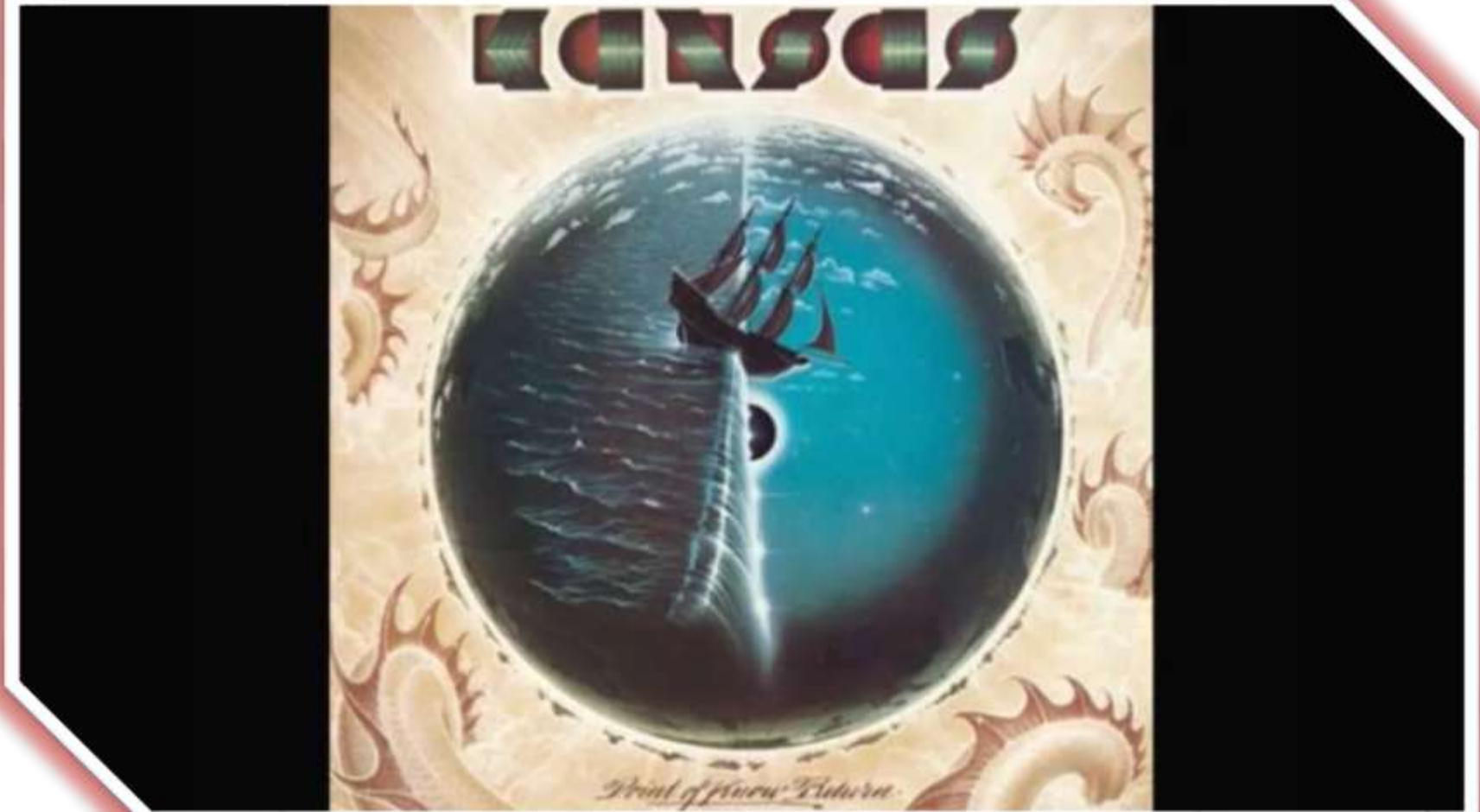
$$\frac{\text{No. of student loan borrowers not in repayment}}{\text{No. of student loan borrowers}}$$

SOURCE: Authors' calculations using data from Federal Reserve Bank of New York Consumer Credit Panel/Equifax.

*Defined as a borrower with a balance in period t equal to or larger than the balance in the prior period ($t-1$) and a past-due amount in period t of zero.



HOW LONG? WE'RE ALREADY THERE



**III. The fog drifts as if asleep but
burns off quickly when...**



“You never change anything by fighting the existing. To change something, build a new model and make the existing obsolete. “ - *Buckminster Fuller*



Change is a challenge

“Moving a university is like moving a cemetery— you can’t expect any help from the inhabitants,”

- Barb Oakley, Coursera professor



Revolution Hits the Universities

I can see a day soon where you'll create your own college degree by taking the best online courses from the best professors from around the world.

It will change teaching, learning and the pathway to employment.

“There is a new world unfolding,” ... and everyone will have to adapt.”

- Thomas Friedman, NY Times, Jan 2013



The Price of the Existing Model

Columbia University Master's Degree in Journalism

THE PRICE:

\$147,000 - Most students will pay with government loans
- Preston Cooper, *Forbes* (August 2017)



Paying Off the Existing Model

THE PAY-OFF:

- \$37,800 - Journalist Median Annual Salary
- Lay-offs are the norm.
- Industry shrinking 8% by 2027.
- Not a cost-effective investment

Taxpayers bailout defaulted loans



A National Problem



The Debt Stats:

- 2/3 of 1.4 trillion in student debt belong to women
- 61% of indebted women attended public colleges
- \$27,000 is the typical debt for a college grad.
- Often the cost of the degree is much more than the annual salary of chosen field.
- Young, inexperienced teens are making these decisions without being fully informed.

The Consequences:

- 21% postpone marriage due to debt.
- 28% delay starting a family.
- 43% move back in with their parents after graduation.
- 54% take a job outside their field of study.
- 55% hold off on buying a home.
- 62% defer saving for retirement.
- *From, American Student Assistance Survey, 2015.*

Winter is Coming to Higher Ed...



