

Behavioral Economics

Part 1

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Rational
理性

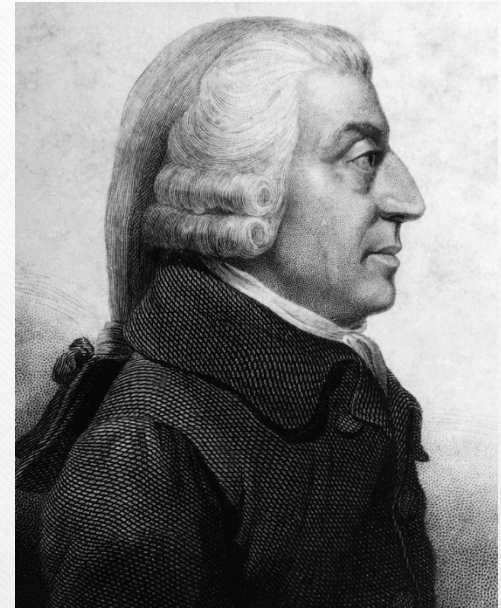
Self 自利
Interested

Homo
Economicus

“It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest.”

Adam Smith

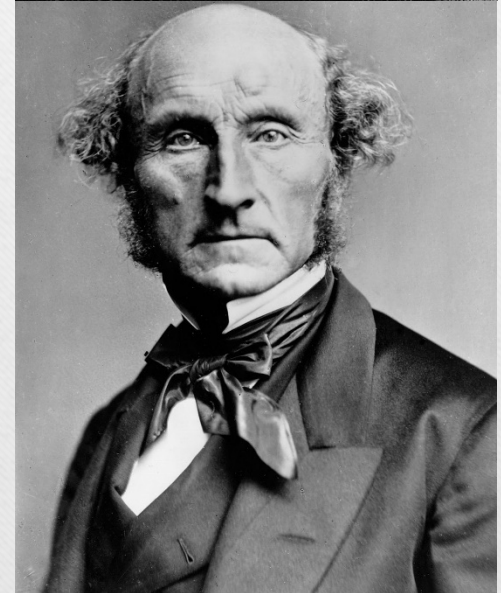
Wealth of Nations



“Political Economy considers mankind as occupied solely in acquiring and consuming wealth.”

John Stuart Mill

Essays on Some Unsettled Questions of Political Economy



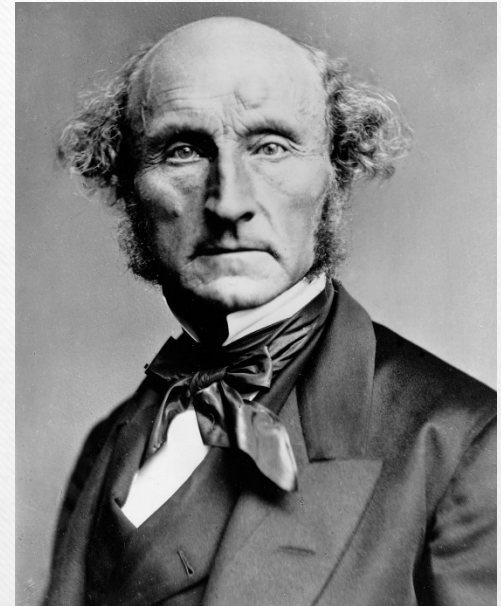
What is Behavioral Economics?

- Behavioral Economics relaxes the assumption of rationality in hope of explaining phenomena that appear to contradict standard economic theory
- Behavioral Economics research are often inspired by findings in psychology, which is why the field is called *Psychology and Economics* in some schools

