

Introduction

- Course outline
- What is behavioral economics?
- The contributions of Richard Thaler (2017 prize in economic sciences)

Course Outline

- Lectures
- Term paper/Experimental design paper and seminars
- Written exam

Term Paper/Experimental Design Paper

- A proposed design of an experiment

- A paper of about 20 double-spaced pages written as a complete academic paper, but without a results section (possible structure: introduction, previous research, design of experiment, hypotheses and statistical tests, discussion, references). **Maximum number of words 7,000 (including everything; e.g. figure and table headings, references and appendix).** The word count should be stated on the front page.

- Written in groups of about 4 students.

- Step I: 1 page proposal for the paper (with the writing group). Deadline Friday February 9 at 15.00 (e-mail to magnus.johannesson@hhs.se).

- Step II: Deadline for submission of term paper: Friday March 1 at 15.00. The term paper should be e-mailed to all course participants (and to magnus.johannesson@hhs.se).

- Step III: Term paper seminars (March 5, 6, and 7; the schedule will be e-mailed on Friday March 1). Each author group will be the discussants of one paper. The discussants are responsible for presenting and discussing the paper (structure: presentation of the paper, questions to the authors, and general discussion). 45 minutes is allocated to each paper.

Examination

- Term paper 40% (the term paper will be graded on a percentage scale; the grade also includes the performance on the term paper seminars).
- Written exam 60%.
- Final grade: weighted average of the above converted to the pass (50-59), good (60-69), very good (70-79), and excellent (80-100) scale.

Behavioral Economics

- Relaxes the simplifying assumptions in the conventional economic man model in economics of "selfish" preferences (utility depends only on own payoff) and full rationality (including complete self-control).
- Strives to obtain a more realistic description of human behavior.
- Evidence collected mainly from experiments.
- Behavioral economics and experimental economics were initially distinct subdisciplines, but have more or less merged into one field typically referred to as behavioral economics.

