



**Universitat
Pompeu Fabra**
Barcelona

Topics in Macroeconomics III: Macroeconomic Policy

2023–2024 Academic Year

Master of Research in Economics, Finance and Management

1. Description of the subject

- Topics in Macroeconomics II 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).

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:

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).

Topics covered in class will be selected after consultation with students among the following:

1. Open Economies

Clarida, Richard, Jordi Galí, and Mark Gertler (2002): "A Simple Framework for International Monetary Policy Analysis," *Journal of Monetary Economics*, vol. 49, no. 5, 879–904.

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.

Egerov, Konstantin and Dmitry Mukhin (2021): "Optimal Policy under Dollar Pricing," unpublished manuscript.

De Paoli, Bianca (2009): "Monetary Policy in a Small Open Economy: the Role of the Asset Market Structure," *Journal of Money, Credit and Banking* 41(7), 1301-1330.

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): "Mussa Puzzle Redux," unpublished manuscript.

Itskhoki, Oleg and Dmitry Mukhin (2022): "Optimal Exchange Rate Policy," unpublished manuscript.

Auer, Raphael, Ariel Burstein and Sarah Lein (2021): "Exchange Rates and Prices: Evidence from the 2015 Swiss Franc Appreciation," *American Economic Review* 111(2), 652-686.

Gopinath, Gita (2016): "The International Price System," Jackson Hole Symposium Proceedings, Federal Reserve Bank of Kansas City, 71-122.

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

Engel, Charles (2014): "Exchange Rates and Interest Parity," *Handbook of International Economics* vol. 4, 453-522.

Engel, Charles (2016): "Exchange Rates, Interest Rates and the Risk Premium," *American Economic Review* 106(2), 436-474.

Galí, Jordi (2020): "Uncovered Interest Parity, Forward Guidance and the Exchange Rate," *Journal of Money, Credit and Banking*, 52(S2), 465-496

Itskhoki, Oleg and Dmitry Mukhin (2021): "Exchange Rate Disconnect in General Equilibrium," *Journal of Political Economy* 129(8), 2183-2232.

2. Heterogeneity: HANK and TANK Models

Galí, Jordi (2018): "The State of New Keynesian Economics: A Partial Assessment," *Journal of Economic Perspectives* 32(3), 87-112.

Aiyagari, Rao (1994): "Uninsured Idiosyncratic Risk and Aggregate Savings," *Quarterly Journal of Economics*, Volume 109, Issue 3, 1 August 1994, 659--684

Bewley, Truman (1983): "A Difficulty with the Optimum Quantity of Money", *Econometrica*, 51(5), 1485-1504.

Huggett, Mark (1993): "The Risk Free Rate in Heterogeneous Agent Incomplete Insurance Economies," *Journal of Economic Dynamics and Control* 17 (5-6), 953-969.

Krusell, Per and Anthony A. Smith (1998): "Income and Wealth Heterogeneity in the Macroeconomy," *Journal of Political Economy*, 106 (5), 867--896.

Acharya, Sushant and Keshav Dogra (2020): "Understanding HANK: Insights From a PRANK," *Econometrica*, 88 (3), 1113--1158.

Auclert, Adrien (2019): "Monetary Policy and the Redistribution Channel," *American Economic Review*, 109 (6): 2333--67.

Auclert, Adrien, Matthew Rognlie and Ludwig Straub (2018): "The Intertemporal Keynesian Cross," NBER working paper 25020.

Kaplan, Greg, Benjamin Moll, and Giovanni L. Violante, (2018): "Monetary Policy According to HANK," *American Economic Review*, 108 (3), 697--743.

Berger, David, Luigi Bocola, and Alessandro Dovis (2022): "Imperfect Risk Sharing and the Business Cycle," *Quarterly Journal of Economics*, forthcoming.

Debortoli, Davide and Jordi Galí (2022): "Idiosyncratic Income Risk and Aggregate Fluctuations," mimeo.

Werning, Iván (2015): "Incomplete Markets and Aggregate Demand," Working Paper 21448, National Bureau of Economic Research.

Broer, Tobias, Niels-Jakob Harbo Hansen, Per Krusell, and Erik Oberg (2020): "The New Keynesian Transmission Mechanism: A Heterogeneous-Agent Perspective," *The Review of Economic Studies*, 87 (1), 77--101.