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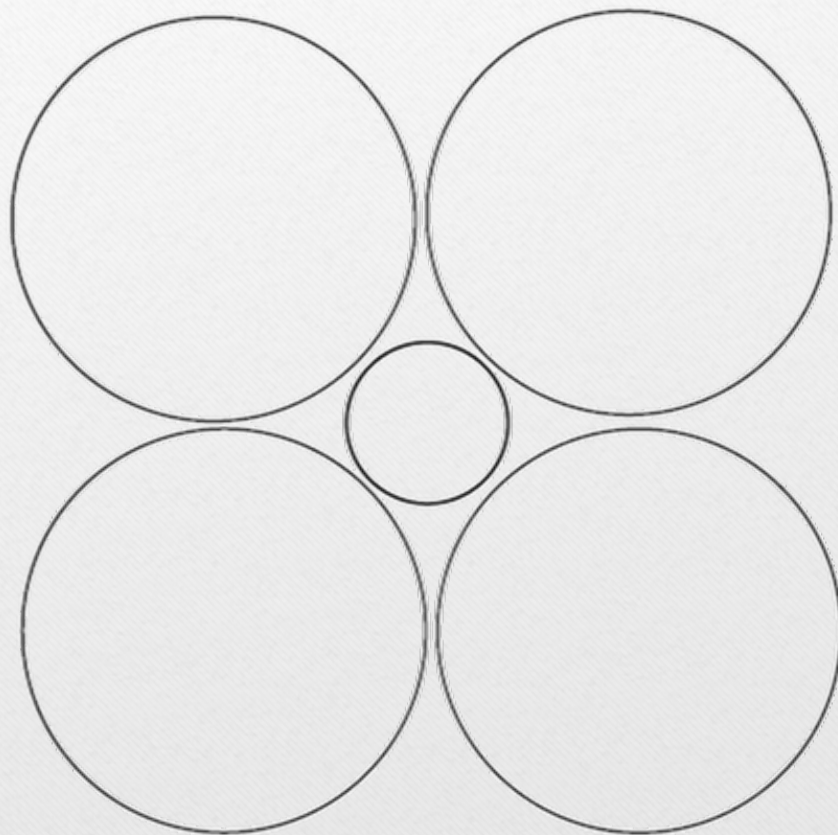
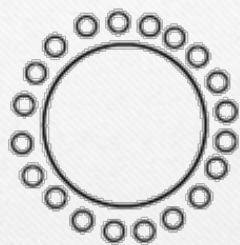


The more wealth you have, the happier?

How Happy Are You if...

- You get a total pay raise of 8% this year?
- ...when everyone else is getting 10%?

Which Circle is Bigger?



Gains and Losses

- Human perceptions are **comparative**: e.g. easy to tell which of two buckets of water is warmer but hard to tell their absolute temperature
- Similarly, gains and losses in wealth are more pronounced than the absolute change

Experiment: Chocolates and Pens

- I will either give you a bag of chocolates or a pen
- You can choose to keep what you get, or you can switch for the other item?

Experiment: Candies and Mugs

- An experimenter randomly assign subjects to three groups.
- To Group 1 he gave a candy bar, to Group 2 he gave a mug, while to Group 3 he gave nothing

Group 1



Group 2



Group 3

Experiment: Candies and Mugs

- He then tells the first two groups that they can exchange what they were given for the other good. To Group 3 he allows them to pick whatever they wanted out of the two.

Group 1



Group 2



Group 3



Experiment: Candies and Mugs

- If we expect people to like mugs more than candies, there should be a lot exchange from the group that was given candies and very few from the group that was given mugs. Vice versa if people prefer candies.
- Actual:

