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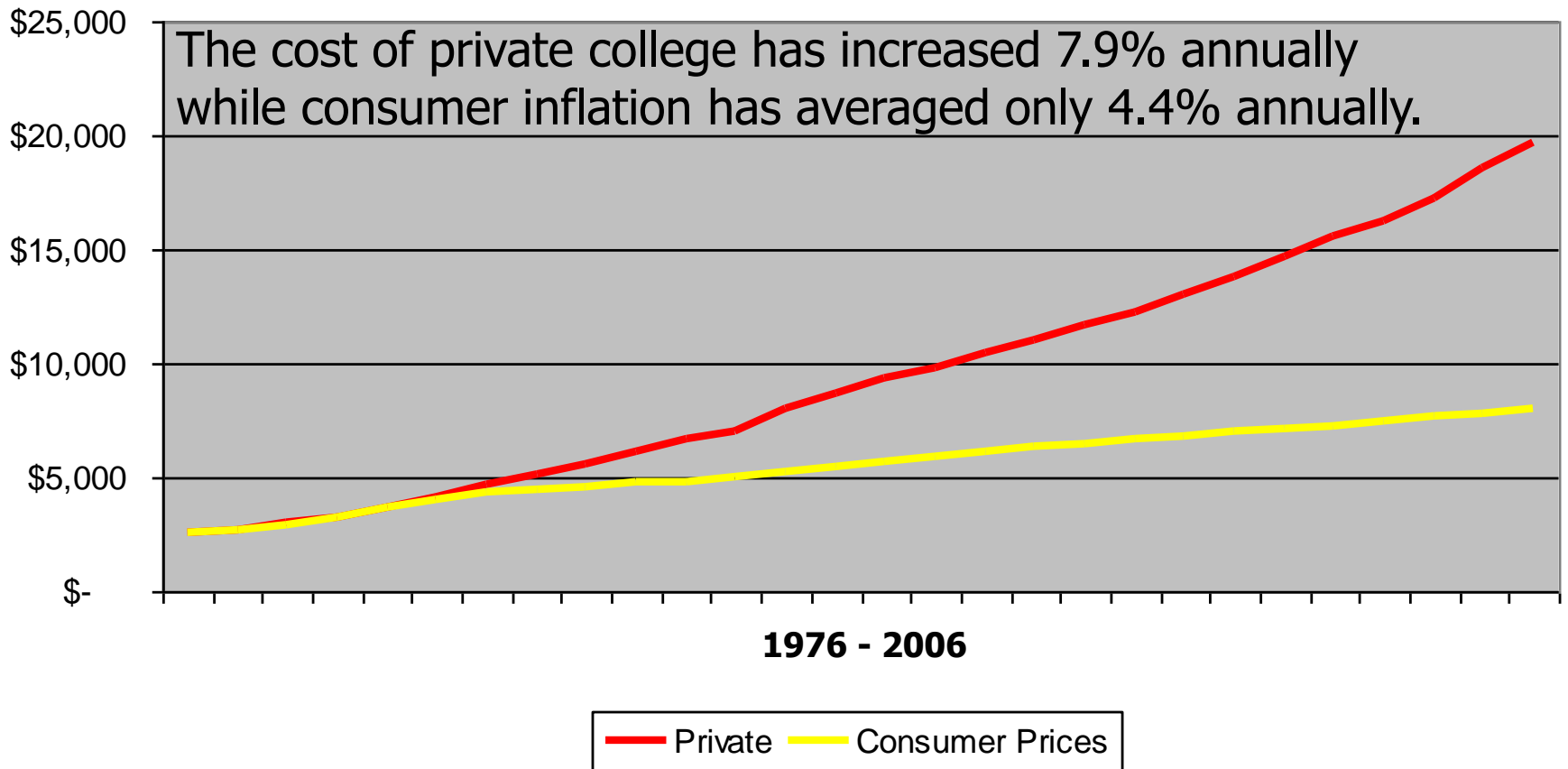
# **Technological Changes in Higher Education**

**May 24, 2013**

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What does a college degree cost?

