Central Banks, Macroeconomic Policy and Financial Markets
FNCE 7400
Fall 2023

Professors
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Office Hours (in person)
Tuesday 3:30 – 4:30 pm and by appointment

Teaching Assistants
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Office hours (Zoom):
Wednesday 5:00-6:00 pm

Course Overview

Description

Macroeconomic events and policies play a crucial role in driving financial market performance over time. This is an advanced course in applied macroeconomics that discusses both how macroeconomic policy works today and how it impacts the broad economy and financial markets. It is assumed that students have a good knowledge of intermediate undergraduate macroeconomic analysis and at least a basic understanding of the key financial market indicators.

The first half of the class focuses on understanding and predicting Central Banking (CB) decision making and how monetary policy is conducted today. We provide the methods and knowledge on how central banks think and implement policies to reach the goals of price and financial stability as well as support of growth and employment. The core of this section connects economic knowledge, legal frameworks and the goals and methods followed by central banks. We explain the rationale for the policy prescriptions implemented today mainly by the Federal Reserve Bank (Fed) in the US as well as by the European Central Bank (ECB), Bank of Israel (BOI) and some other major countries. We discuss the current events of inflation and risk of recession as the world exits from the Covid-19 crisis and central banks adjust their monetary policy. We will also cover events before and after the 2008 financial crisis and attempt to draw
lessons from the 1970s stagflation episodes. Students will simulate and forecast upcoming central banks' policy decisions based on current data and the latest theory.

The second half studies government policy more broadly and how financial markets process macroeconomic events and policy announcements. It discusses the key macroeconomic drivers of bond and stock market valuations and how they respond to economic news and policy actions by central banks and governments. We discuss the impact of recent developments and, in particular, the consequences of the aggressive policy interventions to the Covid-19 recession and the subsequent economic recovery. Students will estimate the impact of key macro developments and assess their implications for bond and equity valuations.

**Prerequisites**

This course assumes students have a solid knowledge of intermediate macroeconomics, or similar, principles of finance and some basic regression analysis.

**Meeting Information**

**Class Times**
Tuesday and Thursday: 10:15-11:45 SHDH 213 (Section 7400.1) and 1:45 PM-3:15 PM SHDH 213 (Section 7400.2).
However, most guest speakers will be able to talk to only one session over Zoom. All sessions will be recorded and available on Canvas.

**Class Structure**

Most classes will:
- **Start with a class discussion of the latest news** or data related to the class. Our main sources will be the *Financial Times* and *The Wall Street Journal*, as well as *The Economist* and *Bloomberg*. Readings will usually be shared on the day before class.
- **Conclude with a short Quiz**. The Quiz aims to review the core concepts discussed during that class. Quizzes are on Canvas. They should be done individually using a mobile device.

Students are expected to attend regular lectures and contribute actively to class discussions. If you cannot attend for health or family emergency reasons, you should still participate in any follow up online discussions. Both in class and online discussions will count towards your participation grade.

For lectures with distinguished guest speakers, the format will generally that of a presentation followed by student Q&A. The **Final Quiz** will be based **entirely** on the content of these sessions. Guest lectures might need to be scheduled outside regular class time. They will all be recorded and posted on Canvas.

**Classroom Safety**

The exact **classroom safety rules** will conform with the latest guidance from Penn and the city of Philadelphia. Masks are optional.
Requirements and Grading

The final course grade will be calculated as follows:

- **Team Assignments**: to be done by teams of 3-4 students (30%)
- **Active participation**: in class discussions and/or online discussion boards (20%)
- **11 Quizzes** (drop lower score): (30%)
- **A Long Quiz**: covers presentations by guest speakers (20%)

Key Deliverables Dates

- Sep 7 - Presentation and discussion of Assignment 1
- Sep 19 - Presentation and discussion of Assignment 2
- Oct 3 - Presentation and discussion of Assignment 3
- Nov 14 - Presentation and discussion of Assignment 4
- Dec 6 – Long Quiz

Course Materials

Because this is an advanced class that discusses real-time events there is no suitable textbook. Most of our references provide supportive information but are not required to follow the class material. They include a few useful chapters or sections from some (text) books, as well as reports, lectures and several recently published articles on each of the topics. We will provide all necessary readings and data for the assignments. Slides, readings and assignment materials can be found on Canvas.

