



MACRO-FINANCE THEORY AND EMPIRICAL METHODS

UNIVERSITY OF OXFORD - SAÏD BUSINESS SCHOOL

Lecturer: Dr. Fatih Kansoy	Term/Weeks: Trinity Term: Weeks 1-4
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Course Canvas Page: MFE TT25 MF	Website: https://macrofinance.info

Aims of the Course: This course seeks to develop advanced understanding of modern financial markets, with emphasis on central banking, financial globalisation, and market dynamics. The course combines theoretical foundations with data-driven analysis, focusing on how central banks, international capital flows, and market mechanisms interact in today's global financial system. Using modern analytical tools, including text mining and high-frequency data analysis, students will explore key topics such as central bank communication, financial bubbles, bank runs, and quantitative easing effects. The course is designed for Masters in Financial Economics (MFE) students and aims to bridge theoretical concepts with practical applications, preparing students for careers in financial institutions, central banks, and consultancy.

Learning Outcomes for the course: Upon successful completion of this course, students will be able to: (i) critically analyse and evaluate the impact of financial globalisation, capital mobility, and central bank policies on global markets, (ii) apply data science methods such as text mining and event studies to assess the effects of monetary policy and market responses, and (iii) present their analysis through visual, verbal, and written communication.

Method of Assessment:

Final Exam (75%): The final exam will be two-hour long. Students should answer 3 questions out of 5.

Presentations (25%): The practical assignment will consist of a presentation in the last class of the term. Students may choose between two types of topics:

- A) High-effort, high-return topics: These involve using methods and strategies discussed in the "High-frequency Analysis" or "Finance Meets Data Science" sections of the course. Students will apply these techniques to current research questions.
- B) Standard-effort, standard-return topics: Students will choose any topic from the course reading list and critically evaluate it.

Presentations should last about 20 minutes and will be followed by questions. Groups typically consist of 3-5 people, and each group will present only in front of the lecturer. Students are strongly advised to use slides (e.g., PowerPoint, Latex Beamer), which should be of professional quality.

General Information on the Course:

- No single textbook covers all the materials in this course. Some good reference textbooks are:
 - Schmitt-Grohé, S., Uribe, M. and Woodford, M., 2022. International Macroeconomics: A Modern Approach. Princeton University Press.
 - Rogoff, Kenneth, and Maurice Obstfeld. 1996. Foundations of International Macroeconomics. Cambridge, Massachusetts: MIT Press.
 - Carlin, W. and Soskice, D.W., 2024. Macroeconomics: Institutions, Instability, and Inequality. Oxford.
- Links to online working papers, blogs and policy publications are available through the course management system.
- Students should collaborate in preparing the presentation and are welcome to study in groups for the final exam.
- Students are expected to adhere to the highest standards of behaviour, including (but not limited to) no cheating in the exam, no plagiarism in the presentations, and no use of devices in a distractive way (such as phones, laptops, and tablets) in the classroom for non-academic purposes.

Tentative Course Outline:

Central Bank Communication and the Role of Expectations	≈ Lecture 1
High-frequency Analysis: News, Surprises and Financial Reactions	≈ Lecture 2-3
Finance Meets Data Science: Extracting Information from Text	≈ Lecture 3-4
Dancing Together: Financial Globalisation, Risk Sharing, and Spillovers	≈ Lecture 5
International Capital Market Integration	≈ Lecture 6
Capital Controls	≈ Lecture 7
Quantitative Easing, Quantitative Tightening, and Beyond	≈ Lecture 8

Main Reading List**Part I: The Only Game in Town: Central Banking****Session 1: Central Bank Communication and the Role of Expectation**

In this session, we explore how central banks use communication as a powerful policy tool to shape market and household expectations. We will investigate how clear and relatable communication influences economic decisions and policy effectiveness. By examining empirical evidence and theories from prominent literature, you will gain insights into why the way central banks communicate matters profoundly for monetary policy outcomes