## Tuition & Fees (4-Year Institutions, \$ per year)

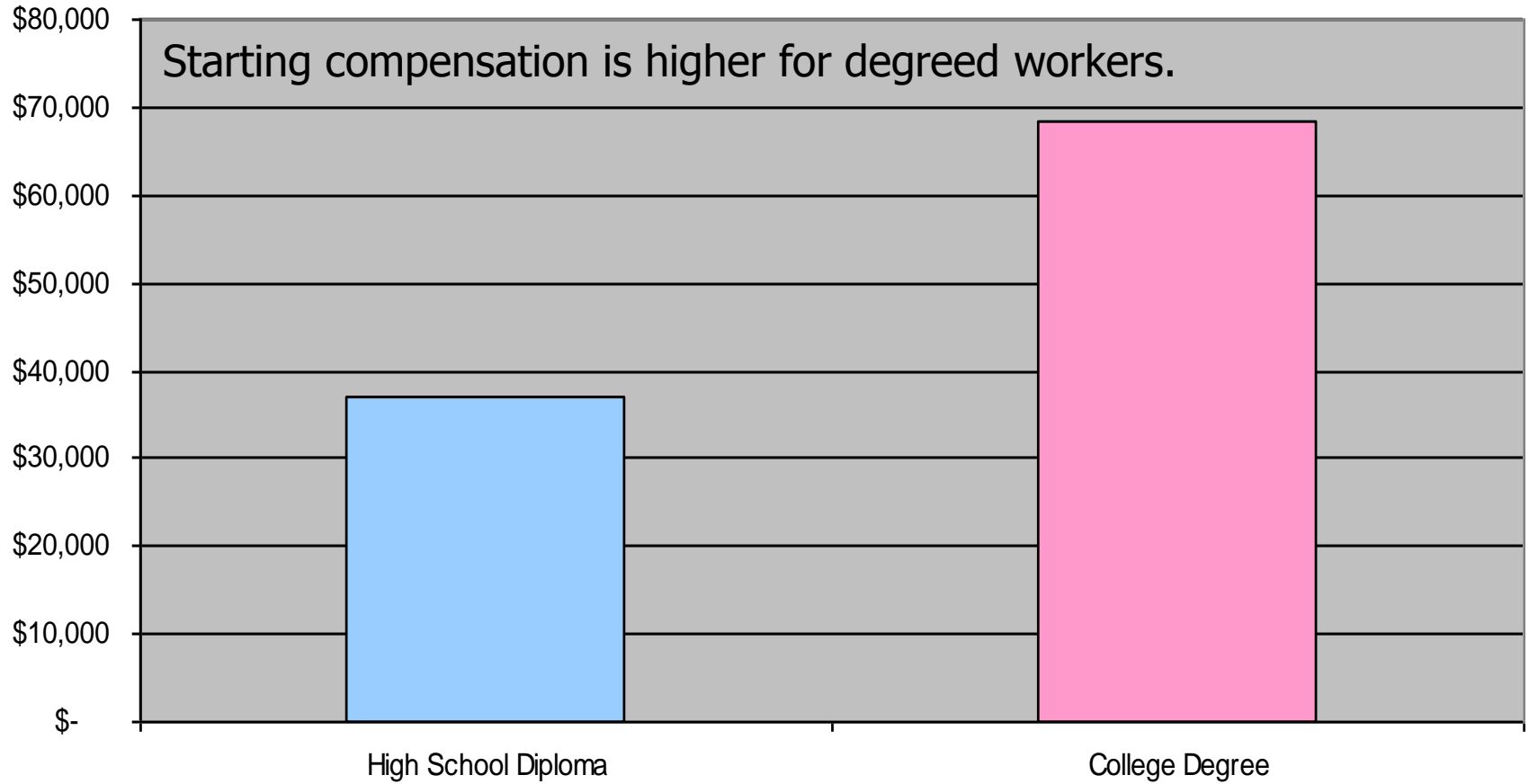


Source: *Statistical Abstract of the United States, 1995-2006*; *Current Population Reports, Bureau of Census, 1978-1997*; *Annual Survey of Colleges, The College Board, 2002*

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What is a college degree worth?

## Median Compensation for 18-24 Year Olds (2006)



Source: *Statistical Abstract of the United States*



Expected Compensation = (Compensation) (Employment Rate)

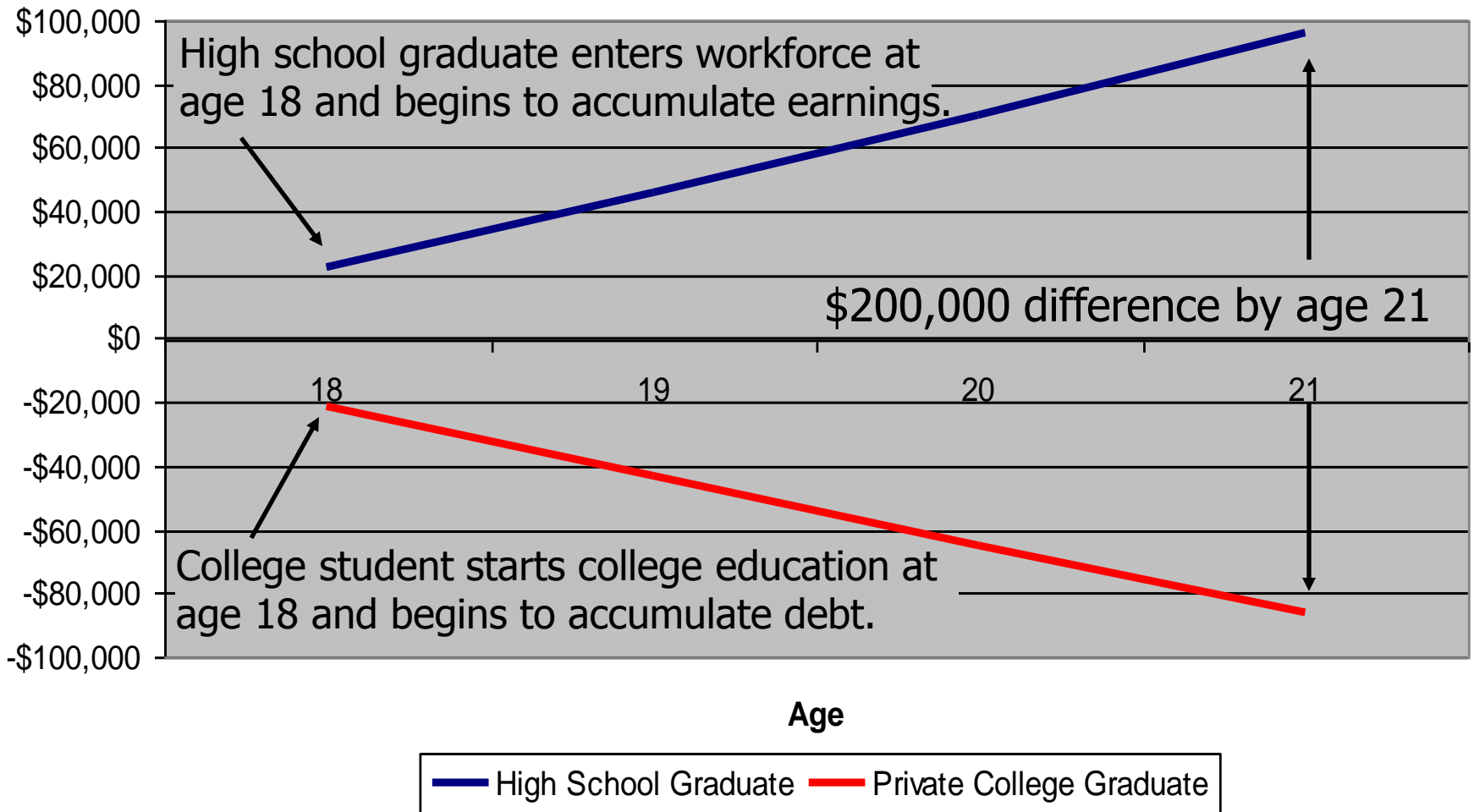
- The median working college graduate earns **80%** more than the median working high school graduate.
- Accounting for the likelihood of employment, the median college graduate can expect to earn **140%** more than the median high school graduate.

