Topics in Macroeconomics III:
Macroeconomic Policy II

2021-2022 Academic Year
Master of Research in Economics, Finance and Management

1. Description of the subject

- Topics in Macroeconomics III — Code: 32082
- Total credits: 3 ECTS — Workload: 75 hours
- Term: 2nd
- Type of subject: Optative
- Department of Economics and Business
- Teaching Team: Jordi Galí and Ramon Marimon

2. Teaching guide

Introduction

Part I (taught by Jordi Galí) will cover several extensions of the New Keynesian framework and will provide an overview of the related recent literature. Part II (taught by Ramon Marimon) will cover some of the tools provided by economic theory for the design of optimal policies, with the background of the three great crises of the 21st century (financial, debt, covid).

Students taking the course must have completed successfully the Advanced Macro sequence (or a similar sequence if they are visiting students), and are expected to take this course in conjunction with Macroeconomic Policy I, which complements the topics and methodologies covered here.

Contents

PART I: Extensions of the New Keynesian Framework (Jordi Galí)

In addition to the readings listed below for each topic, the following textbooks provide useful background reading for the course:

Benigno, Pierpaolo (2020): Lectures on Monetary Economics.
Galí, Jordi (2015): Monetary Policy, Inflation and the Business Cycle. An Introduction to the New Keynesian Framework, Second edition, Princeton University Press (Princeton, NJ).
Walsh, Carl E. (2017): Monetary Theory and Policy, Fourth edition, MIT Press (Cambridge, MA)
Woodford, Michael (2003): Interest and Prices: Foundations of a Theory of Monetary Policy, Princeton University Press (Princeton, NJ).

1. Open Economies

Corsetti, Giancarlo, Luca Dedola, and Sylvain Leduc (2011): "Optimal Monetary Policy in Open Economies," in B. Friedman and M. Woodford (eds.) Handbook of Monetary Economics, vol 3B, 861-934.
Engel, Charles F. (2011): "Currency Misalignments and Optimal Monetary Policy: A Reexamination", American Economic Review 101, 2796-2822.
Galí, Jordi, and Tommaso Monacelli (2005): "Monetary Policy and Exchange Rate Volatility in a Small Open Economy," Review of Economic Studies, vol. 72, issue 3, 2005, 707-734
Gopinath, Gita, Emine Boz, Camila Casas, Federico J. Díez, Pierre-Olivier Gourinchas, Mikkel Plagborg-Møller (2020): "Dominant Currency Paradigm," American Economic Review 110 (3), pp. 677-719
Itskhoki Oleg and Dmitry Mukhin (2021): "Exchange Rate Disconnect in General Equilibrium," Journal of Political Economy, forthcoming.
Benigno, Pierpaolo (2004): "Optimal Monetary Policy in a Currency Area," Journal of International Economics, vol. 63, issue 2, 293-320.
Galí, Jordi, and Tommaso Monacelli (2008): "Optimal Monetary and Fiscal Policy in a Currency Union," Journal of International Economics, vol. 76, 116-132

2. Zero Lower Bound

Krugman, Paul (1998): "It's Baaaack: Japan's Slump and the Return of the Liquidity Trap," Brookings Papers on Economic Activity, vol. 2, 137-187.

Eggertsson, Gauti, and Michael Woodford (2003): "The Zero Bound on Interest Rates and Optimal Monetary Policy," Brookings Papers on Economic Activity, vol. 1, 139-211.

Jung, Taehun, Yuki Teranishi, and Tsutomo Watanabe, (2005): "Optimal Monetary Policy at the Zero Interest Rate Bound," Journal of Money, Credit and Banking 37 (5), 813-835.

Eggertsson, Gauti (2010): "What Fiscal Policy is Effective at Zero Interest Rates?" NBER Macroeconomics Annual 2010, 59-112.

Adam, Klaus and Roberto Billi (2006): "Optimal Monetary Policy under Commitment with a Zero Bound on Nominal Interest Rates," Journal of Money, Credit and Banking 38, 1877-1905.

Adam, Klaus and Roberto Billi (2007): "Discretionary Monetary Policy and the Zero Bound on Nominal Interest Rates," Journal of Monetary Economics 54 (3), 728-752.

Nakov, Anton (2008): "Optimal and Simple Monetary Policy Rules with a Zero Floor on the Nominal Interest Rate," International Journal of Central Banking vol 4(2), 73-127.

Billi, Roberto, Jordi Galí, and Anton Nakov (2021): "Monetary Policy and Secular Stagnation," work in progress.

Benhabib, Jess, Stephanie Schmitt-Grohe, and Martin Uribe (2001): "The Perils of Taylor Rules," Journal of Economic Theory 96, 40-69.