1. Bholat, David, Nida Broughton, Janna Ter Meer, and Eryk Walczak. "ENHANCING CENTRAL BANK COMMUNICATIONS USING SIMPLE AND RELATABLE INFORMATION." *Journal of Monetary Economics* 108 (2019): 1-15.
2. Binder, Carola. "FED SPEAK ON MAIN STREET: CENTRAL BANK COMMUNICATION AND HOUSEHOLD EXPECTATIONS." *Journal of Macroeconomics* 52 (2017): 238-251.
3. Blinder, Alan S., Michael Ehrmann, Marcel Fratzscher, Jakob De Haan, and David-Jan Jansen. "CENTRAL BANK COMMUNICATION AND MONETARY POLICY: A SURVEY OF THEORY AND EVIDENCE." *Journal of economic literature* 46, no. 4 (2008): 910-945.
4. Kerssenfischer, Mark, and Maik Schmeling. "WHAT MOVES MARKETS?." *Journal of Monetary Economics* 145 (2024): 103560.
5. Blinder, Alan S., Michael Ehrmann, Jakob De Haan, and David-Jan Jansen. "CENTRAL BANK COMMUNICATION WITH THE GENERAL PUBLIC: PROMISE OR FALSE HOPE?." *Journal of Economic Literature* 62, no. 2 (2024): 425-457.
6. Bohl, Martin T., Dimitrios Kanelis, and Pierre L. Siklos. "CENTRAL BANK MANDATES: HOW DIFFERENCES CAN INFLUENCE THE CONTENT AND TONE OF CENTRAL BANK COMMUNICATION." *Journal of International Money and Finance* 130 (2023): 102752.
7. Carlin, Wendy, and David W. Soskice. "MACROECONOMICS: INSTITUTIONS, INSTABILITY, AND INEQUALITY." Oxford University Press, 2024. Chapter 4
8. Cieslak, Anna, and Andreas Schrimpf. "NON-MONETARY NEWS IN CENTRAL BANK COMMUNICATION." *Journal of International Economics* 118 (2019): 293-315.
9. Coibion, Olivier, Yuriy Gorodnichenko, and Michael Weber. "MONETARY POLICY COMMUNICATIONS AND THEIR EFFECTS ON HOUSEHOLD INFLATION EXPECTATIONS." *Journal of Political Economy* 130, no. 6 (2022): 1537-1584.
10. Ehrmann, Michael, and Alena Wabitsch. "CENTRAL BANK COMMUNICATION WITH NON-EXPERTS—A ROAD TO NOWHERE?." *Journal of Monetary Economics* 127 (2022): 69-85.
11. Hayo, Bernd, and Matthias Neuenkirch. "CENTRAL BANK COMMUNICATION IN THE FINANCIAL CRISIS: EVIDENCE FROM A SURVEY OF FINANCIAL MARKET PARTICIPANTS." *Journal of International Money and Finance* 59 (2015): 166-181.
12. Lamla, Michael J., and Dmitri V. Vinogradov. "CENTRAL BANK ANNOUNCEMENTS: BIG NEWS FOR LITTLE PEOPLE?." *Journal of Monetary Economics* 108 (2019): 21-38.

Session 2/3: High-frequency Analysis: News, Surprises and Financial Reactions.

This session introduces methods for analysing financial market responses to monetary policy using high-frequency financial data and methods such as event studies. We will learn about the identification of monetary policy shocks, the role of market expectations, and how surprises

in policy announcements affect asset prices in different financial markets such as stock, bond, and foreign exchange markets as well as commodity markets. Through classic and contemporary papers, you'll understand the mechanics behind rapid market adjustments following central bank actions and statements.

1. Altavilla, Carlo, Luca Brugnolini, Refet S. Gürkaynak, Roberto Motto, and Giuseppe Ragusa. "MEASURING EURO AREA MONETARY POLICY." *Journal of Monetary Economics* 108 (2019): 162-179.
2. Bernanke, B.S. and Kuttner, K.N., 2005. WHAT EXPLAINS THE STOCK MARKET'S REACTION TO FEDERAL RESERVE POLICY?. *The Journal of Finance*, 60(3)
3. Braun, R., Miranda-Agrippino, S. and Saha, T., 2024. MEASURING MONETARY POLICY IN THE UK: THE UK MONETARY POLICY EVENT-STUDY DATABASE. *Journal of Monetary Economics*
4. Gürkaynak, R.S. and Wright, J.H., 2013. IDENTIFICATION AND INFERENCE USING EVENT STUDIES. *The Manchester School*, 81
5. Gürkaynak, R.S., Sack, B.P. and Swanson, E.T., 2004. DO ACTIONS SPEAK LOUDER THAN WORDS? THE RESPONSE OF ASSET PRICES TO MONETARY POLICY ACTIONS AND STATEMENTS. *The Response of Asset Prices to Monetary Policy Actions and Statements* (May 2005).
6. Gürkaynak, R.S., Kısacıkoglu, B. and Wright, J.H., 2020. MISSING EVENTS IN EVENT STUDIES: IDENTIFYING THE EFFECTS OF PARTIALLY MEASURED NEWS SURPRISES. *American Economic Review*, 110(12)
7. Gürkaynak, R., Karasoy-Can, H.G. and Lee, S.S., 2022. STOCK MARKET'S ASSESSMENT OF MONETARY POLICY TRANSMISSION: THE CASH FLOW EFFECT. *The Journal of Finance*, 77(4)
8. Gürkaynak, R.S., Sack, B.P. and Swanson, E.T., 2007. MARKET-BASED MEASURES OF MONETARY POLICY EXPECTATIONS. *Journal of Business & Economic Statistics*, 25(2)
9. Kuttner, K.N., 2001. MONETARY POLICY SURPRISES AND INTEREST RATES: EVIDENCE FROM THE FED FUNDS FUTURES MARKET. *Journal of Monetary Economics*, 47(3)
10. Rigobon, R., 2003. IDENTIFICATION THROUGH HETEROSKEDASTICITY. *Review of Economics and Statistics*, 85(4)
11. Rigobon, R. and Sack, B., 2004. THE IMPACT OF MONETARY POLICY ON ASSET PRICES. *Journal of monetary economics*, 51(8)
12. Swanson, E.T., 2021. MEASURING THE EFFECTS OF FEDERAL RESERVE FORWARD GUIDANCE AND ASSET PURCHASES ON FINANCIAL MARKETS. *Journal of Monetary Economics*, 118