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Sure, but college is expensive!

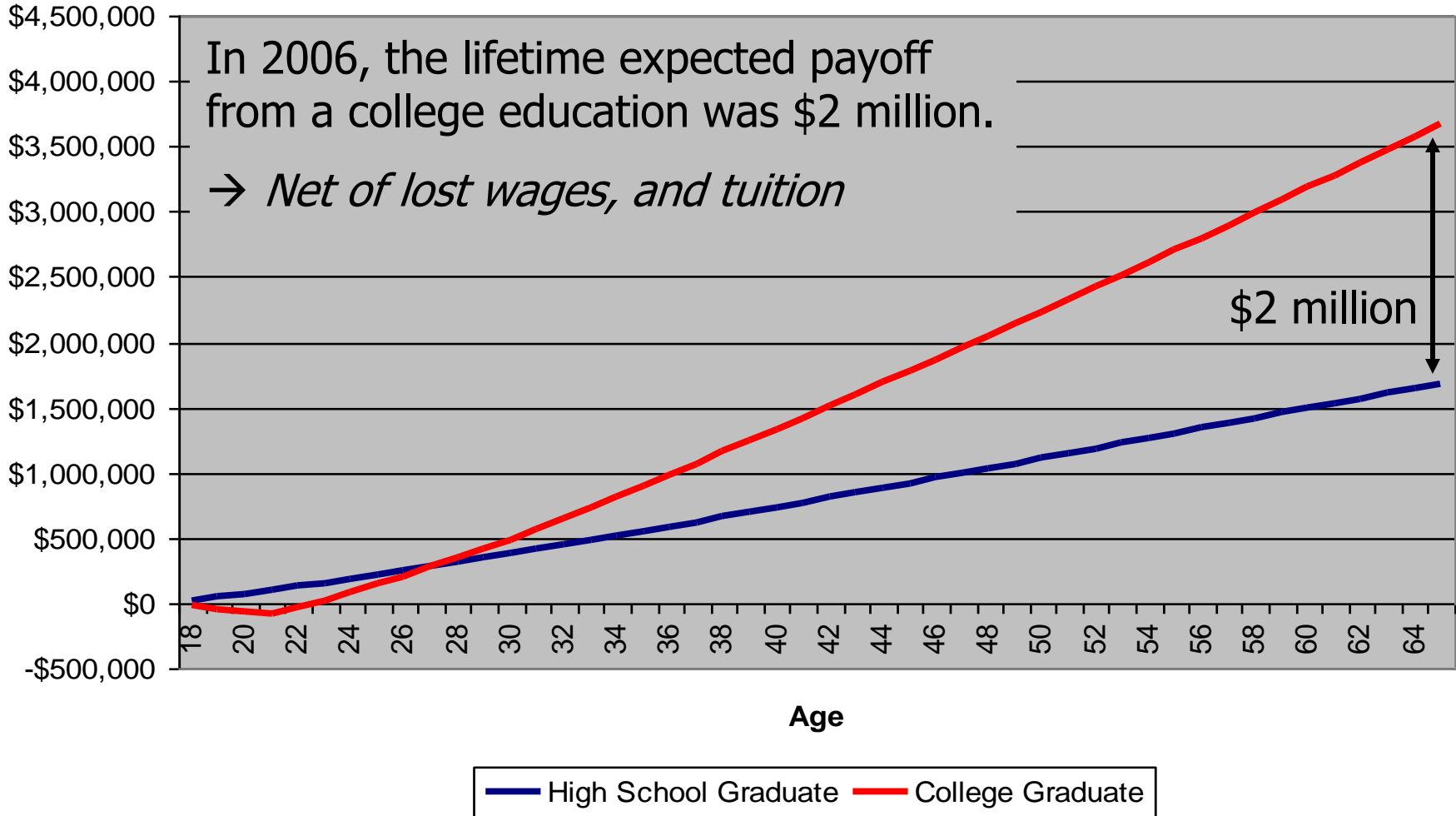


### Cumulative Expected Compensation and Tuition (2006)



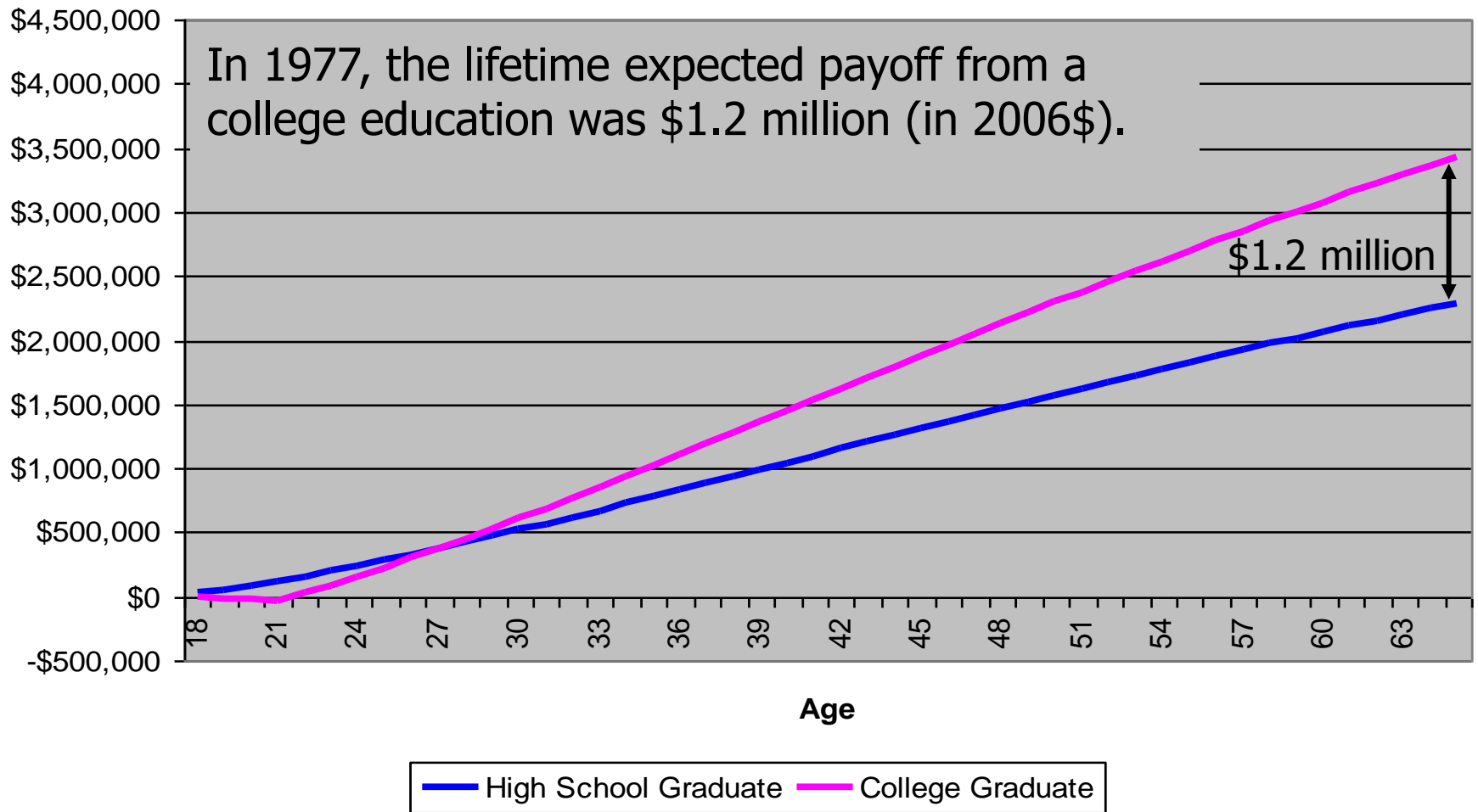
Source: *Statistical Abstract of the United States; Current Population Reports*, Bureau of Census; *Annual Survey of Colleges*, The College Board

### Lifetime Expected Compensation for 18 Year Olds in 2006 (2006\$)



Source: *Statistical Abstract of the United