

Master's course

Advanced Macroeconomics I

Syllabus

- Summary:

The course studies macroeconomic models at an advanced level using state-of-the-art dynamic general equilibrium theory. The main focus is on monetary models of the business cycle and the role of fiscal and monetary policy in this framework. Specifically, we will study how monetary policy interacts with fiscal policy and how they jointly determine equilibrium prices and allocations in real and financial markets. We will also explore the existence and form of optimal monetary and fiscal policy aiming to maximize consumer welfare under alternative informational and political constraints.

The course is based on the two major workhorses of modern macroeconomics in this field: First, the New Classical framework which abstracts from market frictions assuming price-taking behavior of all market participants combined with price flexibility on all markets. Second, the New Keynesian models which incorporate various frictions such as monopolistic competition and/or staggered price adjustments. Specifically, we will explore the role of fiscal policy and its potential to stimulate the economy in a zero-interest environment which was the empirically relevant case for many years in the wake of the Great Recession in 2008. In recent years, the New Keynesian approach has become the dominant framework used at central banks to guide monetary policy.

- Credit points: 6 ECTS
- Target audience:

Students enrolled in the M.Sc. programs "Economics" and "VWL".

- Contents (tentative):

- I. New Classical Monetary Theory:

- 1. The Basic New Classical Model
 - 2. (In-)Determinacy and the Fiscal Theory of the Price Level
 - 3. Interaction of Fiscal and Monetary Policy
 - 4. Monetary Policy in a Currency Union
 - 5. Optimal Fiscal and Monetary Policy
 - 6. The Stochastic New Classical Model

- II. New Keynesian Monetary Theory:

- 1. The Basic New Keynesian Model
 - 2. Optimal Fiscal and Monetary Policy
 - 3. Fiscal Policy at the Zero-Lower Bound
 - 4. Monetary Policy Trade-Offs: Discretion vs. Commitment*

* = 'time permitting'

- Literature:

- Cochrane (2023): *The Fiscal Theory of the Price Level*
 - Gali (2008): *Monetary Policy, Inflation, and the Business Cycle*
 - Ljungqvist & Sargent (2012): *Recursive Macroeconomic Theory*
 - Miao (2014): *Economic Dynamics in Discrete Time*.

Additional references will be given in class.

- Prerequisites:

Course participants are expected to have a sound understanding of intermediate macroeconomics and microeconomics paired with a solid background in basic mathematics (linear algebra, calculus, constrained optimization, etc.) and statistics (probability theory, random variables, etc.). Since the course will have a strongly quantitative focus, we also expect a genuine interest in economic theory and mathematical model building.

- Examination:

Two-hour (90 minutes) written final exam at the end of the semester.
A retake will be offered at the end of the following semester.

- Course meeting times:

One and a half (3×45 min.) lecture classes every week taking place on *Thursdays, 4-7 pm* in lecture hall *HS 1199*

Lecture classes start on *Thursday, October 20, 2022*

A weekly tutorial class (90 min.) accompanying the lecture to be offered in English and in Chinese (covering the exact same material)

English tutorial classes take place on *Fridays, 12-2 pm* in *HS 1098*

Chinese tutorial classes take place on *Fridays, 2-4 pm* in *R101 Breisach Tor*.

- Organization:

The entire course material (slides, problem sets) will be provided electronically via the ILIAS platform (ilias.uni-freiburg.de).

Students can directly sign up for the course and no password is required.

The course material will be released gradually every week. Participants enrolled in the course will be notified about all updates.

Same procedure applies for the tutorial classes and solutions to the problem sets.

We will also set up the ILIAS course to include a *discussion forum* permitting all participants to engage in online discussions and ask questions.

- Teaching format:

All classes take place in-person requiring your presence in Freiburg.

Students unable to be in Freiburg can download the course material but there will be no lecture videos nor live-streaming of lectures and tutorials

Should the COVID-19 pandemic force us to move to remote teaching again, we will inform you as soon as we can.

Bibliography

COCHRANE, J. H. (2023): *The Fiscal Theory of the Price Level*. Princeton University Press, MA.

GALI, J. (2008): *Monetary Policy, Inflation, and the Business Cycle*. Princeton University Press, Princeton a.o.

LJUNGQVIST, L. & T. SARGENT (2012): *Recursive Macroeconomic Theory, Third Edition*. MIT Press, Cambridge, Massachusetts.

MIAO, J. (2014): *Economic Dynamics in Discrete Time*. MIT Press, Cambridge, Massachusetts.