Bilbiie, Florin O. (2008): "Limited Asset Markets Participation, Monetary Policy and (Inverted) Aggregate Demand Logic," *Journal of Economic Theory*, 140 (1), 162--196.

Bilbiie, Florin O. (2021): "Monetary Policy and Heterogeneity: An Analytical Framework," mimeo.

Campbell, John Y. and N. Gregory Mankiw (1989): "Consumption, Income, and Interest Rates: Reinterpreting the Time Series Evidence," *NBER Macroeconomics Annual*, 4, 185-216.

Debortoli, Davide and Jordi Galí (2018): "Monetary Policy with Heterogeneous Agents: Insights from TANK Models," mimeo.

Galí, Jordi, David López-Salido and Javier Vallés (2007): "Understanding the Effects of Government Spending on Consumption," *Journal of the European Economic Association*, 5 (1), 227--270.

Nisticó, Salvatore (2016): "Optimal Monetary Policy and Financial Stability in a non-Ricardian Economy," *Journal of the European Economic Association*, 14(5), 1225-1252.

3. Inflation Dynamics

Ball, Laurence, Daniel Leigh, Prachi Mishra (2022): "Understanding U.S. Inflation during the COVID Era," *Brookings Papers on Economic Activity*, forthcoming.

Barnichon, Regis and Geert Mesters (2020): "Identifying Modern Macro Equations with Old Shocks," *Quarterly Journal of Economics* 135(4), 2255--2298

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.

Galí, Jordi and Mark Gertler (1998): "Inflation Dynamics: A Structural Econometric Analysis," *Journal of Monetary Economics*, vol 44, no. 2, 195-222.

Galí, Jordi, Mark Gertler, David López-Salido (2001): "European Inflation Dynamics," *European Economic Review* vol. 45, no. 7, 1237-1270.

Galí, Jordi (2011): "The Return of the Wage Phillips Curve," *Journal of the European Economic Association*, vol. 9, issue 3, 436-461.

Galí, Jordi and Luca Gambetti (2020): "Has the U.S. Wage Phillips Curve Flattened? A Semi-Structural Exploration" in G. Castex, J. Galí and D. Saravia (eds.) *Changing Inflation Dynamics, Evolving Monetary Policy*, Central Bank of Chile (Santiago, Chile).

Hazell, Jonathon, Juan Herreño, Emi Nakamura and Jon Steinsson (2022): "The Slope of the Phillips Curve: Evidence from U.S. States," *Quarterly Journal of Economics* 137(3), 1299-1344.

Jorgensen, Peter L. and Kevin Lansing (2022): "Anchored Inflation Expectations and the Slope of the Phillips Curve," FRB of San Francisco working paper.

Mavroeidis, Sophocles, Mikkel Plagborg-Møller, and James H. Stock (2014): "Empirical Evidence on Inflation Expectations in the New Keynesian Phillips Curve," *Journal of Economic Literature* 52(1), 124-188.

McLeay, Michael and Silvana Tenreyro (2020): "Optimal Inflation and the Identification of the Phillips Curve," *NBER Macroeconomics Annual* 2019, 199-254.

Stock, James and Mark Watson (2020): "Slack and Cyclically Sensitive Inflation," *Journal of Money, Credit and Banking*, 52(S2), 393-428

Werning, Iván (2022): "Expectations and the Rate of Inflation," mimeo.

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.

La'O, Jennifer, Alireza Tahbaz-Salehi (2022): "Optimal Monetary Policy in Production Networks," *Econometrica* 90(3), 1295-1336.

Pastén, Ernesto, Raphael Schoenle and Michael Weber (2020): "The Propagation of Monetary Policy Shocks in a Heterogeneous Production Economy," *Journal of Monetary Economics* 116, 1-22.

Rubbo, Elisa (2022): "Networks, Phillips Curves, and Monetary Policy," mimeo.

4. 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.

5. Endogenous Markups

Baqae, 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

Chiavari, Andrea, Marta Morazzoni, Danila Smirnov (2021): "Heterogenous Markup Cyclicity and Monetary Policy," working paper.

Amiti, Mary, Oleg Itskhoki, and Josef Konings (2019): "International Shocks, Variable Markup and Domestic Prices," *Review of Economic Studies* 86, 2356–2402.

Atkeson, Andrew and Ariel Burstein (2008): "Pricing to Market, Trade Costs, and International Relative Prices," *American Economic Review* 98:5, 1998–2031.

