



Researching Family Balance Sheets to  
Strengthen Families and the Economy

# Student Debt and Choices in Higher Education

8/25/2013

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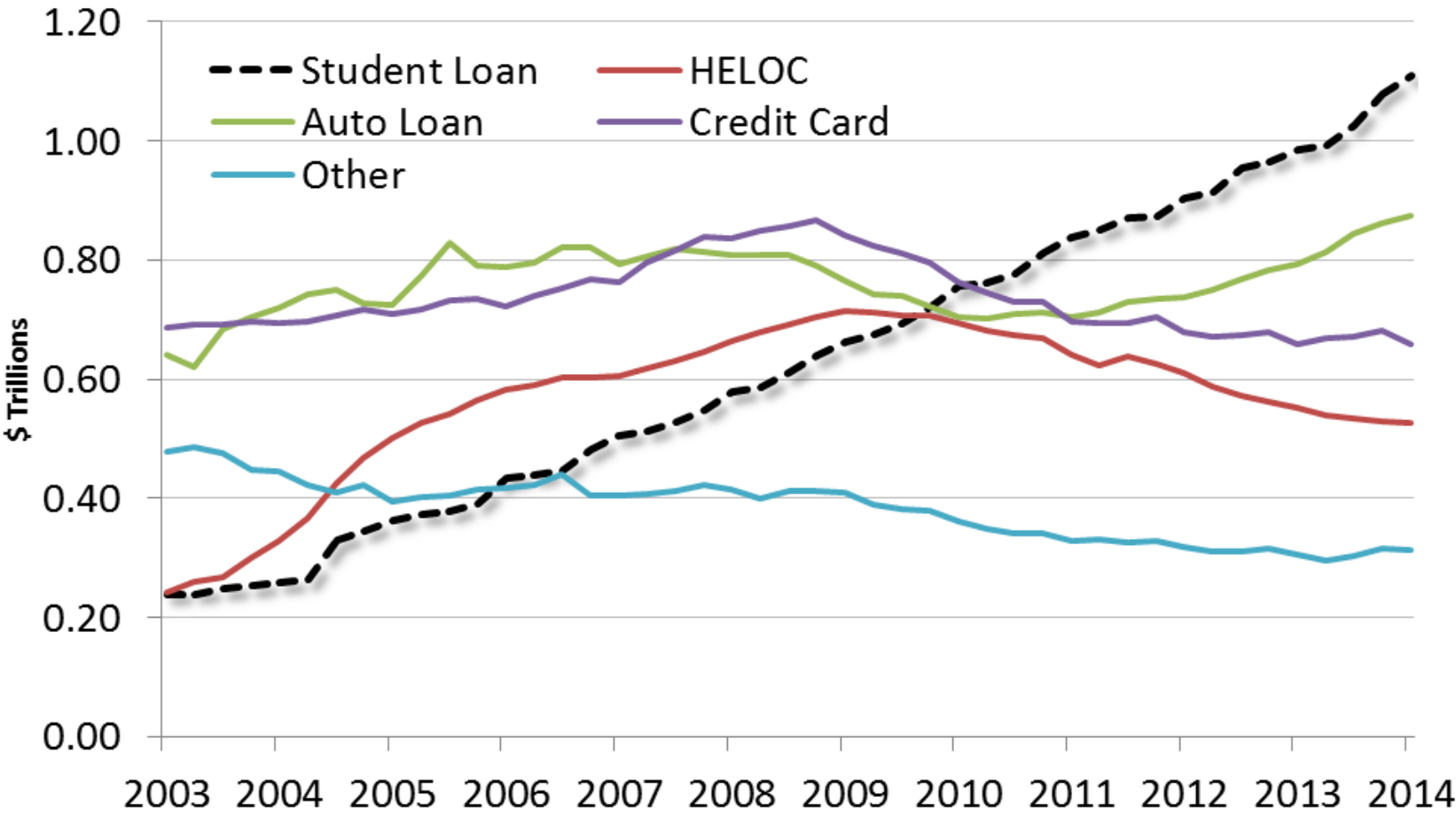
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Disclaimer: These comments do not necessarily represent the views of the Federal Reserve Bank of St. Louis or the Federal Reserve System.

# Motivation

## Aggregate Debt by Category (Mortgages Excluded)



Source: FRBNY Credit Panel/Equifax

# Some Questions to Keep in Mind

- Who should attend college?
  - First approximation: those who will complete.
  - What are the payoffs? Costs?
- What institutions best serve students' needs?
- Choice of college major or program?
- How do you finance higher education?
  - Scholarships and grants? Loans? Work? Savings? Work-study? Other lines of credit?
- Most of the answers are individual specific.

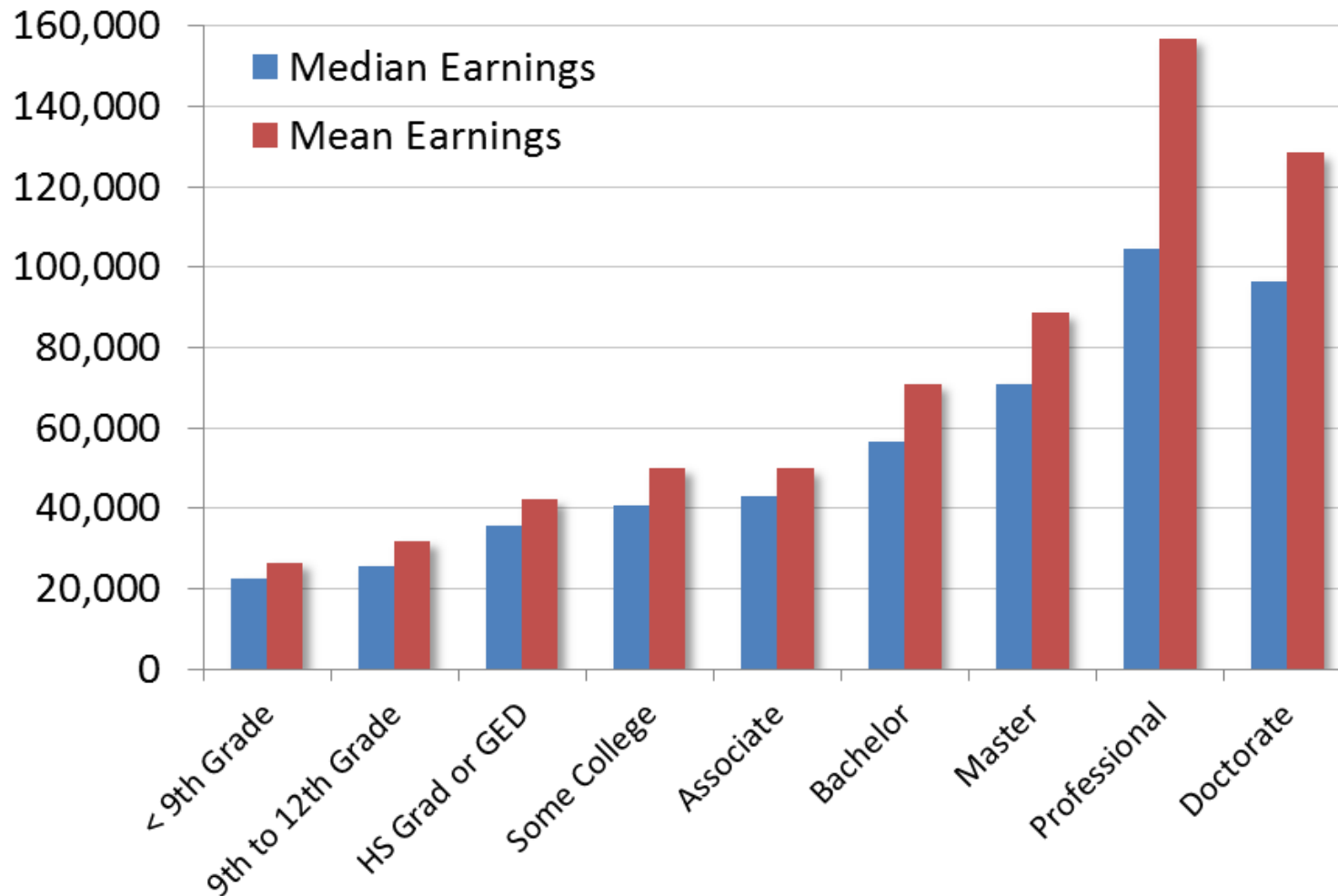
# Investing in Human Capital

- Think about college as an investment with risks.
  - Odds of finishing? Job prospects? Income prospects?
  - Not always a financial question.
- Cost is important, both implicit and explicit.
  - Tuition is costly, so is forgone income while in school.
- What is the counterfactual?
  - Do not compare across groups (selection bias), compare your expected earnings net of costs for attending or not.

