

Growth and Business Cycles (S1 & S2)

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Webpage for the Course

<https://fu-berlin.blackboard.com>

Description

The course is divided in two parts. Part 1 (December 11-15, 2023) covers the topics of Growth and Business Cycle and Part 2 (January 8-12, 2024) develops advanced topics, with the aim of introducing students to the frontier of macroeconomics research and equipping them with the necessary skills to develop their own, independent research projects. The course facilitates the transition from coursework to independent research, and the development of analytical frameworks to assess macroeconomic conditions.

The course will mix traditional lectures, aimed at introducing state-of-the-art topics, with student-led presentations and discussions to critically and broadly evaluate the literature and develop new ideas. This format will provide a constructive and open environment to foster critical thinking.

Students will learn cutting-edge topics and techniques in macroeconomics to develop critical thinking at the frontier of knowledge, and enhance an analytic approach to address macroeconomic issues. The course will also contribute to develop skills in discussing new ideas, presenting them before a critical audience, and write focused and critical reports. The final research proposal will help students transitioning from coursework to independent research while allowing early constructive feedback. The course will also facilitate discussions and cooperation among students.

Assessment Methods

Master Students

The final mark for the course will be the weighted average of the following coursework:

- (i) A written critical report of a research paper (40%).
- (ii) A research proposal (60%) of 3,000 words maximum.

PhD Students

The final mark for the course will be the weighted average of the following coursework:

- (i) A written critical report of a research paper (40%).
- (ii) A short research proposal (60%) of 6,000 words maximum.

Assessment procedures and deadlines

Students will prepare slides for a presentation on a pre-agreed research paper to be critically evaluated (either chosen from recent journal articles or working papers, see suggested papers marked with “R” in the reading list for Part 2 of the course, or an unpublished article of their own choice pre-agreed with the course teacher). The slides will be submitted two days ahead of the presentation to enable the lecturer and the class audience to prepare feedback. Each course participant, or a random selection of participants (depending on the total number of students in the course), will be selected to present before the class audience on the last day of the second part of the course, and receive feedback from the lecturer and peers. The presentation will not be marked. Following the presentation session, each student will submit the written report (in format of a “referee report”) on the selected paper that will be marked. **The deadline to submit the report is on January 31, 2024.**

Students will develop an independent research proposal (not exceeding 3,000 or 6,000 words for master and PhD students, respectively) on a topic of their choice, involving macroeconomic issues. The proposal should be aimed at proposing new research and include an initial development of the idea within a quantitative framework in the context of the pertinent literature. The proposal will be marked. **The deadline to submit the proposal is on February 12, 2024.**

Both assignments must be submitted electronically in PDF format.

Course Topics

Course Topics
Part 1: December 11-15, 2023
Introduction to advanced methods in Macroeconomics
Neoclassical growth: OLG models
Neoclassical growth: Ramsey model
Endogenous growth
Real Business Cycle model
Search and matching model of the labour market
Part 2: January 8-12, 2024
Economic slack in Macroeconomics
Economic slack: Application to Fiscal Policy and Labor Markets
Supply chain disruptions in models of economic slack
Imperfect Information and Uncertainty
Student-lead Presentations of the Referee Reports

Reading List for Part 1

Some books appear repeatedly in the reading list below. They are:

1. Acemoglu: Introduction to Modern Economic Growth
2. Barro and Sala-i-Martin: Economic Growth

3. Romer: Advanced Macroeconomics, 4th edition, 2011

An Introduction to Growth and Business Cycles

1. Romer: Chapters 4 and 5.
2. Lucas (1978): “Asset Prices in an Exchange Economy” , *Econometrica*.
3. Hall (1978): “The Stochastic Implications of the Permanent Income-Life Cycle Hypothesis,” *Journal of Political Economy*.
4. Hall (1988): “Intertemporal Substitution in Consumption,” *Journal of Political Economy*.
5. Barro and King (1984) “Time Separable Preferences and Intertemporal Substitution Models of the Business Cycle,” *Quarterly Journal of Economics*.
6. Mankiw, Rotemberg and Summers (1985) “Intertemporal Substitution in Macroeconomics,” *Quarterly Journal of Economics*.

