

# Turbulent Waters: the Future of America's Colleges and Universities

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# WHY DOES COLLEGE



# COST SO MUCH?

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# Motivation for the New Book - I

Presentations at more than 30 colleges and associations of colleges.

- a. What is going to happen next?
- b. Will online education eat our lunch?
- c. Will students keep coming?

# Motivation for the New Book - II

Books about the future of higher education

a. ***The End of College*** by Kevin Carey

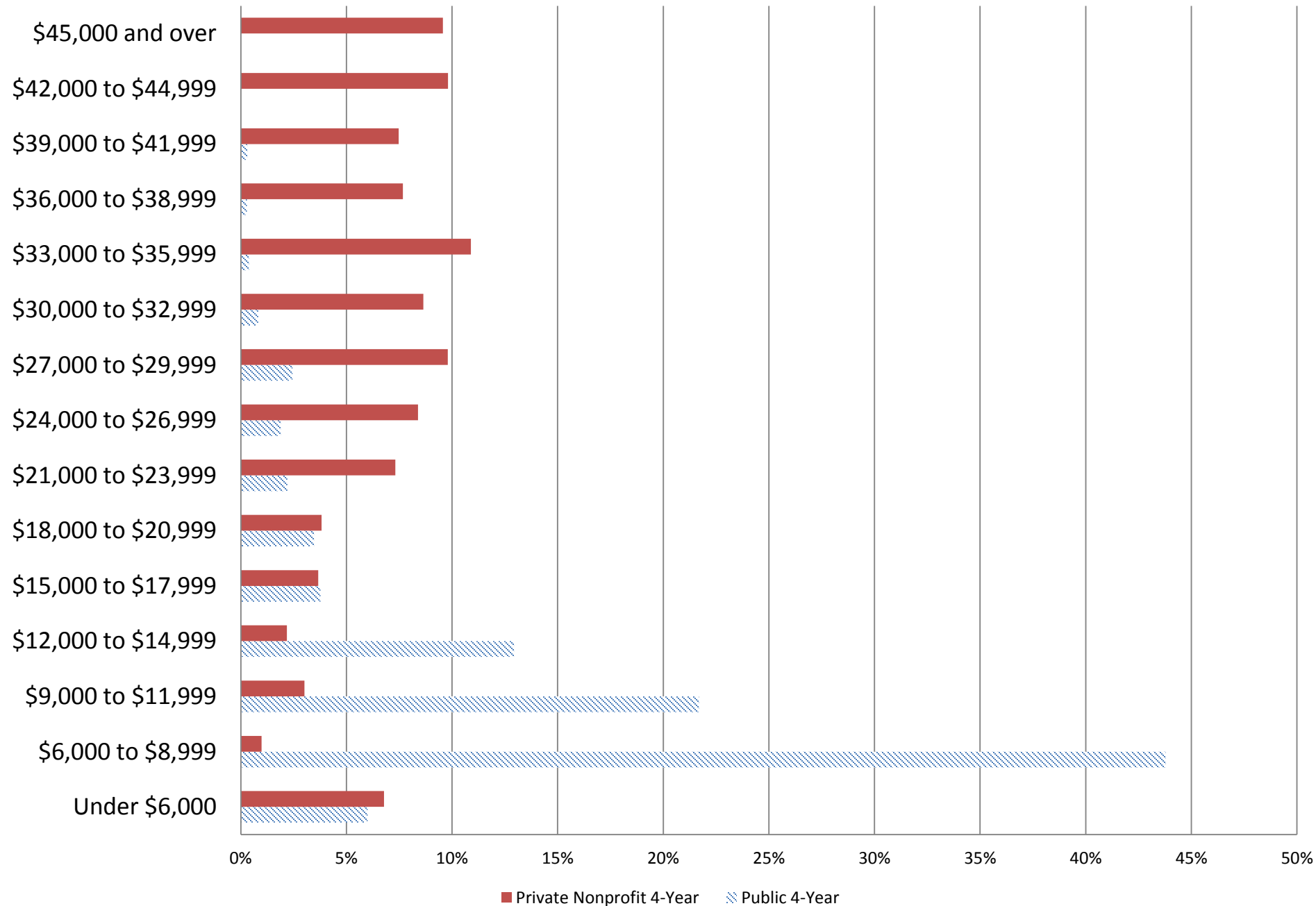
b. ***College Disrupted: The Great Unbundling of Higher Education*** by Ryan Craig

c. ***The Innovative University: Changing the DNA of Higher Education*** by Clayton Christensen and Henry Eyring

