

Economic Growth

440.634

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Office hours: After the class or by appointment
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Prerequisites:

440.601 Microeconomic Theory and Policy; 440.602 Macroeconomic Theory and Policy; and 440.606 Econometrics.

Objective:

What causes a country to grow and develop industries? Why does growth experience differ in different nations? The current course examines contemporary theories of economic growth and empirically applies them to panels of present day developing and industrialized countries, and to the historical evolution of individual countries and groups of countries. Topics include *inter alia* neoclassical growth models, population and growth, the economics of ideas, endogenous growth models, institutions and growth, and political systems and growth.

Textbook: “Introduction to Economic Growth” by Charles I. Jones (EG in abbreviation)

Students may access their required readings (articles mentioned in the syllabus), including JSTOR articles, at Reserves’ site at:

<http://proxy.library.jhu.edu/login?url=http://reserves.library.jhu.edu/access/reserves/findit/articles/index.php> .

[Users will be prompted for the course password: **MAH634**.]

Exams

There will be one midterm and one final. None of the exams will be cumulative. However, material from the previous exam will be useful for the latter. You will be graded not only based on the answers to the questions on the exam but also on how you derived them. This will allow me to give partial credits when possible. Your grade will be based on:

50% Midterm exam
50% Final exam

Grades will be mostly based on exams. Class participation is encouraged throughout the course. HWs will be assigned but will not be graded and solutions to the HWs will be handed out and discussed in the next class.

Disabilities:

Students with any documented physical or learning disabilities in need of special accommodation should let me know in advance – so that arrangements can be made.

Course Outline

Introduction

- History of Economic Growth
- Mathematics
- Harrod-Domar Model

EG Chapter 1, Appendix and Lecture Notes.

In this session, we will introduce the scope and nature of development in general and growth in particular. We will introduce some mathematical tools essential to grasp the theory behind economic growth. At the end of the class, we will apply the mathematical tools to understand one of the first models of economic growth.

Neoclassical Growth Theory (I)

- Solow Growth Model
- Convergence Hypothesis
- Total Factor Productivity Growth

EG Chapter 2.

We will discuss the neoclassical growth models of Solow-Swan. Results of Solow-Swan model will be contrasted to that of Harrod-Domar model. After detailed description of the theory, empirical evidence will be presented.

Neoclassical Growth Theory (II)

- Empirical evidence for and against Solow Growth Model
- A Modified Solow Growth Model

EG Chapter 3 and Lecture Notes.

We will begin with how empirical evidence can go for and against the neo-classical growth theory. Then a new theory will be presented by incorporating human capital in the Solow growth model. The lecture will present a slightly different model from that of the book. But either of them will suffice for understanding the basic analytics of the model.

New Growth Theory (I)

- The role of ideas, innovations
- Increasing returns to scale in growth model

EG Chapters 4 and 5.1.

In this session, we will introduce new growth theories that were initiated by Paul Romer. Unlike previous models, these new growth models introduce increasing returns to scale to illustrate non-convergence among nations.

New Growth Theory (II)

- The role of imperfect competition
- Growth and development

EG Chapters 5.2 and 5.3.

We will continue with new growth theories. This session will introduce micro-foundation behind increasing returns to scale.

Empirical Evidence (I)

- Neoclassical vs. New Growth Theory

Article: *The Neoclassical Revival in Growth Economics: Has it Gone Too Far?*

We compare the empirical analysis of both types of growth models described in the previous lectures. We show that how human capital is calculated is crucial in determining the relative explanatory power of these theories.

Empirical Evidence (II)

- East Asian Development: An Overview
- Hong Kong and Singapore

Article: *A Tale of Two Cities: Factor Accumulation and Technical Change in Hong Kong and Singapore*
Lecture notes

The spectacular growth of East Asia has been the most significant event in economic growth in the post-war era. In this lecture, empirical tools and economic models are utilized to analyze the specific case of East Asia.

Overlapping Generations Model

- Introducing two generations
- Diamond Model
- Social Security

Article: *Website of Daron Acemoglu*

Previous models assumed an agent to live forever. In reality, people live for a finite amount of time. This model considers two generations co-existing simultaneously – one young who are working and another old who are retired and renting their savings to capital market.

Heterogeneity (I)

- Introducing heterogeneity
- Inequality and development (Galor-Zeira Model)

Article: *Income Distribution and Macroeconomics*

Article: *Inequality and Economic Development: An Overview*

Lecture notes

Previous growth models assumed a representative agent. In reality, people differ with respect to endowments they possess. The first part presents how heterogeneity can affect the long-run development of a nation with respect to human capital accumulation.

Heterogeneity (II)

- Discussing Piketty briefly
- Discussing Miles Corak (from Marc Sumerlin Lecture)

Article: Capital is back: Wealth-Income ratios in rich countries 1700–2010

Lecture notes: We discuss an article on how income distribution has changed in the developed world across time and place.

Institutions and Development

- Defining institutions
- Colonial origins of institutions and the impact on growth
- The case of Botswana

Article: *The Colonial Origins of Comparative Development: An Empirical Investigation*

Article: *An African Success Story: Botswana*

What is the role of institutions in the process of development? We look at the cross-country evidence of whether the quality of institutions at all depended upon colonial origins or not. Next, we look at an important case study of Botswana.