# Payoffs and Costs

# Income By Education

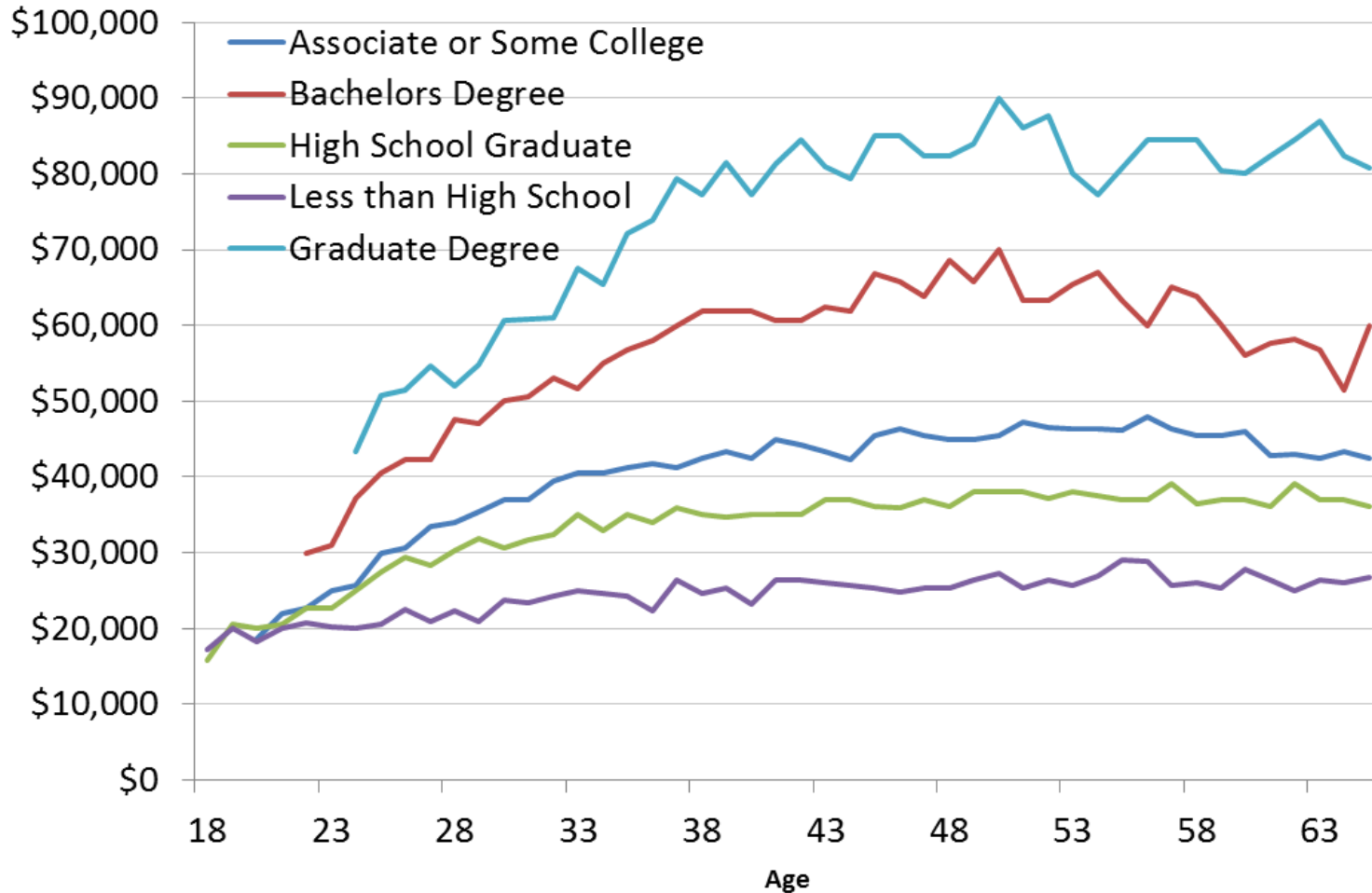
## Income By Education



Source: U.S. Census Bureau, Current Population Survey, 2013 Annual Social and Economic Supplement.

# Earnings over The Life Course

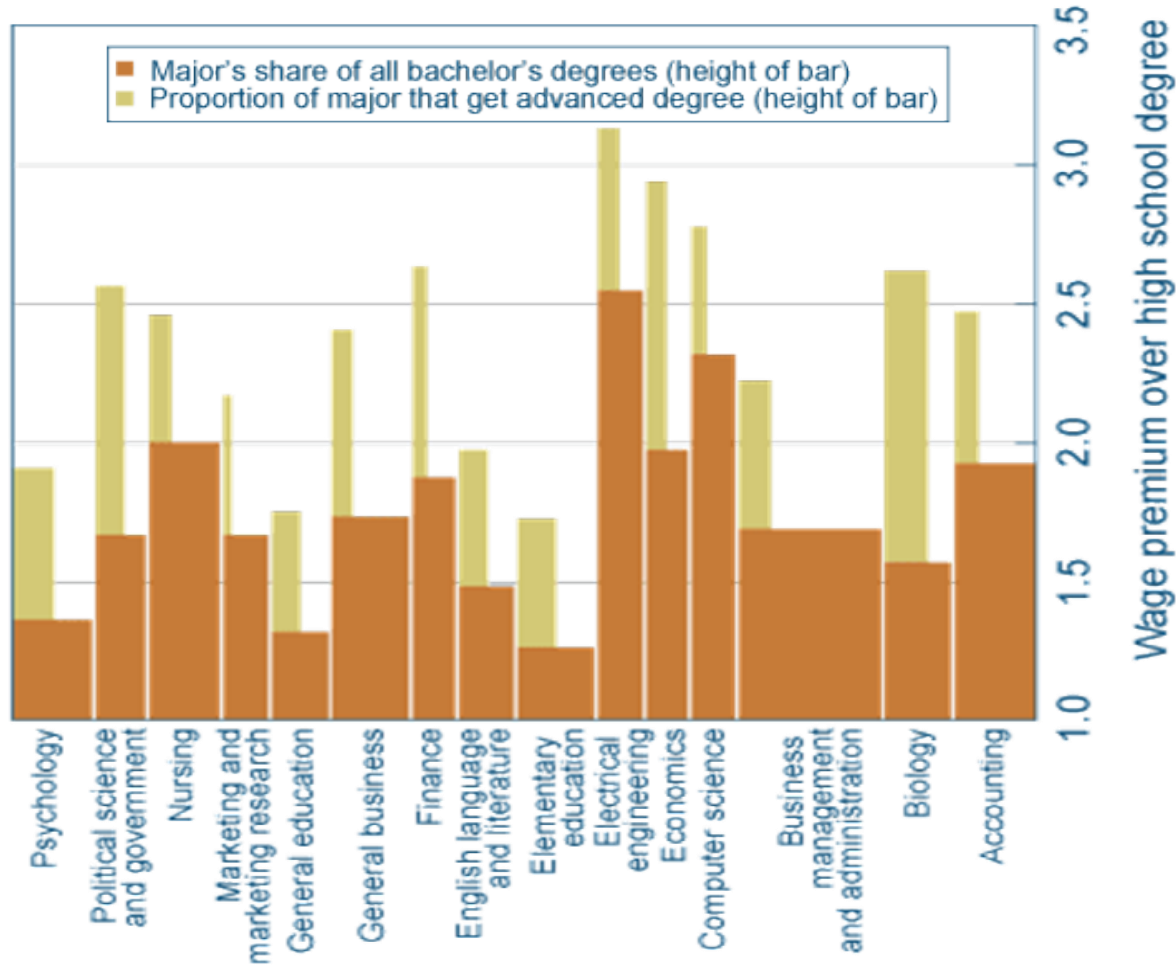
## Median Income By Education over the Life Cycle



Source: U.S. Census Bureau, Current Population Survey, 2013 Annual Social and Economic Supplement.