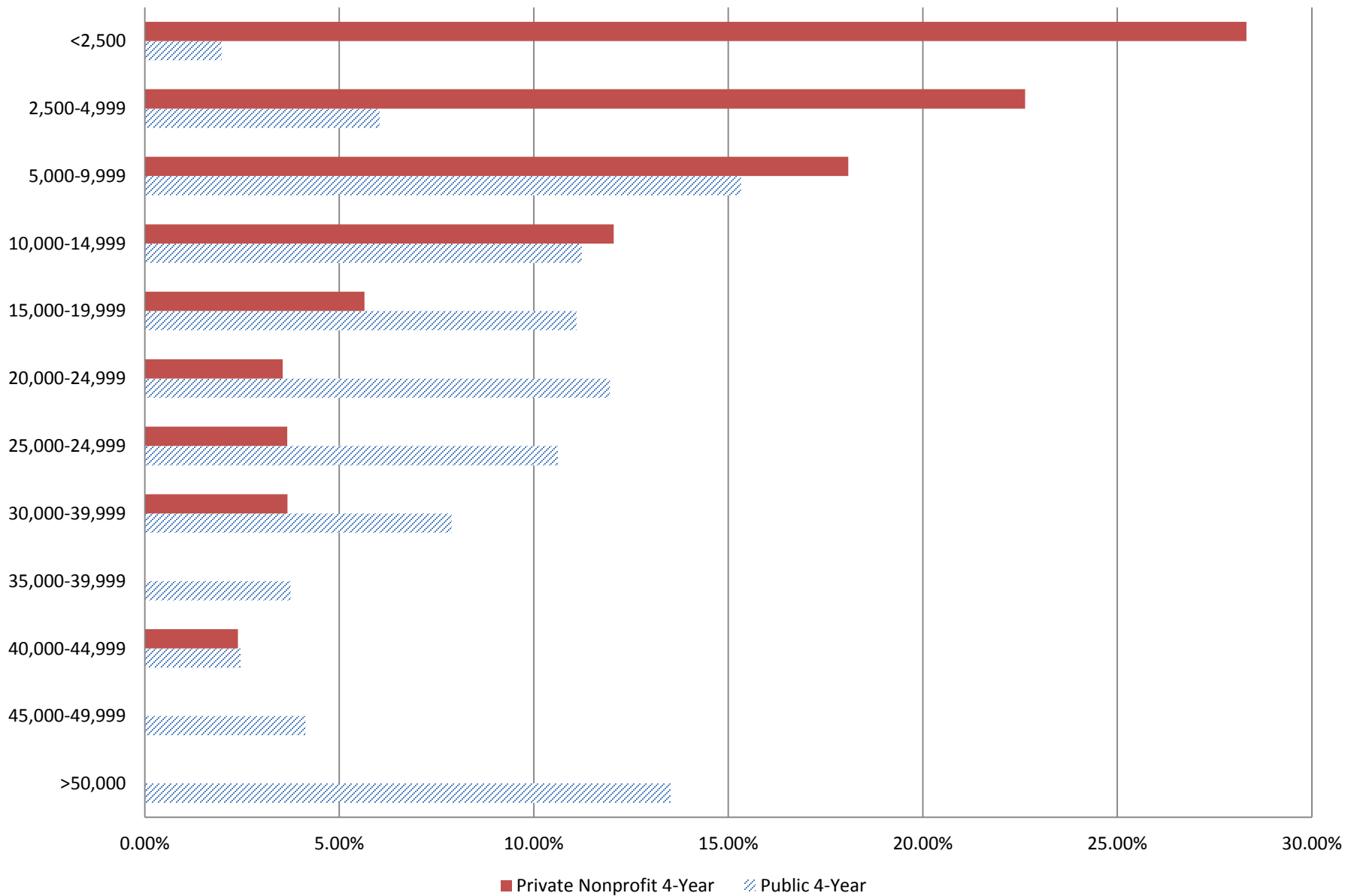
# Problems with these books

1. The message is that colleges are in horrible shape, and new technologies are going to come to the rescue.
2. All colleges and universities were treated as if they were the same – they had the same problems and these problems required the same solution.

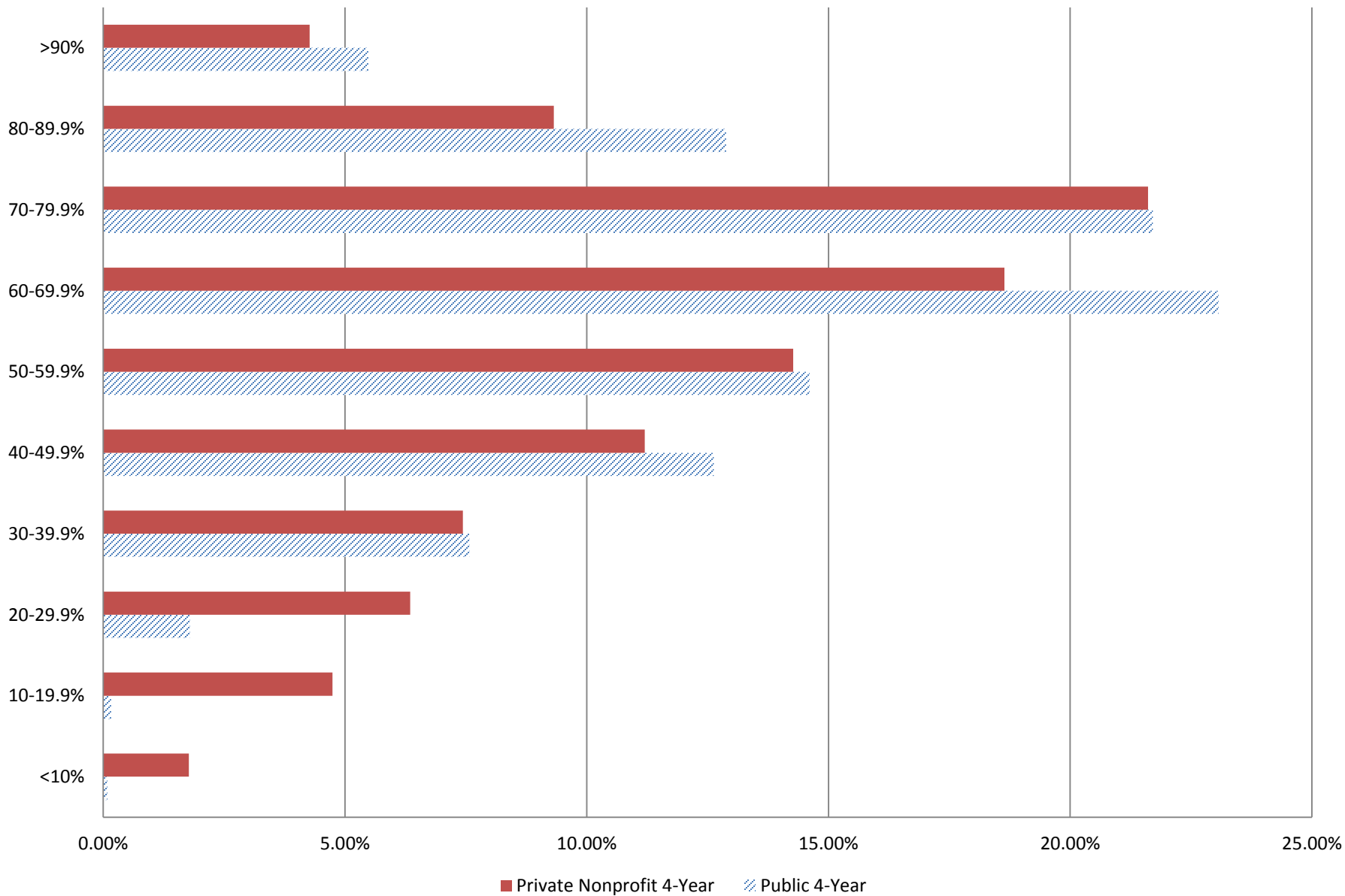
# Published Tuition and Fees, College Board