The Neoclassical growth model

1. Chapter 8 and Chapter 9 (Sections 9.1 to 9.5) of Acemoglu.
2. Chapter 2 of Blanchard and Fischer.
3. Chapter 2 of Romer (Part A and B).
4. Chapter 2 of Barro and Sala-i-Martin (see also Appendix Section A.3 and Appendix to Chapter 3).
5. Diamond (1965): “National Debt in a Neoclassical Model,” *American Economic Review*.
6. Chapter 3 of Blanchard and Fischer *Lectures in Macroeconomics*.
7. Lungqvist and Sargent *Recursive Macroeconomic Theory* Chapter 9 (Chapter 8 in 2000 edition).

Endogenous growth

1. Chapters 11, 13, and 14 of Acemoglu.
2. Chapters 4, 5, 6, 7 and 11 of Barro and Sala-i-Martin.
3. Chapters 1.4 and 2 of Aghion and Howitt *Endogenous Growth Theory*.
4. Jones and Manuelli (1990): “A Convex Model of Equilibrium Growth: Theory and Policy Implications,” *Journal of Political Economy*.
5. Romer (1990): “Endogenous Technological Change,” *Journal of Political Economy*.
6. Aghion and Howitt (1992): “A Model of Growth Through Creative Destruction,” *Econometrica*.
7. Grossman and Helpman (1991): “Quality Ladders in the Theory of Growth,” *Review of Economic Studies*.
8. Lucas, R.E., 1988, “On the Mechanics of Economic Development”, *Journal of Monetary Economics*, 22, 3-42.

Real Business Cycles

1. Chapter 5 of Romer.
2. Chapter 2 of DeJong with Dave “Structural Macroeconometrics”, Second Edition, Princeton University Press.
3. Stock and Watson (1991): “Business Cycle Fluctuations in US Macroeconomic Time Series.” in Taylor and Woodford, Vol 1A, Ch 1, Section 3.
4. Barro and King (1984): “Time-Separable Preferences and Intertemporal-Substitution Models of Business Cycles,” *Quarterly Journal of Economics*, 99.
5. Campbell (1992): “Inspecting the Mechanism: An Analytical Approach to the Stochastic Growth Model,” *Journal of Monetary Economics*, 33, 463-506.
6. King, Plosser and Rebelo (2002): “Production, Growth and Business Cycles,” *Computational Economics*.
7. Kydland and Prescott (1982): “Time to Build and Aggregate Fluctuations,” *Econometrica*, 50(6), 1345-1370.
8. Prescott (1986): “Theory Ahead of Business Cycle Measurement”, Federal Reserve Bank of Minneapolis Quarterly Review, Fall 1986. See also Larry Summers comments on the article and Prescott’s response.
9. King and Rebelo (1999): “Resuscitating Real Business Cycles,” in Taylor and Woodford, Vol. 1B, Ch 14.
10. Cooley and Prescott (1995): “Economic Growth and Business Cycles,” in Cooley, Ch 1.
11. Cogley and Nason (1995): “Output Dynamics in Real-Business-Cycle Models,” *American Economic Review* 85.

Modelling the labour market

1. Chapter 10 of Romer.
2. Hansen (1985): “Indivisible Labour and the Business Cycle,” *Journal of Monetary Economics*.
3. Rogerson (1988): “Indivisible Labor, Lotteries and Equilibrium,” *Journal of Monetary Economics*.
4. Ljungqvist and Sargent (2012): “Career Length: Effects of Curvature of Earnings Profiles, Earnings Shocks, and Social Security,” mimeo.
5. Solow “Another Possible Source of Wage Stickiness” (1979, *Journal of Macroeconomics*).
6. Shapiro and Stiglitz (1984): “Equilibrium Unemployment as a Worker Discipline Device,” *American Economic Review*.
7. Mortensen and Pissarides (1994): “Job creation and job destruction in the theory of unemployment,” *Review of Economic Studies*.
8. Pissarides (2000): “Equilibrium Unemployment Theory,” MIT Press.
9. Merz (1995): “Search in the labor market and the real business cycle,” *Journal of Monetary Economics*, vol. 36(2), pages 269-300, November.

