

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

> Monetary Theory and Policy Summer Semester 2025 Prof. Dr. Alexander Meyer-Gohde Chair of Financial Markets and Macroeconomics

Lecture:

Recitation:

Professor: Office Hours: Office: E-mail:

Administrative Assistant: Office: E-mail:

Teaching Assistant: Office: E-mail:

Seminarhaus Westend - SH 1.101 Wednesdays 14:15-15:45

Seminarhaus Westend - SH 1.101 Thursdays 10:15-11:45 (every second week beginning May 15th)

Alexander Meyer-Gohde By appointment House of Finance, Room 4.47 meyer-gohde@econ.uni-frankfurt.de https://www.imfs-frankfurt.de/professuren/finanzmaerkte-und-makrooekonomie

> Pamela Spiegel House of Finance, Room 4.44 office.amg@wiwi.uni-frankfurt.de

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Faculty of Economics and Institute for Monetary and Financial Stability

Chair of Financial Markets and Macroeconomics

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Modalities: The lecture will be offered in a hybrid format (in person lecture and uploads of lecture videos on OLAT), the recitation will only be offered in person.

Course Grade: The grade will be based on a final exam. The exam questions will be in English. You may answer in English or in German.

Course Description: This course introduces students to the dynamic stochastic general equilibrium (DSGE) models used in modern monetary macroeconomics called New Keynesian models. The basic model equations including nominal frictions such as price stickiness are derived carefully, and model solution techniques are discussed. Numerical solutions of the models are obtained and the models are simulated and analyzed using Dynare in MATLAB. Extensions to the core model that will be treated in class include an analysis of optimal monetary policy and the financial accelerator.



After completing the course, students should understand the dynamic mechanisms of nominal rigidities and the policy tradeoffs facing monetary policy. Mechanically, students will be able to derive, solve and simulate simple DSGE models and should be able to read and understand more elaborate models found in the literature.



Literature:

- Barro, Robert and David Gordon (1983): "Rules, discretion and reputation in a model of monetary policy," Journal of Monetary Economics, 12(1), pp. 101-121.
- Bernanke, Ben S. & Gertler, Mark & Gilchrist, Simon (1999): "The financial accelerator in a quantitative business cycle framework," Handbook of Macroeconomics, in: J. B. Taylor & M. Woodford (ed.), Handbook of Macroeconomics, volume 1, chapter 21, pp: 1341-1393.
- Clarida, Richard, Jordi Galí, and Mark Gertler (1999): "The Science of Monetary Policy: A New Keynesian Perspective," Journal of Economic Literature, American Economic Association, vol. 37(4), pp. 1661-1707.
- Galí, Jordi (2008): Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework. Princeton University Press.
- King, Robert and Watson, Mark, (1995), Money, prices, interest rates and the business cycle, No 95-10, Working Paper Series, Macroeconomic Issues, Federal Reserve Bank of Chicago.
- Lucas, Robert E. (1976): "Econometric Policy Evaluation: A Critique," Carnegie-Rochester conference Series on Public Policy, vol. 1, 19-46.
- McCandless, George (2008): The ABCs of RBCs: An Introduction to Dynamic Macroeconomic Models. Harvard University Press.

Sims, Christopher (1980):"Macroeconomics and Reality," Econometrica, 48(1), 1-48.

Woodford, Michael (2001): "The Taylor Rule and Optimal Monetary Policy," American Economic Review 91(2), pp. 232-237.

Course Outline

1. Introduction

| Concepts/techniques: | Real Business Cycles versus New Keynesianism |
|----------------------|--|
| Main readings: | Galí (2008), ch. 1 |
| Additional reading: | Lucas (1976), Sims (1981) |

2. A Classical Monetary Economy

| Concepts/techniques: | Intertemporal optimization, monetary neutrality, log lin- |
|----------------------|---|
| | earization |
| Main reading: | Galí (2008), ch. 2 |
| Additional reading: | King and Watson (1995) |

3. The Basic New Keynesian Model

| Concepts/techniques: | Staggered price setting, equilibrium determination |
|----------------------|--|
| Main reading: | Galí (2008), ch. 3 |
| Additional reading: | Clarida et al. (1999) |

4. Optimal Policy Design

| Concepts/techniques: | Policy efficiency, optimal versus simple policy rules |
|----------------------|---|
| Main reading: | Galí (2008), ch. 4 |
| Additional reading: | Woodford (2001) |



5. Discretion versus Commitment

| Concepts/techniques: | Time consistency |
|----------------------|-------------------------|
| Main reading: | Galí (2008), ch. 5 |
| Additional reading: | Barro and Gordon (1983) |

6. The Financial Accelerator

| Concepts/techniques: | Extension to financial markets |
|----------------------|--------------------------------|
| Main reading: | Bernanke et al. (1999) |

LGMMF-1 Students will understand the empirical foundations of price rigidities and how they connect individual business decisions regarding price policies and aggregate monetary policy.

LGMMF-2 Students will understand fundamental considerations in the design of monetary policy, such as the consequences of optimal policy under discretion versus with commitment.

LGMMF-3 Students will learn the theoretical and methodological foundations of state of the art structural models of monetary policy, understand their empirical foundations, and implement them in numerical software packages.

LGMMF-4 Students will be able to apply state of the art structural models of monetary policy to practical policy questions by implementing them in state of the art numerical software packages.