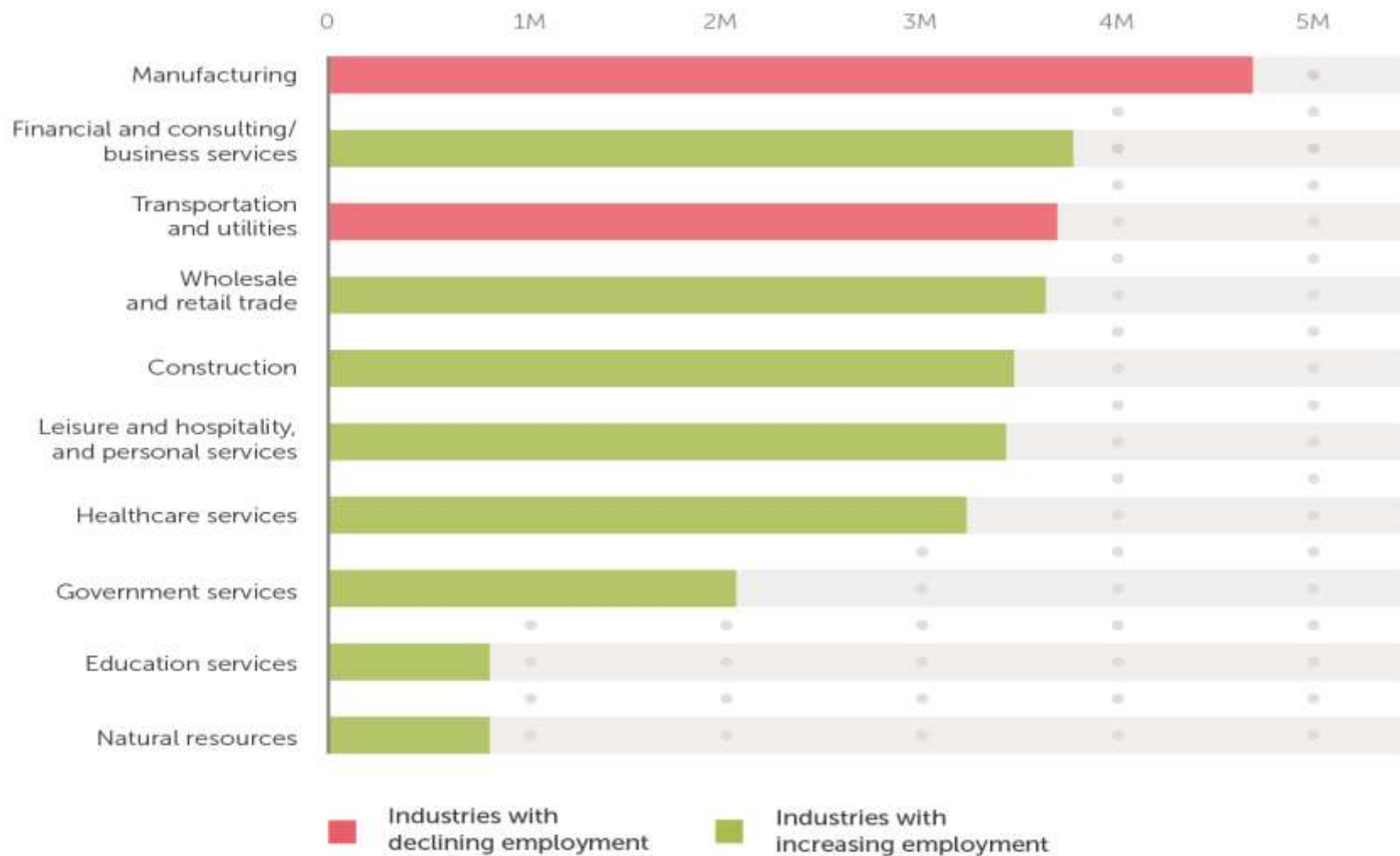
Is a 4 yr degree essential?



30 million jobs in the U.S. don't require a four-year college degree and pay an average salary of \$55,000.



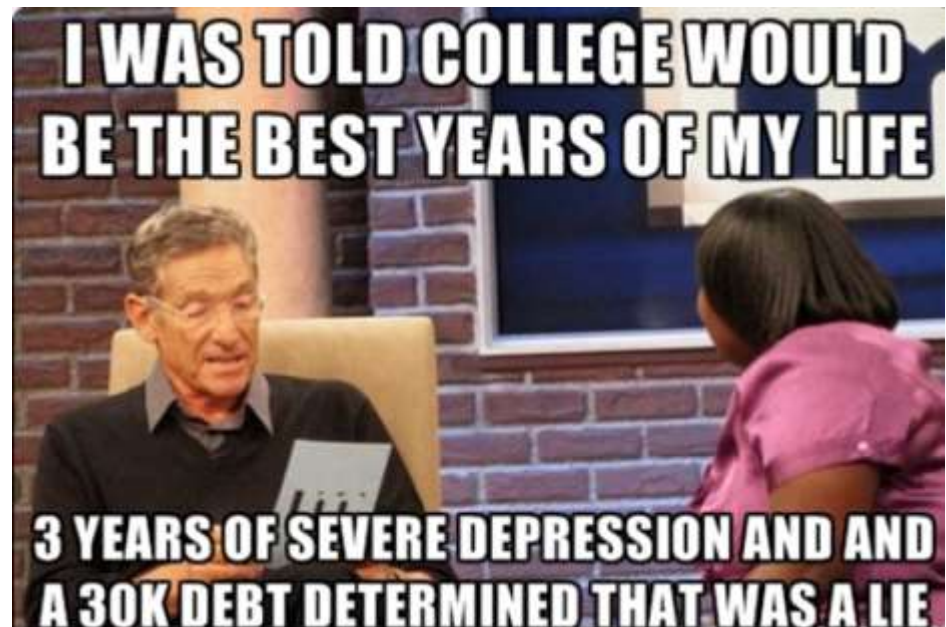
Figure 16. Good jobs are spread across many skilled-services industries in addition to the declining traditional blue-collar industries.



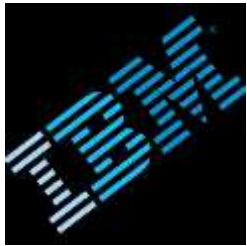
Source: Georgetown University Center on Education and the Workforce analysis of Current Population Survey Annual Social and Economic Supplement (March), 1992-2016.

Skills are in demand

- 70% of hiring professionals agreed with the statement, “If a candidate has the right skills for an open position, it doesn’t matter what type or format of education was used to get them.”



Many major companies don't require a 4 yr. degree for a high-paying jobs with benefits



Bank of America



NORDSTROM



<https://www.glassdoor.com/blog/no-degree-required/>

Yet, A High School Diploma is Not Enough: An Associate's Degree or Credentials are Required

Requirements for job openings over the last twenty-six years:

- **High School Diploma only:** ↓ 8%.
- **Some college:** ↑ 11%.
- **Associate Degree:** ↑ 83%.