The Prize in Economic Sciences 2017



Richard H. Thaler

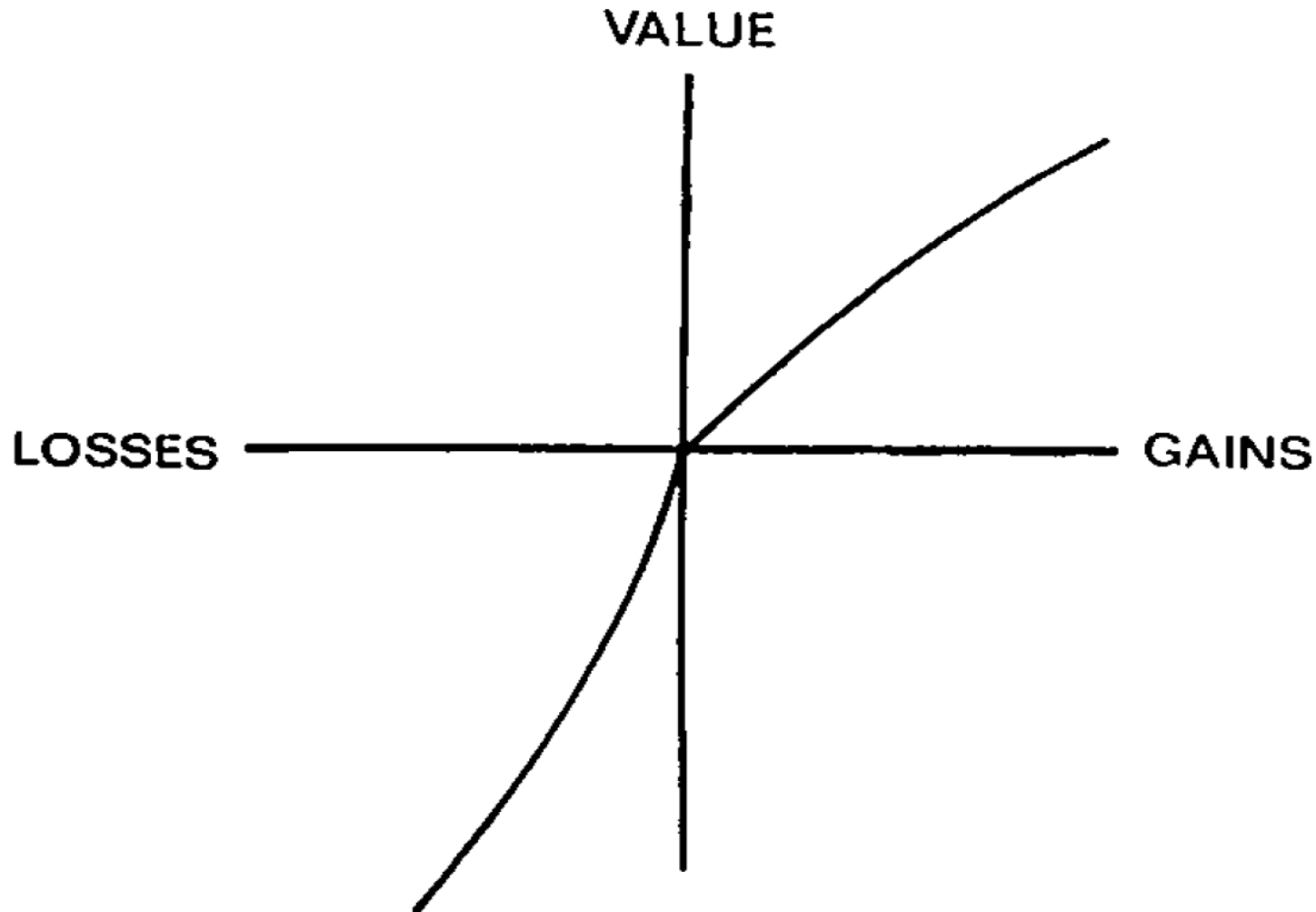
University of Chicago

” for his contributions to behavioral economics”

