

# Macroeconomics IV

Bocconi University

Ph.D. in Economics

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**Time:** Th. 10:15 – 11:45

Th. 14:45 – 16:15

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**Course description.** The course is divided into two parts. In the first part, we will cover the workhorse New-Keynesian model. We will use this model to draw normative lessons for monetary policy, both with and without commitment of the Central Bank. We will also discuss the empirical evidence quantifying the importance of nominal rigidities.

The second part of the course focuses on models of informational frictions. Starting from the seminal work of Lucas (1972) on money non-neutrality, the course will cover the business-cycle properties of models with dispersed information and the social value of information.

We will discuss (most of) the papers marked with an asterisk. The other papers are recommended to those who are interested in the topic.

# The New Keynesian Model

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## Theory

- \* Jordi Galí. *Monetary policy, inflation, and the business cycle: an introduction to the new Keynesian framework and its applications*. Princeton University Press, 2015
- Carl E Walsh. *Monetary theory and policy*. MIT press, 2017
- Michael Woodford. *Interest and prices*. Princeton University Press, 2011
- Lawrence J Christiano, Martin Eichenbaum, and Charles L Evans. Nominal rigidities and the dynamic effects of a shock to monetary policy. *Journal of Political Economy*, 113(1):1–45, 2005
- Jordi Galí. Technology, employment, and the business cycle: do technology shocks explain aggregate fluctuations? *American Economic Review*, 89(1):249–271, 1999
- Marvin Goodfriend and Robert G King. The new neoclassical synthesis and the role of monetary policy. *NBER Macroeconomics Annual*, 12:231–283, 1997
- Robert G King and Sergio T Rebelo. Resuscitating real business cycles. *Handbook of macroeconomics*, 1:927–1007, 1999
- Mikhail Golosov and Robert E Lucas Jr. Menu costs and Phillips curves. *Journal of Political Economy*, 115(2):171–199, 2007
- Varadarajan V Chari, Patrick J Kehoe, and Ellen R McGrattan. Business cycle accounting. *Econometrica*, 75(3):781–836, 2007
- Olivier Wang and Iván Werning. Dynamic oligopoly and price stickiness. *American Economic Review*, 112(8):2815–2849, 2022

## Optimal Policy

- Richard Clarida, Jordi Galí, and Mark Gertler. The science of monetary policy: a new keynesian perspective. *Journal of Economic Literature*, 37(4):1661–1707, 1999
- Michael Woodford. Optimal monetary stabilization policy. *Handbook of Monetary Economics*, 3:723–828, 2010

## Zero-Lower Bound

- Gauti B. Eggertsson and Michael Woodford. Zero bound on interest rates and optimal monetary policy. *Brookings papers on economic activity*, 2003(1):139–233, 2003
- Lawrence Christiano, Martin Eichenbaum, and Sergio Rebelo. When is the government spending multiplier large? *Journal of Political Economy*, 119(1):78–121, 2011

- Florin O Bilbiie, Tommaso Monacelli, and Roberto Perotti. Is government spending at the zero lower bound desirable? *American Economic Journal: Macroeconomics*, 11(3):147–73, 2019

## Risk Shocks

- \* Lawrence J Christiano, Roberto Motto, and Massimo Rostagno. Risk shocks. *American Economic Review*, 104(1):27–65, 2014
- \* Ricardo J Caballero and Alp Simsek. A risk-centric model of demand recessions and speculation. *The Quarterly Journal of Economics*, 135(3):1493–1566, 2020
- Susanto Basu and Brent Bundick. Uncertainty shocks in a model of effective demand. *Econometrica*, 85(3):937–958, 2017
- Sebastian Di Tella and Robert Hall. Risk premium shocks can create inefficient recessions. *The Review of Economic Studies*, 89(3):1335–1369, 2022