13. Wright, J.H., 2012. WHAT DOES MONETARY POLICY DO TO LONG-TERM INTEREST RATES AT THE ZERO LOWER BOUND?. *The Economic Journal*, 122(564)
14. Romer, C.D. and Romer, D.H., 2004. A NEW MEASURE OF MONETARY SHOCKS: DERIVATION AND IMPLICATIONS. *American economic review*, 94(4), pp.1055-1084.

Session 3/4: Finance Meets Data Science: Extracting Information from Text

Here we discuss how modern data science techniques, particularly text mining and machine learning, are applied to economic research. We will explore how textual data from central bank documents can be systematically analysed to measure economic sentiments, policy uncertainty, and communication effectiveness. You will learn both the potential and challenges of employing computational methods for economic analysis. More importantly we will be more critical consumers of financial news and central bank communication. **Note that we will not go into the details of the methods but rather focus on the applications. Thus, no programming is required for this session.**

1. Ash, E. and Hansen, S., 2023. TEXT ALGORITHMS IN ECONOMICS. *Annual Review of Economics*, 15(1)
2. Armelius, H., Bertsch, C., Hull, I. and Zhang, X., 2020. SPREAD THE WORD: INTERNATIONAL SPILLOVERS FROM CENTRAL BANK COMMUNICATION. *Journal of International Money and Finance*, 103, p.102116.
3. Baker, S.R., Bloom, N. and Davis, S.J., 2016. MEASURING ECONOMIC POLICY UNCERTAINTY. *The quarterly journal of economics*, 131(4), pp.1593-1636.
4. Bholat, D., Hansen, S., Santos, P. and Schonhardt-Bailey, C., 2015. TEXT MINING FOR CENTRAL BANKS. Available at SSRN 2624811.
5. Gentzkow, M., Kelly, B. and Taddy, M., 2019. TEXT AS DATA. *Journal of Economic Literature*, 57(3)
6. Grimmer, J. and Stewart, B.M., 2013. TEXT AS DATA: THE PROMISE AND PITFALLS OF AUTOMATIC CONTENT ANALYSIS METHODS FOR POLITICAL TEXTS. *Political analysis*, 21(3)
7. Hansen, S. and McMahon, M., 2016. SHOCKING LANGUAGE: UNDERSTANDING THE MACROECONOMIC EFFECTS OF CENTRAL BANK COMMUNICATION. *Journal of International Economics*, 99
8. Hansen, S., McMahon, M. and Prat, A., 2018. TRANSPARENCY AND DELIBERATION WITHIN THE FOMC: A COMPUTATIONAL LINGUISTICS APPROACH. *The Quarterly Journal of Economics*, 133(2)
9. Hansen, S., 2018. MACHINE LEARNING FOR ECONOMICS AND POLICY. *Social and Economics Studies*, 5, pp.369-397.

Part II: Dancing Together: Financial Globalisation, Risk Sharing, and Spillovers

Session 5: Dancing Together: Financial Globalisation, Risk Sharing, and Spillovers

In this session, we examine how financial globalisation impacts economic synchronisation, risk sharing, and crisis transmission across countries. We will analyse how global financial interconnectedness affects economic stability and the propagation of financial shocks. By reviewing influential studies, you will better understand the roles of global banks, financial regulation, and international linkages in shaping macroeconomic outcomes and risks.

