

BGSE Macroeconomics I

Keith Kuester

Winter term, 2025/26

Outline:

This is the first course in the PhD core macro sequence at U Bonn. It serves as an introduction. Students learn basic techniques and concepts, and study the work-horse models of representative-agent macroeconomics. Macroeconomics studies the outcomes of interactions in large populations. How does society allocate its resources? How does the interaction of private incentives and public policies shape economic outcomes? Should policy try to smooth economic fluctuations? Because populations are large and policy interventions are made on a large scale, general-equilibrium effects may be important. Models serve as laboratories. The course covers basic frameworks for studying growth, business cycles with and without frictions, and monetary and fiscal stabilization policies. Towards the end, the course also provides a first look at the distributional effects of stabilization policies.

Lecture times: Th/Fr. 08:30 sharp - 10:00, Room 0.017 (Selten Raum).

Office hours: Mo 15.00-16.00; Kaiserplatz 7-9, Room 4.015. Please always register beforehand, sending me an email by Friday cob.

There will be a recap/Q+A session (a “tutorium”) roughly every other week. The first tutorial is scheduled for October 31, 14:00 in Room 0.017 (Selten Raum).

Grading: To be considered successful, students must pass a two-hour final exam. This exam will be open book. Students may also choose to take a midterm exam as an exercise. Participation in the midterm is voluntary. Students can use the midterm to improve their final exam grade by up to 0.7 points. For example, if a student receives a 4.0 on the final exam and a 1.0 on the midterm, the average grade is a 2.5. The final grade will be a 3.3 (an improvement of 0.7 grade points at most on the final exam). If a student receives a 2.7 on the final exam and a 1.3 on the midterm, the final grade will be a 2.0. Students are strongly encouraged to study the problem sets distributed throughout the course.

Overview

Ch. 0 **Outlook and introduction.**

For an introduction to macro as a subject, see Azzimonti et al. (2025) ch. 1.

Ch. 1 **Asset prices in macro.**

Textbook: Azzimonti et al. (2025), ch. 7.2, ch. 16, Ljungqvist and Sargent (2018), ch. 8.8, ch. 14.1-14.3.

Review paper: Cochrane (2017).

Ch. 2 **Growth.**

Main reference: Jones (2016).

Textbook: Azzimonti et al. (2025), Ch. 2, Ch. 13, Ljungqvist and Sargent (2018), ch. 15.1-15.4.

Review papers: Herrendorf et al. (2014), Hornstein et al. (2005), Grossman and Oberfield (2022), Jones (2022).

Ch. 3 **Real business cycle theory.**

Textbook: Azzimonti et al. (2025), ch. 14

Classic reference: King and Rebelo (1999). Business cycle accounting: Brinca et al. (2016); Cost of business cycles: Lucas (2003), further references on the slides;

Ch. 4 **Equilibrium unemployment over the business cycle.**

Textbook: Cahuc et al. (2014), ch. 9

Azzimonti et al. (2025), ch. 20

Textbook: Ljungqvist and Sargent (2018), ch. 29.1-29.5.

Review papers: Rogerson et al. (2005), Rogerson and Shimer (2011).

Further references on the slides.

Ch. 5 **Classical monetary model.**

Textbook: Azzimonti et al. (2025), ch. 17.3, or Walsh (2017), ch. 2 and 3; or Galí (2015), ch. 2.

Further references on the slides.

Ch. 6 **Nominal Rigidities – New Keynesian Model – positive and normative.**

Azzimonti et al. (2025), ch. 18.

Walsh (2017):

- ch. 7.2.2 price-setting and Phillips curve.
- ch. 7.2.3 monopolistic competition.
- ch. 8 (all sections): New Keynesian model and policy implications.
- ch. 11.1-11.4: effective lower bound and forward guidance.

Galí (2015):

- ch. 3: basic New Keynesian model, shock transmission, determinacy.
- ch. 4: optimal monetary policy.
- ch. 5: sticky wages and sticky prices.

Further references on the slides.

Ch. 7 **Monetary fiscal interaction.**

Textbook :Walsh (2017), ch. 4.2 and 4.5, Ljungqvist and Sargent (2018), ch. 27.

Review papers: Leeper and Leith (2016), Sims (2013).

Application: Bianchi et al. (2023). Further references on the slides.

Ch. 8 **Household heterogeneity and the business cycle.**

Main reference: Bilbiie (2025) and Angeletos et al. (2024).

Further references on the slides.

How you might wish to use the references:

The course provides an introduction to select areas of graduate macro. What is relevant for the exam is the material we cover in lectures and problem sets. The material provided on e-campus and in class is intended to be self-contained for this course. However, it may not be sufficient for every student, and some students may wish to read more about a topic. The references above are meant to serve as alternative sources of information and intuition, and as starting points for reading up on a topic; as do the additional references provided on the slides. The references do not necessarily use the exact same notation or modeling that is used in the classroom (in fact, in most cases, they do not). Nor do the references necessarily cover the exact same ground (most often the references end up covering more material than the lectures).

As per the books, Azzimonti et al. (2025) is available online for free. Ljungqvist and Sargent (2018), Walsh (2017), and Galí (2015) are all available in the university library. Walsh's book, in addition, can be accessed online from the ULB when connected through the university's network.

References

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- Bianchi, F., Faccini, R., and Melosi, L. (2023), ‘A Fiscal Theory of Persistent Inflation*,’ *The Quarterly Journal of Economics*, 138(4), pp. 2127–2179.
- Bilbiie, F. O. (2025), ‘Monetary Policy and Heterogeneity: An Analytical Framework*,’ *The Review of Economic Studies*, 92(4), pp. 2398–2436.
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