Benhabib, Jess, Stephanie Schmitt-Grohe, and Martin Uribe (2001): "Avoiding Liquidity Traps," Journal of Political Economy vol. 110, no. 3, 535-563.

Nakata, Taisuke and Sebastian Schmidt (2021): "Expectations-driven Liquidity Traps: Implications for Monetary and Fiscal Policy" American Economic Journal: Macroeconomics, forthcoming.

Mertens, Karel and Morten Ravn (2014): "Fiscal Policy in an Expectations-Driven Liquidity Trap," Review of Economic Studies 19(2), 109-127

Coibion, Olivier Yuriy Gorodnichenko, and Johannes Wieland (2012): "The Optimal Rate of Inflation in New Keynesian Models: Should Central Banks Raise their Inflation Target in Light of the Zero Lower Bound," Review of Economic Studies, vol 20, 1-36.

Dordal-i-Carreras, Marc, Olivier Coibion, Yuriy Gorodnichenko, and Johannes Wieland (2016): "Infrequent but Long-Lived Zero-Bound Episodes and the Optimal Rate of Inflation," Annual Review of Economics 8, 497-520.

Andrade, Philippe, Jordi Galí, Hervé Le Bihan, and Julien Matheron (2020): "The Optimal Inflation Target and the Natural Rate of Interest," Brookings Papers on Economic Activity, Fall issue, 173-230

3. Endogenous Markups

Baqaee, David, Emmanuel Farhi and Kunal Sangani (2021): "The Supply-Side Effects of Monetary Policy," mimeo.

Kimball, Miles (1995): "The Quantitative Analytics of the Basic Neomonetarist Model," Journal of Money, Credit and Banking, 27(4), 1241--77.

Klenow, Peter and Jonathan L. Willis (2016): "Real Rigidities and Nominal Price Changes," Economica 83, 443--472

4. Inflation Dynamics

Castex, Gustavo, Jordi Galí, and Diego Saravia (eds.)(2020): Changing Inflation Dynamics, Evolving Monetary Policy, Central Bank of Chile (Santiago, Chile)

Coibion, Olivier, and Yuriy Gorodnichenko (2015): "Is the Phillips Curve Alive and Well After All? Inflation Expectations and the Missing Disinflation," American Economic Journal: Macroeconomics, 7, 197--232.

Hazell, Jonathon, Juan Herreño, Emi Nakamura and Jon Steinsson (2021): "The Slope of the Phillips Curve: Evidence from U.S. States," Quarterly Journal of Economics, forthcoming.

Jorgensen, Peter Lihn and Kevin Lansing (2021): "Anchored Inflation Expectations and the Slope of the Phillips Curve," FRB of San Francisco working paper.

Stock, James and Mark Watson (2019): "Slack and Cyclically Sensitive Inflation," NBER Working Paper No. 25987.

Castro Cienfuegos (2019): "The Importance of Production Networks and Sectoral Heterogeneity for Monetary Policy," mimeo.

Hoynck, Christian (2020): "Production Networks and the Flattening of the Phillips Curve," mimeo.

Pastén, Ernesto, Raphael Schoenle and Michael Weber (2019): "The propagation of monetary policy shocks in a heterogeneous production economy," Journal of Monetary Economics .

Rubbo, Elisa (2021): "Networks, Phillips Curves, and Monetary Policy," mimeo.

5. Monetary Policy and Bubbles

Bernanke, Ben S. and Mark Gertler (1999): "Monetary Policy and Asset Price Volatility," in New Challenges for Monetary Policy, Federal Reserve Bank of Kansas City, 77-128.

Bernanke, Ben S. and Mark Gertler (2001): "Should Central Banks Respond to Movements in Asset Prices?" American Economic Review 91(2), 253-257.

Bernanke, Ben S. (2002): "Asset Price Bubbles and Monetary Policy," speech before the New York Chapter of the National Association of Business Economists.

Borio, C. and P. Lowe (2002): "Asset Prices, Financial and Monetary Stability: Exploring the Nexus," BIS Working Papers no. 14.

European Central Bank (2005): "Asset Price Bubbles and Monetary Policy," Monthly Bulletin, April, 47-60.

European Central Bank (2010): "Asset Price Bubbles and Monetary Policy Revisited," Monthly Bulletin, November, 71-83.

Galí, Jordi (2014): "Monetary Policy and Rational Asset Price Bubbles," American Economic Review, vol. 104(3), 721-752.

Galí, Jordi (2021): "Monetary Policy and Bubbles in a New Keynesian Model with Overlapping Generations," American Economic Journal: Macroeconomics 13(2), 121-167

Miao, Jianju, Zhouxiang Shen, and Pengfei Wan (2019): "Monetary Policy and Rational Asset Bubbles: Comment," American Economic Review 109, 1969-1990.