States; Current Population Reports*, Bureau of Census; *Annual Survey of Colleges*, The College Board

### Lifetime Expected Compensation for 18 Year Olds in 1977 (2006\$)



Source: *Statistical Abstract of the United States; Current Population Reports*, Bureau of Census; *Annual Survey of Colleges*, The College Board

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## **Rate of Return**

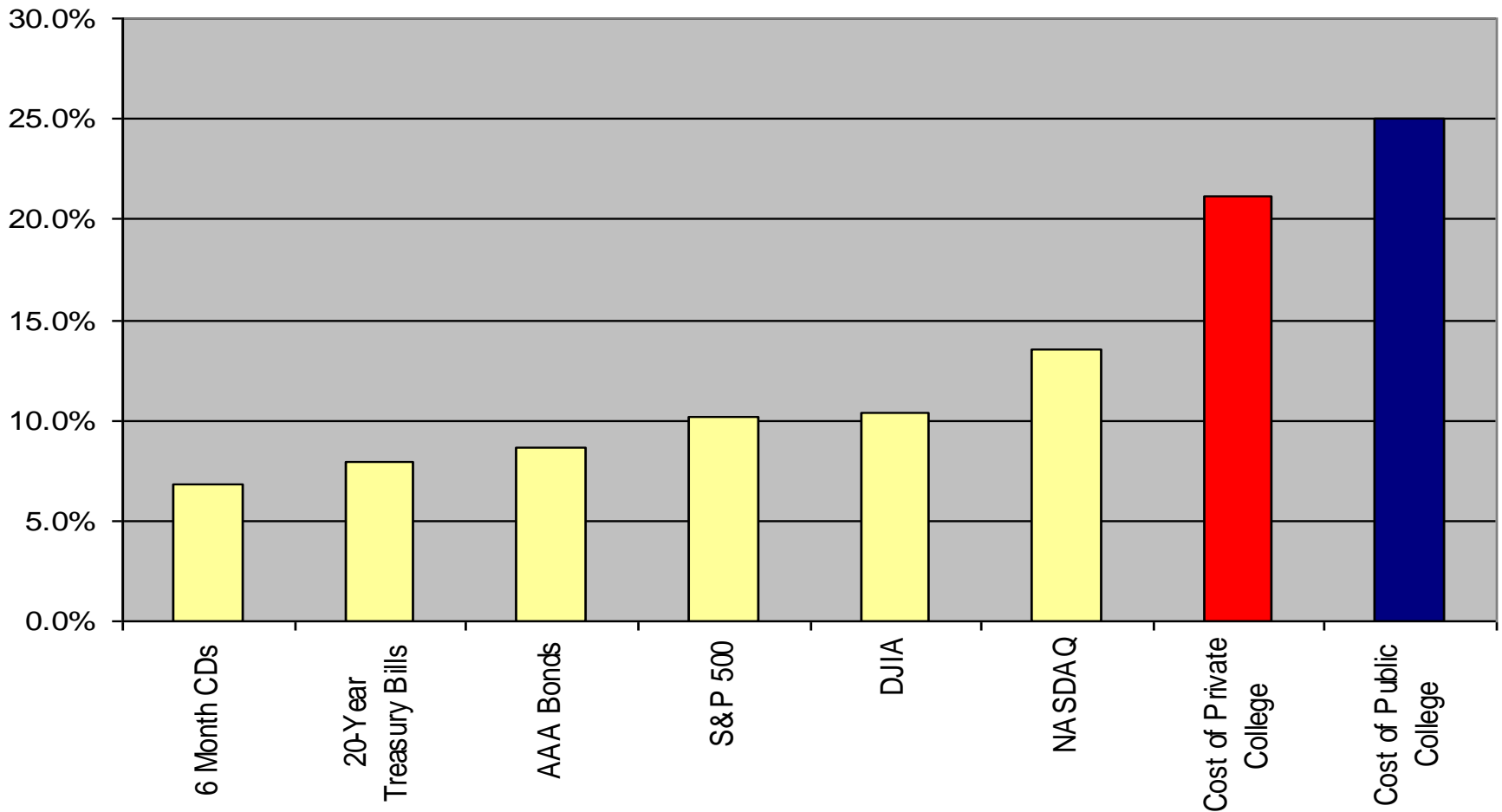
Investment → Tuition and fees plus four years of foregone income