10. Kaplan (2012): “Moving Back Home: Insurance Against Labor Market Risk,” *Journal of Political Economy*.

Modelling dynamics in the RBC

1. Abel (1990): “Asset Prices under Habit Formation and Catching up with the Joneses,” *American Economic Review*.
2. Ravn, Schmitt-Grohe and Uribe (2006): “Deep Habits,” *Review of Economic Studies*.
3. Abel (1981): “A Dynamic Model of Investment and Capacity Utilization,” *Quarterly Journal of Economics*.
4. Hayashi (1982): “Tobin’s Marginal Q and Average Q: A Neoclassical Interpretation,” *Econometrica*.
5. Tobin (1969): “A General Equilibrium Approach To Monetary Theory,” *Journal of Money, Credit and Banking*. 1 (1): 15–29.
6. Christiano, Eichenbaum and Evans (2005): “Nominal Rigidities and the Dynamic Effects of a Shock to Monetary Policy,” *Journal of Political Economy*.
7. Smets and Wouters (2007) “Shocks and Frictions in US Business Cycles: A Bayesian DSGE Approach,” *American Economic Review*.
8. Fisher (2006): “The Dynamic Effects of Neutral and Investment-Specific Technology Shocks,” *Journal of Political Economy*.
9. Justiniano and Primiceri (2007): “The Time-Varying Volatility of Macroeconomic Fluctuations,” *American Economic Review*.

Reading List for Part 2 and suggested articles for the Referee Report

(*): Relevant reference for the lecture.

(R): Reference for referee report.

Economic Slack in Macroeconomics

[Michaillat and Saez \(2015\)](#) *

[Benassy \(1993\)](#)

[Petrongolo and Pissarides \(2001\)](#)

[Diamond \(1982\)](#)

[Gourio and Rudanko \(2014\)](#)

[Blinder \(1994\)](#)

[Diamond \(2011\)](#)

[Wasmer and Weil \(2004\)](#)

[Michaillat and Saez \(2021\)](#)

[Michaillat \(2022\)](#) R

Qiu and Rios-Rull (2022) R
Petrosky-Nadeau, Wasmer and Weil (2021) R

Economic Slack: Application to Fiscal Policy and Labor Markets

Ghassibe and Zanetti (2022) *
Pizzinelli, Theodoridis and Zanetti (2019) *
Fujita and Ramey (2012)
Petrosky-Nadeau and Zhang (2021)
Thomas and Zanetti (2009)
Zanetti (2011)
Jung and Kuester (2015)
De Bortoli Matthes (2022)
Fernandez-Villaverde, Mandelman, Yang and Zanetti (2022) R
Michau (2022) R
Jo and Zubairy (2022) R
Cynthia and Xie (2022) R

Supply chain disruptions in models of economic slack

Bai, Fernandez-Villaverde, Li and Zanetti (2023) * R
Comin, Johnson and Jones (2023) R
Attinasi, Balatti, Mancini and Metelli (2021)
Brancaccio, Kalouptsi and Papageorgiou (2020)
Arias, Fernandez-Villaverde, Rubio-Ramirez and Shin (2023)
Ester, Kriegel, Sander and Xu (1996)
Brancaccio, Kalouptsi, Papageorgiou and Rosaia (2020) R
Di Giovanni, Kalemli-Ozcan, Silva, Yildirim (2022) R

Imperfect Information and Uncertainty

Melosi, Morita, Rogantini Picco and Zanetti (2023) *
Blanchard, L'Huillier and Lorenzoni (2013) *
Gambetti, Korobilis, Tsoukalas and Zanetti (2022) * R
Woodford (2001)
Lorenzoni (2009)
Lorenzoni (2011)
Mackowiak, Matejka and Wiederholt (2023)
Venkateswaran (2014) R
L'Huillier, Singh and Yoo (2021) R