Penn provides free online subscriptions to several major financial publications (*Financial Times*, *Wall Street Journal*, *New York Times*) and we strongly recommend you take advantage of them to be able to link to any web articles we will post from those publications.

In addition, Yardeni Research ([https://www.yardeni.com](https://www.yardeni.com)) provides incredibly detailed content on financial markets and the macroeconomy. It is freely available and updated daily.

**Background Reference:**

- Andy A. Abel, Ben S. Bernanke and Dean Croushore, Macroeconomics (10th edition) Pearson. (ABC)
Tentative Schedule

1. *Covid-19, the Great Financial Crisis and Central Banks Intervention (Aug 29)*

**Readings**

**Optional background:**
- ABC, pp. 568-574.
- The Economist, *“Central Banks: The Danger of Excessive Distraction”*, 2022.

2. *Inflation and Interest Rates: Foundations (Aug, 31)*

**Main Question:** What are the optimal long run (target) inflation and nominal interest rate?

**Readings**

**Priority:**

**Optional background:**
- ABC, pp. 63-248; 248-252; 263-270; 276-278; 474-481

**Optional additional:**
- The Economist, “Central-bank digital currencies are talked about more than coming to fruition”, 2023.
- The Economist, “A new era of economics: starting over again”, 2020

3. *The Taylor Rule: How do Central Banks Conduct Monetary Policy? (Sep. 5 & 7)*

**Main Question:** How is the short-term interest rate determined?

**Readings**

**Priority:**
- Ben S. Bernanke, *“Monetary Policy and the Housing Bubble”*, speech at the American Economic Association, 1/2010
Optional background:
- ABC, pp. 542-582

Optional additional:

DUE: Sep. 7 - Presentations and discussion of Assignment 1. Was the Fed federal funds rate too low before 8/2007 and after 10/2008?

4. Monetary Policy, Bond Yields and Credit Spreads (Sep. 12 & 14)
Main question: How do bond markets respond to macroeconomics and monetary policy?

Readings
Priority:
- Federal Reserve Bank of Cleveland, “Yield Curve and Predicted GDP Growth”, 2022
- John Williams, “Measuring the Natural Rate of Interest: Past, Present and Future”, Board of Governors, May 2023

Optional additional
- Federal Reserve Bank of New York, Measuring the Natural Rate of Interest

5. Policy at the Zero Lower Bound for Interest Rates (Sep. 19 & 21)
Main question: Is monetary policy effective at the zero lower bound or with negative interest rates?

Readings
Priority:

Optional background:
- ABC, pp. 569-573, 620

Optional additional:
- The Economist, “The Perils of Expanded Balance-Sheets”, 2022
DUE: Sep. 19: Presentations and discussion of Assignment 2
Simulation and discussion of the FOMC decision of 9/20. The Fed monetary policy since March 2020 and what is expected for the future.

6. **Flexible Inflation Targeting Policy: Theory and Practice (Sep 26 & 28)**
Main question: What is the theory and practice of modern monetary policy analysis?

**Readings:**
**Priority:**
- Zvi Eckstein: [Notes on the DSGE model](#)

**Optional background:**
- ABC, 160-167; 170-175; 339-342; 441-443; 490-497; 518-527

**Optional additional:**

Main Question: How does fiscal and monetary policy interact and affect financial stability?

**Readings**
**Priority:**
- ECB, [The ECB New Monetary Strategy](#), July 8, 2021.

**Optional background:**
- ABC, 604-627

**Optional additional:**
- The Economist - [How higher interest rates squeeze government budgets](#) - 7-16-2022.

Simulation of the next ECB monetary policy decision. Does ECB policy under Mario Draghi and Christine Lagarde follow a Taylor rule or only the goal of “price stability”?