# Major Matters

## Wage Premiums for Four-Year and Advanced Degrees in Selected Majors

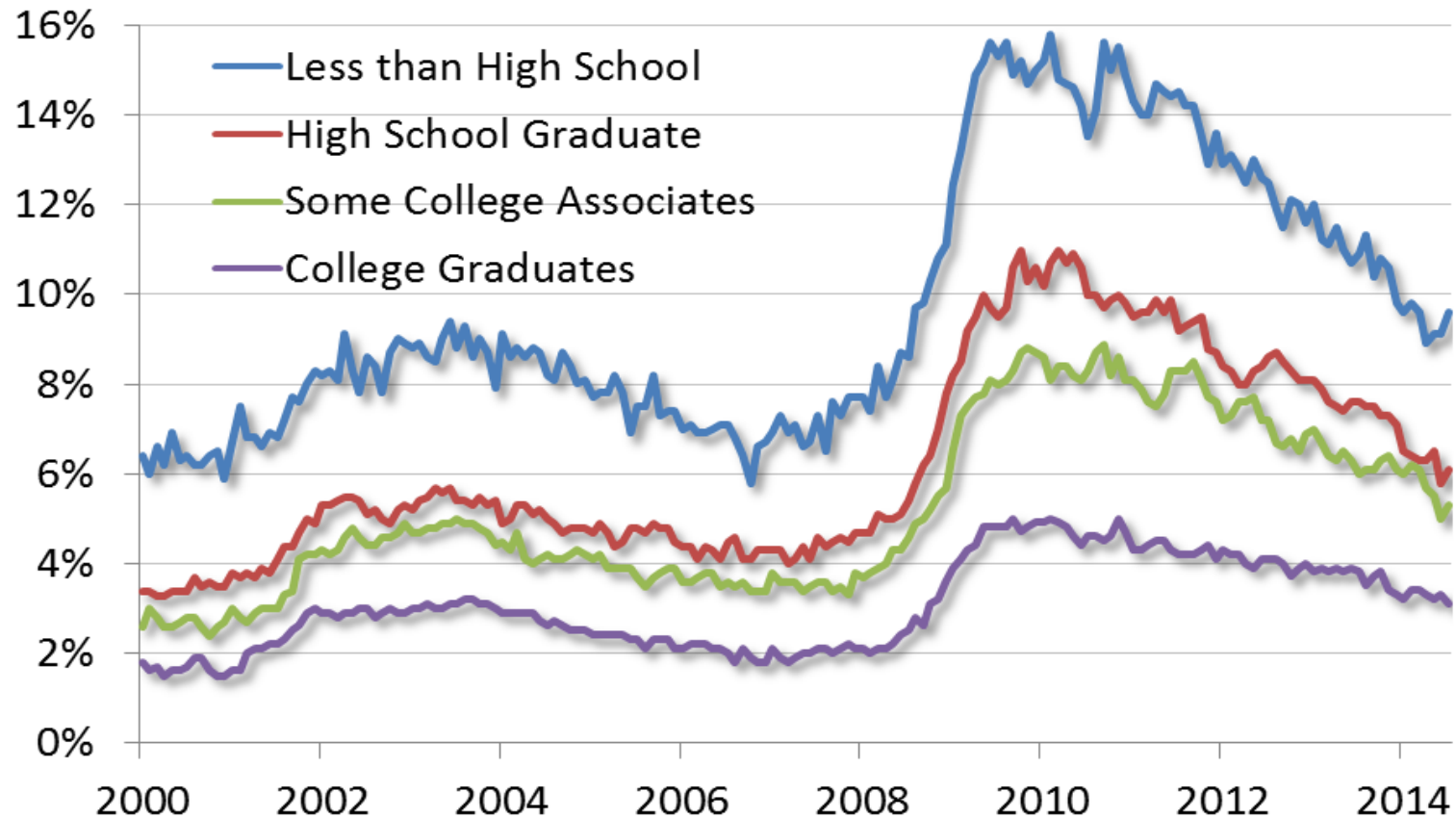


Source: James FRBC Economic Commentary (2012)



# Unemployment Decreases with Education

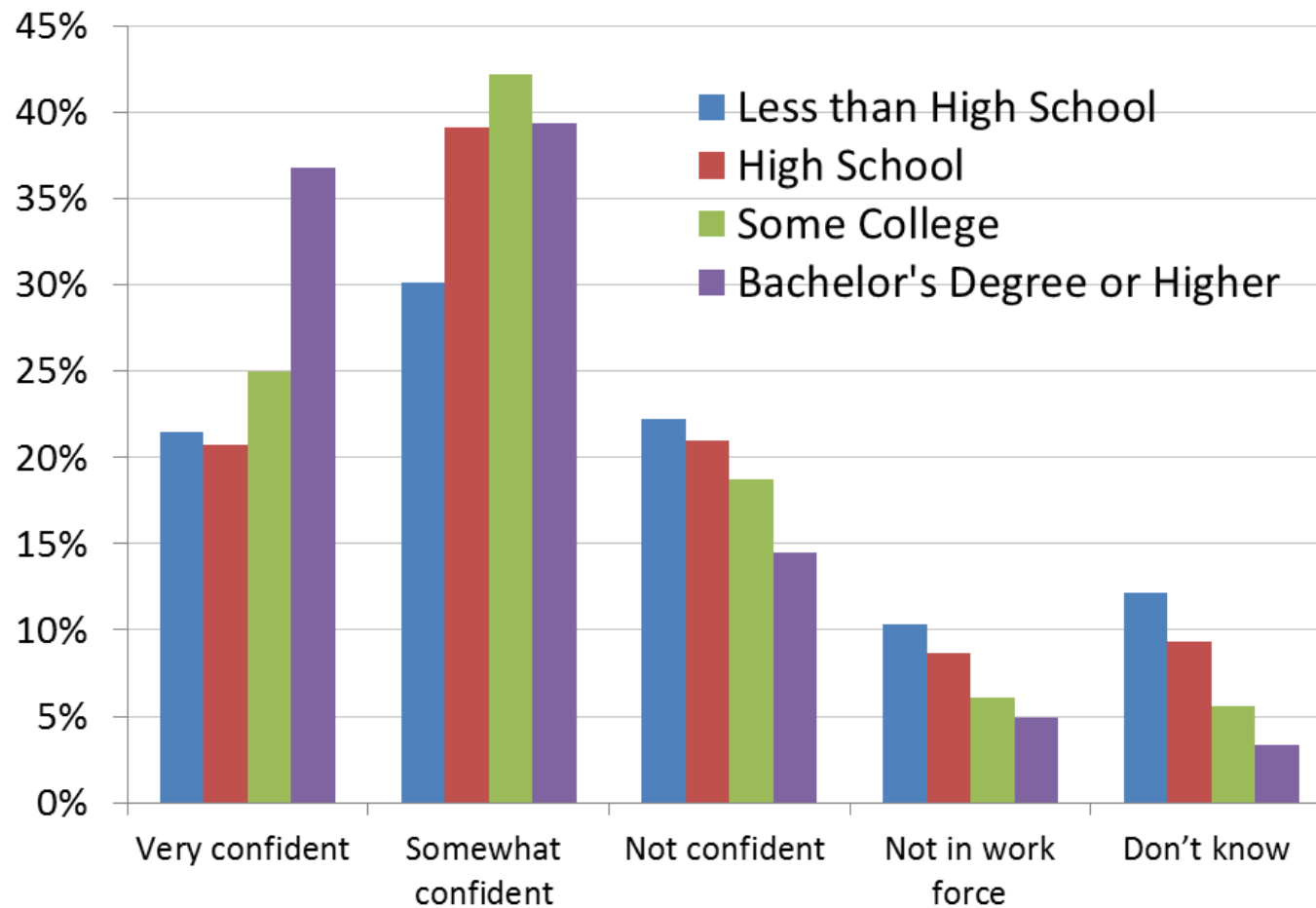
## Unemployment Rates by Educational Attainment