55 million job openings by 2020

65% of jobs will require postsecondary education

- **35% - a bachelor's degree**
- **30% - some college or an associate's degree**
- Only 35% will not require post-high school education.
- Job openings:
Fastest growth in Healthcare, community services, STEM.
Critical thinking and decision making skills will be needed.
- At the current rate, U.S.A. will fall short by 5 million workers with postsecondary education.

https://cew.georgetown.edu/wp-content/uploads/2014/11/Recovery2020.ES_.Web_.pdf

Students' Primary Expectations

- Low tuition cost
- Job placement with good salary.

Carrie Warick, Director of Policy and Advocacy, National College Access Network, Student Survey.



Is a four-year university degree the only way to meet these expectations?

What are We



To do Now?

Alternatives to a High Cost, High Debt 4-year College Degree

- **Associate Degrees** from Community Colleges in highly skilled occupations.
- **MOOCs**; Massive Open On-line Courses:
 - Coursera
 - EdX
 - Udacity
 - MIT's Micro Masters
 - Georgia Tech and AT&T's Online Masters
- **Nano Degrees or Certification** programs
- **Hi-tech Coding Bootcamps**, \$10,000-\$20,000.
- **Business internships** combined with course instruction.

Community Colleges

- “Community Colleges are now seen as the primary vehicles for workforce training in this country.”
 - Carrie Kisker, Education Policy Researcher