8. **The Outlook for US Monetary Policy (Oct. 5)**
Main Question: What is the Near-term Outlook for U.S. Monetary Policy?
Guest speaker: Loretta Mester (President, Federal Reserve Bank of Cleveland)
**NOTE:** The presentation takes place only during the 1:45-3:15 session

Main question: How different is monetary policy in small open economies? Should it include exchange rate intervention?

Guest speaker: Professor Amir Yaron (Governor, Bank of Israel)

NOTE: The presentation takes place only during the 10:15-11:45 session

Reading
Priority:
- Latest minutes on Bank of Israel Interest Rate Decisions

Optional Additional:

10. Inflation and Fiscal Policy (Oct. 26)
Main question: How does fiscal policy affect inflation and economic growth?

Readings
Priority:
- Brookings Institution, Hutchins Center Fiscal Impact Measure
- Moody’s Analytics, Global Fiscal Policy in the Pandemic, 2022

Optional additional

11. The Long Run Fiscal Outlook (Oct 31)
Main question: What are the causes and effects of a fiscal crisis? What is the likelihood of a fiscal crisis in the US?

Readings
Priority:
- Penn Wharton Budget Model, “Can Higher Inflation Help Offset the Effects of Larger Government Debt?”, 2021

Optional additional

12. Monetary Policy in the Euro-Zone (Nov 2)
Guest lecture: Dr. Frank Smets (Counsel to the Executive Board, European Central Bank)
Main question: What is the ECB monetary policy framework?

NOTE: The presentation takes place only during the 10:15-11:45 session

13. Equity Markets and the Macroeconomy (Nov 7, 9 and 14)
Main Questions: How do macro variables and policies impact stock valuations? What is the impact of inflation on the various asset classes?

Readings
Priority:
• Roger Ibbotson and James Harrington, Stocks, Bonds, Bills and Inflation (SBBI) Summary Edition, CFA Institute 2021

Optional additional
• Xiang Fang, Yang Liu and Nikolai L. Roussanov, “Getting to the Core: Inflation Risks Within and Across Asset Classes”, working paper, Wharton School, 2022
• Yardeni Research, Predicting Valuation

DUE: Nov 14 Presentation and discussion of Assignment 4.
Is the US stock market overvalued?

14. Interest Rate Strategies (Nov. 16)
Guest lecture: Dr. Praveen Korapaty (Chief Interest Rates Strategist, Goldman Sachs)
Main question: What is the outlook for interest rates in the major economies?
NOTE: The presentation takes place only during the 10:15-11:45 session

15. The US Macro Outlook (Nov. 28)
Guest Lecture: Dr. Mark Zandi (Chief Economist, Moody Analytics)
Main question: What is the near-term outlook for the US economy?
NOTE: The presentation takes place only during the 10:15-11:45 session

16. Macro Investment Strategies (Nov. 30)
Guest Lecture: Alp Ercil (CEO, Asia Research and Capital Management)
Main question: Investment considerations in a changing global macro environment

17. Summary and Conclusion (Dec. 5)
Summary of guest speaker presentations and reflection on the main themes of the course.

DUE: Dec. 6 LONG QUIZ on Guest Speaker Presentations.

Ethics Matrix

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**A = Allowed material**

**Shaded Cell = Not allowed**

**W = Allowed to work together**

**D = Discussion of general concepts and procedures is allowed but no sharing of specific answers.**

**Shaded Cell = Not allowed**

The information above covers many common situations but probably not every circumstance. Remember: the Wharton Code of Ethics that you accepted requires, among other things, that you represent yourself and your work honestly, do not try to gain unfair advantage over other students, follow the instructor’s guidelines and respect confidentiality of your work and that of others. Should you have questions, please contact your professor.