Source: Bureau of Labor Statistics

# College Grads More Confident about Job Skill

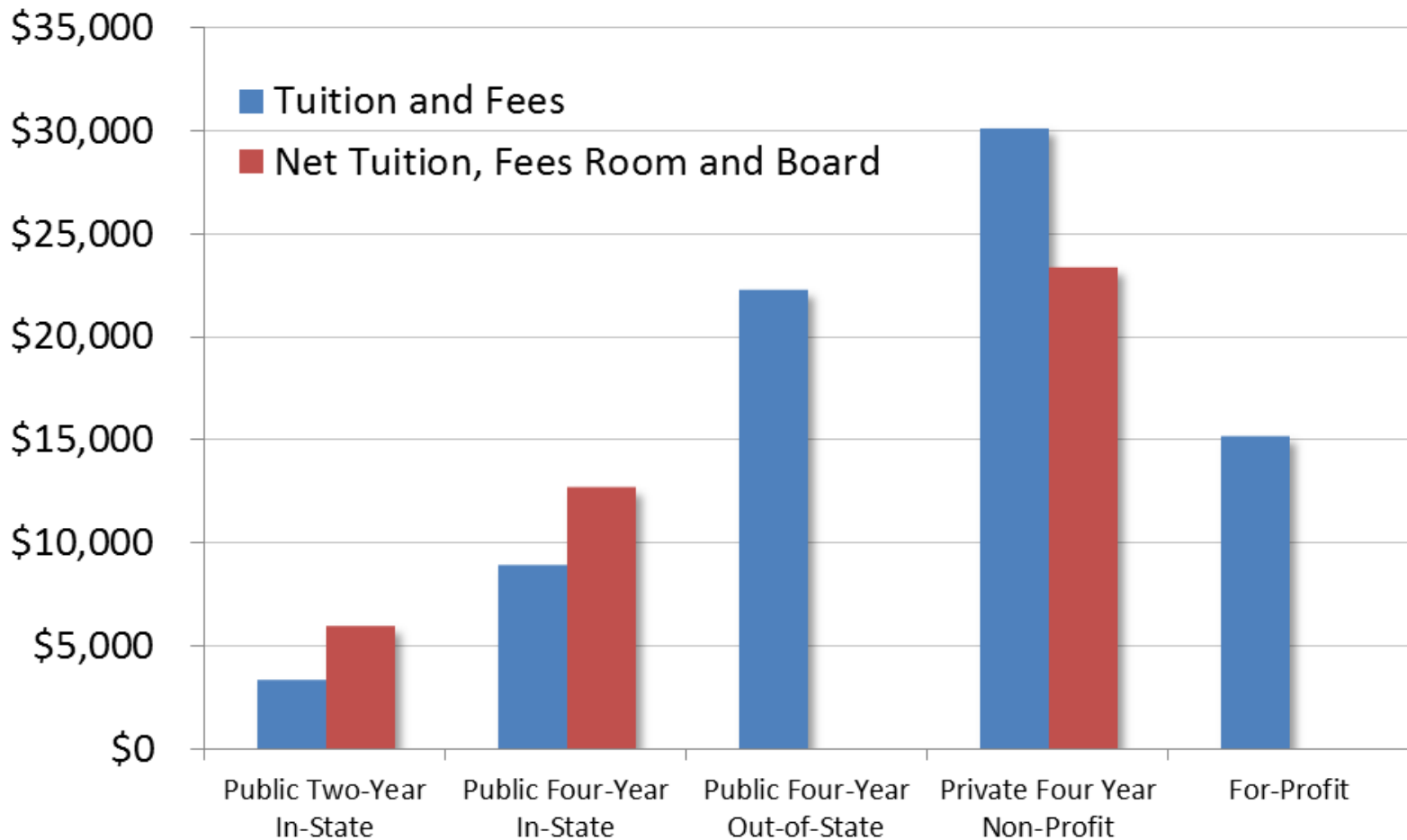
Thinking about your current education and work experience, how confident are you that you have the skills necessary to get the kind of jobs you want now.



Source: Board of Governors' Survey of Household Economics and Decision making

# Costs of College Differ by Institution

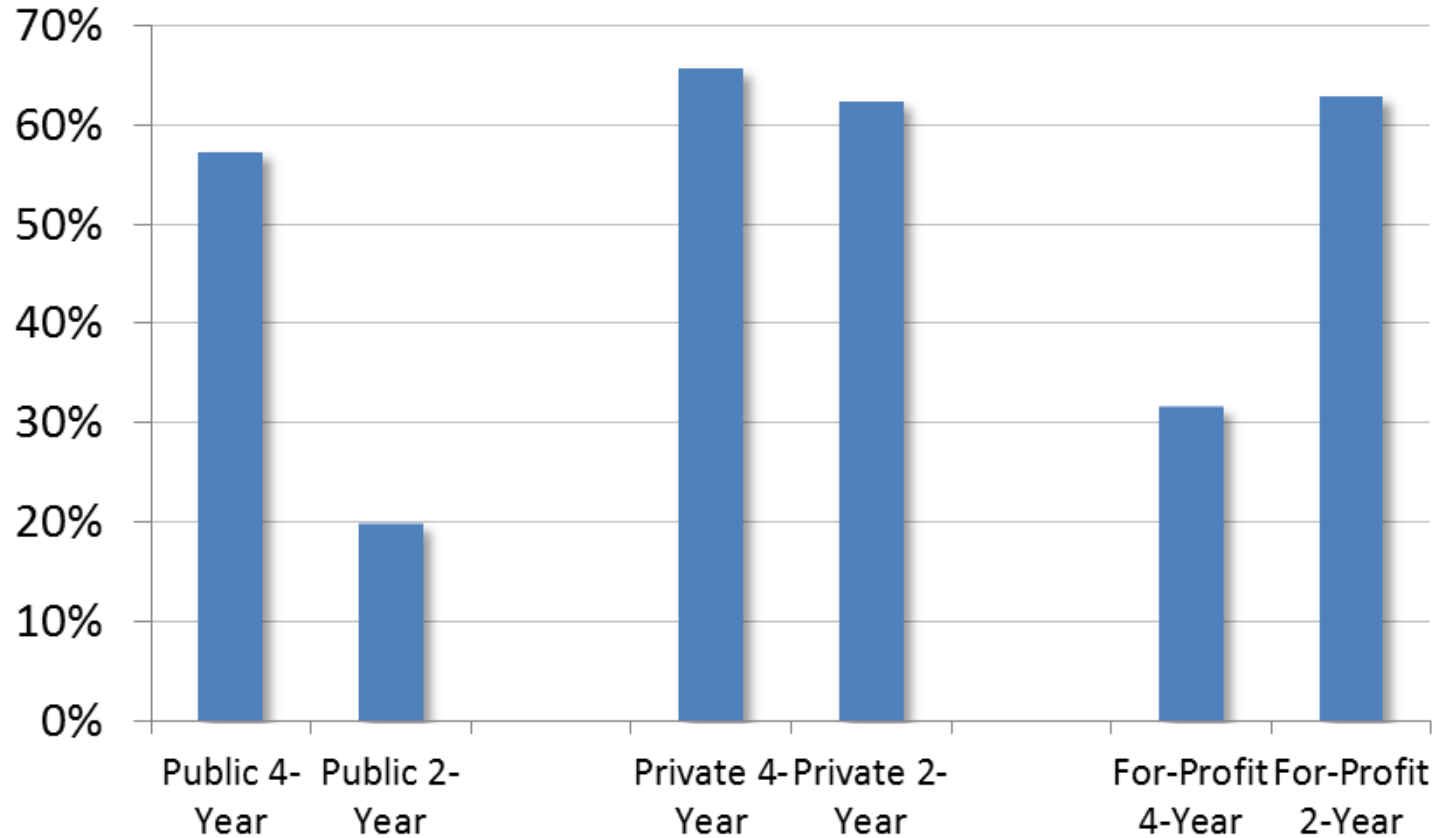
## Tuition and NTFRB by Control of Institution



Source: The College Board

# Probability of Completion Matters

## Graduation Rates by Control of Institution



Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System

# Student Debt Overview

# Student Loans Basics

- Loans used to finance the cost of higher education.
  - Includes tuition, books, and living expenses.
- Public and private debt financing of higher education.
- Debt rarely dischargeable in bankruptcy.
- Loan gets paid whether student completes or not.