Community Colleges Costs v. Universities



In-district Annual Tuition and Fees

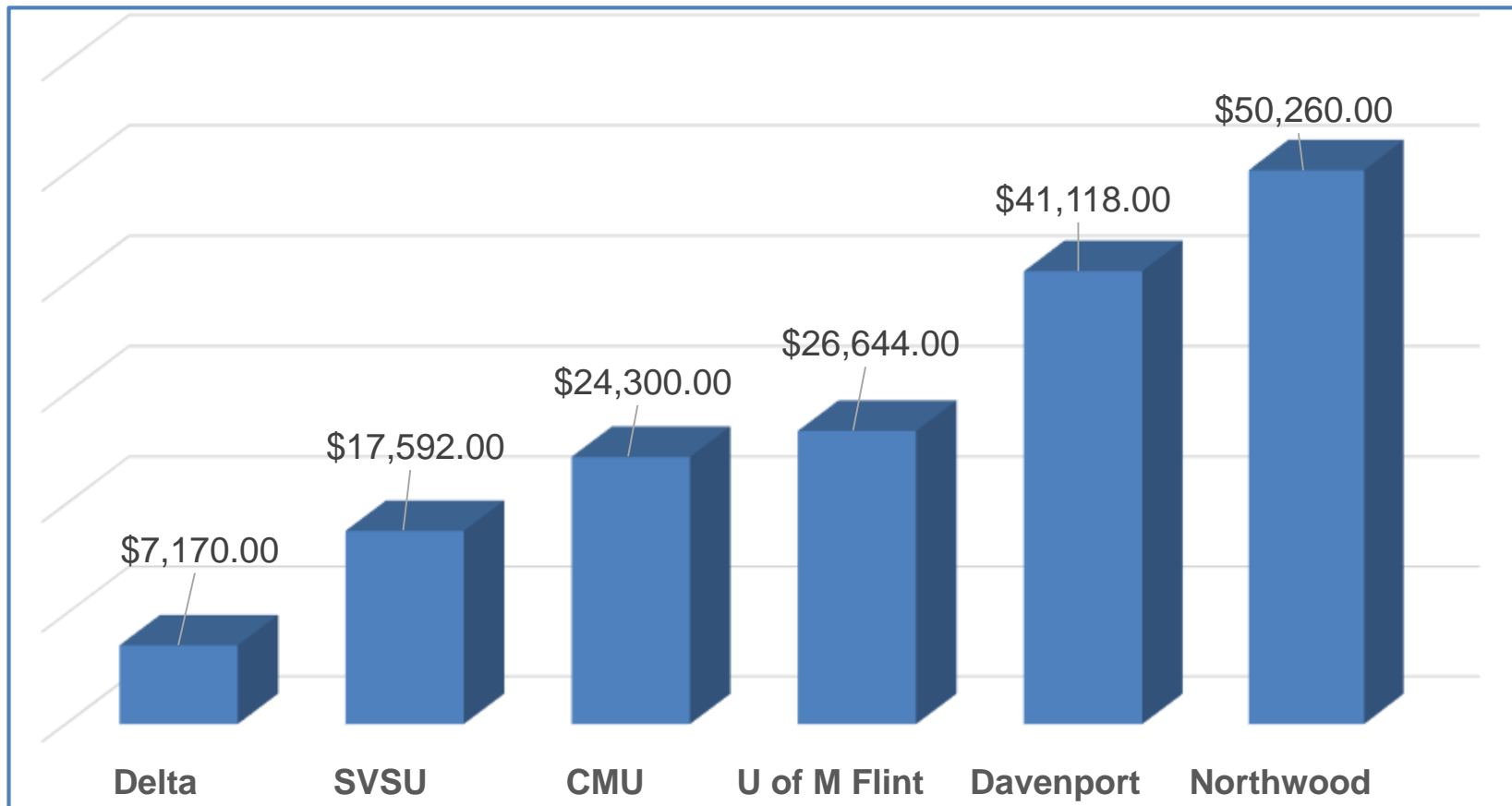
- Public 2-yr college: \$3,500



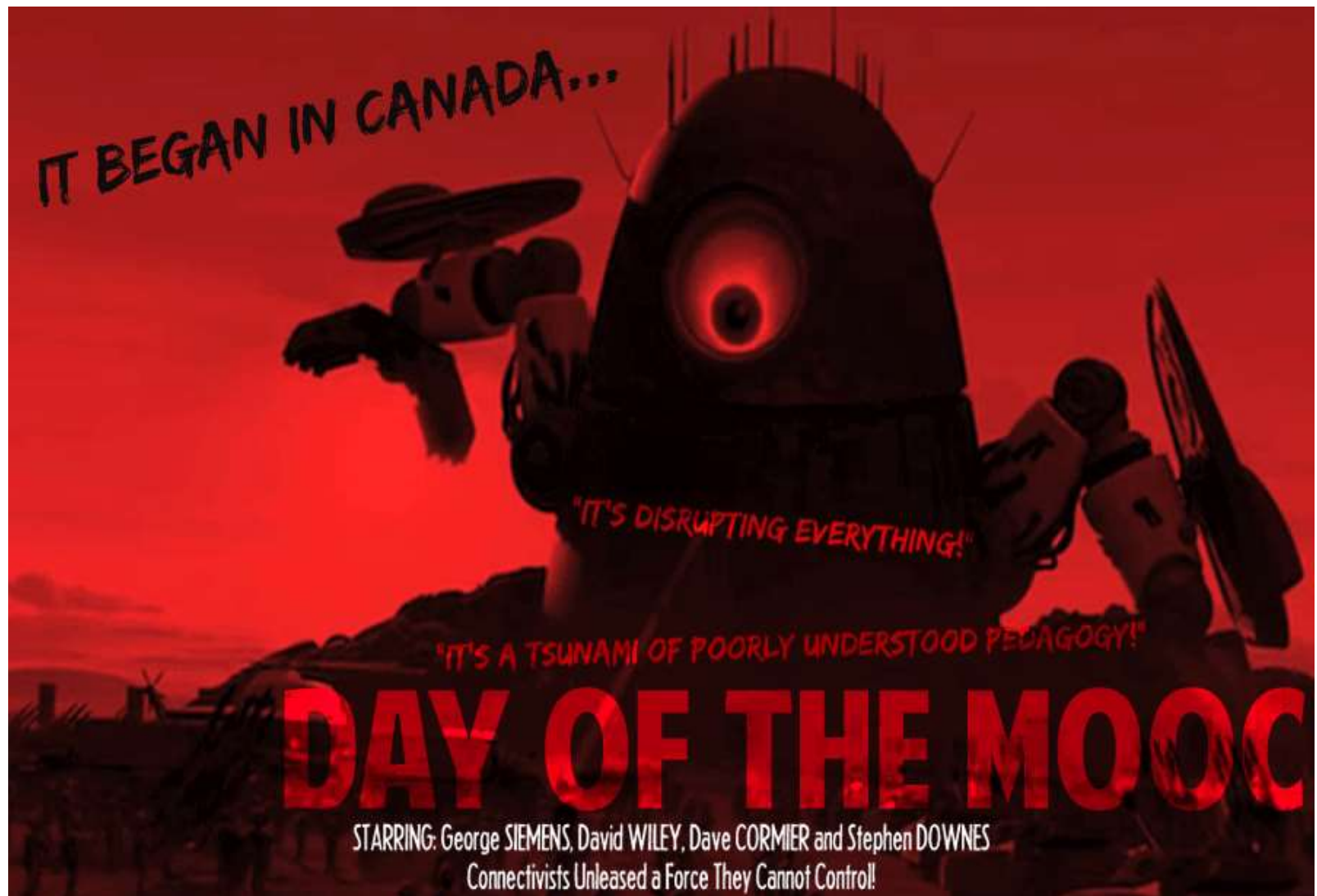
- Public 4-yr university: \$26,000, tuition, books, housing (MSU/UM)
- A private 4-year university, \$33,500 per year in tuition and fees.

– Source, College Board.

Tuition and Fees for Sixty Credit Hours*



*Hours needed for typical Associates Degree



What is a MOOC?

Massive - up to 100,000 students or more

Open – Anyone, anywhere can enroll

Online – Coursework is delivered via internet (Apps)

Course – similar to most online college courses



MOOCS BY THE NUMBERS

CLASS CENTRAL



78M

Students



800+

Universities



9.4k

Courses

By the Numbers: MOOCs in 2017

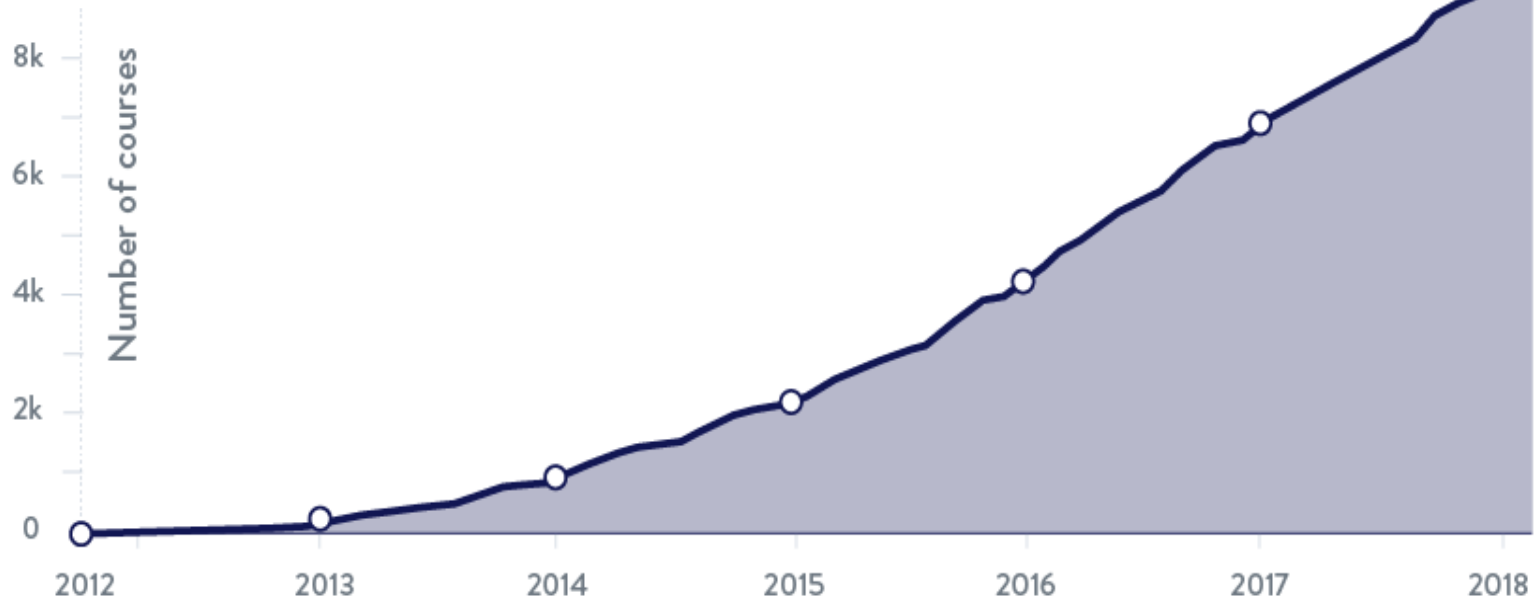
- Free-Reverse certification exceeds \$65 million
- Certificates
- Microcredentials
- Credits
- Online degrees
- Corporate training



