

Behavioural and experimental economics

ICEF BSc programme, elective course 4th year

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16 сентября 2012 г.

Аннотация

The course introduces students interested in multidisciplinary studies of human behaviour through combination of formal theoretical and empirical, especially experimental methods. This approach has emerged in recent years, and gave rise to one of the most actively growing areas of economics research, in connection with other social disciplines, especially psychology. This course covers major concepts and issues in economic and psychological approaches to individual and collective decision-making, ways and methods to test theoretical hypotheses using natural, experimental and observational data, and suggest explanations to some empirical phenomena and challenges that appear to be unsurmountable to standard neoclassical modelling. The course has substantial interactive component: (almost) every topic includes practical assignments to be completed during or after the class, and students are asked to design and complete an empirical research project on a relevant topic of their choice.

1 Course philosophy and methods

Course goals are:

1. Familiarize students with contemporary experimental and empirical studies of human behaviour which emerged in the border of economics and psychology over the last 50 years;
2. Develop critical thinking and working skills with contemporary research literature.
3. Enhance their creativity and capability to conduct indepenent research in the field of behavioural and social sciences, data analysis and interpretation.

The course will largely be interactive, and draws heavily on experimental results, including those obtained in the class and due to course participants. It is thus imperative that students attend the classes and comply to the experimental rules as necessary. Besides regular lectures and seminars, students will be requested to design and complete an original group research project aimed at a study of a particular phenomenon pertinent to individual or social behaviour in broadly defined social context. Specific in group every week. Lecture and classroom discussion will be integral parts of the course, so active participation in the class flow is mandatory for its successful completion. Student groups will be

given time for individual consultancy with the course instructors concerning their project, and will have to report its results to the class at the end of the course.

There will be a special blog for the course, in which all course readings will be posted. Further, students will be asked to leave at least one comment for every theme in this blog.

2 Grading

The course will be graded as follows:

20% Home assignments and feedback;

20% Research project

10% Results of experiments

50% Final examination

3 Contents

12/09 Rationality of human behaviour.

Class: Introduction to projects

Main Readings:

1. Conlisk J. Why bounded rationality. JEL, 1996
2. Simon H.A. Rationality as process and as product of thought. AER, 1978
3. Arrow K.J. Economic theory and the hypothesis of rationality. In: J.Eatwell, M.Milgate, P.Newman, eds. The New Palgrave dictionary of economics (new edition), 1987.
4. Sen A. Rational Behavior. In: L.Blume and S.Durlauf, eds. The New Palgrave dictionary of economics (new edition), 2008.

Further readings: for further insights on rationality and related issues from cross-disciplinary perspective, you may find useful the following collected papers and books, which cover more than the present topic:

5. Sen A.K. and Williams B., eds. Utilitarianism and beyond. CUP, 1982
6. Arrow K.J., E.Colombatto, M.Perlman, C.Schmidt (eds.) The Rational Foundations of Economic Behaviour. Proceedings of the IEA Conference, Macmillan, 1996
7. Hargreves-Heap S., Hollis M., Lyons B., Sugden R., Weale A. The Theory of Choice. Blackwell, 1992.
8. Rubinstein A. (1998) Modelling bounded rationality. Cambridge (MA): MIT Press.

9. THESIS almanach, 1993, v.2, no.5, available at
<http://igiti.hse.ru/Editions/THESIS>

19/09 Heuristics and biases

Class: HA1: Rationality. Introduction to data analysis using R.

Main Readings:

1. Gerd Gigerenzer, Ralph Hertwig, Ulrich Hoffrage, Peter Sedlmeier. Cognitive Illusions Reconsidered. Chapter 109, vol.1, in: C.R.Plott and V.L.Smith, eds. Handbook of Experimental Economics Results, Elsevier, 2008.
2. Канеман Д., Тверски А. Рациональный выбор, ценности и фреймы // Психологический журнал. – 2003. – Т. 24. - № 4. - С. 31-42.
3. Tversky A., Kahneman D. The framing of decisions and the psychology of choice. Science, 1981, № 211, P.453-458.

