

Advanced Monetary Economics

Introduction

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Lecture 1

Question we want to address in this class

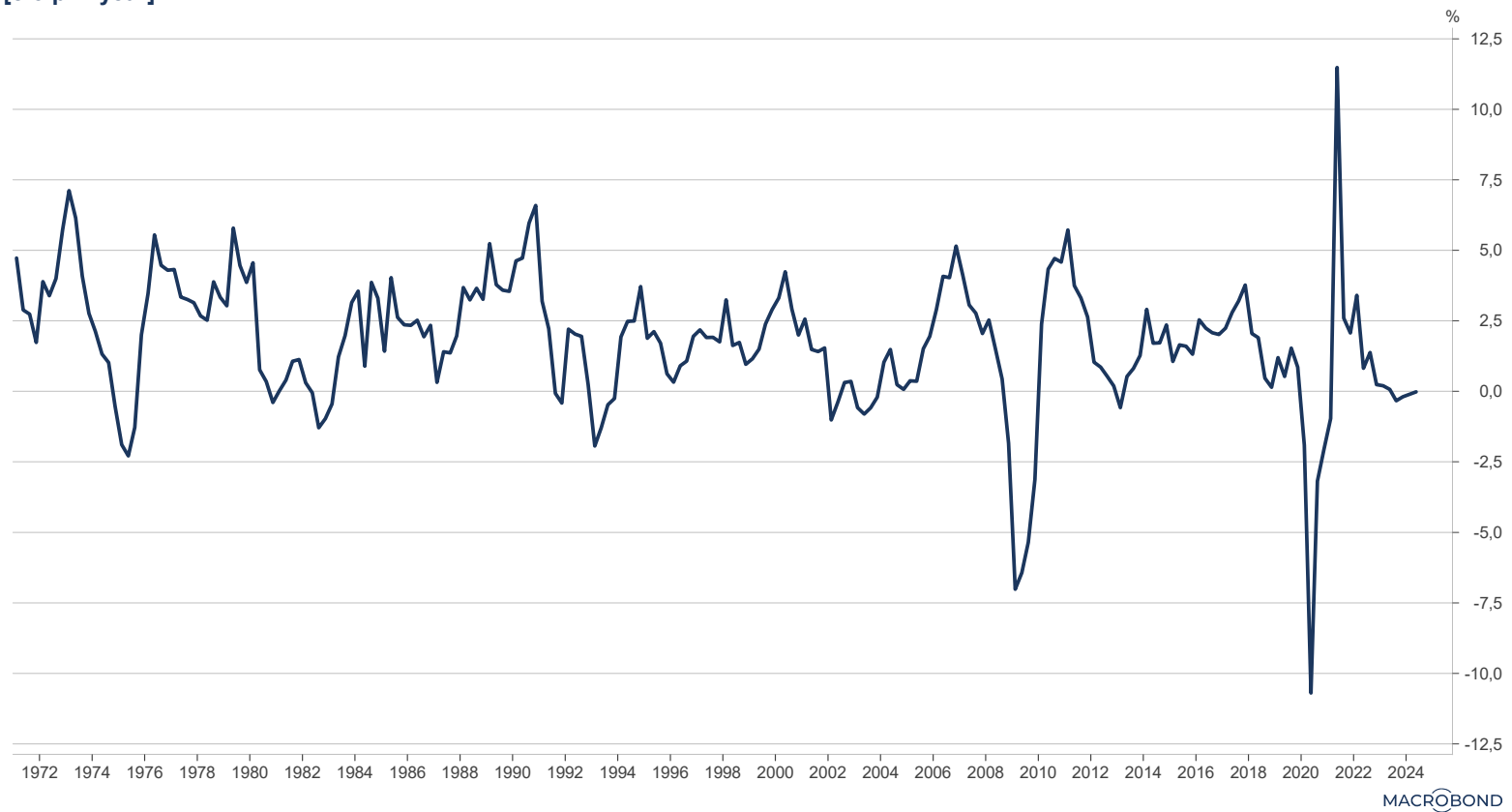
1. What is money?
2. What is monetary policy?
3. What are the effects of monetary policy in theory?
4. How to measure the effects of monetary policy?
5. What is the relation between fiscal and monetary policy?

Motivation

- Why is it useful to study monetary economics now?
- The corona pandemic led to largest GDP decline in peace time history.
- Pandemic and Ukraine war led to strongest inflation spike in decades.
- Monetary policy is one main policy tool to stabilize inflation, GDP, and employment.
- More generally, we want to study the role of monetary policy in causing and fighting business cycle fluctuations and crises.