Growth of MOOCs in 6 years

CLASS CENTRAL

Growth of MOOCs



By the Numbers: MOOCs in 2017

MOOC-based Credentials

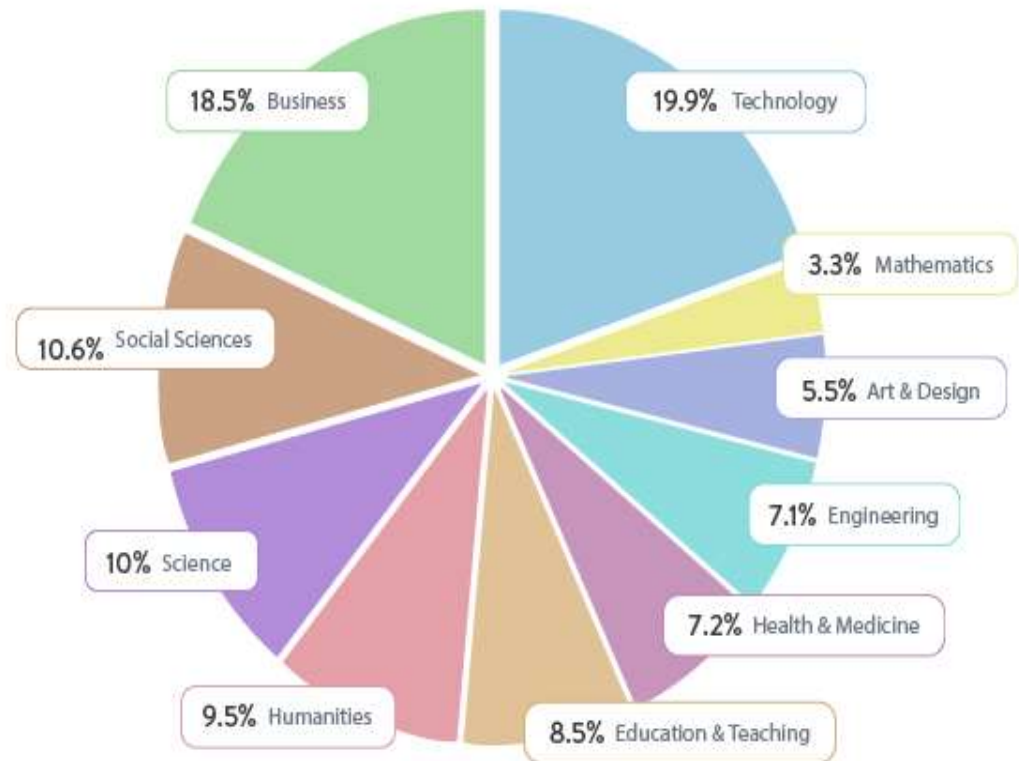
Credential	No. Credentials
Specializations by Coursera	257
Professional Education by edX	64
MicroMasters by edX	43
Professional Certificate by edX	35

Top 5 MOOC Providers



By the Numbers: MOOCs in 2017

Course Distribution by Subject





COURSERA: BEST MOOC PLATFORM IN 2017!

4 Master's degrees (1-3 years): \$15,000-20,000.

(Accounting, MBA, Data Science, etc.)

Certificate courses \$29.00 to a few hundred dollars .

Created with \$16 million of venture funding.





By the Numbers

24
MILLION
LEARNERS

149
UNIVERSITY
PARTNERS

2,000
COURSES

160+
SPECIALIZATIONS

2 DEGREES

- Leading MOOC platform [Coursera](https://www.coursera.org), with 30 million users, saw a 70 percent increase in paying customers in 2017.



Coursera Courses

- Global offerings from 150 universities from 29 countries.
- Courses are 4-10 weeks, with one to two hours of video lectures a week.
- “On-demand” option--- all material is



