

Faculty of Business and Economics Chair for Economics, esp. Economic Policy and Economic Research

# Introduction to Economic Growth

Summer Semester 2024

### **Synopsis**

Why are some countries rich and some countries poor? Exploring modern theories of economic growth and their empirical applications, this course provides fundamental insights on the determinants of long-run economic growth and crosscountry differences in income levels and dynamics.

#### **Modules**

Programmes of Faculty of Business and Economics: BA-WW-VWL-2707a, D-WW-WIWI-2707a

Bachelor / Master International Relations: BA-IB-ECG / MA-IB-ECG

Other programmes: according to export and/or learning agreements

#### Assessment

Written exam, duration 90 minutes; offered in summer semester 2024 and in the following winter semester 2024/25.

Bonus points can be achieved through homework assignments.

## **Instructors**

Prof. Dr. Alexander Kemnitz, office hour: Tue, 1:00 - 2:30 pm, by appointment, SCH C 265, email: alexander.kemnitz@tu-dresden.de

Olga Tcaci, M.Sc., office hour: Wed, 4:40-6:10 pm, by appointment, SCH C 261, email: olga.tcaci@tu-dresden.de

### **Teaching Format**

Lecture: E-lecture supplied via OPAL.

Tutorial: on site, Mon, 11:10 am - 12:40 pm, SCH A118/H, on April 08, April 15, April 29, May 13, June 03, June 17, July 01, July 08.

### Resources

Starting April 08, lecture slides and videos, homework assignments, release schedules and questions for the tutorial will be supplied on the OPAL-site of this course.

Access requires login to OPAL via your TU Dresden account and registration on the course site.

For voluntary introductory reading, we recommend the following textbooks, all available at DrePunct:

Barro, R. J. & X. Sala-i-Martin (2004): Economic Growth, 2nd Edition, MIT Press

Jones, C. I. & D. Vollrath (2013): Introduction to Economic Growth, 3rd Edition, Norton

Weil, D. (2013): Economic Growth, 3rd Edition, Pearson

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TU Dresden, Fakultät Wirtschafts-

Bulk mail to Helmholtzstraße 10.

Visitors' address Georg Schumann-Bau C 264 (national) Münchner Platz 3 01187 Dresden

Barrier-free access

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- I. Introduction: Some Facts and Data on Economic Growth
- II. Factor Accumulation
  - A. The Solow Model
  - 1. Neoclassical Production Function
  - 2. Physical Capital Accumulation
  - 3. Population Growth
  - B. Implications and Evidence
  - 1. Differences in Per Capita Income
  - 2. Convergence
  - C. Some Further Issues
  - 1. Markets
  - 2. The Golden Rule of Capital Accumulation
  - D. Perpetual Growth
  - 1. CES-Production Functions
  - 2. The AK Model
  - 3. Human Capital
  - 4. Public Infrastructure
  - E. Growth Accounting

## III. Technological Progress

- A. Categories of Technological Progress
- B. Exogenous Technological Progress
- C. Endogenous Technological Progress
- 1. The Economics of Ideas
- 2. Learning-by-Investing
- 3. Research and Development

### IV. Fundamentals

- A. Globalisation and Economic Integration
- 1. Capital Mobility
- 2. Technology Transfer
- 3. Trade
- B. Social Infrastructure and Institutions
- 1. The Evidence
- 2. Determinants of Social Infrastructure