

# Education as investment

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# Learning objectives

- List main components of the cost of college
- Explain the meaning of opportunity cost
- Describe the statistics on earnings and educational attainment
- Explain the pitfalls of relying on the mean/median
- List best practices for maximizing the return on your college education

# Cost of college, example

Tuition and fees: 13K (9k + 4k)

Room and board: 12K (7.5k + 4.5k)

Total: 25K

actual numbers, to the nearest thousand, for Rowan University for 2015

<https://www.rowan.edu/home/undergraduate-admissions/tuition>

Average HS graduate starting salary: 30K

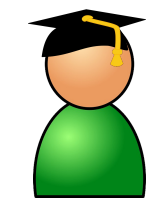
– Translates to ~25K after tax, assuming single individual in NJ

Assuming no employment during college, and same living expenses in/out, what is the net cost of 4 years of college?

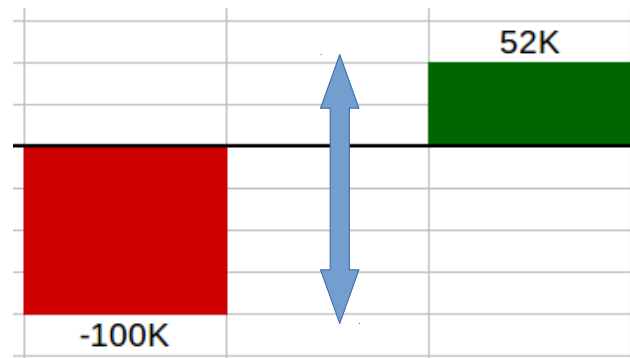
# Cost of college, result

- Earn nothing
- Spend 13K per year on tuition and fees
- Spend 12K on living expenses
- After 4 years, you are down  $4 \times 25 = 100K$

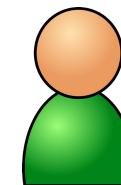
- Earn 25K per year after tax
- Spend 12K on living expenses
- Save 13K per year
- After 4 years, you are up  $4 \times 13 = 52K$



College



Difference:  
**152K**



No college

Opportunity cost

# Quiz 1

Say you spend 152K, and the going interest rate is 5% per year. How much in annual interest are you giving up by this decision, in addition to the principal spending of the 152K?

# Quiz 1 result

Spend own money:

Give up future returns

Borrow other people's money:

Acquire obligation to pay future returns to others

At 5%, you are losing

$152K * 0.05 = 7600$  per year.

**Summary for Semester Selected**

**Fall 2014**

**Prior Semester Balance** \$0.00

D/C	Description	Charges	Credits
AFUF	University Fees (ugm flat)	\$1,770.00	
B50M	50 Meal Plan	\$390.00	
BBBU	Meal Plan Boro Bucks	\$100.00	
BFLX	Meal Plan Dining Dollars	\$75.00	2226+115+348 = 2,689
BULM	All Access Meal Plan	\$0.00	
CINS	Student Health Insurance	\$0.00	2,689*8 = 21,512
HWCF	Whitney Center	\$4,911.00	
RFAB	Student Refund(F/A)	\$1,680.00	52,000 + 21,512 = 71,512
TFA1	Tuition-Fall In-State-UG	\$4,886.00	
FPEL	Federal Pell Grant		\$2,865.00
FSDL	Fed.Direct Subsidized Ln.		\$2,226.00
FSEO	Federal Seog		\$175.00
FTG1	Tuition Aid Grant		\$3,903.00
PCSH	Payment-Cash		\$348.00
PVSA	Payment-VISA		\$115.00
SATD	Achieving The Dream Schol.		\$750.00
SRSP	Rowan Scholars Program		\$3,430.00
<b>Total Semester Charges:</b>		<b>\$13,812.00</b>	
<b>Total Semester Credits:</b>			<b>\$13,812.00</b>
<b>Current Amount Due:</b>			<b>\$0.00</b>

# Benefits of college

## Average starting salary:

HS grad: ~30K (~25K after tax)

College grad: ~45K (~35K after tax)

Net gain:

$35K - 25K = 10K$

Payoff time:

$152/10 = 15$  yrs

## Unemployment:

HS grad: 12.2%

College or more: 3.8%

$152K * 0.05 = 7600$

~5K after tax

Net gain:

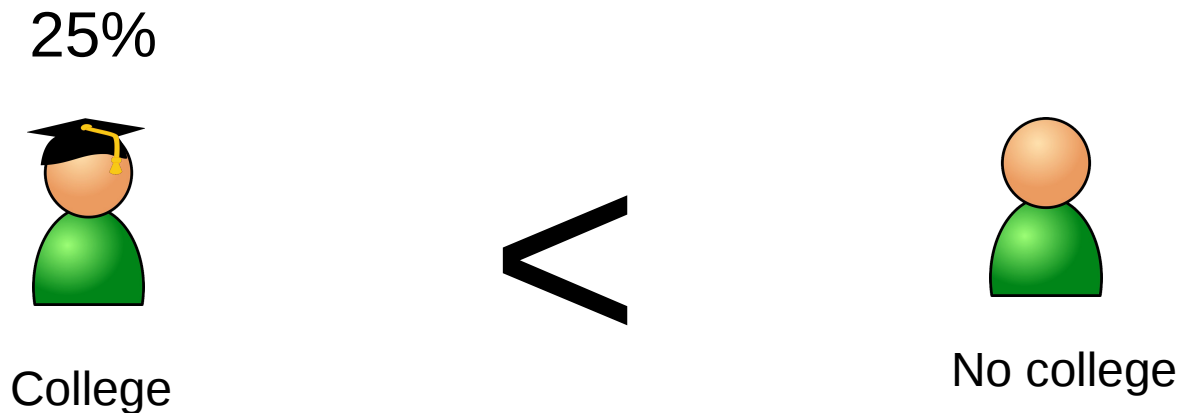
$10K - 5K = 5K$

Source:

<http://www.pewsocialtrends.org/2014/02/11/the-rising-cost-of-not-going-to-college/>



# Averages are misleading



## Data sources

Payscale College Salary Report:

<http://www.payscale.com/college-salary-report/majors-that-pay-you-back/bachelors>

Bureau of Labor Statistics Current Population Survey:

<http://www.bls.gov/cps/earnings.htm>

# Takeaways

Complex picture, many variables

Paying full price for a lower-earning major,  
probably a bad idea

Paying full price for a higher-earning major,  
probably fine

# Choosing your path

~~Follow your passion~~

~~Listen to your gut~~

~~Find your calling~~

Talk to or read about people doing things

Try things

# Additional reading

<https://80000hours.org/career-guide/>

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