AMA II - Second half Summer Term 2023 - Syllabus

Content

This part of the course focuses on state-of-the-art macroeconomic modeling techniques and numerical solution methods applied to international macroeconomics. The goal of the course is to provide students with the tools to read and replicate papers from the current literature and start their own research projects in the field. The first part of the course uses the book by Uribe and Schmitt-Grohe (see citation below) as the main source. Towards the end of the course we will discuss some topics based on current research papers. The course will cover the following topics, concepts and numerical methods.

Topics: International business cycles; capital flows and reversals; financial stability and macroprudential policies; nominal and real exchange rates; nominal exchange rate policies and exchange rate determination; sovereign default; monetary unions.

Concepts: Open endowment and production economies; financial frictions; nominal rigidities and unemployment; pecuniary and demand externalities; limited commitment and time (in-)consistency; Social and Ramsey planning problems; constrained efficiency.

Numerical methods: Global solution methods for models with strong non-linearities (e.g. occasionally binding constraints): Value function iteration, policy function iteration

Format

Before each meeting, I will assign a problem set to be handed in. In the meeting, I will first present a set of slides and then we discuss the solution to the problem set together.

Meetings and Location There will be six meetings on Wednesdays, 8:30-12:00, from 31.05.-05.07.2023. They will be held at DIW Berlin, Mohrenstr. 58, Karl-Popper room.

Problem sets will be a combination of analytical, numerical and possibly empirical exercises. Problem sets are handed in and graded.

Grading

Grades are joint with the first half of the course. They are based on problem sets (30%), class participation (20%) and a term paper (50%). For details on the term paper see the Syllabus for the first part.

Literature

The main textbook is: Uribe, M. and Schmitt-Grohe, S. (2017) Open Economy Macroeconomics, Princeton University Press.

We will cover most of the material in chapters 1-12 from the book.

Software

Computational exercises are an important part of the course. For these exercises we will use MATLAB.