# Size of Schools

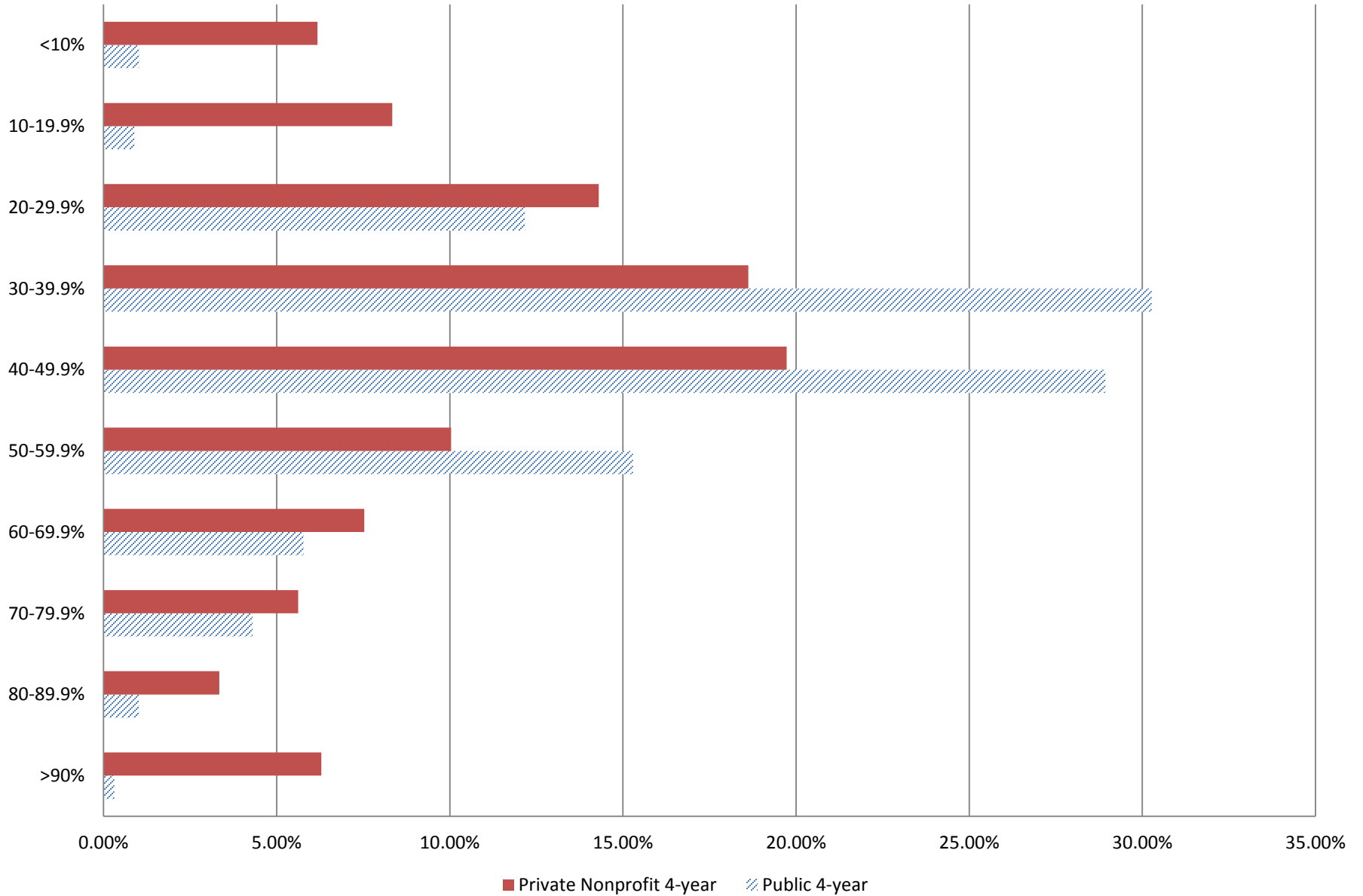


# Fraction of Applicants Admitted





# Percentage of Arts and Sciences Degrees



# Colleges will faces Threats in the Future

**I. Internal Threats**

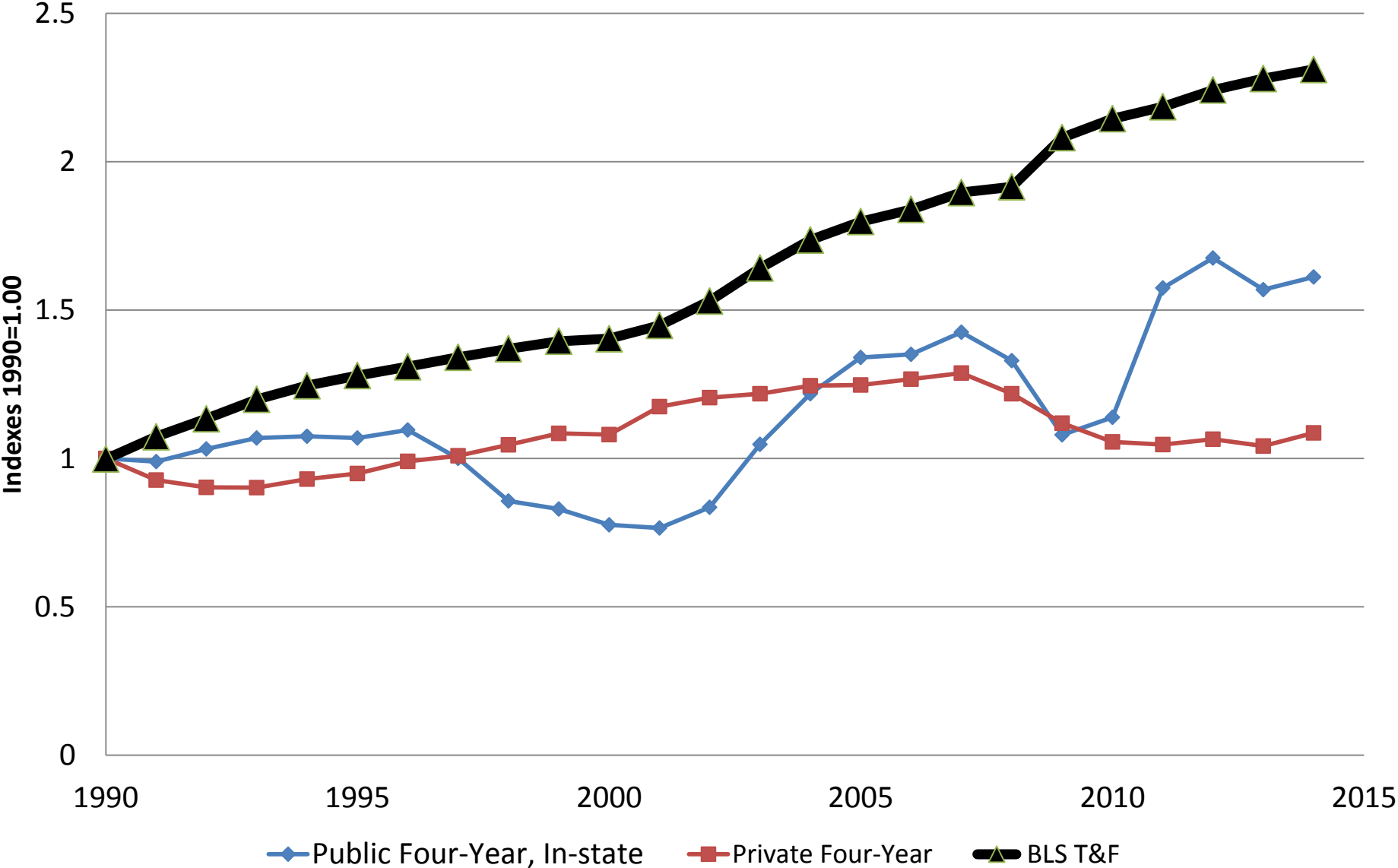
**II. Environmental Threats**

**III. Technological Threats**

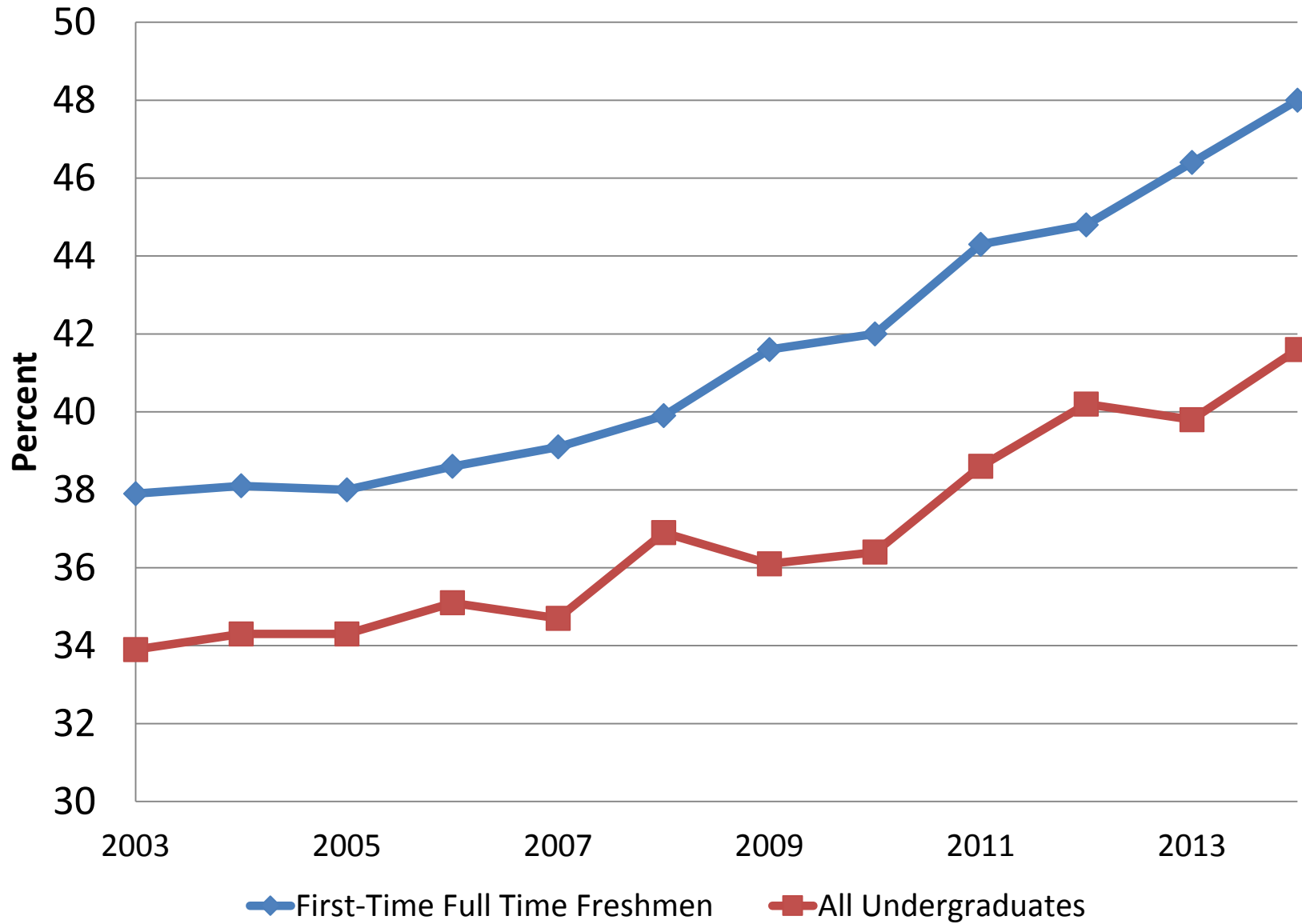
# Internal Threats

- Rising costs of providing a college education
- Reduced ability to price discount
- Falling payoff to a college degree

# Real *List* Price Tuition & Fees (Bureau of Labor Statistics), and Real *Net Price private* and *public in-state* (College Board), 1990-2014