# Undergraduate Loans

Loan Type	Max Disbursement per Year	Interest Rates 2014-2015	Disbursement Fees 2014-2015	Purpose
Perkins	\$5,500	5.00%	None	Available to students with exceptional financial need. Interest does not accrue. Funds depend on your financial need and the availability of funds at the college.
Direct Subsidized	\$5,500-\$12,500	4.66%	1.073%	Direct Subsidized Loans are available to undergraduate students with financial need. Interest does not accrue during school, deferment, or grace period.
Direct Unsubsidized	\$5,500-\$12,500	4.66%	1.073%	Direct Unsubsidized Loans are available to students; there is no requirement to demonstrate financial need. Interest is accrued through the life of the loan.
Direct Plus	Up to full cost of education minus other aid	7.21%	4.292%	PLUS loans are federal loans that parents of dependent undergraduate students can use to help pay education expenses. These loans are underwritten and interest is accrued throughout the duration.
Private	None (Underwritten)	Varies (Generally higher)	Varies	Private loans depend on the originator. They are underwritten, tend to have higher interest rates, are unsubsidized, may be variable rate, may require payment immediately, have less flexible repayment structures and potentially have prepayment penalties.

Source: Studentaid.ed.gov

# Repayment Options of Federal Loans

Repayment Plan	Monthly Payment and Time Frame and Some Conditions (More Conditions Apply)
Standard Repayment	Payments are a fixed amount of at least \$50 per month. Up to 10 years of repayment.
Graduated Repayment Plan	Payments are lower at first and then increase, usually every two years. Up to 10 years of repayment.
Extended Repayment	Payments may be fixed or graduated. Up to 25 years of Repayment. Direct Loan borrower, you must have more than \$30,000 in outstanding Direct Loans.
Income-Based Repayment Plan	Your maximum monthly payments will be 15 percent of discretionary income, the difference between your adjusted gross income and 150 percent of the poverty guideline for your family size and state of residence (other conditions apply). Your payments change as your income changes. Up to 25 years of repayment. You must have a partial financial hardship. You'll pay more for your loan over time than you would under the 10-year standard plan. If you have not repaid your loan in full after making the equivalent of 25 years of qualifying monthly payments, any outstanding balance on your loan will be forgiven. You may have to pay income tax on any amount that is forgiven.
Pay as You Earn Repayment Plan	Your maximum monthly payments will be 10 percent of discretionary income, the difference between your adjusted gross income and 150 percent of the poverty guideline for your family size and state of residence (other conditions apply). Your payments change as your income changes. Up to 20 years of repayment. If you have not repaid your loan in full after you made the equivalent of 20 years of qualifying monthly payments, any outstanding balance on your loan will be forgiven. You may have to pay income tax on any amount that is forgiven. You must have a partial financial hardship.
Income-Contingent Repayment Plan	Payments are calculated each year and are based on your adjusted gross income, family size, and the total amount of your Direct Loans. Your payments change as your income changes. Up to 25 years of repayment. If you do not repay your loan after making the equivalent of 25 years of qualifying monthly payments, the unpaid portion will be forgiven. You may have to pay income tax on the amount that is forgiven.

Source: Studentaid.ed.gov



# Some Facts on Student Loans

- Currently: **42.1 million borrowers** <sup>1</sup>
- College seniors that graduated with debt: **71 percent** <sup>2</sup>
- Debt per undergraduate borrower at graduation: **\$29,400** <sup>2</sup>
- Mean debt of all borrowers: **\$28,362** <sup>1</sup>
- Median Debt of all borrowers: **\$15,622** <sup>1</sup>
- Delinquency rate as of 2011: **27 percent** <sup>3</sup>

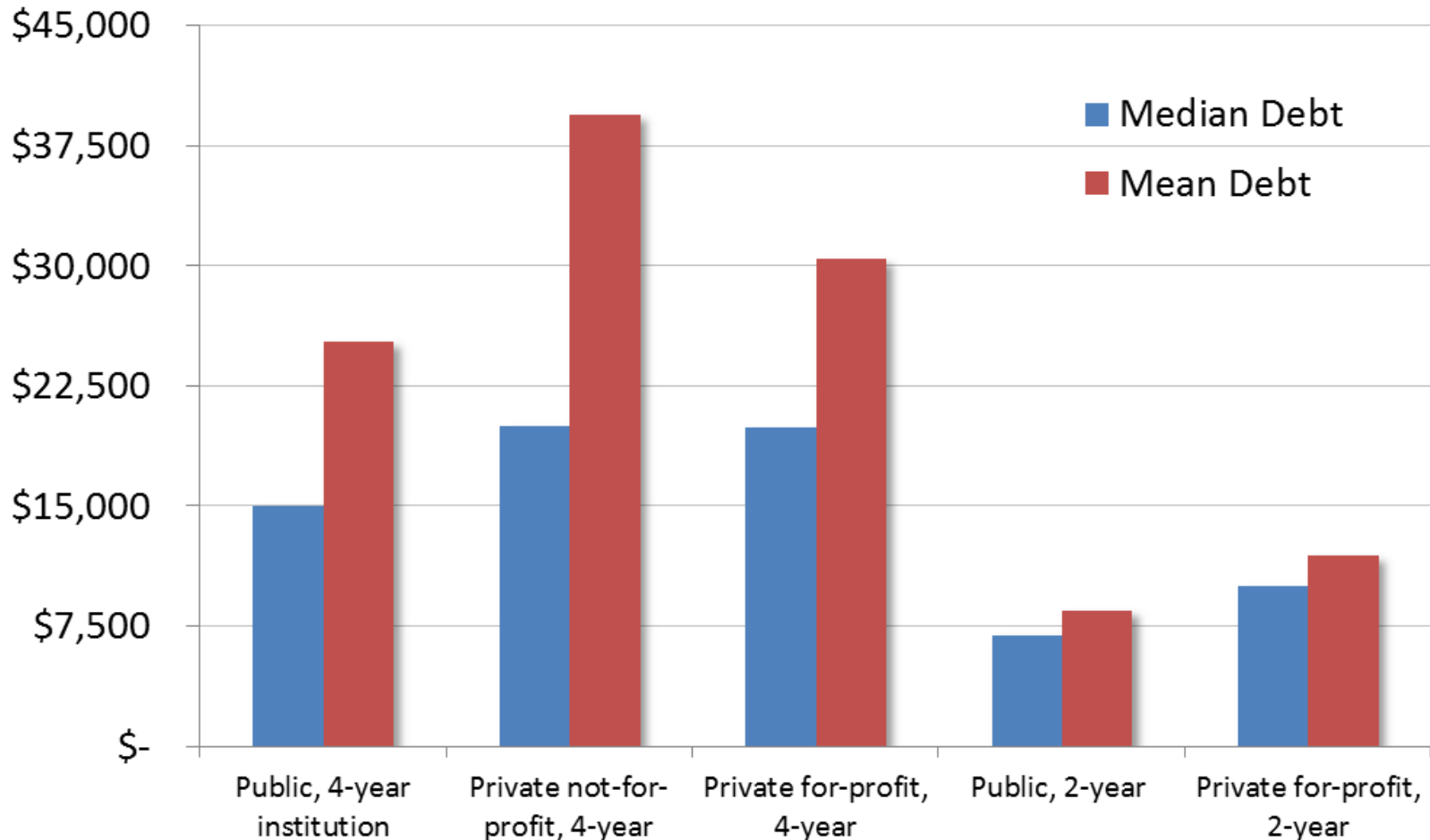
<sup>1</sup> FRBNY Consumer Credit Panel/Equifax based on Authors' Calculation (Q2 2014)

<sup>2</sup> Project for Student Debt (2012)

<sup>3</sup> Federal Reserve Bank of New York (2011) Only looking at borrowers in repayment.