Group	Want 	Want 
1: Given 	11%	89%
2: Given 	90%	10%
3: Given Nothing	56%	44%

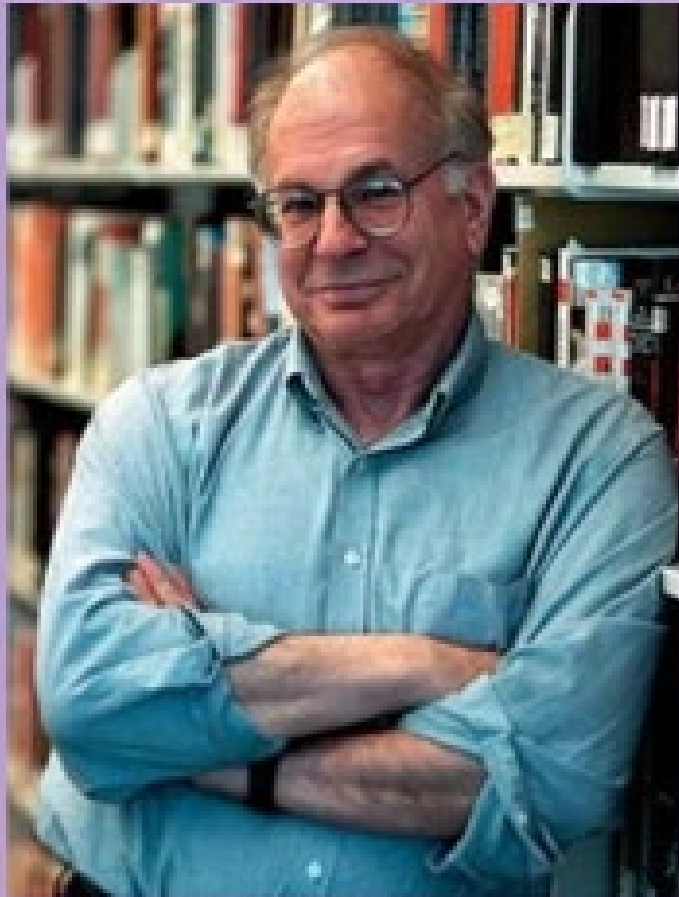
Experiment: Candies and Mugs

- This observed pattern is called **endowment effect**.
- Interpretation: If they get the candy,
 - subjects who got a mug felt losing the mug as a loss
 - subjects who were given nothing to start with only see that as a forgo gain



Reference Dependence

- One of the most important contribution of behavioral economics is demonstrating that decisions are often **reference dependent**:
 - A sense of gain when one overachieves
 - A sense of loss when not reaching one's target
- Studies have shown that the sense of loss is about *twice* as salient as the sense of gain. This is called **loss aversion**
- Because of this sense of loss, people have strong incentive to avoid missing a target
- Loss aversion is one of the three components of **Prospect Theory (展望理論)**



