

ECONOMICS OF INNOVATION
Prof. Cristiano Antonelli
Fall 2021
“Vilfredo Pareto” PhD in Economics

- 1) Introduction
- 2) Lexicon. Endogenous/exogenous. Invention, innovation, adoption, diffusion. Product-process-input-organization-markets innovation. The map of isoquants: Elasticity of substitution. The direction: neutral/labor/capital intensive. Effects on employment/localization/size
- 3) Total factor productivity and Tobin’s q: definition and debates
- 4) Adam Smith, Nicholas Kaldor, Jacob Schmookler and the demand pull approach
- 5) Karl Marx, John Hicks and the induced technological change approach: the problem of technological coherence.
- 6) Schumpeter 1911: entrepreneurship and Marshallian economics
- 7) Schumpeter 1942: the corporation, oligopolistic rivalry and product life cycle
- 8) The dynamics of learning and its implications: localized technological change
- 9) The Arrovian economics of knowledge: the implications of the limited appropriability: intellectual property rights, university and subsidies
- 10) The limited appropriability revisited: limited exhaustibility, limited transferability and technological congruence
- 11) Spillover economics. New growth theory: technical versus pecuniary externalities
- 12) The technology production function and the knowledge “generation” function: the CDM approach. Jacobs increasing returns
- 13) Schumpeter 1947: the creative response
- 14) Lamarckian and Darwinian evolutionary economics: Genotypes vs. phenotypes
- 15) From the economics of knowledge to the knowledge economy*
- 16) Technological change and international trade*
- 17) Technological change and income inequality*

Basic References are found in:

Antonelli, C. (2017), *“Endogenous Innovation: The Economics of an Emergent System Property”*, Cheltenham, Edward Elgar.

Antonelli, C. (2019), *“The Knowledge Growth Regime: A Schumpeterian Approach”* Palgrave MacMillan, London (ISBN: 978-3-030-05507-3).