Econ 210C Part 2: Monetary Economics

Johannes Wieland, UCSD, Spring 2024

Logistics

Instructor:

Johannes Wieland

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- OH: Tue 12:20-1:20pm, SDSC 197E.

Lectures:

- Tue, Thu 11am-12:20pm, WLH 2114

Overview:

The course focuses on Monetary Economics. We derive the Classical Dichotomy in a classical monetary model and learn what tools (and how) the central bank can use to control inflation. After discuss the evidence for monetary non-neutrality from various empirical approaches, we first develop a simple model consistent with these data and then the New Keynesian model. Time-permitting, we also discuss other approaches that deliver monetary non-neutrality. The course then turns to the optimal conduct of monetary policy in normal times and (time-permitting) in the liquidity trap.

Textbooks and Course Materials:

- Lecture slides and required readings will be posted on the course website.
- Textbook:
  - Gali, Jordi. *Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework and Its Applications*, 2nd Edition. Princeton University Press: Princeton, NJ.

- Other Suggested Macroeconomics Textbooks:
  - Romer, David. *Advanced Macroeconomics*, 5th Edition, McGraw-Hill.
  - Woodford, Michael. *Interest and Prices: Foundations of a Theory of Monetary Policy.* Princeton University Press: Princeton NJ.

Requirements:

- **These are my best estimates for how I will conduct the assessment for this class. While I will do what I can to keep to the predicted assessments for this course, the evolving situation may make it necessary for me to make a change.**
- 10 Lectures From May 7 to June 6.
- Grading For This Half of Course: 60% take-home final, 40% problem sets.
- Problem sets:
  - You are encouraged to work in groups up to four people.
  - If you do so you must indicate who you worked with on your write up.
  - Each student must submit upload their work to a Github repository by the deadline.
  - Give us read access to your repository so we can access the files.
    - I recommend not making this your standard repository OR to revoke access at the end of the quarter.
  - Grading: Check+, Check, Check-, 0.
    - If you make an effort to answer every question you will get a check, which is considered full credit.
    - Check+ (=1.25× full credit) goes to the best attempt. If multiple attempts are equally strong on paper, then whichever answer executes code the fastest will get a Check+. Note that we may (and likely will) publish the best answer as a template for everyone else.
  - You can discuss questions with other students outside your group, but you should not share solutions.
- Final:
  - Take home exam, 8 hours.
  - Assignment will be available starting June, 11 at 8am.
  - Will be a combination of data analysis, model computation, and write-up.

  - Open book: you can use lecture slides, textbook, internet, ChatGPT and other "AI"-methods.
  - But you are not allowed to discuss the final with any other student.

- You are encouraged to stop me if you are confused and ask questions. I want this to be a discussion rather than a lecture as frequently as possible!

- You may not use electronic devices such as laptops, tablets, or phones in class. If you feel like you need an electronic device to learn or have another good reason to use electronic devices in class, please come see me.

- I want the course to be fun.
  - I will try to reference interesting recent research.
  - The focus will be on theory, but I will also discuss related empirics.
  - Please ask questions and be engaged. Even if you do not become a macroeconomist, you will be asked about monetary policy for the rest of your life. Now is the time to learn something about it.

Reading List

Required readings are starred. Readings may be changed over the course of the quarter. This reading list is extensive because it is not only be a list of required readings but also a guide to the literature should you become interested in the topics we cover.

- The Classical Dichotomy
  - * Gali Chapter 2.

- Solving Models in Sequence Space
  - * Anton Babkin log-linearization guide
  - * Shade Econ Github Repository
  - Boppart, Timo, Per Krusell, and Kurt Mitman, "Exploiting MIT Shocks in Heterogeneous-Agent Economies: The Impulse Response as a Numerical Derivative," JEDC, April 2018, 89, 68-92.
  - Adrien Auclert, Bence Bardóczy, Matthew Rognlie, and Ludwig Straub. 2021. "Using the Sequence-Space Jacobian to Solve and Estimate Heterogeneous-Agent Models", ECMTA 89 (5) 2021: 2375-2408.

- Controlling Inflation
  - * Castillo-Martinez, Laura and Ricardo Reis (2019) "How do central banks control inflation? A guide for the perplexed." WP

  - Cochrane, John (2011). "Determinacy and Identification With Taylor Rules." JPE 119(3): 565-615.
  - Angeletos, George-Marios and Chen Lian (2021) "Determinacy without the Taylor Principle", WP.
  - Gali Chapter 2.