is always available

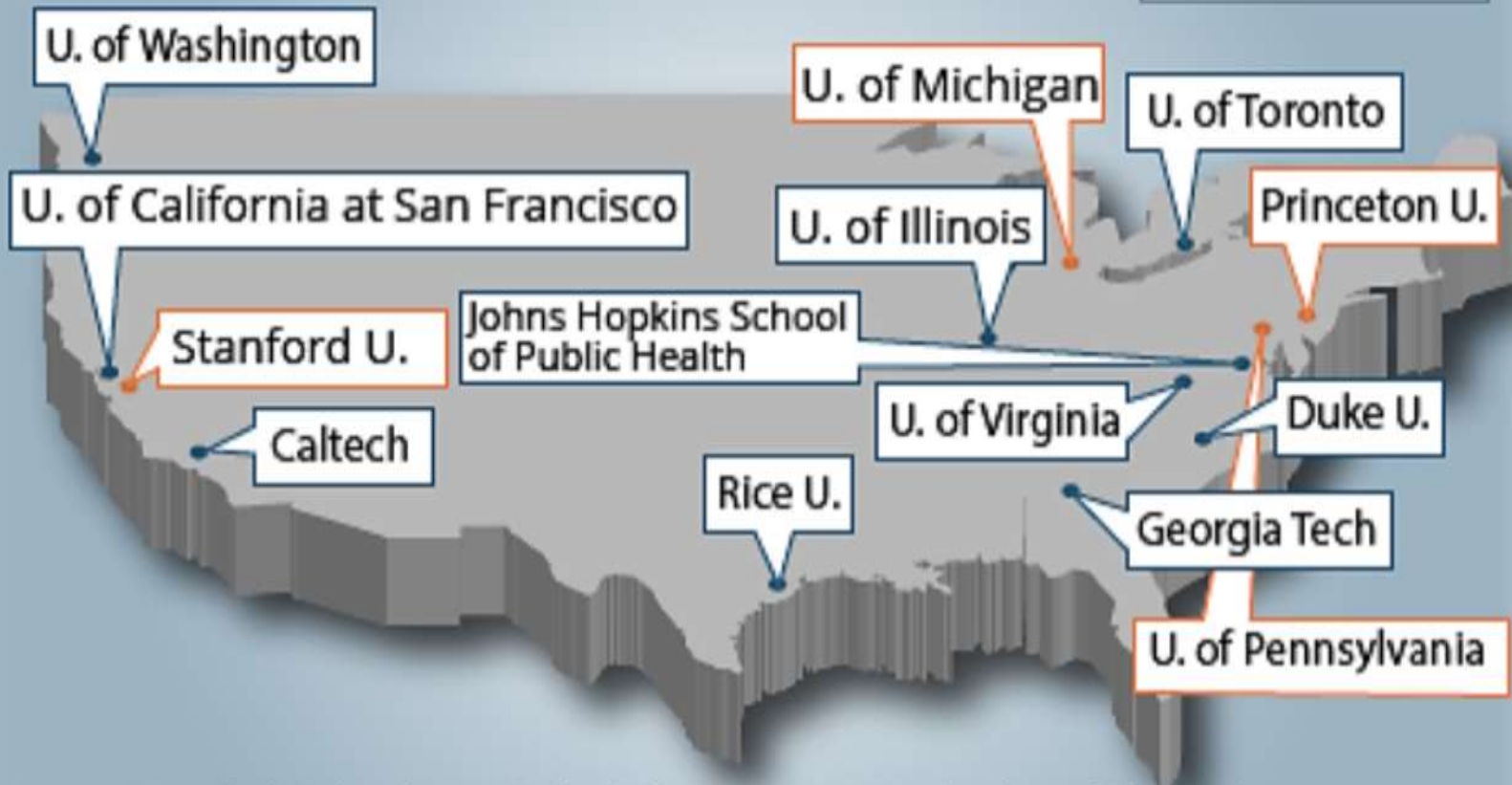


student



Coursera's Institutional MOOC Partners

- Original Member
- New Member



Not on Map: École Polytechnique Fédérale de Lausanne (Switzerland), U. of Edinburgh (U.K.)

Source: Coursera

Designed by Lauren Rouppas

UDACITY: 1.6 MILLION STUDENTS

- Offers 150 Open Online courses (MOOCS)
- Pairs with industry giants—Google, AT&T, Facebook, IBM, Salesforce, Cloudera, etc.
- A Nanodegree program is an online certification that you can earn in 6-12 months (10-20 hours/week) for \$200/month. (50,000 students)



Udacity: Cost and Relevancy

- Basic programming skills for entry-level programming and analyst positions at companies like AT&T.**
- Students acquire real skills through a series of online courses and hands-on projects.**
- Job ready skills yield relevancy.**
- Nanodegree costs about \$2,400**



\$7,000 MASTERS DEGREE IN COMPUTER SCIENCE FROM GEORGIA TECH



Udacity, Georgia Tech, and AT&T Partnership

Online Masters Degree in Computer Science

We're incredibly excited to offer the first fully accredited, massive, open, and online Masters Degree in Computer Science from Georgia Tech in collaboration with AT&T. This degree will be offered at an affordable price and individual courses will also be available for students to take for free or for individual certification. Our mission with each single course is to help students advance their knowledge and careers.

To learn more about our program, sign up to hear the latest updates!

Name

Email

Sign up to stay informed!



Georgia Tech's Low Cost, On-line Computer Science Master's Degree

- **First MOOC Program granting a degree.**
- **Cost is currently at \$7,000 per student.**
- Average cost for a CS Master's; \$40,000 – up to \$120,000.
- AT&T donated \$4 million towards the development of the program in a MOOC format.

• 15,000 hours of instruction
UDACITY



AT&T

20

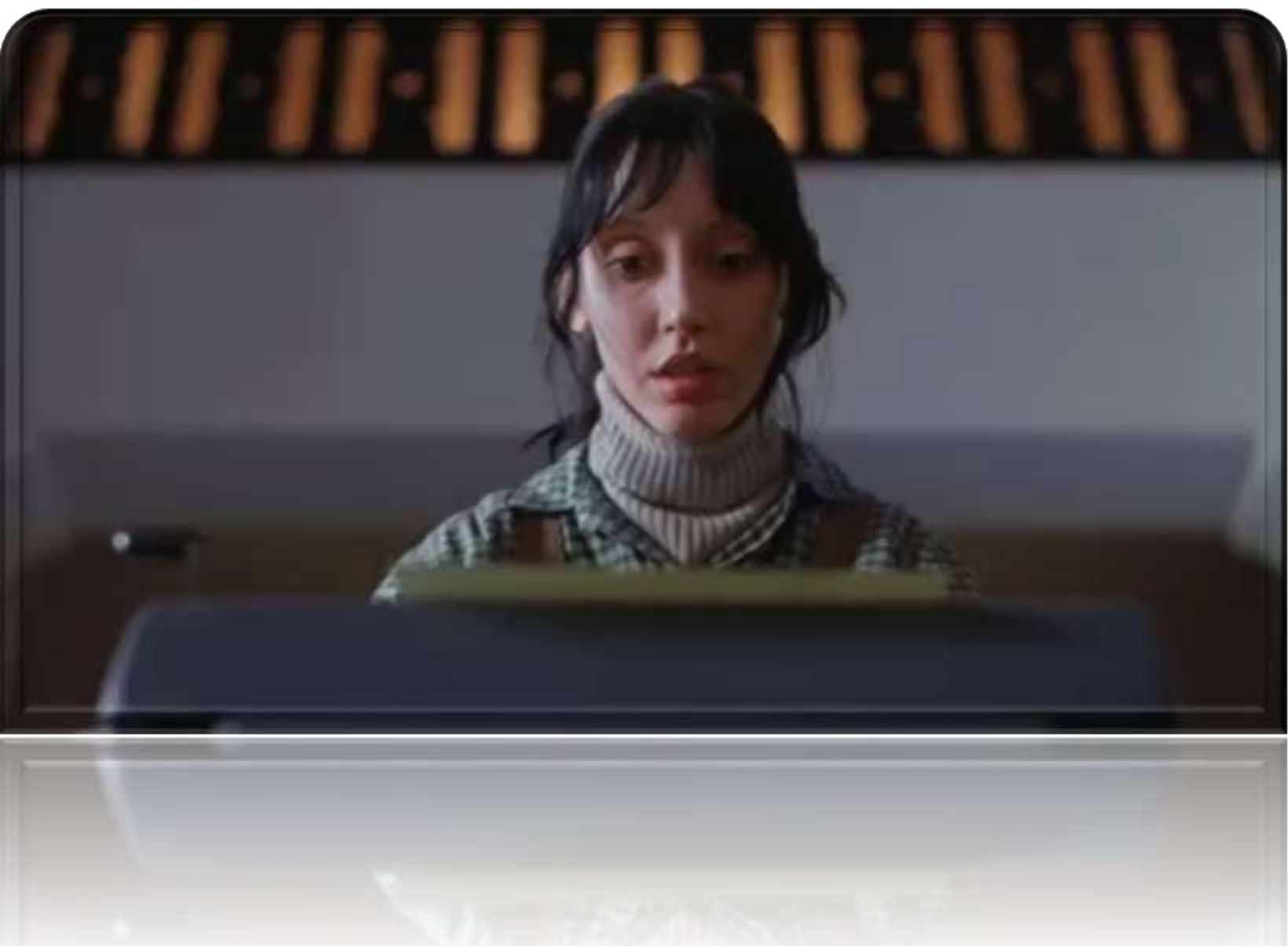


Georgia Tech's low cost, on-campus Master's in Computer Science



- Three year program; 30 requires credit hour
- 9, 825 students admitted; 550 AT&T employees.
- Globally accessible: students from >100 countries
- Good retention rate
 - 70% who originally enrolled have graduated or are still in the program 50% of those who drop out, re-enroll.
- 500 graduates: Employment placement not yet assessed.
- Corporate-subsidized training in course creation, enrollment, and recruitment.