Further readings include the following volumes of collected papers:

4. Kahneman D., Slovic P., Tversky A. Judgment under uncertainty: heuristics and biases. CUP, 1982 (рус.пер.: Канеман Д., Словик П., Тверски А. Принятие решений в неопределенности: Правила и предубеждения. Харьков: Гуманитарный центр, 2005.)
5. Kahneman D. and Tversky A., eds. Choices, Values, and Frames. CUP, 2000.
6. Gilovich T., Griffin D., Kahneman D. Heuristics and Biases: The Psychology of Intuitive Judgment. CUP, 2002.
7. Gigerenzer G. and Selten R., eds. Bounded rationality: an adaptive toolbox. MIT Press, 2000.

and the following articles referring to some of the specific heuristics:

8. Tversky, A. and Kahneman, D. (1986). Rational choice and the framing of decisions. Journal of Business. v. 59, S251-S278.
9. Tversky, A. and Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. Cognitive Psychology. 5(2). 207-232.
10. Fischhoff B. and Beyth R. (1975) 'I knew it would happen' - remembered probabilities of once-future things. Organizational Behaviour and Human Decision Processes, v.13, p.1-16.
11. Grether D.M. and Plott C.R. (1979) Economic theory of choice and the preference reversal phenomenon. American Economic Review, v.69, no.5, p.623-638.
12. Arkes H. and Blumer C., (1985). "The Psychology of Sunk Cost". Organizational Behavior and Human Decision Process 35: 124-140.
13. Read D. and Loewenstein G. 1995. "Diversification Bias: Explaining the Discrepancy in Variety Seeking between Combined and Separated Choices." Journal of Experimental Psychology: Applied 1:34-49

14. Langer E.J. (1975). The illusion of control. *Journal of Personality and Social Psychology*, 32(2), 311-328.
15. Moore, D.A. and Healy P. J. (2008). The trouble with overconfidence. *Psychological Review*, 115(2), 502-517.
16. Aukutsionek S.P. and Belianin A.V. (2001) Calibration of business forecasts: a survey study of the Russian managers. *Journal of Economic Psychology*, 2001.

26/09 Rational behaviour and utility theory under certainty, risk and uncertainty. EUT, SEU, and beyond.

Class: Data analysis: R and Stata

Main Readings:

1. Starmer C. Developments in Non-Expected Utility Theory: The Hunt for a Descriptive Theory of Choice under Risk. *JEL*, 2000.
2. Kahneman D. and Tversky A. (1979) Prospect theory: an analysis of decision under risk. *Econometrica*, v.47, 1979, p.263-291.
3. Tversky A. and Kahneman D. Advances in prospect theory: cumulative representation of uncertainty. *Journal of Risk and Uncertainty*, 1992, v.5, no.4, p.297-323.
4. Loomes G. and Sugden R. Regret theory: an alternative theory of rational choice under uncertainty. *Economic Journal*, 1982, v.92, p.805-824.

Further readings include textbook expositions, such as:

5. Kreps D. Notes on the theory of choice. Boulder, 1990 (technical, but intuitive)
6. MasColell A., Whinston M, Green J. *Microeconomic theory*, OUP, 1995, ch.6. (formal).
7. Fishburn P. *Utility theory for decision making*. Wiley, 1970 (рус.: Фишберн П. Теория полезности для принятия решений М.: Наука, 1976 — advanced).

Collected papers, both technical and ‘philosophical’:

8. Munier B. and Machina M., eds. *Models and Experiments in risk and rationality*. Boston, Kluwer, 1994
9. Quiggin J. *Generalized expected utility theory: the rank-dependent model*. Boston, Kluwer, 1993.
10. Gärdenfors P. and Sarin N.-E. *Decision, probability and utility*. CUP, 1988.

and research articles, e.g.:

11. Camerer C. (1989) An experimental test of several generalized utility theories. *Journal of Risk and Uncertainty*, v.2, p.61-104.

12. Hey J.D. and Orme C. Investigating generalizations of expected utility theory using experimental data. *Econometrica*, 1994, v.62, p.1291-1326.
13. Prelec D. (1998). The probability weighting function. *Econometrica*, v.66, p.497-527.
14. Rubinstein A. (1988) Similarity and decision-making under risk (Is there a utility theory resolution to the Allais paradox?). *Journal of Economic Theory*, v.46, p.145-153.
15. Белянин А.В. Нобелевская премия за чувство реальности. *Вопросы экономики*, 2003, №1.

3/10 Principles and classification of experiments. Experimental tests: Allais and Ellsberg paradoxes and methodology of experimental economics.
Class: HA2: Decisions under risk (experiment) Main Readings:

1. Vernon Smith, 1982. Microeconomic systems as experimental science. *AER*.
2. Glenn Harrison, 2011. "The methodological promise of experimental economics," *Journal of Economic Methodology*, Taylor and Francis Journals, vol. 18(2), pages 183-187.
3. Rutström, E. E. and N. Wilcox. 2009. Stated beliefs versus inferred beliefs: A methodological inquiry and experimental test. *Games and Economic Behavior* 67: 616-632.

