# Modern Growth Theories Lecture 1

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http://prawo.uni.wroc.pl/user/12141/students-resources

- An introduction to modern economic growth
- The pattern of economic growth worldwide
- Measures of economic development
- The world income distribution
- Convergence across economies
- Determinants of Economic Growth
- Growth Strategies

- Keynesian approach to economic growth
- Harrod-Domar growth model
- The neoclassical growth theory
- The Solow growth model
- Convergence to the steady-state
- Growth accounting in the neoclassical framework

• Extentions of the Solow model

- Analytical foundation of growth theory. Elements of dynamic programming and optimal control.
- Growth model with endogenous savings

• Endogenous growth models

• One sector model – AK model

• Two sector models – capital human growth models

• R&D models of economic growth

• Scale and non-scale R&D-based models

• Convergence in the endogenous growth models

• Trade and growth theory

• Finance and growth theory – main channels, empirical evidence

• Foreign aid and economic growth

#### **Recommended Reading**

- Acemoglu, D., *Introduction to Modern Growth Theory*. Princeton University Press, 2009.
- Aghion, P., Howitt, P., *The Economics of Growth*. MIT Press, 2009.
- Barro, R.J., Sala-i-Martin, X., *Economic Growth*. 2<sup>nd</sup> edition, MIT Press, 2004.
- Sengupta J., Understanding Economic Growth. Springer, 2011.
- Haughton, J., Khandker, S.R., *Handbook on Poverty and Inequality*. The World Bank Washington, 2009.

#### **Recommended Reading**

- Romer D., *Advanced Macroeconomics*, McGraw-Hill, 1996.
- Chiang A.C., Wainwright K., Fundamental Methods of Mathematical Economics, McGraw-Hill/Irwin, Boston, Mass., (4<sup>th</sup> edition) 2005.
- Chiang A.C., *Elements of Dynamic Optimization*, Waveland Press, 1992.

#### Exam 2018

- Economic growth vs economic development.
- Growth strategies.
- Original and augmented Washington Consensus.
- Empirical tests of economic growth.
- The world income distribution.
- Sigma-convergence vs beta-convergence.
- The mechanism behind classic and technological convergence.

#### Exam 2018

- Types of growth models.
- Assumptions and conclusions of the Harrod model.
- The Domar model the razor's edge.
- Growth rate and its properties.
- Labour- and capital-augmenting technical progress.
- The neoclassical production function.
- The Solow growth model assumptions and growth rates at steady state.
- The Solow model convergence to steady-state.
- Growth accounting in the neoclassical framework.

#### Exam 2018

- An extended Solow model with physical and human capital.
- CIES utility function and its properties.
- The neoclassical growth model with endogenous savings.
- Models of endogenous technological progress.
- Models with human capital assumptions and determinants of growth rates.
- Determinants of growth rates in R&D-based growth models.
- Trade in growth models.
- Finance and growth theory.
- Foreign aid and economic growth.