Created edX MOOC provider in 2012.

- Certificate courses range from \$50.00-\$300.00.
- More than 70 schools, nonprofit organizations, and corporations offer, or plan to offer courses on edX.

MIT AND HARVARD

- **EDX PARTNERSHIP** As of 2017, 10 million edX students taking more than 1,270 courses online.

MIT's Micro Masters in Supply Chain Management



- **\$1,350.00!**

- The cost of a MIT Micro Masters Credential in Supply Chain Management.
- Graduate level university courses designed to advance your career.
- *\$50,000 at U of Mich.*



Educational Boot camps: Accelerated Learning Programs

- **300 software boot camps**
- 8-12 weeks of intensive hands-on coding to meet the tech job markets.
- Cost: **Average \$11,500**. Range: \$9,000-20,00.
- Some boot camps partner with traditional colleges.
- Some defer tuition; no payment until employed.
- **75% of grads report havin 120 days of graduation.**



Coding Bootcamp Market



91 Coding
Bootcamps

201

23,000 Graduates



\$266 million
revenue



App Academy--- Software Engineering Bootcamp



- **No tuition payments until employed!!!**
- **Cost of tuition: 18% from first year's salary. (\$16-24,000)**
- **90% of Grads. earn \$80-\$120,000.**
- **98% of students find relevant employment.**
- **12 week intensive program**



Trending --- Micro-credentials on the Rise

- **Graduate certificates:**
 - Increased 11.8 percent between the 2014-15 and 2015-16 academic years.
 - A 2% jump from the five-year average.
 - “This is a response to the demands of the work force,”
 - (Inside Higher Ed, Sept. 28,2017)



CERTIFICATE
Issued August 1st, 2013

This is to certify that

Alexander Neihaus

successfully completed

ER22x: Justice

a course of study offered by **HarvardX**, an online learning
initiative of **Harvard University** through **edX**.

A handwritten signature of Michael J. Sandel in black ink, positioned above a horizontal line.

Michael J. Sandel

Anne T. and Robert M. Bass Professor of Government

Harvard University

HONOR CODE CERTIFICATE

*Authenticity of this certificate can be verified at <https://verify.edx.org/cert/8588b7a4260148c8aec96fac031a7e23>

Bok Teaching Certificate online short course



Course starts **30 October 2017**

[DOWNLOAD COURSE PROSPECTUS](#)

[REGISTER NOW](#)

COURSE INFORMATION

REGISTRATION CLOSES:

24 October 2017

COURSE STARTS:

30 October 2017

LENGTH:

8 weeks online

EFFORT:

8 - 10 hours per week

PRICE:

USD \$2,400 [OPTIONS AVAILABLE](#)

LANGUAGE:

English

WHY THIS COURSE?

WHAT YOU WILL LEARN

Introduction

The Times Higher Education Teaching Survey, which analyzed over 1,150 higher education staff, revealed 85% say students value their teaching.¹

Which means it's important for you to have as much confidence in how you teach as what you teach.

This 8-week Harvard Bok Teaching Certificate online short course gives you the opportunity to engage deeply with effective teaching methods and reflect on your practices, portfolio, and teaching journey.

Inspired by the in-person seminar program currently offered by Harvard's Derek Bok Center for Teaching and Learning, you'll be exposed to the most relevant research on how students learn in the HE

What will set you apart


Earn a premier certificate from HarvardX, in this online short course.

- Create a positive, supportive, and inclusive classroom through the application of rapport-building techniques.
- Bridge the gap between having expertise and imparting that knowledge on your students by developing practical skills for delivering a lesson that is both engaging and effective.
- Raise your institutional profile as a leader in teaching by demonstrating an understanding of the latest research on student learning.
- Move into and succeed in teaching roles that are more challenging and rewarding.

Harvard On-line short course certificate



Where Are Innovators?

- 
- A silhouette of two people standing on a dark, rocky cliff edge, looking out over a vast, hazy landscape of rolling hills and mountains under a blue sky. One person is standing slightly behind the other, with their arm raised as if shielding their eyes or pointing towards the horizon.
- “Not enough people are innovating enough in higher education...”
 - “General Electric looks nothing like it looked in 1975. Harvard, Yale, Princeton, or Stanford look a *lot* like they looked in 1975.”
 - “Change isn’t actually happening very quickly. Innovation in higher education “hasn’t yet been pursued on a scale and with a degree of energy that is commensurate with the real challenge,”

Larry Summers, past President of Harvard.

Traditional H



- Internal and external factors are laying siege to our higher ed institutions.
- U.S. Colleges are closing or combining at an accelerated rate. (WI, GA, VT, PA, CT re-structuring to survive).
- Given the rising costs & resultant high debt for the traditional 4 year university model is dying due to the cost/ benefit analysis.
- Consequence: The ensuing loss of the liberal arts. i.e., Wisconsin.
- Relevancy and job skills are the focus.
- Employers are fueling the proliferation of alternative education models.
- Certifications with specific skills are preferred.



Marygrove
College



Change is Long Over Due: Existing University Model is over 1100 years old

- Valladolid, 1241
- Siena, 1240
- Naples Federico II, 1224
- Padua, 1222
- Cambridge, 1209
- Oxford, 1096
- Bologna, 1088
- Karaouine, 859

**Nearly 400 years in the
U.S.**

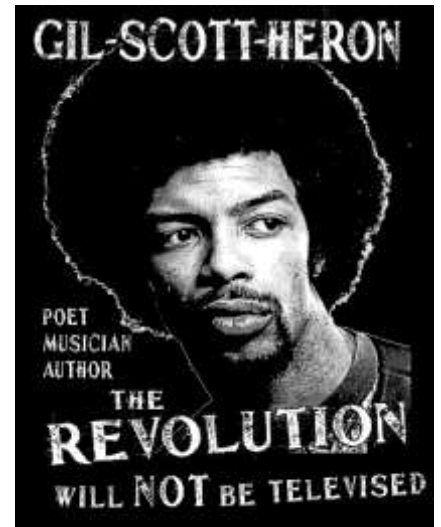


Harvard, 1636

THE REVOLUTION IS NOW

Millions of Students are choosing

Alternative Educational models:



Act Now or Perish

- Adapt, design, implement and embrace low cost, high quality learning models for a relevant education.
- Or cease to exist.