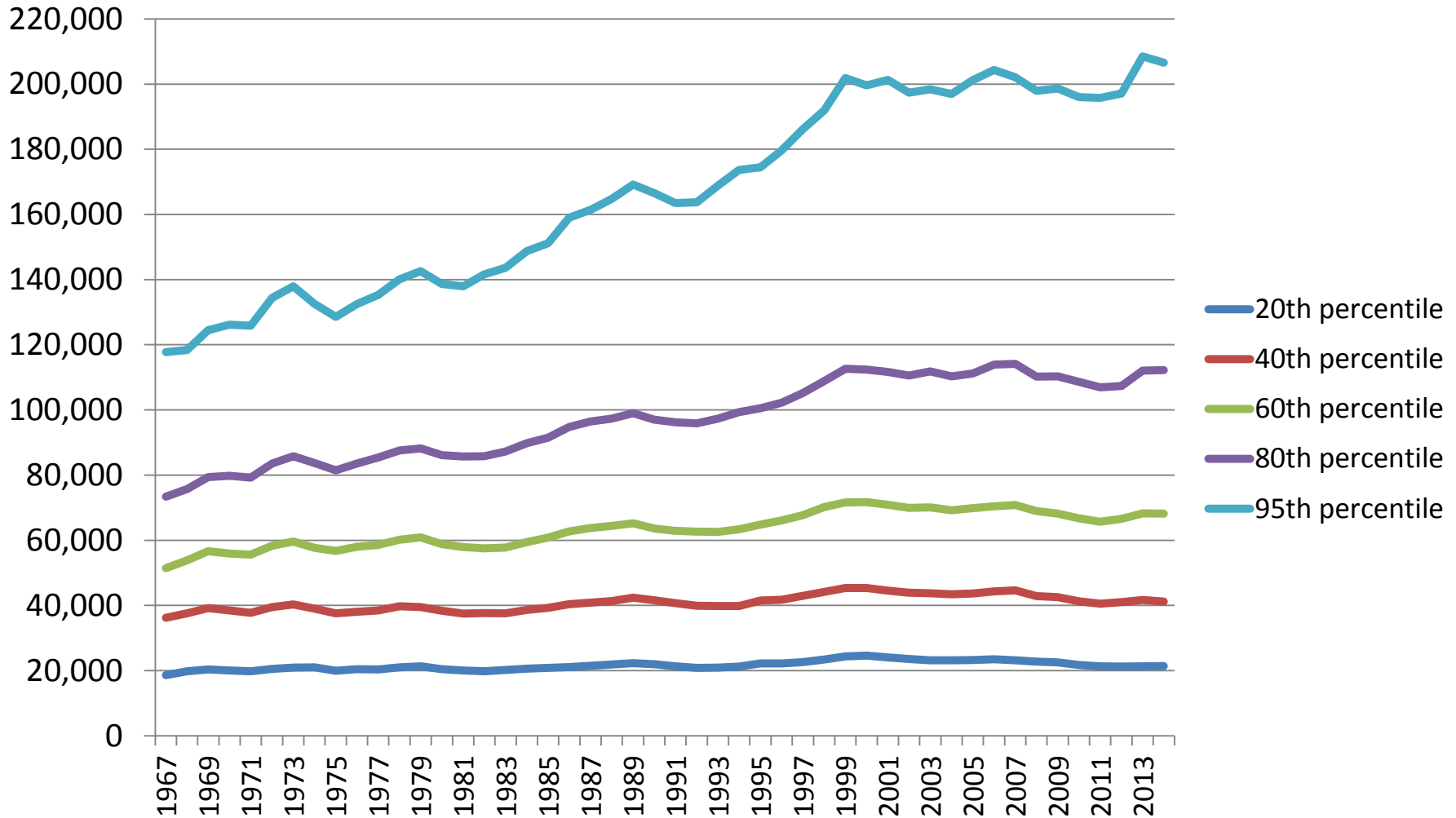


### Average Tuition Discount Rates (NACUBO) 2003-2014



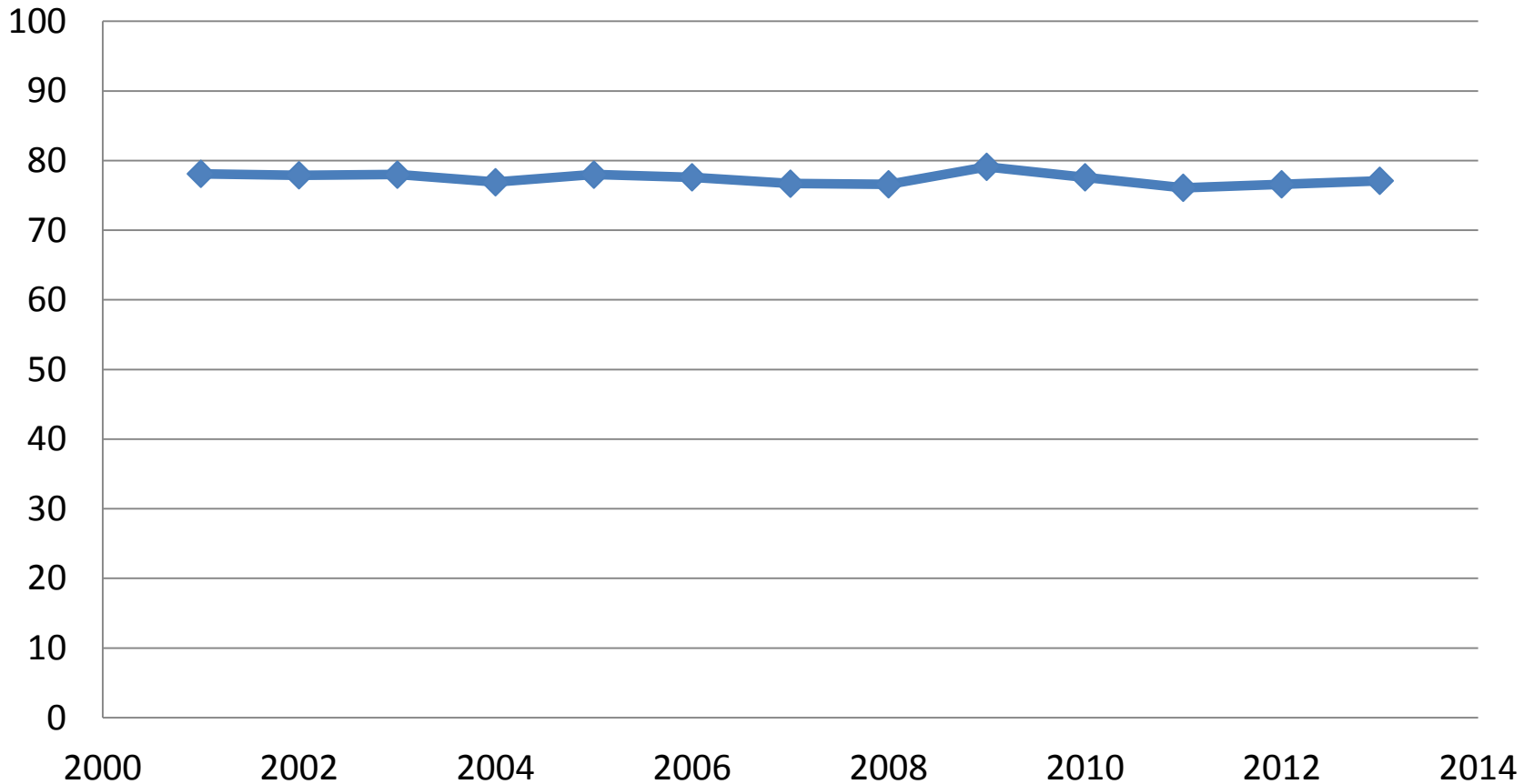
# Stagnant Household Income

## Household income, 1967-2014 in 2014 dollars



# The College Guarantee?

**Percentage of College Graduates Who Make More than the Median High School Graduate, 2001-2013**



# Major Subgroups Ranked by Median Annual Wages

RANK	MAJOR SUBGROUP	MEDIAN ANNUAL WAGES OF COLLEGE-EDUCATED WORKERS (AGES 25-59) (2013\$)
1	Petroleum engineering	136,000
2	Pharmacy	113,000
3	Metallurgical engineering	98,000
4	Mining engineering	97,000
5	Chemical engineering	96,000
6	Electrical engineering	93,000
7	Aerospace engineering	90,000
8	Mechanical engineering	87,000
9	Computer engineering	87,000
10	Geological engineering	87,000
11	Computer science	83,000