Galí, Jordi and Luca Gambetti (2015): "Estimating the Effects of Monetary Policy on Stock Market Bubbles," American Economic Journal: Macroeconomics 7(1), 233-257.

PART II: Fiscal and Monetary Policy and Institutions in a Century of Crises: From Theories to Proposals for EU Fiscal and Social Policies (Ramon Marimon)

1. An introduction to Recursive Contracts to solve models with forward-looking constraints or promises. The interaction of commitment and competition.

A wide range of dynamic macro models entail maximization problems with forward-looking constraints (e.g. incentive, enforcement, participation or Euler-equation constraints). Similarly, planner's problems with recursive preferences entail promises (self-imposed constraints). I will provide a brief self-contained introduction to Recursive Contracts – as solutions to recursive saddle-point problems -- with some applications, including pricing contracts and models with endogenous outside options.

(*) Chien, Yili, Harold Cole and Hanno Lustig, 2016. "Implications of Heterogeneity in Preferences, Beliefs and Asset Trading Technologies for the Macroeconomy," Review of Economic Dynamics (2016) 20, 215-239.

Cooley, Thomas, Ramon Marimon and Vincenzo Quadrini, 2004. "Aggregate Consequences of Limited Contract Enforceability," Journal of Political Economy, 112, 4, 817-847.

(*) Cooley, Thomas, Ramon Marimon and Vincenzo Quadrini, 2020. "Commitment in Organisations and the Competition for Talent", The Review of Economic Studies, 87 (5), 2165–2204,

Gertler, Mark and Nobu Kiyotaki, 2011. "Financial Intermediation and Credit Policy in Business Cycle Analysis," in Handbook of Monetary Economics, Vol. 3A.

Gertler, Mark, Nobu Kiyotaki and Andrea Prestipino, 2020. "A Macroeconomic Model with Financial Panics," Review of Economic Studies, 87(1) 240-288.

Grochulski, Borys and Yuzhe Zhang, 2017. "Market-based incentives," International Economic Review, 58(2), 331-382.

(*) Marcet, Albert and Ramon Marimon, 2019. "Recursive Contracts," Econometrica, 87(5), 1589 – 1631

Marimon, Ramon and Jan Werner, 2021, "The Envelope Theorem, Euler and Bellman Equations, without Differentiability", Journal of Economic Theory, 196.

2. An introduction to macro-learning models, with special emphasis on self-confirming equilibrium

All dynamic macro models need to specify how agents form their expectations. The most common: subjective beliefs = objective beliefs; as in rational expectations equilibria (REE) – in particular, possible multiplicity with self-fulfilling equilibria (SFE). Macro-learning models address Nash's question -- how a Nash equilibrium (in macro, a REE) can be reached? -- or better, which REE is 'learnable'. Importantly, they can help to better explain macro-financial data. I will refer to SFE multiplicity, but focus on subjective-beliefs equilibria -- e.g. Self-Confirming Equilibria (SFE) -- and how they can help to model crises. To start, I will provide a self-contained introduction to macro-learning models.

Adam, Klaus, Albert Marcet and Juan Pablo Nicolini. 2016. "Stock Market Volatility and learning," Journal of Finance, 71(1), 33-82.

Adam, Klaus and Sebastian Merkel, 2019. "Stock Price Cycles and Business Cycles," University of Oxford.

Aguiar, Mark, Satyajit Chaterjee, Harold L. Cole and Zahary Stanebye, 2021. "Self-Fulfilling Debt Crises, Revisited," University of Pennsylvania, Pier Working Paper 20-003.

Ayres, João, Gaston Navarro, Juan Pablo Nicolini and Pedro Teles, 2018. "Sovereign Default: The Role of Expectations," Journal of Economic Theory, 175, 803 – 812.

Ayres, João, Gaston Navarro, Juan Pablo Nicolini and Pedro Teles, 2021. "Self-Fulfilling Debt Crises with Long Stagnations," Federal Reserve Bank of Minneapolis.

Battigalli, Pierpaolo, Simone Cerreia-Vioglio, Fabio Maccheroni, Massimo Marinacci and Thomas J. Sargent, 2021. "A framework for the analysis of self-confirming policies", Univerista' Bocconi.

(*) Evans, George W. and Seppo Honkapohja. 2001. Learning and Expectations in Macroeconomics. Princeton University Press. Chs. 1 & 2.

(*) Gaballo, Gaetano, and Ramon Marimon. 2021. "Breaking the Spell with Credit-Easing: Self-Confirming Credit Crises in Competitive Search Economies," Journal of Monetary Economics, 119, April.