## Empirical Evidence

- \* Mark Bilts and Peter J Klenow. Some evidence on the importance of sticky prices. *Journal of Political Economy*, 112(5):947–985, 2004
- \* Emi Nakamura and Jón Steinsson. Five facts about prices: A reevaluation of menu cost models. *The Quarterly Journal of Economics*, 123(4):1415–1464, 2008
- \* George-Marios Angeletos, Fabrice Collard, and Harris Dellas. Business-cycle anatomy. *American economic review*, 110(10):3030–70, 2020
- Mark Bilts, Peter J Klenow, and Benjamin A Malin. Resurrecting the role of the product market wedge in recessions. *American Economic Review*, 108(4-5):1118–46, 2018
- Loukas Karabarbounis. The labor wedge: MRS vs. MPN. *Review of Economic Dynamics*, 17(2):206–223, 2014
- Christopher J Nekarda and Valerie A Ramey. The cyclical behavior of the price-cost markup. *Journal of Money, Credit and Banking*, 52(S2):319–353, 2020
- Jonathon Hazell, Juan Herreno, Emi Nakamura, and Jón Steinsson. The slope of the phillips curve: evidence from us states. *The Quarterly Journal of Economics*, 137(3):1299–1344, 2022
- Michael McLeay and Silvana Tenreyro. Optimal inflation and the identification of the phillips curve. *NBER Macroeconomics Annual*, 34(1):199–255, 2020
- Emi Nakamura and Jon Steinsson. Fiscal stimulus in a monetary union: Evidence from US regions. *American Economic Review*, 104(3):753–92, 2014
- Valerie A Ramey and Sarah Zubairy. Government spending multipliers in good times and in bad: evidence from us historical data. *Journal of Political Economy*, 126(2):850–901, 2018

- Peter Karadi, Raphael Schoenle, and Jesse Wursten. Measuring price selection in micro-data: it's not there. 2021

## Informational Frictions

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- \* Robert E Lucas Jr. Expectations and the neutrality of money. *Journal of Economic Theory*, 4(2):103–124, 1972
- \* George-Marios Angeletos and Jennifer La'O. Noisy business cycles. *NBER Macroeconomics Annual*, 24(1):319–378, 2010
- \* Stephen Morris and Hyun Song Shin. Social value of public information. *American Economic Review*, 92(5):1521–1534, 2002
- \* George-Marios Angeletos and Alessandro Pavan. Efficient use of information and social value of information. *Econometrica*, 75(4):1103–1142, 2007
- \* George-Marios Angeletos and Chen Lian. Determinacy without the Taylor principle. *Journal of Political Economy*, 131(8):2125–2164, 2023
- \* Guido Lorenzoni. A theory of demand shocks. *American Economic Review*, 99(5):2050–84, 2009
- George-Marios Angeletos and Zhen Huo. Myopia and anchoring. *American Economic Review*, 111(4):1166–1200, 2021
- Zhen Huo and Naoki Takayama. Rational expectations models with higher-order beliefs. *Yale mimeo*, 2023
- Michael Woodford. Imperfect common knowledge and the effects of monetary policy. In *Knowledge, Information, and Expectations in Modern Macro-economics: In Honor of Edmund S. Phelps*, ed. Philippe Aghion, Roman Frydman, Joseph Stiglitz, and Michael Woodford. Princeton, NJ: Princeton University Press, 2003
- George-Marios Angeletos and Chen Lian. Forward guidance without common knowledge. *American Economic Review*, 108(9):2477–2512, 2018
- Bartosz Mackowiak and Mirko Wiederholt. Optimal sticky prices under rational inattention. *American Economic Review*, 99(3):769–803, 2009
- George-Marios Angeletos and Jennifer La'O. Optimal monetary policy with informational frictions. *Journal of Political Economy*, 128(3):1027–1064, 2020
- G-M Angeletos and Chen Lian. Incomplete information in macroeconomics: Accommodating frictions in coordination. In *Handbook of macroeconomics*, volume 2, pages 1065–1240. Elsevier, 2016
- George-Marios Angeletos and Jennifer La'O. Sentiments. *Econometrica*, 81(2):739–779, 2013