Return → Higher expected income

**Rate of return (private tuition) = 21%**

**Rate of return (public tuition) = 25%**

## Average Nominal Rates of Return (1977 through 2006)



Source: *Statistical Abstract of the United States*; *Current Population Reports*, Bureau of Census; *Annual Survey of Colleges*, The College Board

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## **Net Present Value**

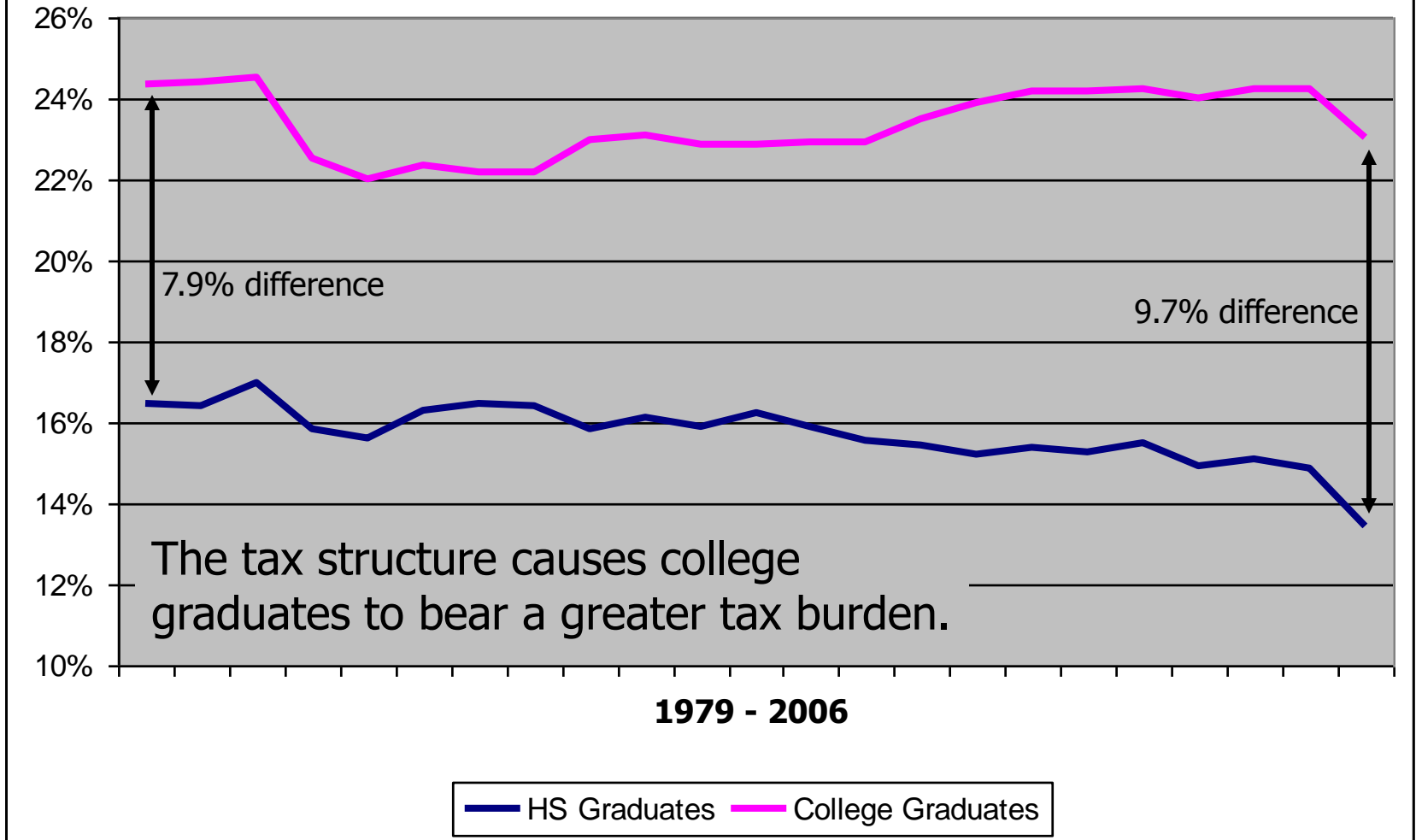
**Net Present Value 1977 (2006\$) = \$500,000**

**Net Present Value 2006 = \$850,000**

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# Taxes Affect the Value of Higher Education