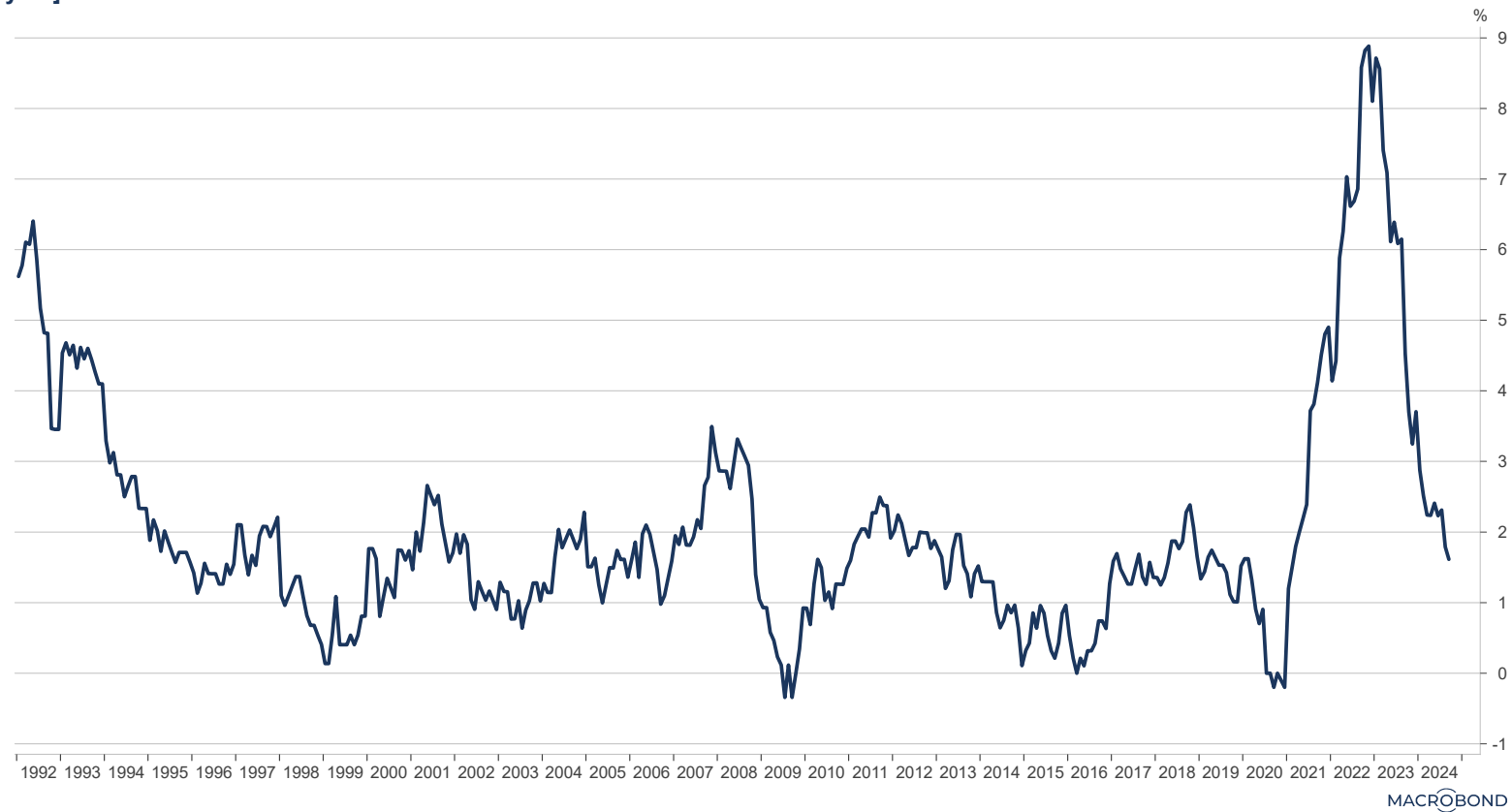
- Evolution of real GDP in Germany

Germany, Gross Domestic Product, Total, Calendar Adjusted (X13 JDemetra+), Constant Prices, SA (X13 JDemetra+), Chained, Index [c.o.p. 1 year]

