

Goethe-Universität | 60629 Frankfurt am Main Fachbereich 02 | House of Finance

Business Cycles: Theory and Policy

Winter Semester 2022/23
Prof. Dr. Alexander Meyer-Gohde
Chair of Financial Markets and Macroeconomics

Lecture: Hörsaalzentrum Westend - HZ 14

Thursdays 8:15-9:45

**Recitation:** Hörsaalzentrum Westend - HZ 13

Wednesdays 8:15-9:45

(every second week beginning October 26th)

**Professor:** Alexander Meyer-Gohde

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https://www.imfs-frankfurt.de/professuren/finanzmaerkte-und-makrooekonomie

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**Teaching Assistants:** Mary Tzaawa-Krenzler

Office Hours: Details to be posted in OLAT

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**Course Grade:** The grade will be based on a final exam. The exam questions will be in English. You can answer in English or in German. If you decide to answer in English, you will not be graded on the quality of your English, but you have to make sure you convey your knowledge of the material.

### **Course Credit:**

The course also is part of the certificate program "Quantitative Economics" offered by the Faculty of Economics and Business in collaboration with the Graduate School of Economics, Finance, and Management (GSEFM). See www.gsefm.eu/certificate for further details.

Course Description: The course introduces students to two modern theories of business cycles: Real Business Cycle theory and New Keynesian theory. A standard Real Business Cycle model will be formally stated and solved. Afterwards, a standard New Keynesian model will be formally stated and solved. Finally, we are going to use these two models for policy analysis. Students are supposed to learn how to state and solve modern business cycle models.

5. Oktober 2022

Faculty of Economics and Institute for Monetary and Financial Stability

Chair of Financial Markets and Macroeconomics

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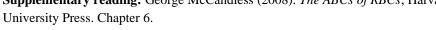
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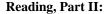


# Reading, Part I:

Main reading: King, Robert, and Sergio Rebelo (2000): "Resuscitating Real Business Cycles," In Handbook of Macroeconomics, edited by John Taylor and Michael Woodford, volume 1B, North-Holland.

**Supplementary reading:** George McCandless (2008): The ABCs of RBCs, Harvard





**Main reading:** Jordi Gali (2008): *Monetary Policy, Inflation, and the Business Cycle:* An Introduction to the New Keynesian Framework, Princeton University Press. Ch. 1-3. Supplementary reading: George McCandless (2008): The ABCs of RBCs, Harvard University Press. Chapter 10.

#### **Course Outline**

# Part I: Real Business Cycle Theory

- 1. Stating a standard RBC model
- 2. The problem of the representative firm
- 3. The problem of the representative household
- 4. Log-linearizing the equations characterizing equilibrium
- 5. Applying a solution method for linear rational expectations models
- 6. The equilibrium responses to an aggregate technology shock

### Part II: New Keynesian Theory

- 1. Stating a standard New Keynesian model
- 2. The problem of the representative household
- 3. The price setting problem of firms
- 4. Log-linearizing the equations characterizing equilibrium
- 5. The New Keynesian Phillips curve
- 6. Applying a solution method for linear rational expectations models
- 7. The equilibrium responses to a monetary policy shock
- 8. The equilibrium responses to an aggregate technology shock

# **Learning Goals**

- LGB-1: Students will understand and apply state-of-the-art structural macroeconomic models of the business cycle.
- LGB-2: Students will master the dynamic optimization and loglinearization techniques fundamental to the solution and analysis of state-of-the-art structural macroeconomic
- LGB-3: Students will able to apply the techniques and their understanding of the course's models in their further studies and use them to inform their understanding and discussion of the macroeconomy.
- LGB-5: Students will be able to use and apply the numerical analysis programs Matlab
- LGB-7: Students will be able to express, explain and analyze state-of-the-art models formally, verbally and graphically.