For practical guide of experimental methodology, use the following sources:

4. Daniel Friedman, Alessandra Cassar. *Economics lab: an intensive course in experimental economics*. Routledge, London and New York, 2004.
5. Daniel Friedman, Shyan Sunder. *Experimental methods: a primer for economists*. Cambridge University Press, 1994.
6. Douglas D. Davis, Charles A.Holt. *Experimental Economics*. Princeton University Press, 1994.

There are many sources on experimental methodology in the web, such as:

7. [Wikipedia](#).
8. [Alvin Roth — perhaps the best collection of links](#)
9. [A comprehensive British educational portal](#)
10. [Charles Holt, founder of *Experimental Economics* journal](#)
11. [Classroom Experiments journal](#)

More links are available at <http://epee.hse.ru/Literature>

10/10 Risk measurement: context and methods

Class: HA2: analysis

Readings: the main practical source for nonparametric statistics is

1. Siegel S. and Castellan N.J. Nonparametric statistics for the behavioural sciences. 1988.
2. Rabin M. Psychology and economics. JEL, 1998, v.36, p.11-46.
3. Berg J.E., Rietz T.A., Dickhaut J.W. On the Performance of the Lottery Procedure for Controlling Risk Preferences. Chapter 115 in: C.R.Plott and V.L.Smith, eds. Handbook of Experimental Economics Results, Elsevier, 2008, vol.1.

Further readings, including non-traditional measurements of risk attitudes:

4. Kahneman D. Maps of Bounded Rationality: Psychology for Behavioral Economics. American Economic Review, Vol. 93, No. 5 (Dec., 2003), pp. 1449-1475 Further readings:
5. Gerd Gigerenzer, Peter M. Todd. Rationality the Fast and Frugal Way: Introduction. Chapter 105, vol.1 in: C.R.Plott and V.L.Smith, eds. Handbook of Experimental Economics Results, Elsevier, 2008.
6. Петровский В.А. Человек над ситуацией. М.: Смысл, 2010.

17/10 Dynamic choice: inconsistency and its explanations. Impatience, temptation and self-control. Examples and experiments.

Class: Retreat on projects

Main Readings:

1. Machina M.J. Dynamic consistency and non-expected utility models of choice under uncertainty. Journal of Economic Literature, 1989, v.27, p.1622-1668.
2. Thaler, Richard, 1981. Some empirical evidence on dynamic inconsistency, Economics Letters, vol. 8(3), pages 201-207
3. Benabou R. and Tirole J. Self-confidence and personal motivation. Quarterly Journal of Economics, Vol. 117, No. 3 (Aug., 2002), pp. 871-915.
4. Laibson D. Golden eggs and hyperbolic discounting. QJE 1997.
5. Germán Loewe. The Development of a Theory of Rational Intertemporal Choice. Mimeo, U.Barcelona, 2006

Further readings:

6. Benabou R. and Tirole J. Intrinsic and extrinsic motivation. Review of Economic Studies, Vol. 70, No. 3 (Jul., 2003), pp. 489-520.
7. Strotz R.H. (1955–56). Myopia and Inconsistency in Dynamic Utility Maximization. Review of Economic Studies, v.23, p.165–180.

8. Rubinstein A. "Economics and Psychology"? The Case of Hyperbolic Discounting. *International Economic Review*, 2003, Volume 44, Issue 4, p.1207–1216.
9. Harrison, Glenn W., Lau, Morten I., Elisabet Rutström, E., 2009. Risk attitudes, randomization to treatment, and self-selection into experiments. *Journal of Economic Behavior and Organization*, Elsevier, vol. 70(3), pages 498-507,
10. Elster J., ed. 1982. *Ulysses and the Sirens: study of rationality and irrationality*. 1984.

24/10 Mock week

31/10 Interactive decisions: games and their empirical tests

Class:

Readings:

7/11 Interactive decisions II: behavioural games and their empirical tests.

Theory vs. evidence

Class:

Readings: Inequity aversion

14/11 Group decisions and their experimental tests. Prosocial preferences

Class:

Readings:

21/11 Collective decision-making

Class:

Readings:

29/11 Market experiments: double auction

Class:

Readings:

5/12 Auctions and mechanism design

Class:

Readings:

19/12 Project presentation and sum up