1. Kalemli-Ozcan, S., Papaioannou, E. and Peydro, J.L., 2013. FINANCIAL REGULATION, FINANCIAL GLOBALIZATION, AND THE SYNCHRONIZATION OF ECONOMIC ACTIVITY. *The Journal of Finance*, 68(3), pp.1179-1228.
2. Kalemli-Ozcan, S., Papaioannou, E. and Perri, F., 2013. GLOBAL BANKS AND CRISIS TRANSMISSION. *Journal of international Economics*, 89(2), pp.495-510.
3. Kose, M. Ayhan and Prasad, Eswar S. and Terrones, Marco E., 2007. HOW DOES FINANCIAL GLOBALIZATION AFFECT RISK SHARING? PATTERNS AND CHANNELS. IZA Discussion Paper No. 2903, Available at <https://www.iza.org/publications/papers/2903>
4. Kose, M.A., Prasad, E.S. and Terrones, M.E., 2009. DOES FINANCIAL GLOBALIZATION PROMOTE RISK SHARING?. *Journal of Development Economics*, 89(2), pp.258-270.
5. Pescatori, A., 2013. PRESS POINTS FOR CHAPTER 3: DANCING TOGETHER? SPILLOVERS, COMMON SHOCKS, AND THE ROLE OF FINANCIAL AND TRADE LINKAGES. *World economic outlook*.
6. Rogoff, Kenneth, and Maurice Obstfeld. 1996. FOUNDATIONS OF INTERNATIONAL MACROECONOMICS. Cambridge, Massachusetts: MIT Press. Section 5

Part III: International Capital Mobility and Capital Controls

Session 6: International Capital Market Integration

This session provides foundational knowledge about international capital flows, exchange rate determination, and their macroeconomic implications. We will examine how openness to international capital markets affects economic stability and policy choices. The readings will equip you to critically assess the role of international finance in shaping macroeconomic outcomes.

1. Schmitt-Grohé, S., Uribe, M. and Woodford, M., 2022. INTERNATIONAL MACROECONOMICS: A MODERN APPROACH. Princeton University Press. Chapter 11

Session 7: Capital Controls

We will explore why governments implement capital controls and their effectiveness in managing economic volatility and crises. By discussing key theoretical insights and empirical evidence,

you will appreciate the rationale, limitations, and practical consequences of restricting cross-border financial transactions. The provided literature offers both historical context and current perspectives on this contentious policy tool.

1. Schmitt-Grohé, S., Uribe, M. and Woodford, M., 2022. INTERNATIONAL MACROECONOMICS: A MODERN APPROACH. Princeton University Press. Chapter 12

If time permits:

Part IV: Quantitative Easing, Quantitative Tightening, and Beyond

Session 8: Unconventional Monetary Policy

In this session, we explore the rationale, implementation, and international repercussions of unconventional monetary policy tools, especially quantitative easing and tightening. Key readings detail the effectiveness, transmission channels, and spillover effects of these policies, addressing how they influence asset prices, economic activity, and financial stability. You will understand central banks' strategies for expanding or contracting their balance sheets to manage economic crises and guide market expectations globally.

1. Bernanke, B.S., 2020. THE NEW TOOLS OF MONETARY POLICY. American Economic Review, 110(4), pp.943-983.
2. Bhattarai, S. and Neely, C.J., 2022. AN ANALYSIS OF THE LITERATURE ON INTERNATIONAL UNCONVENTIONAL MONETARY POLICY. Journal of Economic Literature, 60(2), pp.527-597.
3. Bauer, M.D. and Neely, C.J., 2014. INTERNATIONAL CHANNELS OF THE FED'S UNCONVENTIONAL MONETARY POLICY. Journal of International Money and Finance, 44, pp.24-46
4. Fratzscher, M., Lo Duca, M. and Straub, R., 2018. ON THE INTERNATIONAL SPILLOVERS OF US QUANTITATIVE EASING. The Economic Journal, 128(608), pp.330-377
5. Gertler, M. and Karadi, P., 2018. QE 1 VS. 2 VS. 3...: A FRAMEWORK FOR ANALYZING LARGE-SCALE ASSET PURCHASES AS A MONETARY POLICY TOOL. 29th issue (January 2013) of the International Journal of Central Banking.
6. Kuttner, K.N., 2018. OUTSIDE THE BOX: UNCONVENTIONAL MONETARY POLICY IN THE GREAT RECESSION AND BEYOND. Journal of Economic Perspectives, 32(4), pp.121-146.
7. Neely, C.J., 2015. UNCONVENTIONAL MONETARY POLICY HAD LARGE INTERNATIONAL EFFECTS. Journal of Banking & Finance, 52, pp.101-111.
8. Rossi, B., 2021. IDENTIFYING AND ESTIMATING THE EFFECTS OF UNCONVENTIONAL MONETARY POLICY: HOW TO DO IT AND WHAT HAVE WE LEARNED?. The Econometrics Journal, 24(1), pp.C1-C32.

9. Sims, E.R. and Wu, J.C., 2020. WALL STREET VS. MAIN STREET QE (No. w27295). NATIONAL BUREAU OF ECONOMIC RESEARCH.
10. Tillmann, P., 2016. UNCONVENTIONAL MONETARY POLICY AND THE SPILLOVERS TO EMERGING MARKETS. *Journal of International Money and Finance*, 66, pp.136-156.