## Total Effective Federal Tax Rates



Source: *Statistical Abstract of the United States; Current Population Reports, Bureau of Census; Congressional Budget Office.*



## Expected Additional Lifetime Tax Burden from Obtaining a College Degree (NPV, 2005\$)

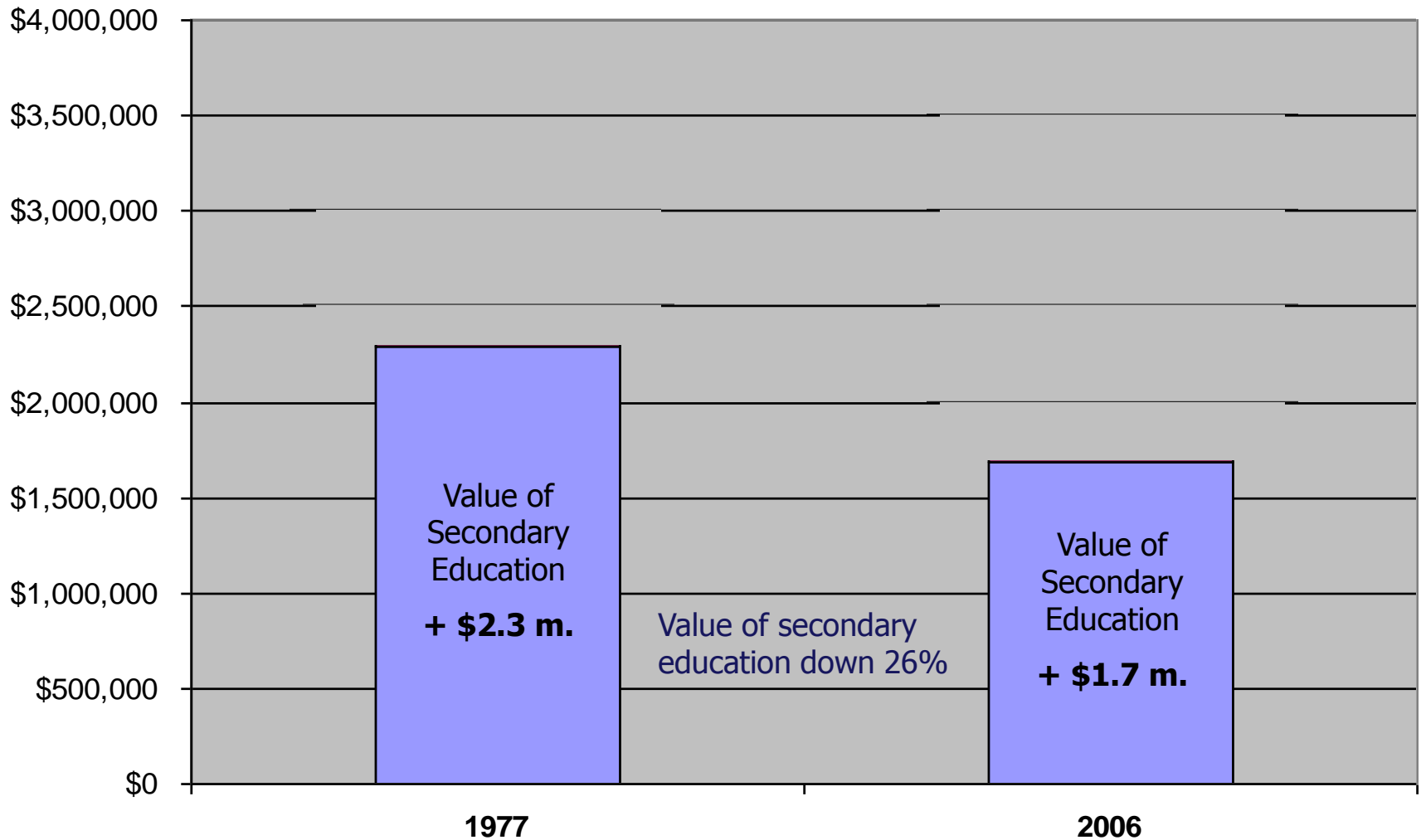


Source: *Statistical Abstract of the United States; Current Population Reports, Bureau of Census; Congressional Budget Office.*

