

Seminar

The Role of Models in Economics

List of topics

I) Methods and Concepts in Economic Models

1. Mathematical Reasoning and Economic Models

Literature

EDGEWORTH, F.Y. ([1881] 2003): *Mathematical Psychics and Further Papers on Political Economy*. Chapter "Points at which Mathematical Reasoning is Applicable to Political Economy", pp. 278-294, ed. by P. Newman. Oxford: Oxford University Press. Originally published London: Kegan Paul.

FRIEDMANN, M. (1953): *Essays in Positive Economics*. Part I - The Methodology of Positive Economics, pp. 3-43. Chicago: University of Chicago Press.

BELL, D.; H. RAIFFA AND A. TVERSKY (1988): "Descriptive, Normative, and Prescriptive Interactions in Decision Making." in *Decision Making. Descriptive, Normative and Prescriptive Interactions*, ed. by D. Bell, H. Raiffa, and A. Tversky, pp. 9-30. New York: Cambridge University Press.

2. The Meaning of "Rationality" in Economics

Literature

ARROW, K.J. (1986): "Economic theory and the hypothesis of rationality," *Journal of Business* **59**. Reprinted in: *The new Palgrave: A dictionary of economics*, Vol. II, pp. 69-75.

KAHNEMAN, D. (1994): "New Challenges to the Rationality Assumption," *Journal of Institutional and Theoretical Economics* **150**, pp. 18-36.

3. Optimization in Economics

Literature

GILBOA, I. (2010): *Rational Choice*. Chapter I "Optimization," pp. 1-32. Cambridge (USA) and London (UK): The MIT Press.

SHUBIK, M. (1961): "Objective Functions and Models of Corporate Optimization," *Quarterly Journal of Economics* **75**, pp. 345-75.

4. Risk and Uncertainty in Economics

Literature

GILBOA, I. (2010): *Rational Choice*. Chapter I "Risk and Uncertainty", pp. 33-70. Cambridge (USA) and London (UK): The MIT Press.

TVERSKY, A., AND D. KAHNEMAN (1983): "Extensional versus intuitive reasoning: The conjunction fallacy in probability judgement," *Psychological Review* **90**, pp. 293-315.

II) Narratives of Economic Models

5. Narrative of the Edgeworth Box.

Literature

EDGEWORTH, F.Y. ([1881] 2003): *Mathematical Psychics and Further Papers on Political Economy*. Chapter "Francis Ysidro Edgeworth", pp. xiii-xlix, ed. by P. Newman. Oxford: Oxford University Press. Originally published London: Kegan Paul.

WEATHERBY, J.L. (1976): "Why was it called an Edgeworth-Bowley Box? A Possible Explanation," *Economic Inquiry* **14**, pp. 294-296.

CREEDY, J.(1986): *Edgeworth and the Development of Neoclassical Economics*. Chapter 3.3, pp. 53-62. New York: Basil Blackwell.

6. Narrative of the Philipps Curve.

Literature

PHILLIPS, A.W. (1950): "Mechanical Models in Economic Dynamics," *Economica* **17**, pp. 282-305.

FISHER, I. (1973): "I Discovered the Phillips Curve: A Statistical Relation between Unemployment and Price Changes," *The Journal of Political Economy* **81**, pp. 496-502.

BARR, N. (2000): "The history of the Phillips Machine" in *A.W.H. Phillips: Collected Works in Contemporary Perspective*, ed. by R. Leeson. Cambridge: Cambridge University Press.

III) The Role of Models in Economic Theories

7. The Role of Models in Keynes' "General Theory".

Literature

KEYNES, J.M. (1936): *The General Theory of Employment, Interest and Money*. Chapter 17 and 18, pp. 222-254. London: MacMillan.

HICKS, J.R. (1937): "Mr. Keynes and the Classics – A Suggested Interpretation," *Econometrica* **5**, pp. 147-159.

DARITY, W. AND W. YOUNG (1995): "IS-LM: an inquest," *History of Political Economy* **27**, pp. 1-41.

8. The Role of Models in Game Theory.

Literature

BINMORE, K. (2007): *Game Theory. A very short Introduction*. Chapter 1 and 2, pp. 1-35. Oxford: Oxford University Press.

DIXIT, A. AND B. NALEBUFF (1991): *Thinking Strategically. The competitive Edge in Business, Politics and Everyday Life*. Introduction and Chapter 1 and 2, pp. 1-55. New York and London: W.W. Norton & Company.

AUMANN, R.J. (1987): "Game Theory", pp. 1-53. in *The New Palgrave: A Dictionary of Economics.*, ed. by J. Eatwell, M. Milgate and P. Newman. London and Basingstoke: The Macmillan Press.

IV) Models and Empirical Research

9. Empirical Research and the Validity of Models

Literature

MANISKI, C.F. (1995): *Identification Problems in the Social Sciences*. Chapter 1 and 2, pp. 10-50. Harvard: Harvard University Press.

ANGRIST, J.D. AND J.-S. PISCHKE (2010): "The Credibility Revolution in Empirical Economics: How Better Research Design is Taking the Con out of Econometrics," *Journal of Economic Perspectives* **24**, pp. 3-30.

10. Using and Testing Models in Laboratory Experiments

Literature

GUALA, F. (2002): "Models, Simulations and Experiments" in *Science, Technology, Values* ed. by L. Magnani and N. J. Nersessian, pp. 59-74. New York: Kluwer Academic/Plenum Press.

SANTOS, A.C. (2007): "The 'materials' of experimental economics: technological versus behavioral experiments," *Journal of Economic Methodology* **14**, pp. 311-337.