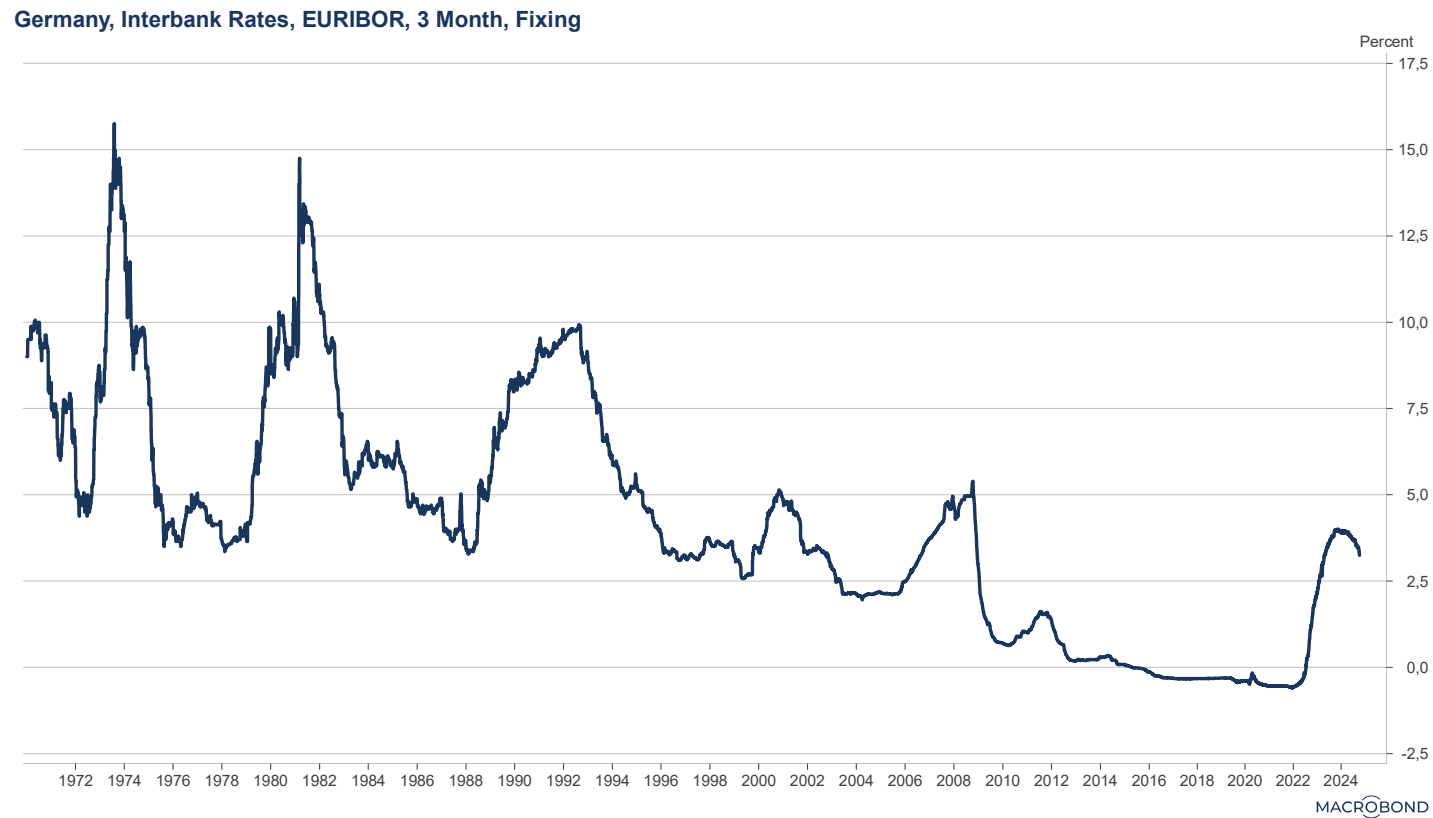


- Evolution of consumer price index inflation in Germany

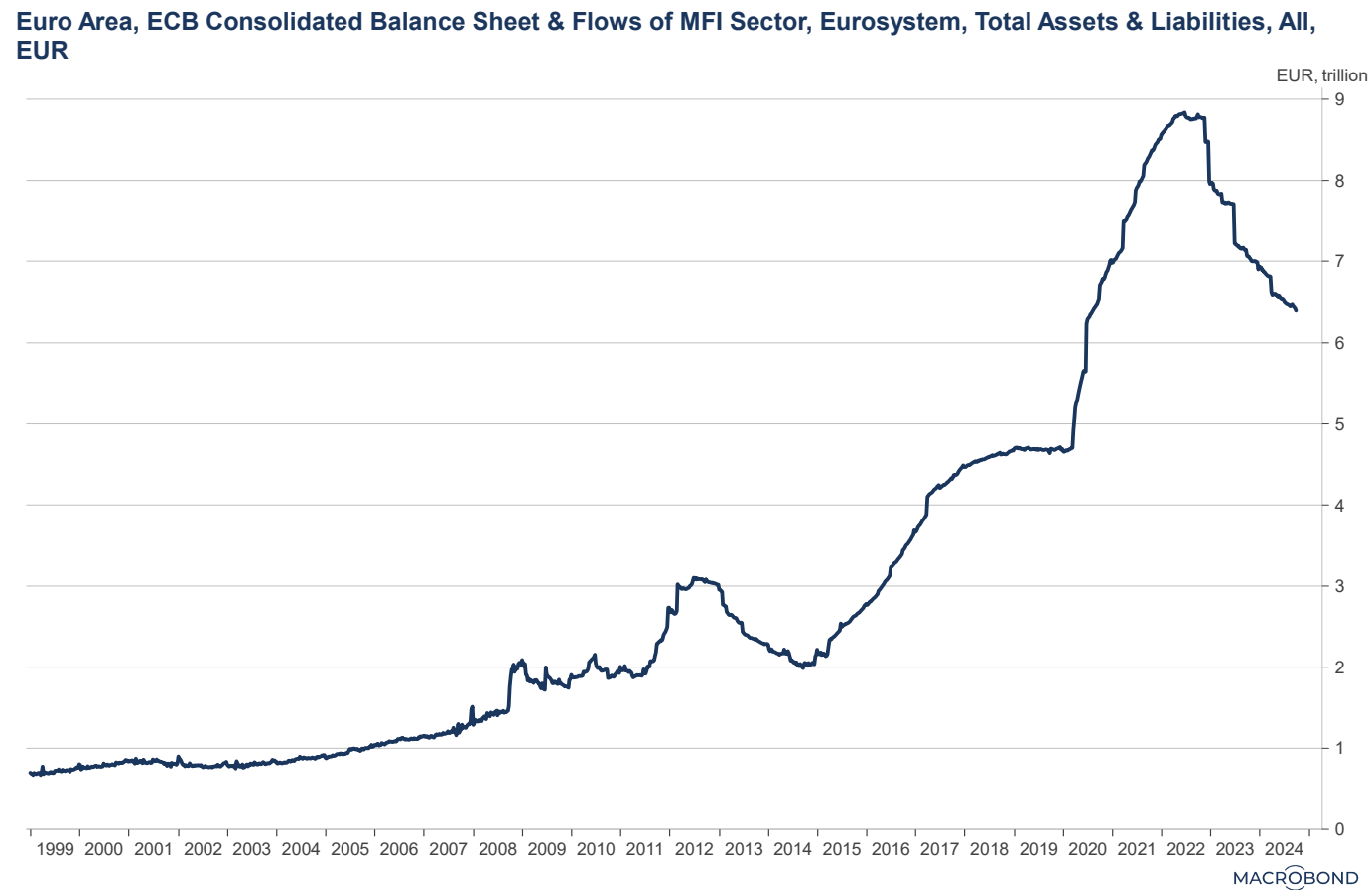
Germany, Bundesbank, Consumer Price Index, Consumer Price Index, Germany, Overall Index, Calendar Adjusted, SA, Index [c.o.p. 1 year]