# Major Subgroups Ranked by Median Annual Wages

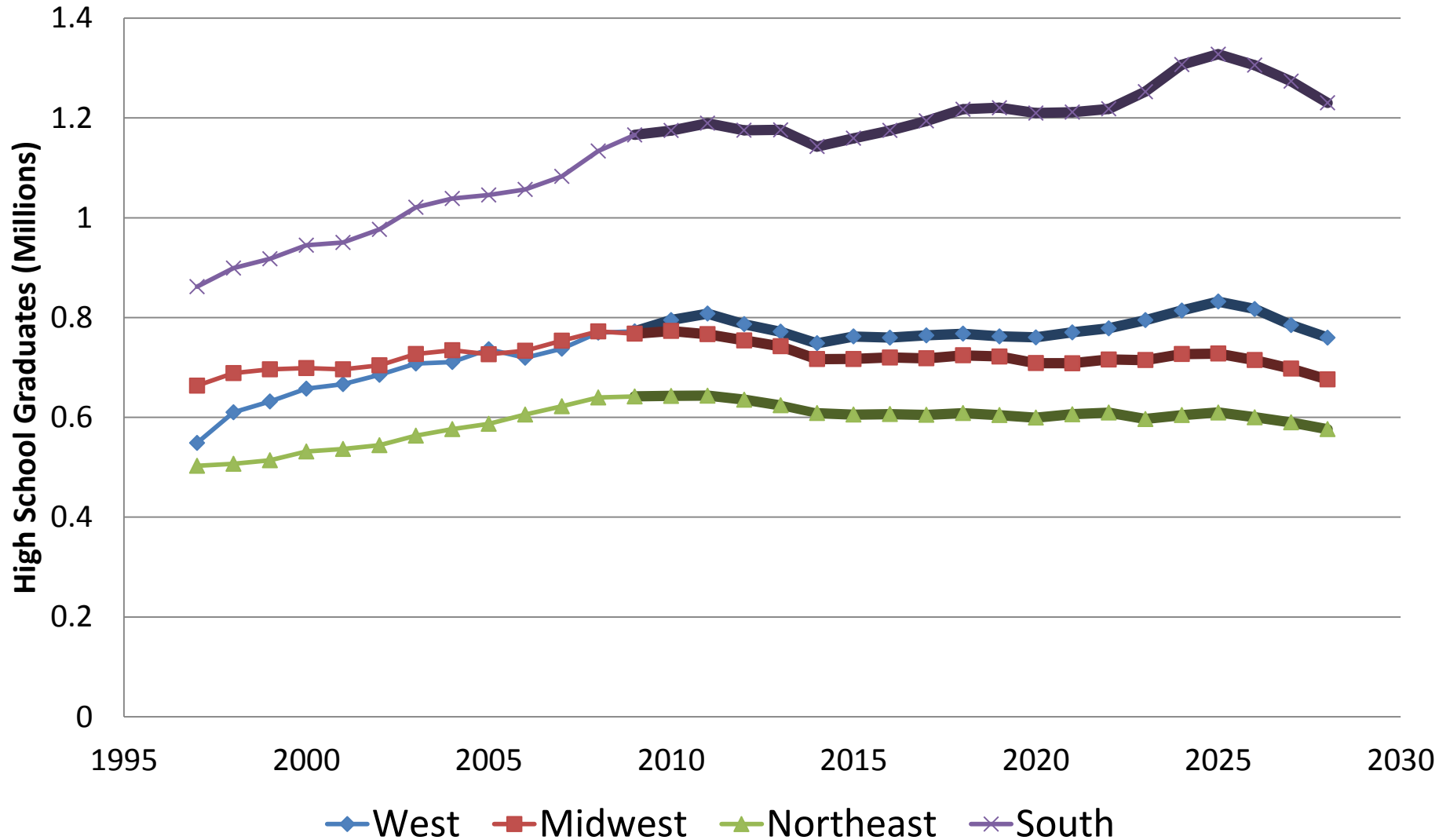
RANK	MAJOR SUBGROUP	MEDIAN ANNUAL WAGES OF COLLEGE-EDUCATED WORKERS (AGES 25-59) (2013\$)
15	Physics	81,000
24	Economics	76,000
29	Mathematics	73,000
35	Geology	69,000
50	Chemistry	64,000
74	Biology	56,000
82	History	54,000
89	English	53,000
92	French, German, Latin	52,000
102	Philosophy	51,000
132	Visual and performing arts	42,000

# Environmental Threats

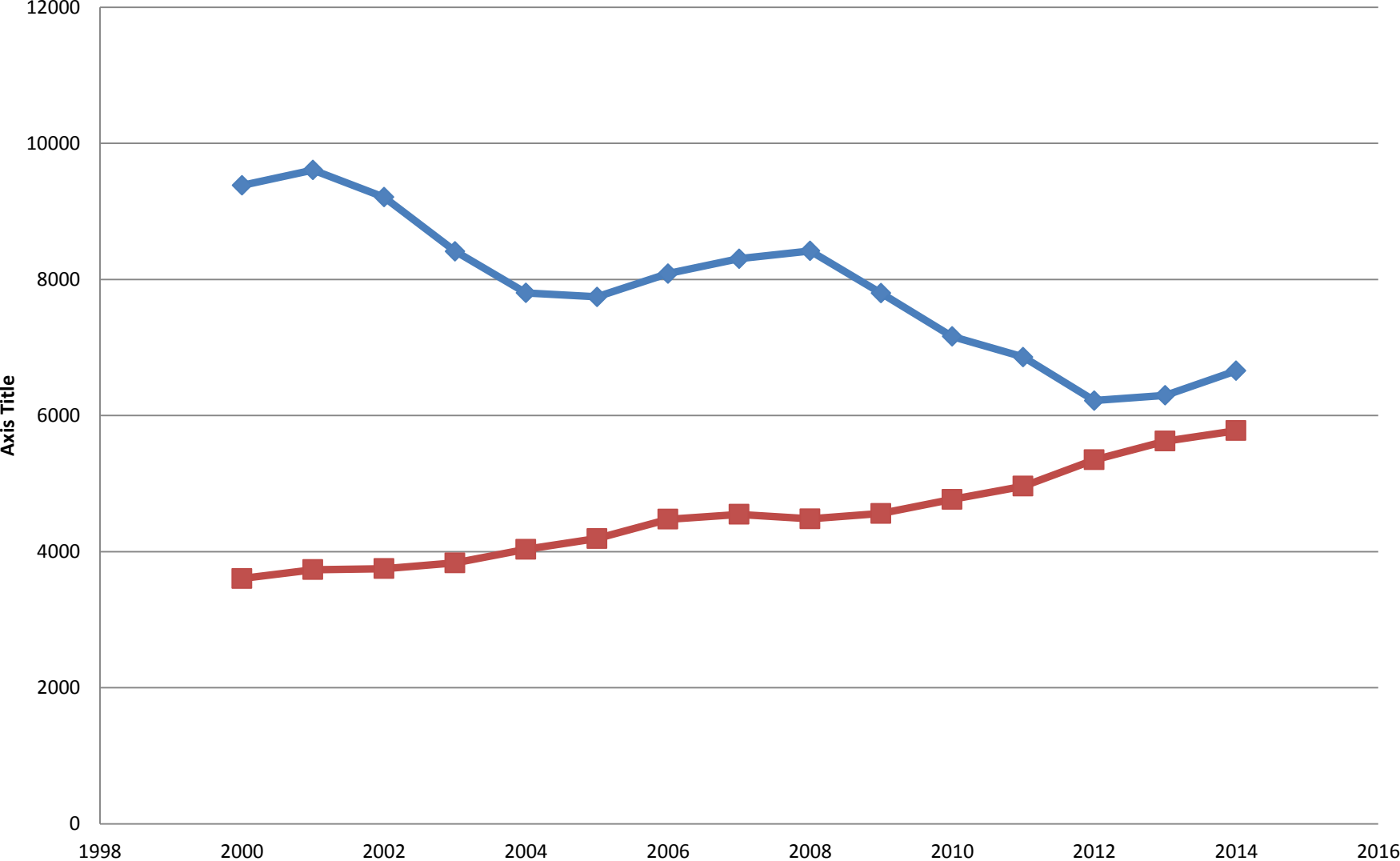
- Demographic Trends
- Falling State Support
- Falling Federal Support for Research