Hansen, Lars Peter. 2014. "Nobel Lecture: Uncertainty Outside and Inside Economic Models," Journal of Political Economy, 122 (5): 945-987.

(*) Sargent, Thomas J. 1999. The Conquest of American Inflation. Princeton University Press. Ch. 3 - 6.

Woodford, Michael. 2013. "Macroeconomic Analysis without the Rational Expectations Hypothesis," Annual Review of Economics 5: 303-346.

3. The Fiscal Theory of the Price Level and the value of debt.

I introduce and use The Fiscal Theory of the Price Level to study 'the value of debt', its evolution and Treasury – Central Bank interactions. Then I move into 'Debt as Money' and how major crises and wars are financed and – time permitting – on what happens when 'r-g<0'?

Angeletos, George-Marios, Fabrice Collard and Harris Dellas, 2020. "Public Debt as Private Liquidity," CEPR Discussion Paper 15488.

(*) Cochrane, John H. 2019. "The Value of Government Debt," NBER Working Paper 26090.

(*) Cochrane, John H. 2021, The Fiscal Theory of the Price Level, Princeton University Press, forthcoming. Chs. 2, 3.4-3.7, 4.1-4.3, EUI – PWC Lecture, May 13, 2021.

Hall, George J. and Thomas Sargent, 2020. "Debt and Taxes in Eight U.S. Wars and Two Insurrections", New York University.

Reis, Ricardo, 2021. "The constraint on public debt when r < g but g < m," mimeo LSE.

Sargent, Thomas J. 2012. "Nobel Lecture: United States Then, Europe Now," Journal of Political Economy, 120, 1, 1-40.

4. On the design of an Economic and Monetary Union (EMU).

I take a closer look into the peculiar European EMU design and the euro area experience. I focus in the current development of the Fiscal Union and how it can be improved. For this, I first discuss the rationale and constrained-efficient design of a Fiscal Union and of a Monetary and Fiscal Union.

(*) Ábrahám, Árpad, Eva Cárceles-Poveda, Yan Liu and Ramon Marimon, 2021. "On the Optimal Design of a Financial Stability Fund," EUI.

Bassetto, Marco, and Gherardo Caracciolo, 2021. "Monetary/Fiscal Interactions with Forty Budget Constraints," mimeo, Federal Reserve Bank of Minneapolis.

Chari, V., Alessandro Dovis and Patrick Kehoe, 2020. "Rethinking Optimal Currency Areas," Journal of Monetary Economics, 111, 80-94.

Dovis, Alessandro, 2019. "Efficient Sovereign Default," Review of Economic Studies, 86, 282-312.

Farhi, Emmanuel and Ivan Werning, 2017. "Fiscal Unions," American Economic Review, 107(12), 3788-3834.

(*) Ferrari, Alessandro, Ramon Marimon and Chima Simpson-Bell, 2021. "Fiscal and Currency Union with Default and Exit," EUI.

Liu, Yan, Ramon Marimon and Adrien Wicht, 2021."Making Sovereign Debt Safe with a Financial Stability Fund," EUI

(*) Marimon, Ramon and Adrien Wicht, 2021. "Euro area fiscal policies and capacity in post-pandemic times" (with), European Parliament, Economic Governance Support Unit, PE 651.392.

Müller, Andreas, Kjetil Storesletten and Fabrizio Zilibotti, 2019. "Sovereign Debt and Structural Reforms," American Economic Review, 109(12), 4220 – 4259.

5. On the design of fiscal- social policies for the incoming (ageing) crisis.

While the last topic has as a background the financial and euro crises, as well as the EU fiscal and monetary framework after the COVID-19 crisis, if there is time and willingness, we may as well cover the next crisis, with a very specific proposal.

Díaz-Saavedra, Julián, Ramon Marimon and João Brogueira de Sousa, 2021. "A Worker's Backpack as Alternative to PAYG Pension Systems," EUI.

3. Teaching methodology

The course will be based on lectures that will convey the core knowledge for each topic, to be supplemented by reading of key articles by students.

4. Assessment and grading system

The grade will be based on two assignments:

(i) A summary/ overview of the state of the art on one of the topics covered in the course, with special emphasis on one of the papers of the literature, which should be discussed critically in detail, while relating it to the previous and subsequent literature. Must be done individually. Maximum length 10 pages (excluding references and figures). (50%)

(ii) A detailed research proposal on one of the topics covered in the course. While a complete paper is welcome but not required, the proposal should contain an original idea, whose details be spelled out clearly, and an explanation of how it would contribute to the literature in a significant way. May be co-authored (two authors at most). Maximum length: 10 pages (excluding references and figures). (50%)

The two assignments should refer to two different topics, one for each part of the course.

Deadline for turning in the two assignments: June 15, 2022.