- Empirical Motivation for Nominal Rigidity: VAR approach
  - * Stock, James and Mark Watson (2001). "Vector Autoregressions." JEP 15(4):101-115.
  - Econometrics Reference: Enders, Walter (2014). "Applied Econometric Time Series." Wiley.
  - Christiano, Lawrence, Martin Eichenbaum, and Charles Evans (2005). "Nominal Rigidities and the Dynamic Effects of a Shock to Monetary Policy." JPE 113(1): 1-45.

- Empirical Motivation for Nominal Rigidity: Other approaches
  - * Nakamura and Steinsson (2018). "Identification in Macroeconomics." JEP 32(3): 59-68.
  - Hausman, Joshua K., Paul Rhode, and Johannes F. Wieland (2019). "Recovery from the Great Depression: The Farm Channel in Spring 1933." AER, 109(2):427-72,
  - Romer and Romer (2004). "A New Measure of Monetary Shocks: Derivation and Implications." AER 94(4): 1055-1084.
  - Velde, Francois (2009). "Chronicle of a Deflation Unforetold." JPE. 117(4): 591-634.

- A Simple Model of Nominal Rigidity
  - * Nakamura and Steinsson (2013). "Price Rigidity: Microeconomic Evidence and Macroeconomic Implications." ARE 5:133-63.
  - Basu, Susanto, John Fernald, and Miles Kimball. (2006). "Are Technology Improvements Contractionary?" AER 96(5): 1418-1448.

- The New Keynesian Model
  - * Gali Chapter 3.
  - Blanchard, Olivier, and Nobuhiro Kiyotaki (1987). "Monopolistic Competition and the Effects of Aggregate Demand." AER 77(4): 647-666
  - Gali, Jordi and Mark Gertler (2007). "Macroeconomic Models for Monetary Policy Evaluation." JEP 21(4): 24-45.

  - Ball, Laurence (1994). "Credible Disinflation With Staggered Price Setting." AER 84(1): 282-289.
  - Goodfriend, Marvin, and Robert King (2005). "The Incredible Volcker Disinflation." JME 52: 981-1015.
  - Fuhrer, Jeff (2011). "Inflation Persistence." In Handbook of Monetary Economics: 423-486.
  - Mankiw, N. Gregory, and Ricardo Reis (2002). "Sticky Information Versus Sticky Prices: A Proposal To Replace the New Keynesian Phillips Curve." QJE 117(4):1295-1328.
  - Smets, Frank and Rafael Wouters (2007). "Shocks and Frictions in U.S. Business Cycle Models." AER 97(3): 586-606.
  - Chari, V.V., Patrick Kehoe, and Ellen McGrattan (2009). "New Keynesian Models: Not Yet Useful for Policy Analysis." AEJ: Macro 1(1): 242-266.
  - Gali, Jordi and Mark Gertler (1999). "Inflation Dynamics: A Structural Econometric Analysis." JME 44: 195-222.
  - Mavroeidis, Sophocles, Mikkel Plagborg-Moller, and James Stock (2014). "Empirical Evidence on Inflation Expectations in the New Keynesian Phillips Curve." JEL 52(1): 124-188.

- Optimal Monetary Policy in a New Keynesian Framework
  - * Gali Chapters 4,5.1-3
  - Clarida, Richard, Jordi Gali, and Mark Gertler (1999). "The Science of Monetary Policy: A New Keynesian Perspective." JEL 37(4): 1661-1707.

- The Liquidity Trap
  - * Krugman, Paul (1998): "It's Baaack: Japan's Slump and the Return of the Liquidity Trap." BPEA Vol. 1998, No. 2, pp. 137-205.
  - Gali Chapter 5.4.
  - Eggertsson, Gauti and Paul Krugman (2012). "Debt, Deleveraging, and the Liquidity Trap: A Fisher-Minsky-Koo Approach. QJE 127(3): 1469-1513.
  - Eggertsson, Gauti and Michael Woodford (2003). "Optimal Monetary and Fiscal Policy in a Liquidity Trap." BPEA 2003(1): 139-233.
  - Werning, Ivan (2012). "Managing a Liquidity Trap: Monetary and Fiscal Policy." WP.
  - Coibion, Olivier, Yuriy Gorodnichenko, Johannes Wieland (2012). "The Optimal Inflation Rate in New Keynesian Models: Should Central Banks Raise Their Inflation Targets in Light of the Zero Lower Bound?" RESTUD 79(4): 1371-1406.

– McKay, Alisdair, Emi Nakamura, and Jon Steinsson (2016). "The Power of Forward Guidance Revisited." AER 106(10): 3133-3158.

– Cochrane, John H (2017), "The new-Keynesian liquidity trap", JME 92: 47-63.

– Wieland, Johannes (2019), "Are Negative Supply Shocks Expansionary at the Zero Lower Bound?," JPE 127(3): 973-1007.