Roma Tre University – PhD in Economics MICROECONOMICS

Syllabus

$2^{nd} \,\, Module$

NEOCLASSICAL THEORY: CONSUMPTION, PRODUCTION, EQUILIBRIUM AND INCOME DISTRIBUTION

NEOCLASSICAL THEORY CONSUMPTION CHOICES AND PURE EXCHANGE EQUILIBRIUM 36 HOURS - PROFESSORS: DARIA PIGNALOSA & PAOLO TRABUCCHI

1. INTRODUCTION (PT)

Topics

The Notion of Equilibrium in the Traditional and in the Neo-Walrasian Version of the Neoclassical Theory

References

Arrow, K. (1968), Economic Equilibrium, in D.L. Sills (ed) *International Encyclopedia of the Social Sciences*, London and New York, Macmillan.

Arrow, K. (1974), General Economic Equilibrium: Purpose, Analytic Techniques, Collective Choice, *The American Economic Review*, 64.

Garegnani, P. (1976), On a Change in the Notion of Equilibrium in Recent Work on Value and Distribution, in M. Brown, K. Sato and P. Zarembka (eds), *Essays in Modern Capital Theory*, North Holland.

2. CONSUMER CHOICE (PT)

Topics

The Consumption Set

Preferences

Preferences and the Utility Function

Utility Maximization, the Walrasian Demand and the Indirect Utility Functions

The Dual Problem: Expenditure Minimization, the Hicksian Demand and the Expenditure Functions

Relationships between (Walrasian and Hicksian) Demand, Indirect Utility and Expenditure Functions

Aggregate Demand

(Appendix: the main utility functions found in the literature) (DP)

References

Mas-Colell, A., Whinston, M. D., and Green, J. R. (1995), *Microeconomic Theory*, Oxford University Press, chapters 1, 2 (without 2F), 3 A-B-C-D-E-(appendix A), 4 A-B. Newman, P. (1965), *The Theory of Exchange*, Prentice-Hall, chapters 1-3.

4. CONSUMER CHOICE UNDER UNCERTAINTY (DP)

Topics

Expected utility theory: simple lotteries; compound lotteries; the expected value of a lottery; representation of lotteries through the Machina triangle; preferences over lotteries; the von Neumann-Morgenstern utility function; the St. Petersburg game; the expected utility theorem; discussion of the theory of expected utility (the Allais paradox, Machina's paradox, the Dutch books argument).

Risk aversion: definition of attitudes toward risk; the certainty equivalent; the risk premium; the demand for insurance; the Arrow-Pratt coefficients of absolute and relative risk aversion. Harmonic absolute risk aversion (HARA) preferences: Quadratic (IARA) utility; exponential (CARA) utility; isoelastic (CRRA) utility.

References

Mas-Colell, A., Whinston, M. D., and Green, J. R. (1995), *Microeconomic Theory*, Oxford University Press, chapter 6, A-B-C.

Gollier, C. (2001), *The Economics of Risk and Time*, The MIT Press, chapter 2, section 2.6. Starmer, C. (2000), Developments in non-expected utility theory: The hunt for a descriptive theory of choice under risk, *Journal of Economic Literature*, 38: 332-382.

4. PURE EXCHANGE EQUILIBRIUM (PT)

Topics

Historical Introduction Existence of Pure Exchange Equilibrium Uniqueness and Stability

References

Dorfman, R., Samuelson, P. A., and Solow, R. M. (1958), *Linear programming and economic analysis*, McGraw-Hill, chapter 13.

- Mas-Colell, A., Whinston, M. D., and Green, J. R. (1995), *Microeconomic Theory*, Oxford University Press, chapters 15A-B, 17A-B-C-D-H.
- Rizvi, S.A.T. (1991), Specialization and the existence problem in general equilibrium theory, *Contributions to Political Economy*, 10.

Newman, P. (1965), *The Theory of Exchange*, Prentice-Hall, chapter 4.

NEOCLASSICAL THEORY OF PRODUCTION AND DISTRIBUTION 16 HOURS - PROFESSOR: SAVERIO M. FRATINI

Topics

1. Elements of Neo-Walrasian theory of production: Production plans and production sets; Profit maximization; Arrow-Debreu equilibrium with production

2. Production and income distribution: The capitalist mode of production; Factors of production; The household-firm model; Marginalist theory of distribution in the land-labour model

3. Theory of Capital: Demand for capital in Solow's model; Demand for capital in Swan's model; Wicksell effect; Many capital goods and marginal productivity; The average period of production; The surrogate production function; Re-switching

References

Debreu, G. (1959) *Theory of Value*, John Wiley and Son.

- Fratini, S.M. (2019) 'On the second stage of the Cambridge capital controversy', *Journal of Economic Surveys*, 33(4), 1073-1093. Doi: 10.1111/joes.12312.
- Fratini, S.M. (2020) 'Incomes from capital in alternative economic theories', in P. De Muro, S.M. Fratini & A. Naccarato (eds) *Economics, Policy and Law.* Roma: Roma Tre-Press. ISBN: 9791280060525.
- Garegnani, P. (1970) 'Heterogeneous Capital, the Production Function and the Theory of Distribution', *The Review of Economic Studies*, XXXVII, 407–36.
- Garegnani, P. (1990) 'Quantity of Capital', in J. Eatwell, M. Milgate and P. Newman (eds): *Capital Theory*. London: Macmillan.
- Mas-Colell, A., Whinston, M. D., and Green, J. R. (1995), *Microeconomic Theory*, Oxford University Press, capp. 5 (A-B-C-E-Appendix A), 17 (B-F).
- Samuelson, P.A. (1962) 'Parable and Realism in Capital Theory: The Surrogate Production Function', *The Review of Economic Studies*, 29(3), 193-206.
- Samuelson, P.A. (1966) 'A summing-up', The Quarterly Journal of Economics, 80 (4), 568-83.
- Swan, T.W. (1956) 'Economic Growth and Capital Accumulation', *The Economic Record*, XXXII, 334–61.
- Wicksell, K. ([1901] 1967) *Lectures on Political Economy*, vol. I, Augustus M. Kelley Publishers.