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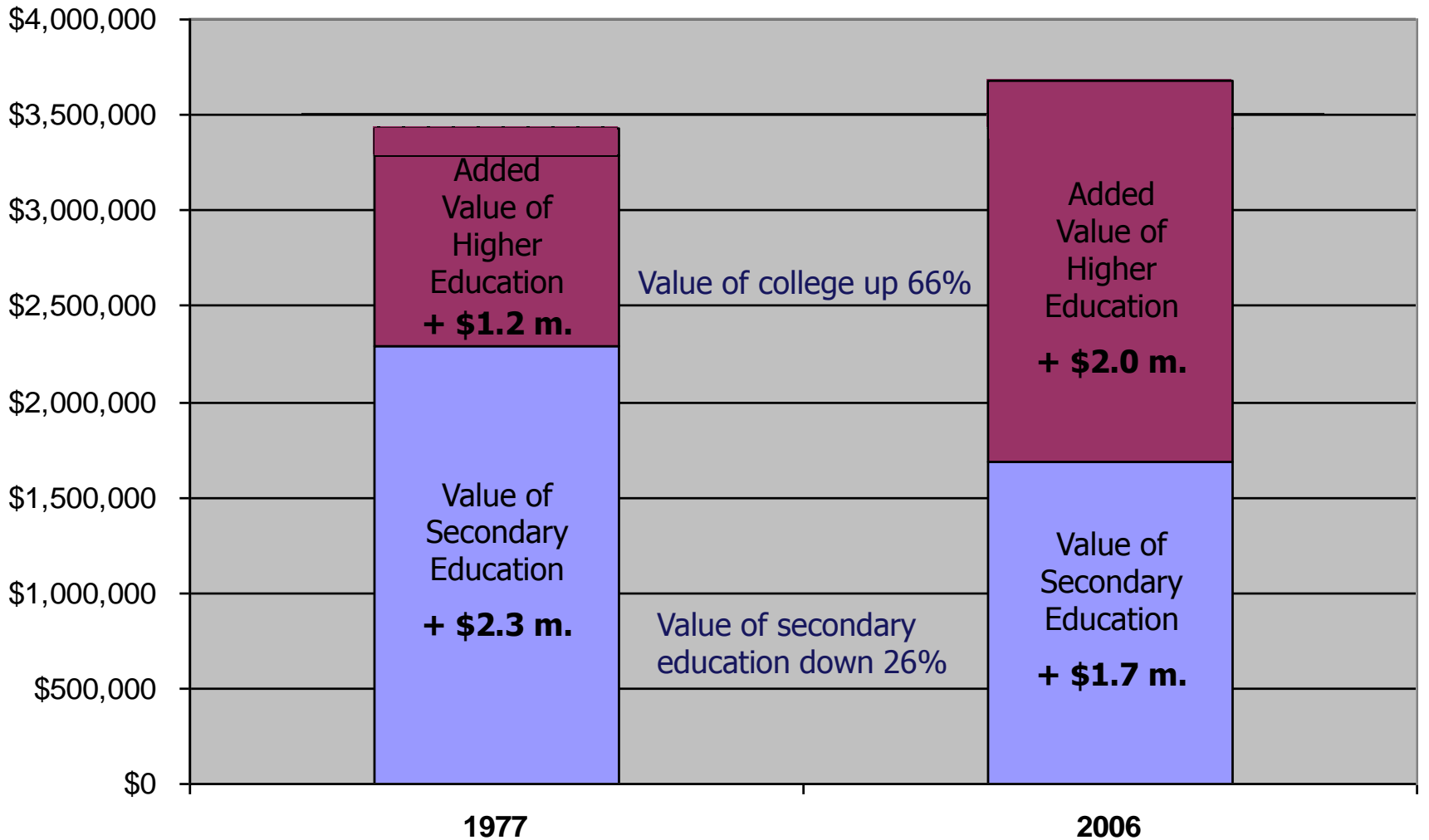
# Why the Debate Over the Value of Higher Education?

## Components of the Value of Higher Education (2006\$)



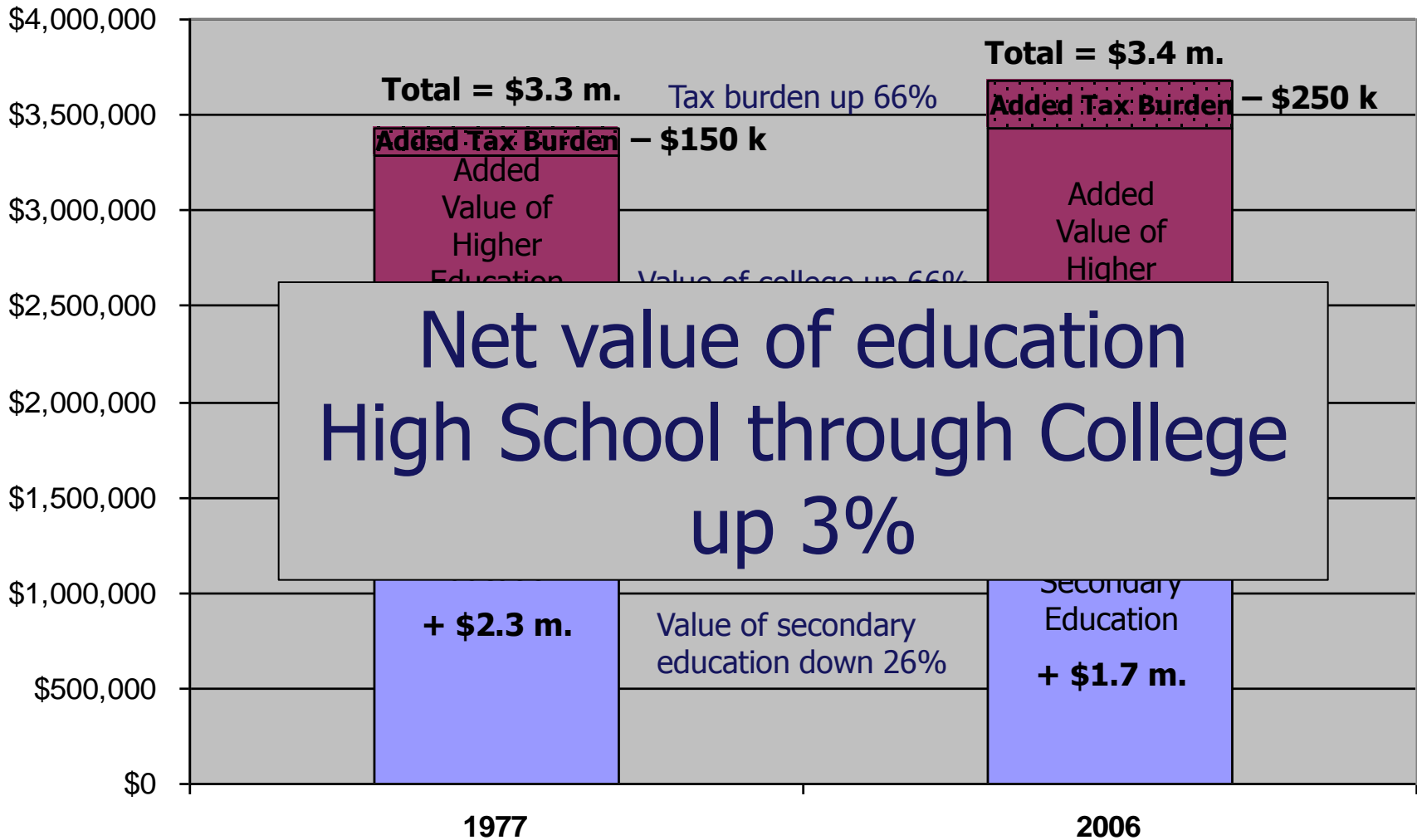
Figures are in 2006\$, but not in present value terms.

