
Emotions and Decisions

Lehren und Forschen an den Grenzen des Wissens

Lecturers

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Chair in Macroeconomics

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Target Audience

The seminar addresses students of Mathematics, but also Bachelor and Master (Diplom) students of Economics and Business Administration with a strong interest in mathematical methods. Students are expected to have a solid analytical knowledge, scientific curiosity and the willingness to work independently.

Objectives and Contents

The seminar primarily deals with the effect of emotions on individual decisions. What determines our behavior? Do we really behave just out of pure self-interest as some economic models suggest or do emotions like hate, fear, love, envy and happiness influence our behavior? Why do we delay unpleasant things that need to be done for tomorrow and want to do pleasant things immediately? Are poor people more unhappy than rich people? How can we explain addictive behavior? Answers to all these questions will be provided by the seminar. The seminar focuses on familiarizing students with recent developments of research in this field and delivering the necessary skills to conduct independent research work. Students are expected to write a term paper and to hold a presentation.

Contact

If you have further questions regarding the content and the organization of the seminar, please contact Michael Graber (Graber@uni-mainz.de).

Topics

Themenvergabe über den Lehrstuhl

1 Survey of surveys

1.1 Psychology and Economics

In economic models it is often supposed that individuals have stable preferences and that they maximize their total utility rationally. Taken to extremes, this could mean that one would behave in the same way regardless of being a child or already grown up. Furthermore, factors like fairness, fear and envy have no influence on our behavior in standard economic models, although it is obvious that these factors play a crucial role for human behavior. The world we live in is uncertain and we steadily try to behave optimally while facing uncertainty in terms of income, prices etc. In standard economic models agents are supposed to know the probabilities of events that can occur in the future. So it is natural to ask if we are really able to estimate probabilities of future events to occur correctly? Another interesting questions that comes up when thinking about human behavior is the following: Do different formulations of one and the same problem lead decision makers to make different decisions? Rabin (1998, 2002); Camerer and Loewenstein (2004) are starting points and allow classifying this and other phenomena in an economic context.

- Topic 1: The student is expected to present the main ideas of “Psychology and Economics” as presented in the paper by Rabin (1998).
- Topic 2: The student is expected to present the main ideas of “Psychology and Economics” as presented in the paper by Rabin (2002).
- Topic 3: The student is expected to present the main ideas of “Psychology and Economics” as presented in the paper by Camerer and Loewenstein (2004).

1.2 Emotions and Economics

- Topic 4: Emotions and Economic Theory

The fact that emotions like love, envy, fear, happiness, guilt and revenge influence our behavior is obviously unquestionable. Elster (1998) is the starting point for the literature related to the interdependence of emotions and economic theory. The student is expected to present this paper and to find more recent papers of the same topic.

- Topic 5: Emotions

Psychological studies show that even minor mood manipulations affect human behavior. For example individuals tip more at restaurants on sunny days. Moreover laboratory experiments show that emotions affect decisions in the short run. The student is expected to present Section 4.5 of DellaVigna (2009) as well as the literature mentioned therein.

- Topic 6: Emotions and Decisions

According to Loewenstein and Lerner (2003) the way emotions affect decisions is twofold. On the one hand decisions are influenced by expectations about emotions that arise after a decision is made. On the other hand emotions at the moment when a decision is made have an effect. The student is expected to present this paper .

- Topic 7: Happiness

Everybody wants to live a happy life and happiness research allows us to understand the formation of subjective well-being. Frey and Stutzer (2002) show which results from happiness research are worth to be integrated into economics. Are rich individuals happier than poor individuals? Does an increasing income lead to more happiness? What are the effects of unemployment and inflation as well as institutions on happiness? Frey and Stutzer (2002) provide answers to these questions and the student is expected to present them.

1.3 Time Discounting and Time Preference

In most dynamic economic models future utilities are discounted exponentially. However, exponential discounting exhibits some features which are not consistent with human behavior. For example humans discount gains more than losses, although exponential discounting implies equal discounting. This is related to something we all know well: Why do we delay unpleasant things that need to be done for tomorrow and want to do pleasant things immediately? In response to these and other shortcomings of exponential discounting several alternative models were developed.

- Topic 8: The student is expected to present the classical approach of time discounting as presented in Frederick, Loewenstein, and O'Donoghue (2002), Sections 2-4.
- Topic 9: The student is expected to present alternative models of time discounting and time preference as presented in Frederick, Loewenstein, and O'Donoghue (2002), Section 5.

1.4 Neuroeconomics

So far the literature mentioned above tries to describe human behavior using results from psychology and economics. From another point of view, one could also state that human behavior is nothing else than just the result of brain activity -signals going back and forth. Neuroscience uses images of brain activity and other techniques in order to describe brain activity. These results are of interest for economist and a new strand in the literature has emerged out of the collaboration of economists and neuroscientists which is called "Neuroeconomics".

- Topic 10: Camerer, Loewenstein, and Prelec (2005) survey this literature and the student is expected to shortly summarize the main implications for economics mentioned therein. Brocas and Carrillo (2008) develop theoretical models of neuroeconomics and the student is expected to present them.

2 Applications

2.1 Visceral Influences on Behavior

Visceral factors like hunger, thirst, moods and emotions often cause humans to behave differently as they would behave out of pure self-interest.