**Daniel
Kahneman**

THINKING,
FAST AND SLOW

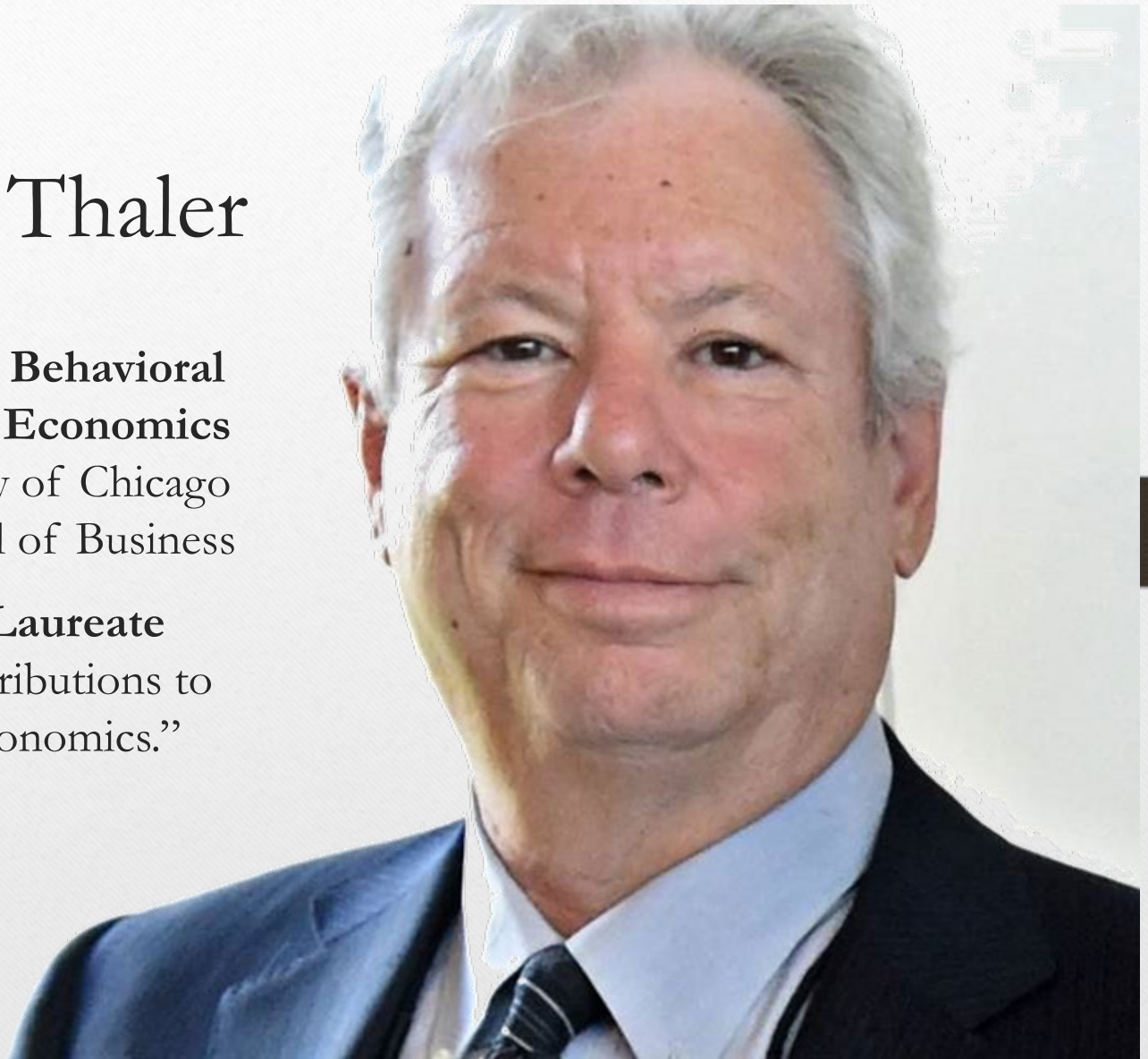


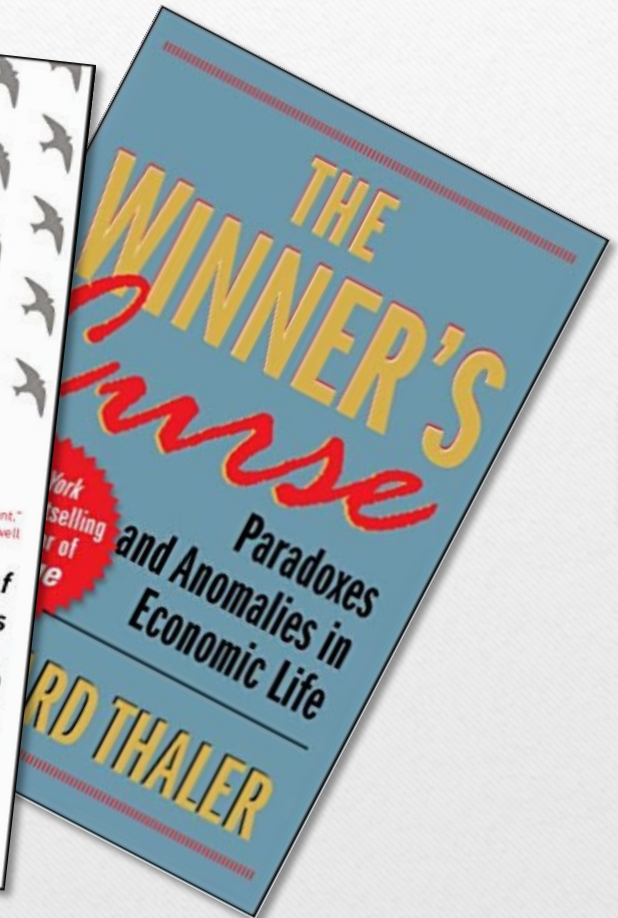
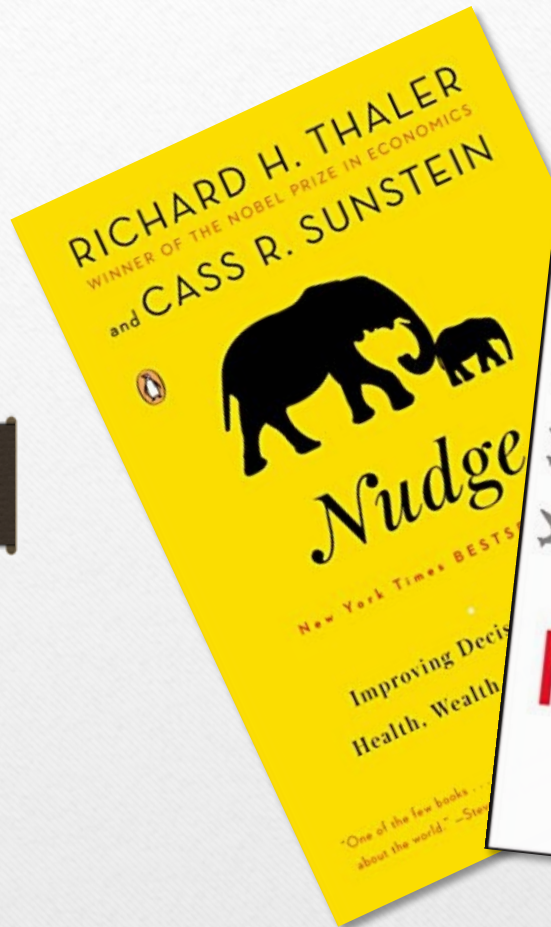
DANIEL
KAHNEMAN