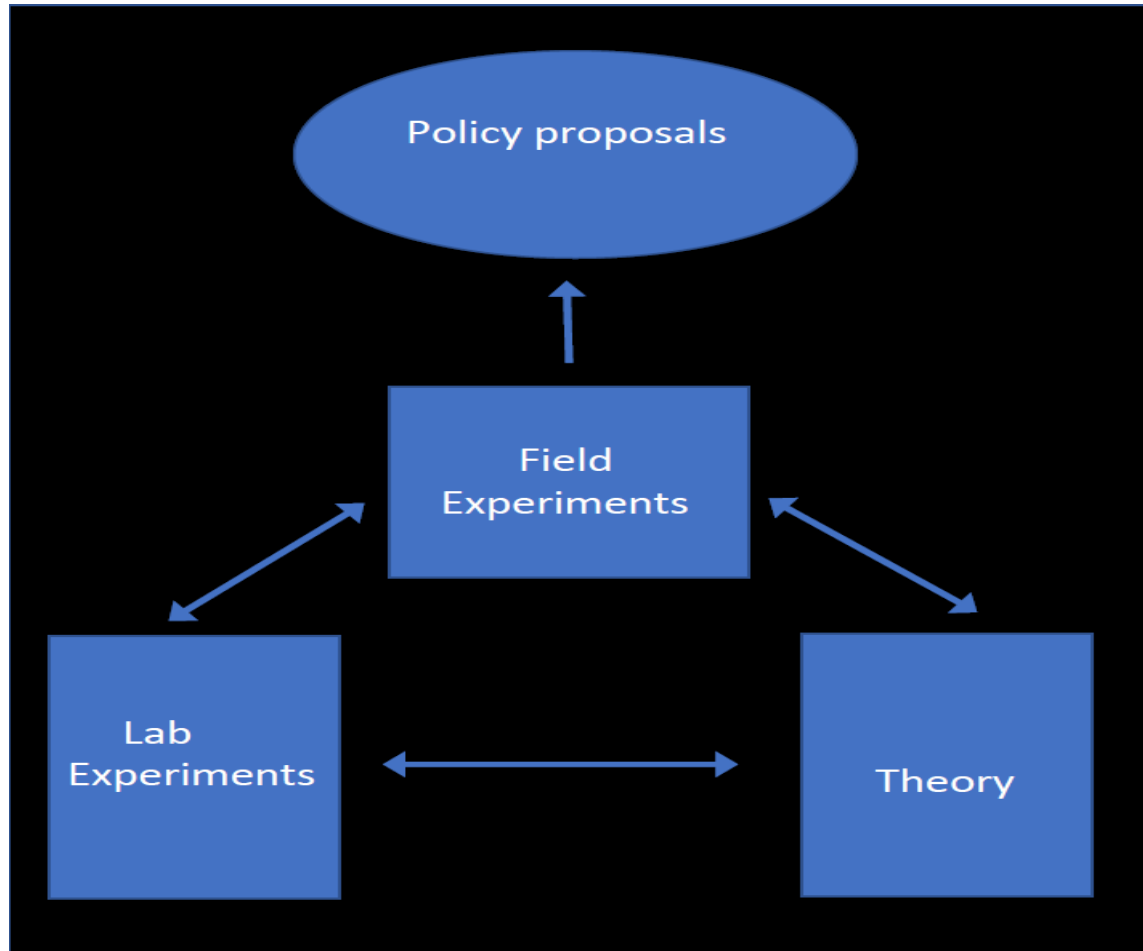
Behavioral Economics

- Bounded rationality
- Limited self-control
- Social preferences
- Related previous price
 - Daniel Kahneman and Vernon L. Smith 2002

Value function in prospect theory (Kahneman & Tversky 1979)



Towards Evidence Based Economics and Policy



Behavioral Economics: Contributions by Thaler

- Bounded rationality
 - The endowment effect
 - Mental accounting
- Limited self-control
 - Empirical evidence of time-inconsistent preferences
 - “Planner-doer” model
 - Policy
- Social preferences
 - Fairness in pricing and wage-setting
 - Fairness in individual preferences

Bounded Rationality: The Endowment Effect (Thaler 1980)

- A good is valued higher once it is part of the endowment of an individual (it becomes part of the reference point)
- *The difference between the willingness to accept to sell a good and the willingness to pay to buy the good*
- *Thaler (1980) explains the endowment effect with loss aversion*
- *Inconsistent with the Coase-theorem*
- *Behavioral economics and law (Jolls, Sunstein & Thaler 1998)*

Example: Thaler (1980)

(a) Assume you have been exposed to a disease which if contracted leads to a quick and painless death within a week. The probability you have the disease is 0.001. What is the maximum you would be willing to pay for a cure?

(b) Suppose volunteers would be needed for research on the above disease. All that would be required is that you expose yourself to a 0.001 chance of contracting the disease. What is the minimum you would require to volunteer for this program? (You would not be allowed to purchase the cure.)

Bounded Rationality: Mental Accounting (Thaler 1985, 1999)

- Narrow decisions (narrow framing)
- Expenses grouped in different mental accounts with limited fungibility between the accounts; the value function from prospect theory; the value of buying a good depends on both consumer surplus and transaction utility
- Examples:
 - Taxi drivers in New York (Camerer, Babcock, Loewenstein & Thaler 1997)
 - The disposition effect on the stock market (Shefrin & Statman 1985, Odean 1998)
 - The House-money effect (Thaler & Johnson 1990)

Limited Self-Control: Empirical Evidence (Thaler 1981)