## Components of the Value of Higher Education (2006\$)



Figures are in 2006\$, but not in present value terms.

## Components of the Value of Higher Education (2006\$)



Figures are in 2006\$, but not in present value terms.

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# Alternative Models for Higher Education

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# For-Profit Education

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DeVry University  
University of Phoenix  
Capella University  
Kaplan University  
Strayer University  
National American University



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For-profit enrollment rose from 0.2% in 1970 to 9% in 2009.

For-profit college graduates end up with

- higher unemployment rates
- lower earnings
- more student loan debt

Source: Deming et. al, 2011, National Bureau of Economic Research, working paper 17710.

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Ironically, the problem with for-profit colleges is one of economic incentive.

What is the purpose of tenure?

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MOOC

(massive open online course)

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# MOOC

Free

No academic credit

Huge classes (thousands per class)

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# Traditional Universities Going Online



▼ SU13: The Global Economy 

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▼ **Control Panel**

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**[Week 2: Profits, Losses, and Prices](#)**



**[Week 3: Income, Poverty, and Wealth](#)**



**[Week 4: Trade and Economic Restrictions](#)**



**[Week 5: Business Cycles, and Fiscal and Monetary Policy](#)**



**[Week 6: Debt and Taxes](#)**


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COURSE MANAGEMENT

**Control Panel**

## Week 7: Economic Freedom and Entrepreneurship



### Discussion12 Economic Freedom and Entrepreneurship

This discussion board is for sharing your thoughts on the week's material. I'll post a couple of question topics relevant to the week's material.



### Wednesday


[Watch Video](#)

#### What's So Great about Economic Freedom?

Duration: (4:25)

User: learnliberty - Added: 2/11/13


[Watch Video](#)

#### Economic Freedom in 60 Seconds

Duration: (1:01)

User: econfree - Added: 5/30/12



#### Does Government Create Jobs?

Duration: (3:03)

User: learnliberty - Added: 4/8/13

## Discussion Board

Forums are made up of individual discussion threads that can be organized around a particular subject. Create Forums to organize discussions. [More Help](#)

Create Forum

Delete

<input type="checkbox"/>	Forum	Description	Total Posts	Unread Posts	Total Participants
<input type="checkbox"/>	<a href="#">Discussion 1 Overview of Economics</a>	Discuss the merits of profit.	121	0	20
<input type="checkbox"/>	<a href="#">Discussion 2 Profit and Losses</a>	You've seen arguments as to why price gouging is actually good for people in general. Discuss.	128	0	20
<input type="checkbox"/>	<a href="#">Discussion 3 Prices</a>	This discussion board is for sharing your thoughts on the week's material. I'll post a couple of q may address these questions or raise questions or offer comments on any topic relevant to the	27	0	12
<input type="checkbox"/>	<a href="#">Discussion 4 Income and Poverty</a>	This discussion board is for sharing your thoughts on the week's material. I'll post a couple of q may address these questions or raise questions or offer comments on any topic relevant to the	0	0	0
<input type="checkbox"/>	<a href="#">Discussion 5 Wealth and Capital</a>	This discussion board is for sharing your thoughts on the week's material. I'll post a couple of q may address these questions or raise questions or offer comments on any topic relevant to the	0	0	0
<input type="checkbox"/>	<a href="#">Discussion 6 Trade</a>	This discussion board is for sharing your thoughts on the week's material. I'll post a couple of q may address these questions or raise questions or offer comments on any topic relevant to the	0	0	0
<input type="checkbox"/>	<a href="#">Discussion 7 Economic Restrictions</a>	This discussion board is for sharing your thoughts on the week's material. I'll post a couple of q may address these questions or raise questions or offer comments on any topic relevant to the	0	0	0



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# University Hybrids

# Learn Liberty Academy

Already have an account? [Sign In](#) [Sign Up!](#)

## ARCHIVED PROGRAM

# America in the Red

## What You Need to Know About the \$16 Trillion U.S. Debt

Economist Antony Davies, Duquesne University



### WHAT TO EXPECT FROM THE PROGRAM:

Learn Liberty Academy got a make-over! We will have a completely redesigned new platform with a series of engaging internet content, including videos and articles, curated by Professor Antony Davies. We will also have live interactive question-and-answer sessions with guest speakers and various short assignments over the course of 3 weeks.

- In the first week, we will examine the current financial health of the U.S. federal government, the anatomy of government spending and why you should care about it.
- During our second week, we will explore the question of "how did we get here?" through case studies on healthcare, housing, and higher education.
- In our third and final week, we'll discuss outcomes of excessive government spending and sustainable alternatives to address societal problems of unemployment, healthcare and prosperity.

We will explore critical questions about the federal government's fiscal ills such as:

- How much does government spend? What does it spend it on?
- Where does the government get its money?
- How can the government get more money? How can it not get more money?
- What effects do spending, taxation, and quantitative easing have on the economy?
- What is the federal debt and how does it affect our future?

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# Where Are We Headed?

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Research universities remain as they are now.

→ Provide graduate degrees and name-brand undergraduate degrees

Colleges provide living, tutoring, and records services.

→ Evolve into “academic hotels”

Colleges employ a small group of professors to set major requirements and hire adjuncts.

→ Professors evolve into “academic managers”

Adjuncts teach online.

→ Adjuncts evolve into “academic contractors”

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# **Technological Changes in Higher Education**

**May 24, 2013**