

FDPE Macroeconomics 4: Monetary policy and business cycles, MA41415

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Overview

The fourth module of the FDPE macroeconomic theory course builds on the real business cycle models and introduces nominal side – money – to those models.

The module follows the chapters 1–5, 7 of Jordi Galí's excellent book ``[Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework](#)''¹. It shows why the monetary policy is neutral in classical, RBC-type macro models and explains a special case where it is not. The classical model is augmented with imperfect competition and price rigidities leading to the canonical new Keynesian model. Next, various monetary policy rules are studied in this framework. We also study the zero lower bound restriction of nominal interest rates on monetary policy and resulting extensions to the basic framework. This builds a bridge to study the interaction of fiscal and monetary policies. Discretion and commitment in monetary policy making is introduced. We also study the open economy dimension of monetary policy.

Outline

Introduction: RBC revolution, empirical regularities, Galí ch. 1

Classical model: Introducing money into simplified RBC model, optimal monetary policy

Galí ch. 2;
 ch 2 in Walsh (2003) *Monetary Theory and Policy*, 2nd Edition

The basic new Keynesian model: Imperfect competition, price rigidities

Galí ch. 3,
 Richard Clarida & Jordi Galí & Mark Gertler, 1999. "The Science of Monetary Policy: A New Keynesian Perspective," *American Economic Association*, vol. 37(4), pages 1661-1707,

Monetary policy rules in the new Keynesian model

Monetary policy rules, characterising optimal rule, Galí ch. 4

Monetary policy at a zero lower bound of nominal interest rates

¹ Book details: <http://press.princeton.edu/titles/8654.html>

Gauti B. Eggertson and Paul Krugman (2012): [Debt, Deleveraging, and the Liquidity Trap: A Fisher-Minsky-Koo Approach](#), *The Quarterly Journal of Economics*, 1469-1513,
 John H. Cochrane (2011): [Determinacy and Identification with Taylor Rules](#), *Journal of Political Economy*, Vol. 119, No 3, pp. 565-615.
 Schmitt-Grohe, Stephanie and Martin Uribe (2014) [Liquidity Traps: An Interest-Rate-Based Exit Strategy](#), *The Manchester School*, 82, S1, September 2014, 1-14.

Monetary policy trade-offs: discretion vs. commitment: Trade-off between stabilisation (of real economy) and inflation, discretion vs. commitment

Galí ch. 5,
 Kydland, Finn and Edward Prescott (1977) "Rules Rather than Discretion: The Inconsistency of Optimal Plans", *Journal of Political Economy*, vol. 85, no. 3, pp. 473-91,
 Walsh book (see above) ch. 8.

Monetary policy in an open-economy setting: Role of exchange rates

Galí ch. 7
 Jordi Galí & Tommaso Monacelli, 2005. "Monetary Policy and Exchange Rate Volatility in a Small Open Economy," *Review of Economic Studies*, Blackwell Publishing, vol. 72(3), pages 707-734, 07.

Interaction of Fiscal and Monetary Policy

Matthew Canzoneri, Robert Cumby, Behzad Diba, Chapter 17 - [The Interaction Between Monetary and Fiscal Policy](#)☆, In: Benjamin M. Friedman and Michael Woodford, Editor(s), *Handbook of Monetary Economics*, Elsevier, 2010, Volume 3, Pages 935-999, (<http://www.sciencedirect.com/science/article/pii/B9780444534545000050>)
 Sims, Christopher A. 2013. "[Paper Money](#)." *American Economic Review*, 103(2): 563-84.

If time allows, we will study monetary policy and unemployment. Jordi Galí, Chapter 10 - [Monetary Policy and Unemployment](#), In: Benjamin M. Friedman and Michael Woodford, Editor(s), *Handbook of Monetary Economics*, Elsevier, 2010, Volume 3, Pages 487-546,

Computations and exercises

Modern quantitative macroeconomics relies on computation since analytical solutions may be provided rarely. The assignments contain both analytical and computational exercises. We recommend using Dynare that is a Matlab library to solve standard dynamic models using perturbation methods. Octave is an opensource [Matlab](#) 'clone' and provides useful alternative if you do not have Matlab. Follow the [Dynare](#) (<http://www.dynare.org>) instructions (<http://www.dynare.org/DynareWiki/DynareOctave>) to [install Dynare with Octave](#). We have tested both Windows and Ubuntu versions of Octave/Dynare and both of them do the job; those using Ubuntu may enjoy better user interface. Familiarise either of the programs and the very basics of Dynare well in advance (by, eg., running and studying example codes).