# Debt Differs by Institution

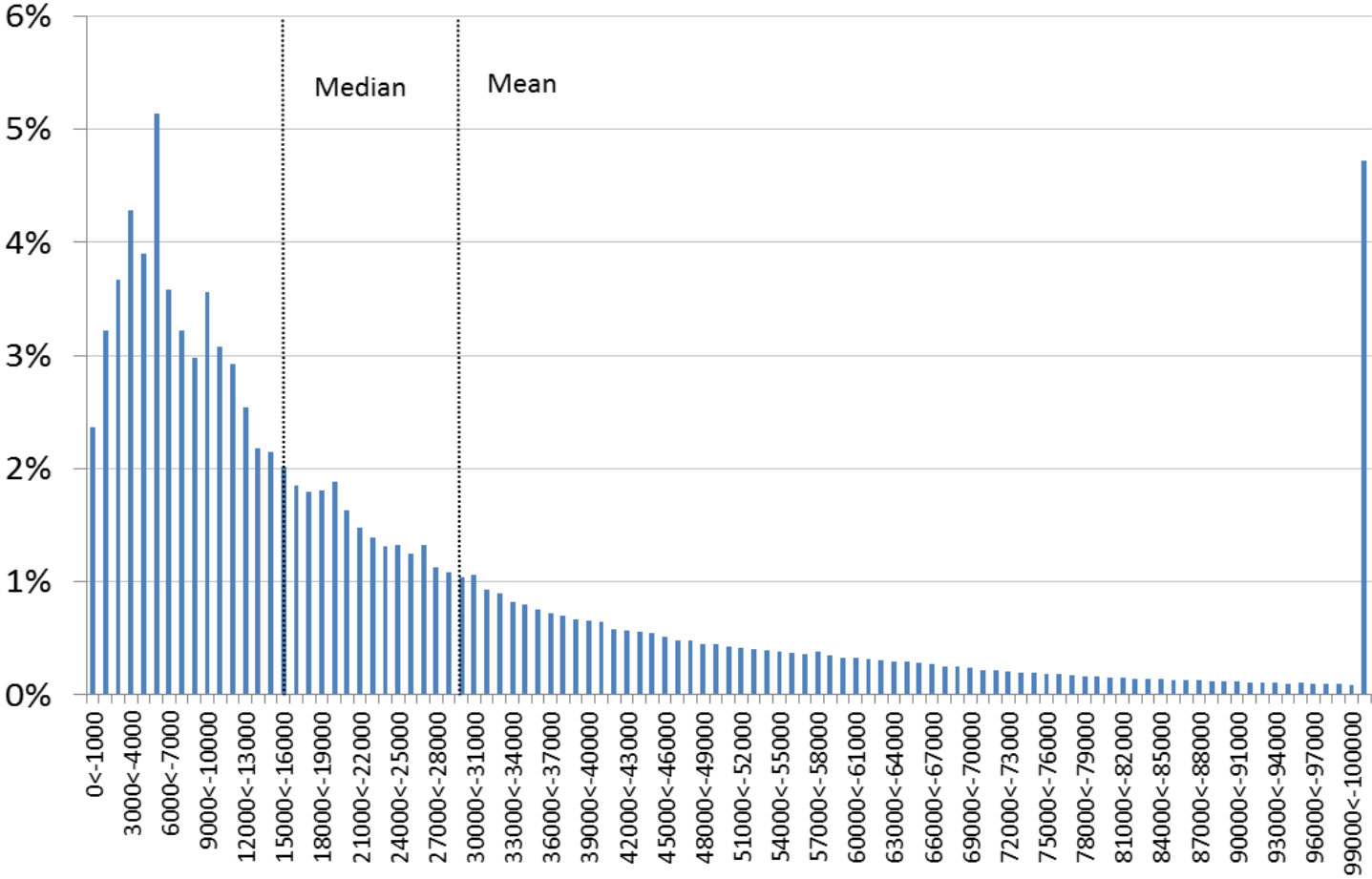
## Mean and Median Current Amount Owed on Student Loan Debt Incurred for Respondent's Own Education