WINNER OF THE NOBEL PRIZE IN ECONOMICS

Richard Thaler

- **Professor of Behavioral Science and Economics**
the University of Chicago
Booth School of Business
- **2017 Nobel Laureate**
“For his contributions to
behavioral economics.”





Case 1

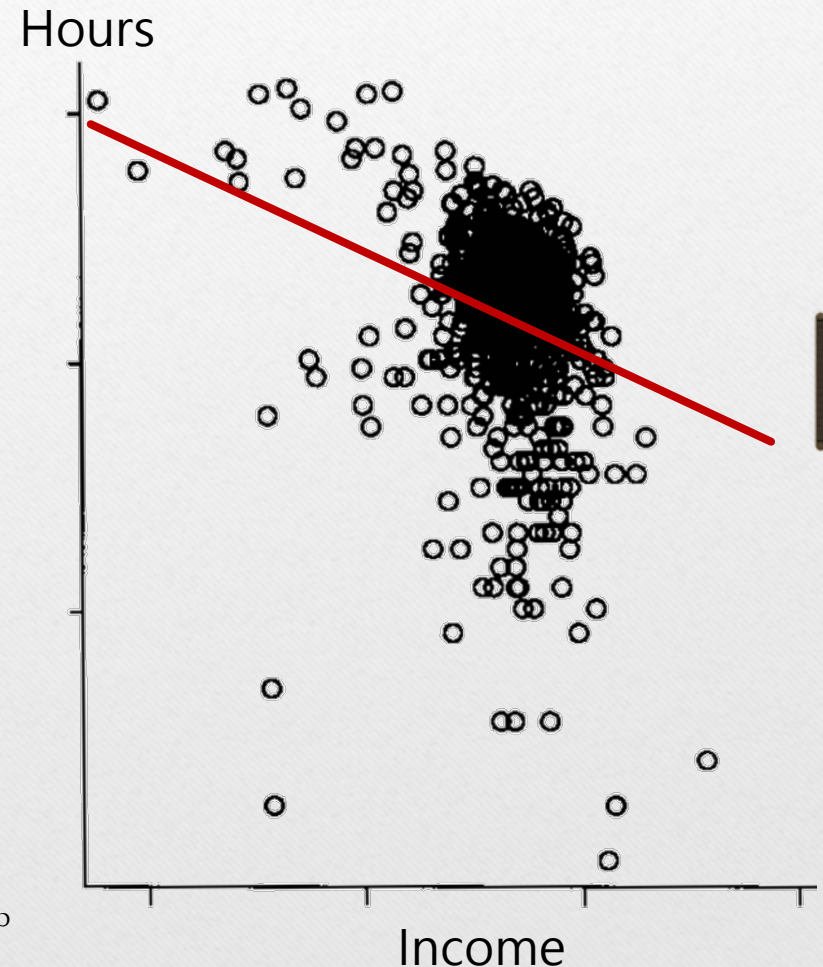
Let's Call it a Day

Taxi Drivers in Theory

- Should you work longer on days when income is higher?
- Good Day: $\$150 \times 8hr - \$450 \text{ rent} = \$750$
- Bad Day: $\$80 \times 8hr - \$450 \text{ rent} = \$190$

Taxi Drivers in Reality

- Thaler co-authored a study on Taxi drivers in New York City
- Data comes from the records of several taxi fleets
- High income was correlated with low hours of work