- Topic 11: Loewenstein (1996, 2000) provide useful insights by incorporating visceral factors into intertemporal utility functions and presenting several propositions how visceral factors influence human behavior. The student is expected to present these two papers.

2.2 Addiction

Addiction can also be understood as a state which causes an individual to lose self-control and to continue to behave in a way that may even damage his health. The most striking

example in this sense is a heroin addict. At first glance addiction does not seem to be consistent with the usual concept of what we understand as rational behavior. However, as Becker and Murphy (1988) show, addictive behavior can also be rational. Laibson (2001) proposes a model of addiction incorporating the role of cue-conditioned desire. The basic idea there is that the occurrence of particular, environmental cues associated with drug use increase the desire to consume the drug. For example a smoker experiences an increased desire to smoke if he sees somebody smoking or a pack of cigarettes.

- Topic 12: A classical model of addiction: The student is expected to present the model of Becker and Murphy (1988).
- Topic 13: An alternative model of addiction: The student is expected to present the model of Laibson (2001).

2.3 Projection Bias

It is a matter of fact, that preferences change over time. Just think about your preferences as you was a child and your current preferences. Hence when we make plans for the future and need to make a decision today, we need to predict our preferences at this particular future point in time. Evidence shows that people are aware of the qualitative change in preferences but they underestimate this change. .

- Topic 14: Loewenstein, O'Donoghue, and Rabin (2003) develop a theoretical model of this so called "projection bias" and the student is expected to present it.

2.4 Politics and Hate

So far, we have learned how emotions affect human behavior. Politicians are aware of this and can use emotions in order to discredit opponents. Glaeser (2005) developed a theoretical model related to this. The basic idea is that politicians can spread hate-creating stories about another group (e.g. minorities, other nations,...) to further their objectives. Voters hear those stories and can decide whether to believe in them or to put effort into learning the truth about the other group. The author concludes that "hatred is particularly likely to spread against groups that are politically relevant and socially isolated. Thus, anti-Americanism in the Middle East is more inevitable than surprising."

- Topic 15: The student is expected to present the theoretical model of Glaeser (2005)

Some (not all!) of the papers mentioned above require a solid analytical background and the willingness to learn new methods. Books about behavioral economics include Camerer, Loewenstein, and Rabin (2003); Diamond and Vartiainen (2007); Wilkinson (2007) among others.

References

- BECKER, G. S., AND K. M. MURPHY (1988): "A Theory of Rational Addiction," *Journal of Political Economy*, 96(4), 675 –700.
- BROCAS, I., AND J. D. CARRILLO (2008): "Theories of the Mind," *American Economic Review*, 98(2), 175 – 180.
- CAMERER, C., G. LOEWENSTEIN, AND D. PRELEC (2005): "Neuroeconomics: How Neuroscience Can Inform Economics," *Journal of Economic Literature*, 43(1), 9 – 64.
- CAMERER, C. F., AND G. LOEWENSTEIN (2004): "Behavioral Economics: Past, Present, Future," in *Advances in Behavioral Economics*, Princeton: Princeton University Press.
- CAMERER, C. F., G. LOEWENSTEIN, AND M. RABIN (2003): *Advances in Behavioral Economics*. Princeton University Press.
- DELLAVIGNA, S. (2009): "Psychology and Economics: Evidence from the Field," *Journal of Economic Literature*, 47(2), 315 – 372.
- DIAMOND, P., AND H. VARTIAINEN (2007): *Behavioral Economics and Its Applications*. Princeton University Press.
- ELSTER, J. (1998): "Emotions and Economic Theory," *Journal of Economic Literature*, 36(1), 47 – 74.
- FREDERICK, S., G. LOEWENSTEIN, AND T. O'DONOGHUE (2002): "Time Discounting and Time Preference: A Critical Review," *Journal of Economic Literature*, 40(2), 351 – 401.
- FREY, B. S., AND A. STUTZER (2002): "What Can Economists Learn from Happiness Research?," *Journal of Economic Literature*, 40(2), 402 – 435.
- GLAESER, E. L. (2005): "The Political Economy of Hatred," *Quarterly Journal of Economics*, 120(1), 45–86.

LAIBSON, D. (2001): "A Cue-Theory of Consumption," *Quarterly Journal of Economics*, 116(1), 81 – 119.

LOEWENSTEIN, G. (1996): "Out of control: Visceral Influences on Behavior," *Organizational Behavior and Human Decision Processes*, 65(3), 272–292.

——— (2000): "Emotions in Economic Theory and Economic Behavior," *American Economic Review*, 90(2), 426 – 432.

LOEWENSTEIN, G., AND J. LERNER (2003): *The Role of Affect in Decision Making*pp. 619–642. Oxford: Oxford University Press.

LOEWENSTEIN, G., T. O'DONOGHUE, AND M. RABIN (2003): "Projection Bias in Predicting Future Utility," *Quarterly Journal of Economics*, 118(4), 1209 – 1248.

RABIN, M. (1998): "Psychology and Economics," *Journal of Economic Literature*, 36(1), 11 – 46.

——— (2002): "A Perspective on Psychology and Economics," *European Economic Review*, 46(4-5), 657 – 685.

WAEDELDE, K. (2008): *Applied Intertemporal Optimization*. available at www.waelde.com/aio.

WILKINSON, N. (2007): *An Introduction to Behavioral Economics*. Palgrave Macmillan.