6. 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 Tsutomu Watanabe, (2005): "Optimal Monetary Policy at the Zero Interest Rate Bound," *Journal of Money, Credit and Banking* 37 (5), 813–835.

Christiano, Lawrence, Martin Eichenbaum and Sergio Rebelo (2011): "When is the Government Spending Multiplier Large?," *Journal of Political Economy* 119(1), 78–121.

Eggertsson, Gauti (2011): "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.
- Nakata, Taisuke and Sebastian Schmidt (2014): "Conservatism and Liquidity Traps," *Journal of Monetary Economics* 104, 37–47.
- 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): "Optimal Monetary Policy with $r^* < 0$," unpublished manuscript.
- 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
- Benigno, Gianluca and Luca Fornaro (2018): "Stagnation Traps," *Review of Economic Studies* 85(3), 1425–1470.
- Del Negro, Marco, Marc P. Giannoni, and Christina Patterson (2015) "The Forward Guidance Puzzle," mimeo
- McKay, Alisdair, Emi Nakamura and Jon Steinsson (2016): "The Power of Forward Guidance Revisited," *American Economic Review*, 106(10), 3133–3158
- 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
- Andrade, Philippe, Jordi Galí, Hervé Le Bihan, and Julien Matheron (2020): "Should the ECB Adjust its Strategy in the Face of a Lower r^* ?", *Journal of Economic Dynamics and Control*, Fall issue, 173–230

PART II: Fiscal and Monetary Policy and Institutions in a Century of Crises: From Theories to a proposal for an EU Fiscal and Monetary Architecture (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. Financial and Debt Crises. Self-Confirming vs Self-Fulfilling Equilibria. The Information Theory of Financial Crises.

Financial and debt crises take different forms and, therefore, different models and theories are needed to analyze them and different policies to prevent or resolve them. We discuss three theories, their implications and their capacity to explain 21st Century Crises and policies: Self-Fulfilling Equilibria, Self-Confirming Equilibria and the Informational Theory of Financial Crises.

(*) Aguiar, Mark, Satyajit Chatterjee, 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, 2022. "A framework for the analysis of self-confirming policies", Univerista' Bocconi.

(*) Dang, Tri Vi, Gary Gorton and Bengt Holmström, 2019. "The Information View of Financial Crisis," Yale U. Working Paper

(*) 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.

Holmström, Bengt. 2015. "Understanding the Role of Debt in the Financial System," Bank for International Settlements, WP No. 479.

Kiyotaki, Nobu and John Moore. 1997. "Credit Cycles," *Journal of Political Economy*, 105(2), 1477-1507.

Kiyotaki, Nobu and John Moore. 2019. "Liquidity, Business Cycles and Monetary Policy," *Journal of Political Economy*, 127(6), 2926-2966.

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, 2022. "Three World Wars: Fiscal-Monetary Consequences," *Proceedings of the National Academy of Sciences* 119(18):e2200349119.

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. What is special of Fiscal and Monetary policy and institutions in the 21st Century and in the EU? Reassessing the EU Fiscal and Monetary Architecture after the 21st Century Crises.

I take a look at how Central Banking has changed in the 21st Century and into the peculiar European EMU design and the euro area experience. Then I show how the theory of Topic 1 can be used to develop a (constrained) efficient design of a *European Stability Fund* as part of a more balanced and stable EMU.

(*) Ábrahám, Árpád, 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.

Bernanke, Ben B., 2022. *The Federal Reserve Bank from the Great Depression to COVID-19: 21st Century Monetary Policy*. Norton & Co.

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, 2022. "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.

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

Reis, Ricardo A.M.R., 2019. Can the Central Bank Alleviate Fiscal Burdens? in *The Economics of Central Banking*, edited by Mayes, Siklos, and Strum, Oxford University Press.

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) 'Deconstruction' of one or two related papers on one of the topics covered in the course. In architectural building "deconstruction is the selective dismantlement of building components" (Wikipedia). The idea is to do something similar with each paper: to get to the 'core components' (CC) that define its contribution within the topic, or topics (e.g. a new mechanism or a new way to assemble known components, or a CC that is novel but similar to the CC of another paper) and distinguish them from other components that just help to put the paper together (e.g. to close the G.E. model, to calibrate it or estimate it) or from components that are rhetorical and could be dismissed. It must be your critical point of view but is not just a critical review or a referee report. 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 2024.