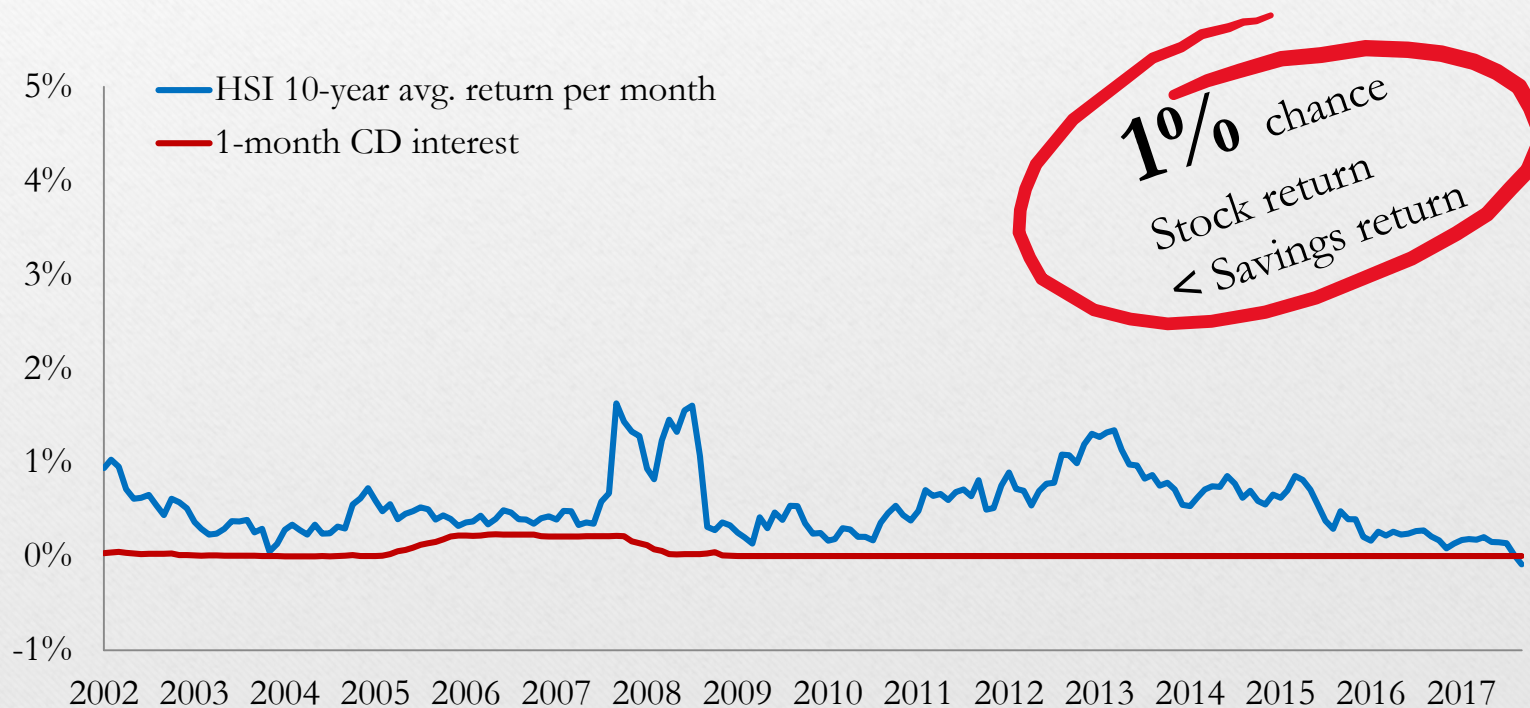
Colin F. Camerer et al. 1997. "Labor Supply of New York City Cab Drivers: One Day at a Time." *Quarterly Journal of Economics*.

Case 2

Don't You Invest?

How Risky is the Stock Market?

- Long run stock return is essentially always higher than long-run savings return



Why Pass up a Sure Win?

- Equity offers very high return with relatively little risk in the long run, yet a considerable population of people never invest
- In financial economics, this is called the **Equity Premium Puzzle**

的士司機每更要做幾多單生意先「圍到皮」？

一更11小時之內

目標生意額：\$1000



或



或



或



相等於
市區的士
約32公里路程
(不包括附加費)

相等於
市區的士
約12公里路程
(不包括附加費)

相等於
市區的士
約9公里路程
(不包括附加費)

相等於
市區的士
約4公里路程
(不包括附加費)

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No One Wants to be on the Losing Side

- Losing money is painful. For this reason, many people choose to:
 - Not investing in the stock market
 - Holding onto losing stocks
- Did we not just say that the stock market is pretty safe?
 - Only *long-term* investment is safe

Is the Stock Market Risky?

- 5-year average return per month



Is the Stock Market Risky?

- Monthly return

41% chance
Stock return
< Savings return