Source: Board of Governors' Survey of Household Economics and Decision making

# Most Balances are “Manageable”

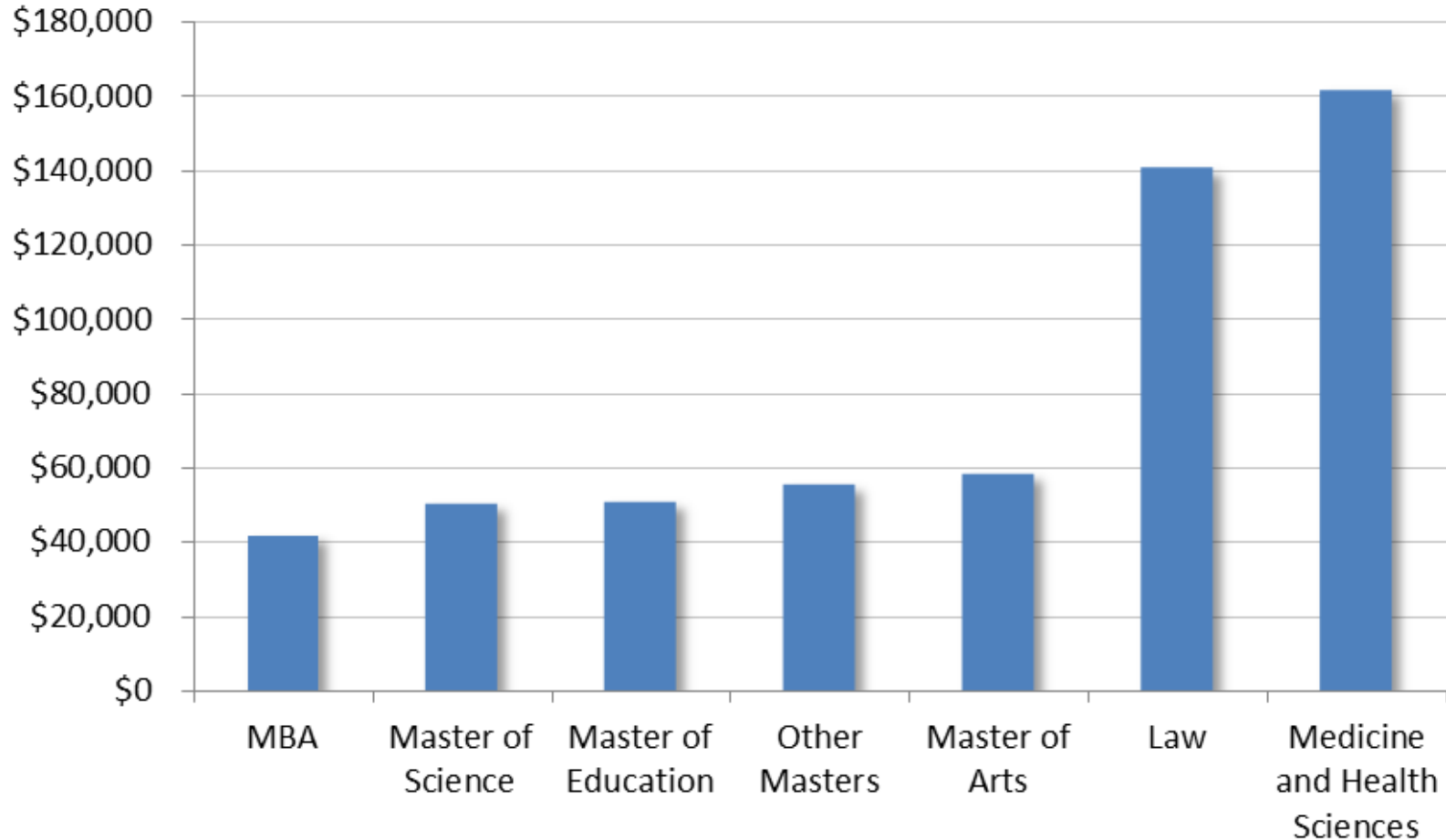
## Distribution of Debt Balances



Source: FRBNY Consumer Credit Panel / Equifax Based on Author’s Calculations

# Who has Large Debts?

## Median Combined Undergraduate and Graduate Debt



Source: New America Foundation analysis of U.S. Department of Education National Postsecondary Student Aid Study

# Monthly Payments

Assuming 10-year amortization at 5 percent with fixed monthly payments:

- Average debt of all borrowers (\$28,362 )  
—
- Median debt of all borrowers(\$15,622 )  
—
- Median Debt of MA degree holders (\$58,539)  
—
- Debt of \$100,000  
—

# Monthly Payments

Assuming 10-year amortization at 5 percent with fixed monthly payments:

- Average debt of all borrowers (\$28,362 )
  - **\$300.82**
- Median debt of all borrowers(\$15,622 )
  - **\$165.70**
- Median Debt of MA degree holders (\$58,539)
  - **\$620.90**
- Debt of \$100,000
  - **\$1,060.66**

# Cohort Default Rates

## 3-Year FY 2010 Official Cohort Default Rates



Source: Department of Education

# Implications

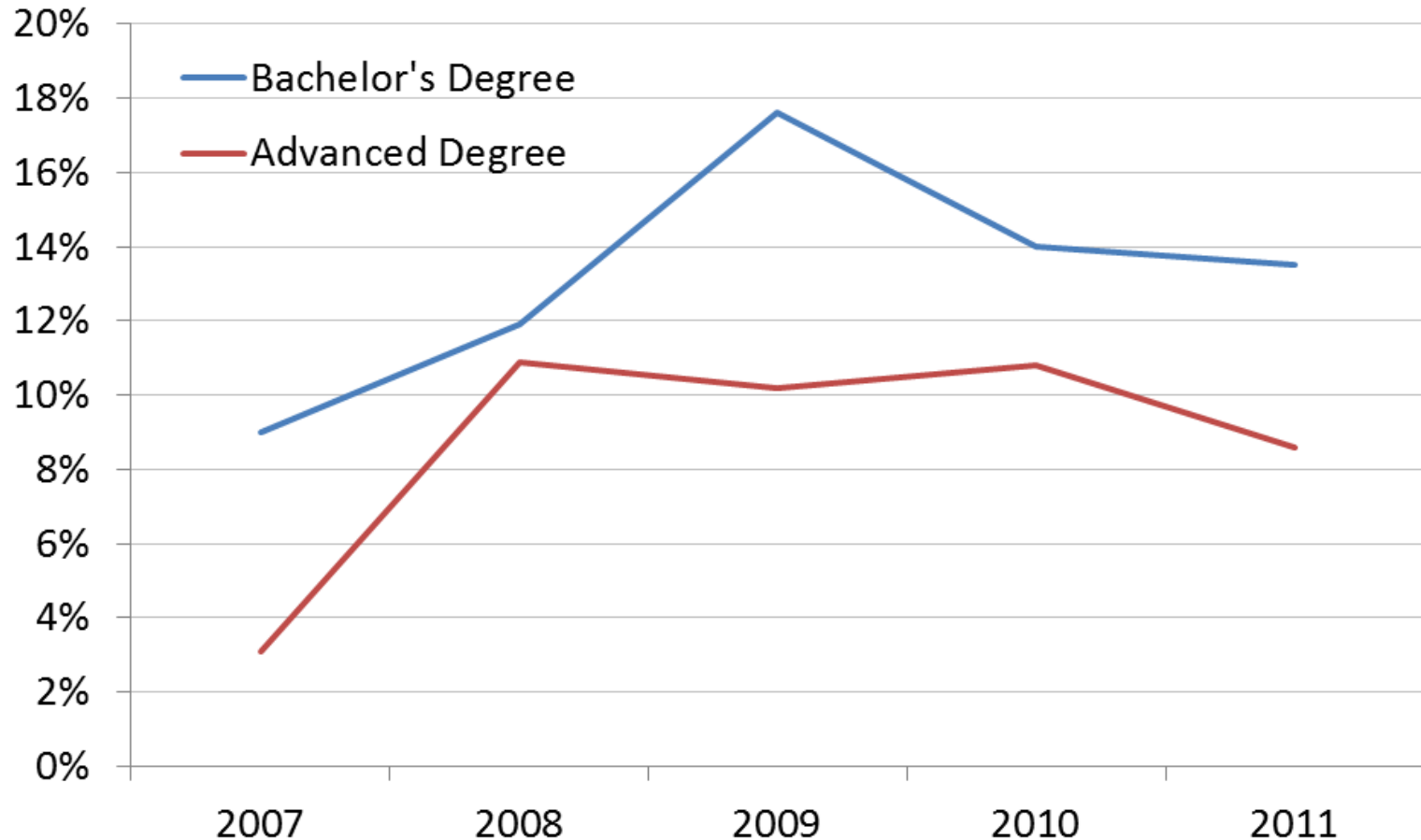


# Payments Issues

- Average monthly net of taxes wages for new grads (\$30,000-\$40,000) is **\$2,239.06 - \$2,947.40**
- Average monthly payment is **\$311**
- Payments represent **10.55-13.89 percent** of monthly income.
  - Assumes completion and gainful employment (strong assumptions)