The Future of Higher Ed:

Tiers of Accessibility and Affordability

- 1. Accessible to all.** On-line teaching is cheaper; universities can offer on-line degrees at the lowest rate.
- 2. Mid-level:** The traditional “face to face” campus experience with Professors and students interacting will cost much more than the on-line experience.
- 3. Only for the very rich:** A few students will enjoy the full Oxford tutorial experience with the best scholars, but they’ll have to pay a premium for it.

- <https://qz.com/1070119/the-future-of-the-university-is-in-the-air-and-in-the-cloud/> Wang and Schrager.



How to Thrive & Survive as Educators

- Enroll in a MOOC class or certification programs.
- Research “what’s out there”
- Network/communicate with non-traditional education providers.
- Design alternative “classrooms”
 - MOOCs
 - Bootcamps
 - Internships with businesses.
 - Shortened degree programs, resulting in less cost
 - Offer certification programs



Mastering the Waves of Change

- Stay ahead of the wave
 - Know and anticipate market needs
 - Partner with employers, high schools, career centers and non-traditional education providers.
 - Use Open Source Resources or cost effective digital interactive texts=lower \$\$\$



Create an Educational Revolution

Administrative Innovation:



- Focus on market relevancy and cost effectiveness.
- Design and implement new programs, degrees, internships, or certification courses and programs.
- Allow rapid implementation of new programs, shortened course offerings, degrees or certifications.

Status Quo Under Siege





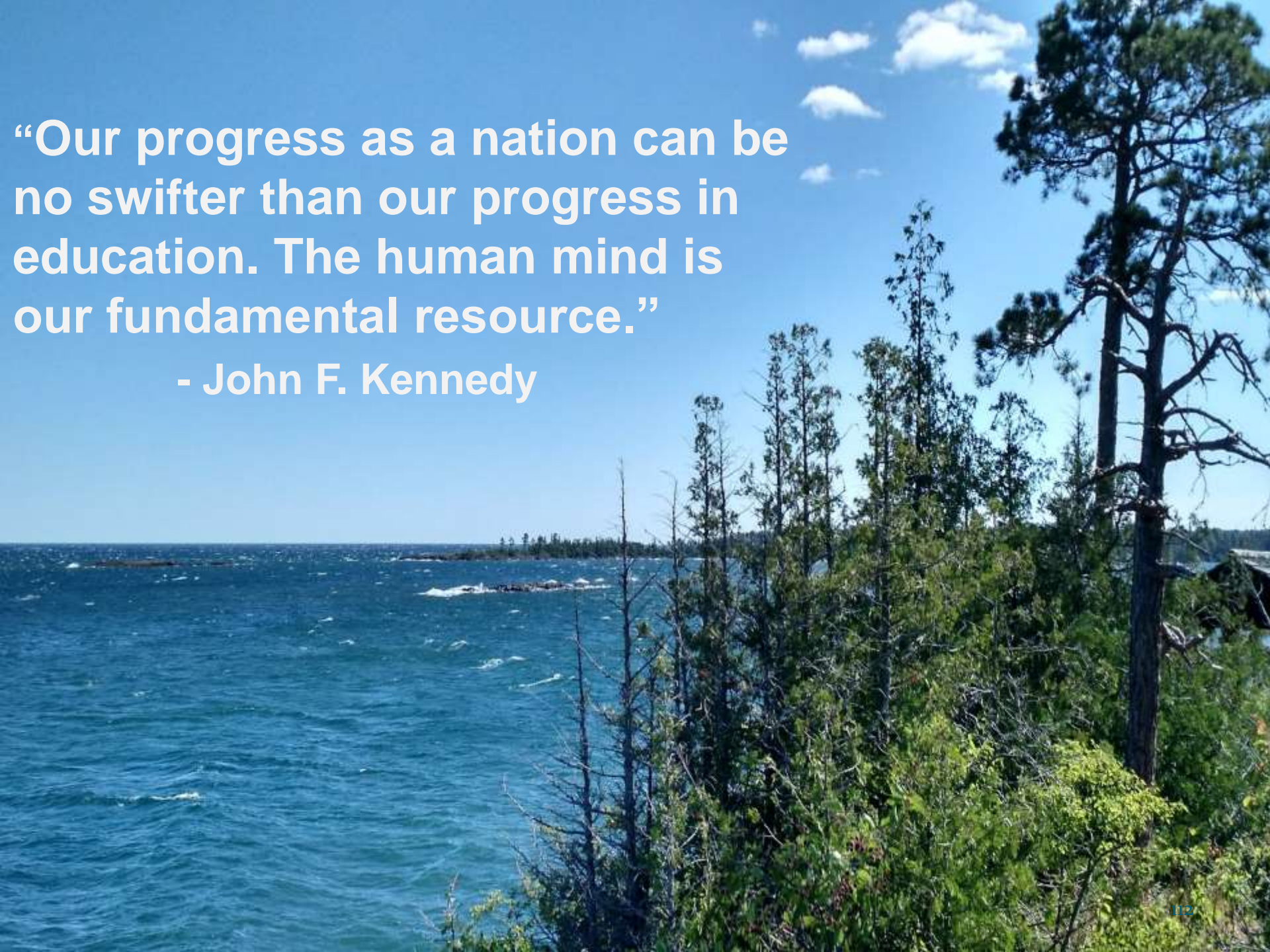
Questions?

Rearranging the chairs?



“Our progress as a nation can be no swifter than our progress in education. The human mind is our fundamental resource.”

- John F. Kennedy



The Revolution is Here:

“You never change anything by fighting the existing.

To change something, build a new model and make the existing obsolete. “

Buckminster Fuller



“The Matrix is a system, Neo. ... when you're inside, you look around, what do you see?

Businessmen, teachers, lawyers, carpenters. The very minds of the people we are trying to save.

But until we do, these people are still a part of that system... You have to understand, most of these people are not ready to be unplugged.

And many of them are so inured, so hopelessly dependent on the system, that they will fight to protect it.” – Morpheus, *The Matrix*

