

Introduction to Monetary Economics*

PUC Rio, MA/PhD 2023

Course Information

Instructor: Fernando Mendo (fmendolopez@gmail.com)

Time: Tuesdays, 4pm-7pm. **Location:** Room F306

Teaching Assistant: Matheus Franciscão (matheusrobertofrancisco@gmail.com)

Office Hours: By appointment

Course Description

This course corresponds to the first half of Macroeconomics II, the second course of the first-year graduate-level macroeconomics sequence. The course aims to introduce the students to Monetary Economics. We start with a brief discussion of classical monetary models (money in utility and cash-in-advance constraints). The lion's share of the course is devoted to the New Keynesian framework. We study the baseline New Keynesian model and its implications for the conduct of monetary policy. Extensions of the baseline model are also considered including the introduction of nominal wage rigidities, unemployment and open economy factors. The last section of the course introduces students to the Fiscal Theory of the Price Level (FTPL).

Evaluation

Problem sets will account for 40% of the overall grade (of Macroeconomics II). The remaining 60% will correspond to problem sets of the second half of the course (40%) and a final assignment (20%).

**Preliminary and subject to changes.*

Course Outline

Classical Monetary Models

1. **Classical Monetary Models.** Models with money in the utility function. Models with a cash-in-advance constraint.

References: Galí (2015, ch. 2)*, Walsh (2010, ch.2-3)*, Woodford (2003, ch.1-2), McCallum (2008, ch.8-9), Cooley and Hansen (1989)

New Keynesian Framework

2. **The basic New Keynesian model.** The basic New Keynesian model. Empirical evidence on price-setting.

References: Galí (2015, ch.1 & 3)*, Walsh (2010, ch. 1, 6 & 8), Woodford (2003, ch.3-5), Christiano *et al.* (2010, sec.1-3), Klenow and Malin (2010), Nakamura and Steinsson (2013)

3. **Monetary Policy Design and Tradeoffs.** Monetary policy design in the basic New Keynesian model. Monetary policy design with short-run tradeoffs.

References: Galí (2015, ch.4-5)*, Woodford (2003, ch.6-8), Taylor (1999), Rotemberg and Woodford (1999), Clarida, Galí and Gertler (1999, 2000), Blanchard and Kahn (1980)

4. **Sticky Wages and Unemployment.** Nominal wage rigidities in the basic New Keynesian model. Unemployment in the New Keynesian model.

References: Galí (2015, ch.6-7)*, Erceg, Henderson and Levin (2000), Blanchard and Galí (2010), Galí (2010, 2011), Basu and House (2016)

5. **Monetary Policy in the Open Economy**

A small open economy New Keynesian model. The SAMBA from the BCB.

References: Galí (2015, ch. 8)*, Galí and Monacelli (2005), de Castro *et al.* (2011)

Fiscal Theory of the Price Level (FTPL)

6. Fiscal Theory of the Price Level (FTPL) One Period Fiscal Theory. Two-period fiscal theory and fiscal policy. An Intertemporal Model. Fiscal Theory in Sticky Price Models. FTPL and the New-Keynesian Model.

References: [Cochrane \(2023\)](#)

Bibliography

- BASU, S. and HOUSE, C. L. (2016). Allocative and remitted wages: New facts and challenges for keynesian models. In J. B. Taylor and H. Uhlig (eds.), *Handbook of Macroeconomics*, vol. 2, 6, Elsevier, pp. 297–354.
- BLANCHARD, O. J. and GALÍ, J. (2010). Labor Markets and Monetary Policy: A New Keynesian Model with Unemployment. *American Economic Journal: Macroeconomics*, 2, 1–30.
- and KAHN, C. M. (1980). The solution of linear difference models under rational expectations. *Econometrica*, 48 (5), 1305–1311.
- CHRISTIANO, L. J., TRABANDT, M. and VALENTIN, K. (2010). DSGE Models for Monetary Policy Analysis. In B. M. Friedman and M. Woodford (eds.), *Handbook of Monetary Economics*, vol. 3A, 7, Elsevier, pp. 285–367.
- CLARIDA, R., GALÍ, J. and GERTLER, M. (1999). The Science of Monetary Policy: A New Keynesian Perspective. *Journal of Economic Literature*, 37, 1661–1707.
- , — and — (2000). Monetary Policy Rules and Macroeconomic Stability: Evidence and Some Theory. *The Quarterly Journal of Economics*, 105 (1), 147–180.
- COCHRANE, J. (2023). *The Fiscal Theory of the Price Level*. Princeton: Princeton University Press.
- COOLEY, T. F. and HANSEN, G. D. (1989). The inflation tax in a real business cycle model. *The American Economic Review*, 79 (4), 733–748.

- DE CASTRO, M. R., GOUVEA, S. N., MINELLA, A., SANTOS, R. C. and SOUZA-SOBRINHO, N. F. (2011). SAMBA: Stochastic Analytical Model with a Bayesian approach. *Banco Central do Brasil Working Paper Series 239*, **239**, 1–139.
- ERCEG, C. J., HENDERSON, D. W. and LEVIN, A. T. (2000). Optimal monetary policy with staggered wage and price contracts. *Journal of Monetary Economics*, **46**, 281–313.
- GALÍ, J. (2008). *Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework*. Princeton University Press, 1st edn.
- (2010). Monetary policy and unemployment. In B. M. Friedman and M. Woodford (eds.), *Handbook of Monetary Economics*, vol. 3A, 10, Elsevier, pp. 487–546.
- (2011). *Unemployment Fluctuations and Stabilization Policies: A New Keynesian Perspective*. Zeuthen Lecture Book Series, The MIT Press.
- (2015). *Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework and Its Applications*. Princeton University Press, 2nd edn.
- and MONACELLI, T. (2005). Monetary Policy and Exchange Rate Volatility in a Small Open Economy. *The Review of Economic Studies*, **72** (3), 707–734.
- KLENOW, P. J. and MALIN, B. A. (2010). Microeconomic evidence on microeconomic evidence on price-setting. In B. M. Friedman and M. Woodford (eds.), *Handbook of Monetary Economics*, vol. 3A, 6, Elsevier, pp. 231–284.
- MCCANDLESS, G. (2008). *The ABCs of RBCs: An Introduction to Dynamic Macroeconomic Models*. Harvard University Press, 1st edn.
- NAKAMURA, E. and STEINSSON, J. (2013). Price rigidity: Microeconomic evidence and macroeconomic implications. *Annual Review of Economics*, **5**, 133–163.
- ROTEMBERG, J. and WOODFORD, M. (1999). *Monetary Policy Rules*. University of Chicago Press, Chicago, IL.
- TAYLOR, J. B. (1999). *Monetary Policy Rules*. University of Chicago Press, Chicago, IL.
- WALSH, C. E. (2010). *Monetary Theory and Policy*. The MIT Press, 3rd edn.

WOODFORD, M. (2003). *Interest and Prices: Foundations of a Theory of Monetary Policy*. Princeton University Press, 1st edn.