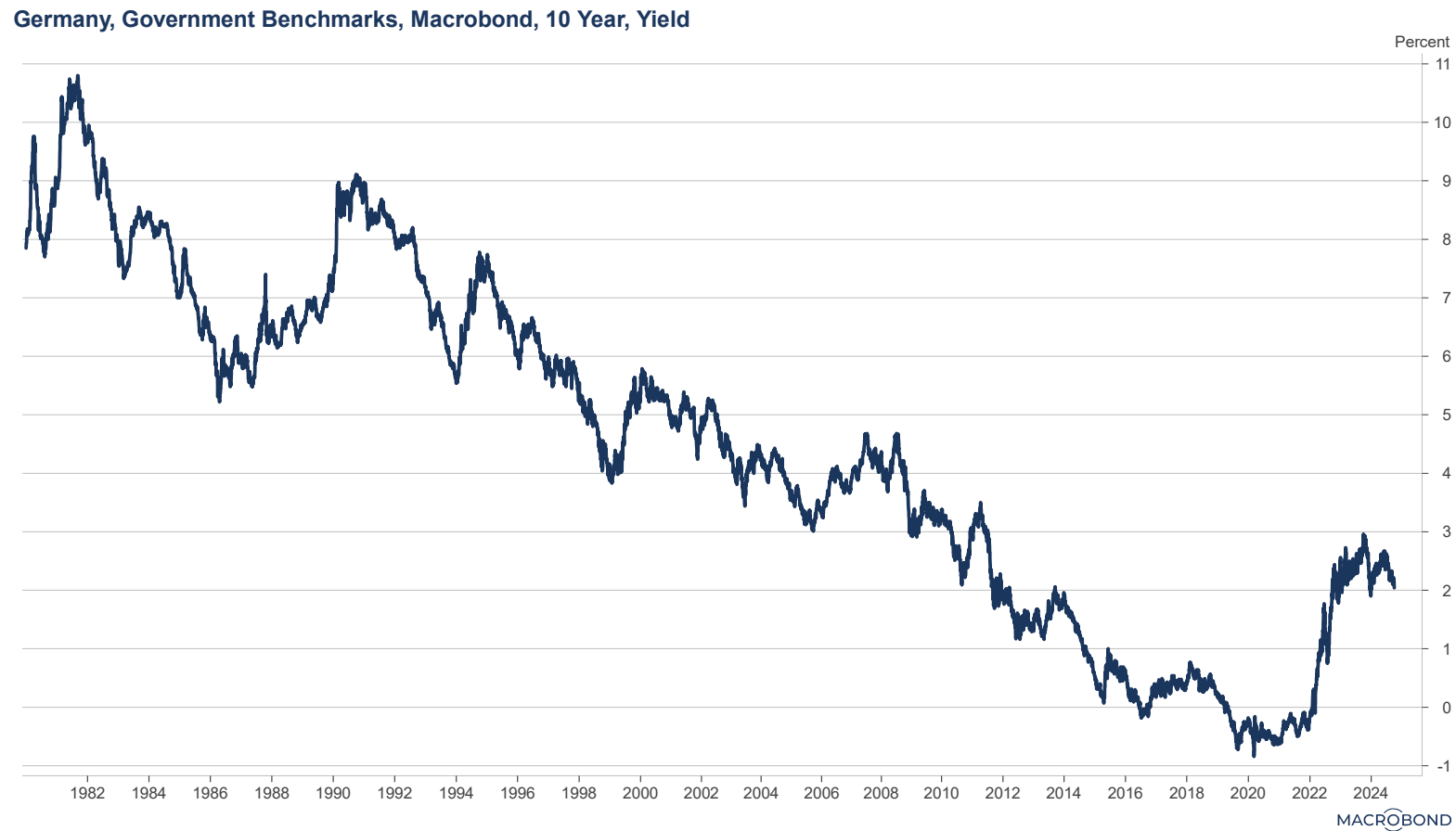
- Evolution of short-term rate in Germany/ euro area



- Evolution of ECB balance sheet



- Evolution of government ten-year yield of Germany



Content of this class

1. Definition and role of money
2. The conduct of monetary policy
 - The market for reserves
 - The different interest rates of the central bank
 - The transmission channels of monetary policy
3. Introduction into Dynamic Stochastic General Equilibrium (DSGE) models
 - The classical monetary model
 - Solution of the classical monetary model

- The New Keynesian model
- Solution of the New Keynesian model
- Effects of monetary policy in a New Keynesian model

4. Empirical monetary economics

- The Taylor rule
- Effect of monetary policy shocks

1 Definition and role of money

- What is money?
- Why has it value?
- What determines its value?
- Short history of money

2 The conduct of monetary policy

- Market for central bank reserves
- Tools of monetary policy: open market operations, standing facilities
- conventional and unconventional monetary policy
- Transmission mechanism of monetary policy: yield curve, interest rate channel, Tobin's Q, wealth channel

3 Introduction to monetary DSGE models

- General equilibrium analysis: households, firms, central bank
- Solution of a DSGE model
- Flexible price model
- Sticky price model (New Keynesian model)
- Dynamic effects of monetary policy
- Impulse response functions

4 Empirical monetary economics

- Empirical studies
- What are central bank reaction functions?
- What is a monetary policy shock?
- How to identify monetary policy shocks?
- How to measure the effects of monetary policy shocks?

Further information

- Prerequisites: I strongly encourage to attend *Dynamic Macroeconomics* by Prof. Holtemöller.
- Required readings
 - Textbook for most part of the class: “Monetary Policy, Inflation, and the Business Cycle” by Jordi Gali (2015)
 - Textbook for the first part of the class: “The Economics of Money, Banking and Financial Markets’ by F.S. Mishkin, K. Matthews und M. Giuliadori (2013)
- Grading: Exam counts for 100%