# Unemployment High Among New Grads

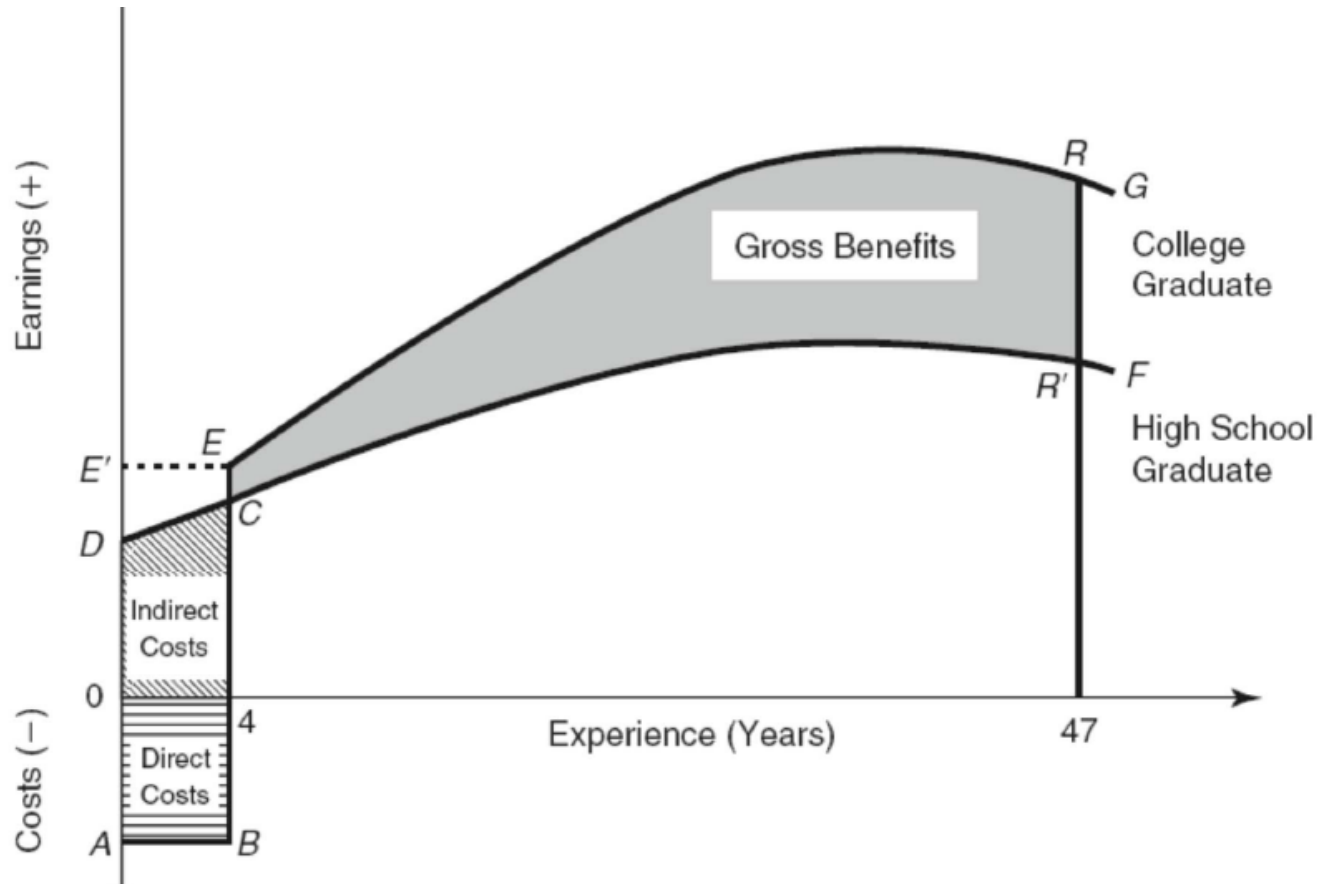
Unemployment Rates of Recent College Graduates Ages 20 to 29 by Degree, October 2007–2011



Source: Bureau of Labor Statistics

# Payment Structure Issue

## Stylized Income over Life Cycle



Source: Blau, Ferber, and Winkler, *The Economics of Women, Men, and Work*, 6th edition

# Default is Bad

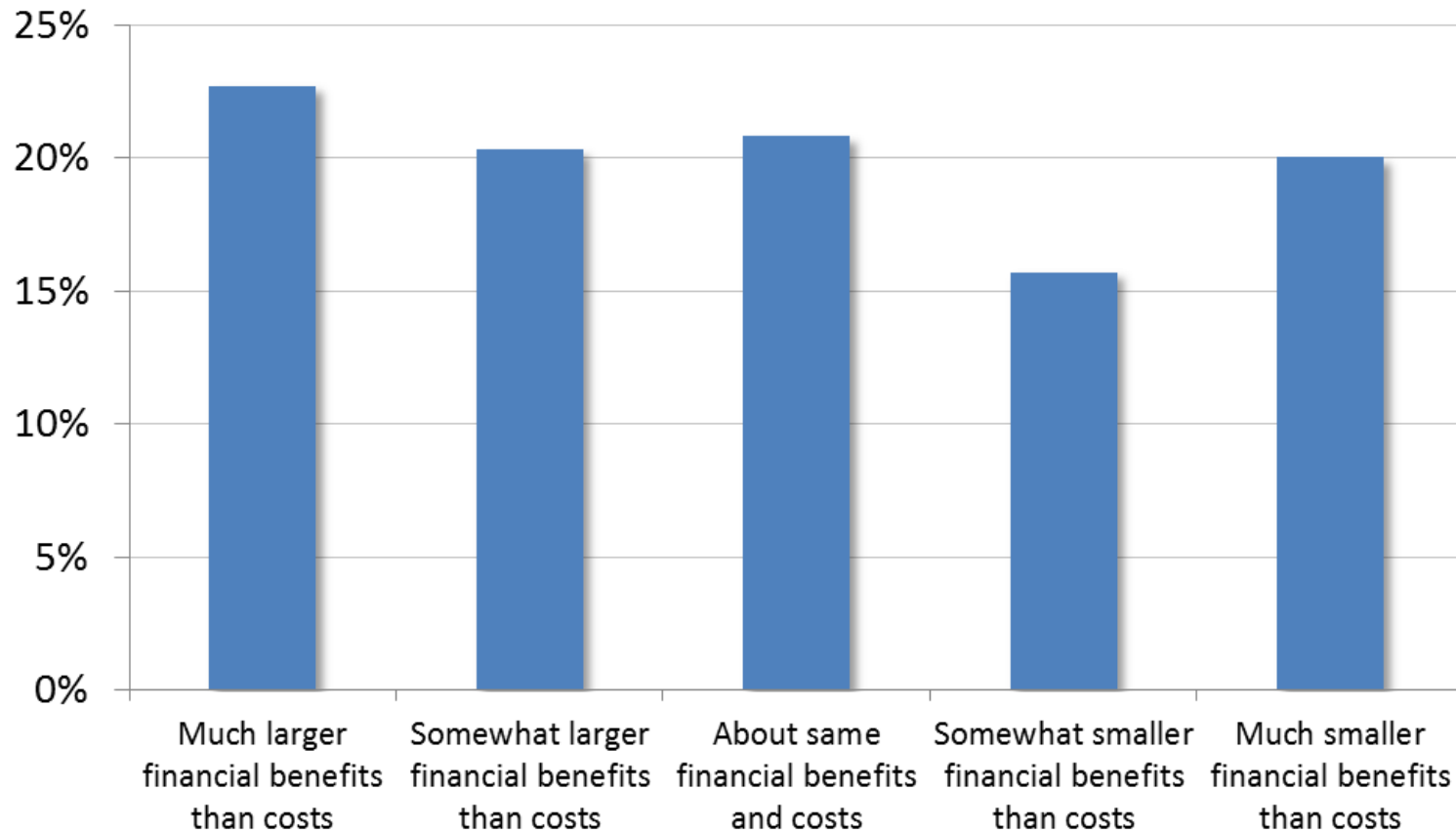
- If borrower defaults (9 months behind on payments):
  - full amount due immediately
  - Have to pay a host of fees
  - reported to credit bureaus
  - could have wages garnished, tax refunds withheld
  - turned over to collection agency
  - lose eligibility for deferment
  - Other issues

# Options for those Behind

- If you know you will have trouble making payments
  - Grace Period
  - Repayment Plans
  - Deferment
  - Forbearance
- If in default
  - Loan Repayment
  - Loan Rehabilitation
  - Loan Consolidation

# Was it Worth it?

**Overall, how would you say the lifetime financial benefits of your most recent educational program compare to the lifetime financial costs to you of this education?**



Source: Board of Governors' Survey of Household Economics and Decision making

# Putting it all Together

- High debt balances, while a worry, might not be the best place for policy interventions
- Is payment structure of student debt a problem?
- High variance in returns to education. Depends on a lot of “factors”
- From a policy perspective, how do we get right people into the right institutions?
- Who should pay for college? Who gets the benefit?

# Resources

- Overview of student loan market.
  - <https://www.kansascityfed.org/publicat/reswkpap/pdf/rwp%2012-05.pdf>
- Federal Student Aid
  - <https://studentaid.ed.gov/>
  - <https://studentaid.ed.gov/sites/default/files/your-federal-student-loans.pdf>
- Generation Debt: The Promise, Perils and Future of Student Loans
  - <http://www.stlouisfed.org/household-financial-stability/events/20131118/agenda.cfm>
- FRBSTL Economic Education
  - [http://www.stlouisfed.org/education\\_resources/college101/](http://www.stlouisfed.org/education_resources/college101/)