# Demographic Trends

## Actual and Projected High School Graduates by Region, 1997-2028

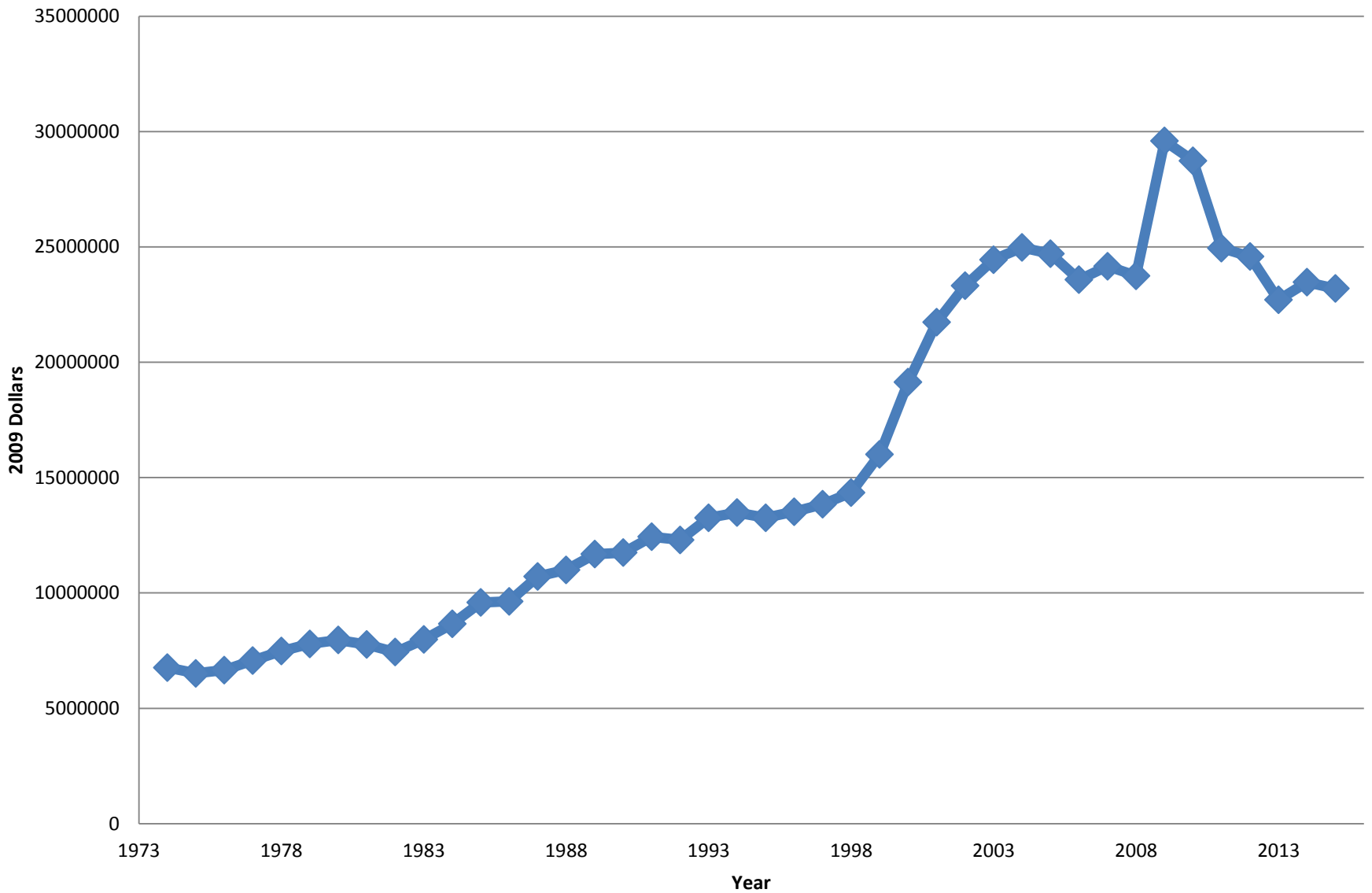


# State Appropriations per Student and Net Tuition



State Support Net Tuition

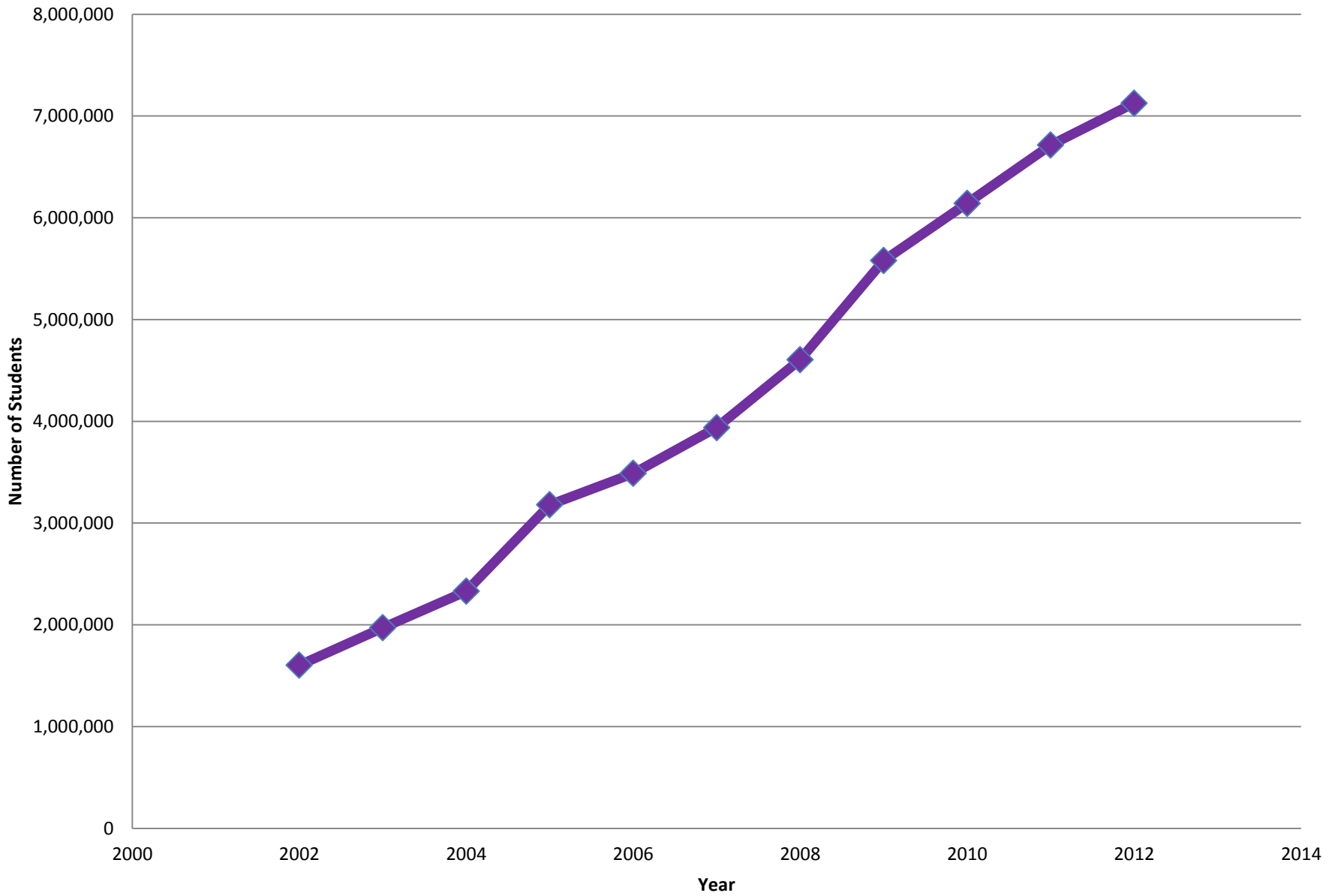
# Federal Basic and Applied Research Obligations to Colleges and Universities, 1974-2015