- Studied hypothetical choices between monetary payments now or in the future (and varied the waiting time to the future period)
- Found evidence of time-inconsistent preferences (the discount rate decreased with the length of the waiting period)
- Leads to a demand for commitment strategies that limit choices for an individual (to avoid short-sighted decisions)

Limited Self-Control: Planner-Doer Model (Thaler & Shefrin 1981; Shefrin & Thaler 1988)

- A myopic (shortsighted) "doer" (maximize the utility this period) and a farsighted "planner" (maximize lifetime utility)
- The planner tries to constrain the choices of the doer by imposing different rules (of thumb) and by exerting costly willpower (self-control)
- Examples, rules of thumb: Not keep alcohol at home, buy a pack instead of a carton of cigarettes
- Dual model of behavior; now common in social science and neuroscience
- Model developed further by Fudenberg & Levine (2006, 2011, 2012)

Limited Self-Control: Policy

- Argument for compulsory retirement savings
- Argument for increased taxes of unhealthy goods over and above the Pigouvian externality
- But heterogeneity in self-control complicates optimal policy
- Thaler & Sunstein (2003, 2008) therefore propose "libertarian paternalism" och "nudging"

Policy: Libertarian Paternalism and “nudging” (Thaler & Sunstein 2003, 2008)

- The importance of the default alternative; e.g. PPM and organ donation
- SMarT retirement savings (Thaler & Benartzi 2004)
- Important for retirement savings in the US; automatic enrollment and automatic escalation (Thaler 1994; Thaler & Benartzi 2004, 2013)
- Large international interest in nudging
- Field-experiments and evidence-based policy

Social Preferences: Pricing and Wage-Setting (Thaler 1985; Kahneman, Knetsch & Thaler 1986a,b)

- The transaction utility in mental accounting depends on perceived fairness
- Investigated perceived fairness in general population samples
- Pricing: preferences for fairness can lead companies to not fully utilize their market power in pricing decisions (e.g. big sporting events and pricing during natural disasters)
- Wage-setting: preferences for fairness can make companies unwilling to lower nominal wages and lead to downward nominal wage rigidity

Example: Kahneman, Knetsch & Thaler (1986b)

“A hardware store has been selling snow shovels for \$15. The morning after a large snowstorm, the store raises the price to \$20. Please rate this action as: Completely Fair, Acceptable, Unfair, Very Unfair.”

(82% of the respondents considered it unfair or very unfair to raise the price).

Social Preferences: Individual Interactions (Kahneman, Knetsch & Thaler 1986a)

- Invented the dictator game; also studied third-party punishment and the ultimatum game
 - Some individuals act fairly towards others even in anonymous interactions
 - Some individuals are willing to forego resources to punish individuals who treat them unfairly
 - Some individuals are willing to punish unfair behavior even if the unfair behavior is not directed towards them (third-party punishment)
- The foundation of models of social preferences (Rabin 1993; Fehr & Schmidt 1999; Bolton & Ockenfels 2000; Charness & Rabin 2002)

Behavioral Finance

- Find evidence of that the stock market overreact to positive and negative new information (De Bondt & Thaler 1985, 1987)
- Explain the closed-end fund puzzle with an increased risk-premia due to a fraction of investors being irrational (noise traders); more likely to hold closed-end funds than the underlying assets (Lee, Shleifer & Thaler 1991)
- Explains the equity premium puzzle with mental accounting; "myopic loss aversion" (Benartzi & Thaler 1995)
- Reject "the law of one price" in equity carve outs (Lamont & Thaler 2003)

Summary of the Contributions of Thaler

- Important early contributions that have shaped behavioral economics
- Central contributions in all three major fields of behavioral economics
- Big influence on policy

Additional Readings

- Thaler RH, Sunstein CR. 2008. Nudge: Improving Decisions About Health, Wealth, and Happiness. Yale University Press.
- Thaler RH. Misbehaving. W.W. Norton & Company.
- Anomalies series: Journal of Economic Perspectives.