# Technological Threats

- Online education
- MOOCs
- Certificates and Badges

# Students With At Least One On-line Course, 2002-12



# Who enrolls in fully online programs?

New Students 2013-2014	Arizona State		Penn State		SNHU	
	Online	Campus	Online	Campus	Online	Campus
Percent of New Students who are First-Time Full-Time Freshmen	2%	56%	1%	91%	27%	76%
Age 22 or Under	15%	80%	14%	98%	15%	80%
Average Age	31	21	31	20	32	22
Began with > 75% of Credits	16%	3%	27%	2%	12%	2%
Began with 50-75%	44%	24%	33%	6%	19%	5%



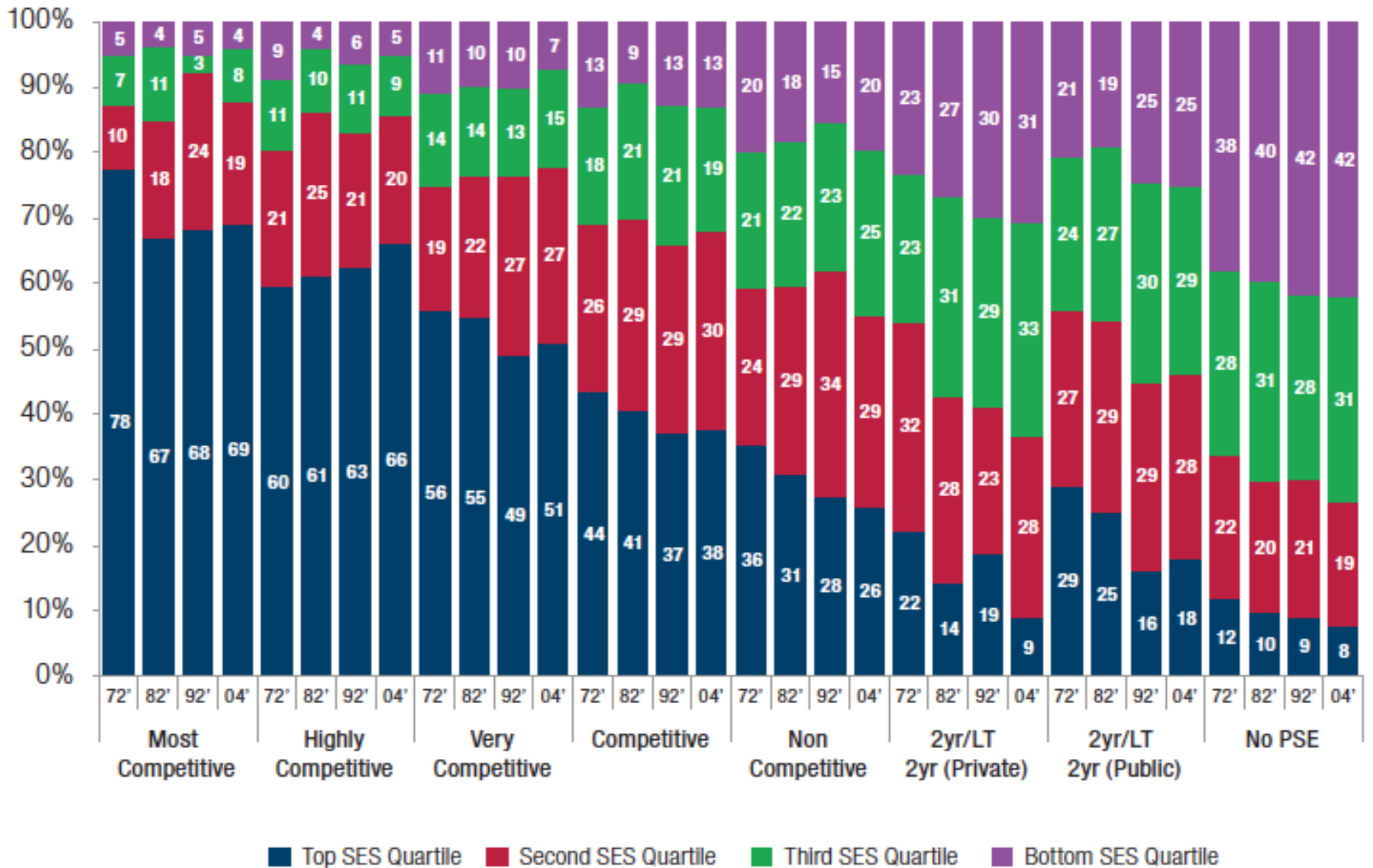
# Bottom Line

How well institutions will survive these threats depends on their ability to raise revenue.

The more selective a college is, public or private, the more likely it will be able to thrive in the future.

- State Flagships and Other Selective Publics
  - They will survive and maybe thrive
- Less Selective State Institutions
  - They are likely to have real troubles if states keep backing away, and if demographics are challenging.
- Selective Privates
  - They will do just fine
- Less Selective Privates
  - Smaller schools with low endowments in demographically challenged states will have a difficult time.

# Income Inequality Across Schools – The Distribution of Students by SES and College Competitiveness



# What Do We Do?

1. Index the Pell Grant

2. Create a Pell Grant Bounty

For every Pell dollar a school brings in it gets 10 or 15 cents to add to its budget.

3. Provide Clear Information on Price