

北京大学国家发展研究院研究生课程

货币政策与金融稳定专题

Topics in Monetary Policy and Financial Stability

Course Syllabus

Fall 2021

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Class Time: 三教 408, 周五 10-12 节

Office hours: Monday 15:30-16:30

COURSE DESCRIPTION

Monetary policy has the ability to shape all economic interactions in a way that no other policy does. All transactions in the modern economy are indexed to currency in some way. The money supply, exchange rates, and reserve requirements all impact the way economic actors operate. However, the recent experience of the Great Recession has raised questions in monetary policy surrounding the limits to this power. At the same time, new methods to address these challenges have been developed, but are yet to be rigorously evaluated. Moreover, some countries are considering expanding the role of the central bank to include the macro-prudential regulation of financial markets.

This course will cover advanced topics in monetary policy and financial stability for graduate students. The course has two parts. The first part will introduce a fairly detailed study of the “New Keynesian” approach to macroeconomics and the implications of this framework for the use of monetary policy and fiscal policy to stabilize business cycle fluctuations. We will start from a classical monetary model and a stylized New Keynesian Model, and then cover some applications of the basic models and related empirical tests. The second part of the course will focus on topics in banking and financial markets which are useful for understanding the financial cycles, financial crisis and the resulting global recession. We will also introduce recent researches on monetary policy in China at the end of this course.

PREREQUISITE

Knowledge of economics at the level of advanced macroeconomics and econometrics is assumed.

GRADING

- **Replications (30%):** This course has two assignments of replicating published articles in order to make students learn modeling, computational and empirical skill.
- **Refereeing an article (20%):** Pick up an unpublished article, subject to my approval, and write a detailed referee report.
- **Final Homework (40%)**
- **Class Attendance and Participation (10%)**

REFERENCES

Gali: Galí, Jordi. Monetary policy, inflation, and the business cycle: an introduction to the new Keynesian framework and its applications. Princeton University Press, 2015 (second edition).

Woodford: Woodford, Michael (2003): Interest and Prices: Foundations of a Theory of Monetary Policy, Princeton University Press (Princeton, NJ).

Walsh: Walsh, Carl E. (2010): Monetary Theory and Policy, Third Edition, MIT Press (Cambridge, MA)

COURSE CONTENT (chapters and articles with * will be covered in class)

Part I: New Keynesian Monetary Economics

Lecture 1 (1 week): Introduction and a classical monetary model

1. *Gali Chapter 1-2

Lecture 2 (1.5 weeks): The Basic New Keynesian Model

2. *Gali Chapter 3

Lecture 3 (1.5 weeks): Monetary policy design in the new Keynesian model

3. *Gali Chapter 4
4. Clarida, R., J. Gali, and M. Gertler (1999), "The Science of Monetary Policy: A New Keynesian Perspective", Journal of Economics Literature, 37, 1661-1707
5. Romer, David, and Christina Romer. 2000. "Federal Reserve Information and the Behavior of Interest Rates." The American Economic Review 90(3): 429–57.

Lecture 4 (1 week): Monetary policy tradeoffs: discretion versus commitment

6. *Gali Chapter 5
7. *Barro, Robert J., and David B. Gordon. 1983. "Rules, Discretion, and Reputation in a Model of Monetary Policy." *Journal of Monetary Economics* 12: 101–21.
8. *Isabel Correia, Juan Pablo Nicolini and Pedro Teles, 2008, "Optimal Fiscal and Monetary Policy: Equivalence Results", *Journal of Political Economy*, Vol. 116, No. 1 (February 2008), pp. 141-170
9. Taylor, John B. 1993. "Discretion Practice versus Policy Rules in Practice." *Carnegie-Rochester Conference Series on Public Policy* 39: 195–214.
10. Alvarez, Fernando E., Francesco Lippi, and Aleksei Oskolkov. *The Macroeconomics of Sticky Prices with Generalized Hazard Functions*. No. w27434. National Bureau of Economic Research, 2020.

Lecture 5 (1 week): Unemployment fluctuations in the new Keynesian model

11. *Gali Chapter 6

Lecture 6 (2 weeks): Empirics

12. *A review of VAR and SVAR
13. *Romer, Christina D, and David H Romer. 1989. "Does Monetary Policy Matter? A New Test in the Spirit of Friedman and Schwartz." *NBER Macroeconomics Annual* 4:121–84.
14. *Christiano, L., M. Eichenbaum and C. Evans. "Nominal Rigidities and the Dynamic Effects of a Shock to Monetary Policy," *Journal of Political Economy*, 2005.
15. *Palma, Nuno. "The real effects of monetary expansions: evidence from a large-scale historical experiment." *Review of Economic Studies* (2021).
16. *Jordà, Òscar, Sanjay R. Singh, and Alan M. Taylor. *The long-run effects of monetary policy*. No. w26666. National Bureau of Economic Research, 2020.
17. Christiano, L., M. Eichenbaum and C. Evans. "Monetary Policy Shocks: What Have We Learned, and To What End," in Taylor and Woodford (eds.), *Handbook of Monetary Economics*, 1999.
18. Gali and Gertler, *Inflation Dynamics: A structural Econometric Analysis*," *JME* 1999.
19. DeJong, " A Bayesian Approach to Dynamic Macroeconomics ", *Journal of Econometrics* 2000.
20. Canova and Sala, *Back to Square One: Identification Issues in DSGE Models*," *JME* 2009.

21. Fernandez-Villaverde, "The Econometrics of DSGE Models," 2010.
22. Christiano, L., M. Eichenbaum and R. Vigfusson. "Assessing Structural VARs," NBER Working Papers 12353, 2006

Part II: Frictions in Banking and Financial Markets

General Readings:

23. *Adrian, Tobias, Paolo Colla and Hyun Song Shin (2012), Which Financial Frictions? Parsing the Evidence of the Financial Crisis 2007-9, NBER Macroeconomics Annual 2012, Volume 27, edited by Acemoglu, Parker, and Woodford.
24. Haldane, Andrew (2010), The \$100 Billion Question, Bank of England.
25. Rosenblum, Harvey (2011), Choosing the Road to Prosperity: Why We Must End Too Big to Fail – Now, Federal Reserve Bank of Dallas Annual Report.
26. Korinek, Anton (2015), Thoughts on DSGE Macroeconomics, October 2015, working paper prepared for Joe Stiglitz's festschrift conference.

Lecture 7 (1 week): Bank runs, and bailouts

27. *Diamond, Douglas W., and Philip H. Dybvig. 1983. "Bank Runs, Deposit Insurance, and Liquidity." *Journal of Political Economy* 91(3)
28. *Mark Gertler and Nobuhiro Kiyotaki, 2015. "Banking, Liquidity, and Bank Runs in an Infinite Horizon Economy," *American Economic Review*, American Economic Association, vol. 105(7), pages 2011-2043, July.
29. *Baron, Matthew, Emil Verner, and Wei Xiong. Banking crises without panics. Forthcoming, *Quarterly Journal of Economics*
30. D.W. Diamond, A.K. Kashyap, Chapter 29 - Liquidity Requirements, Liquidity Choice, and Financial Stability, Editor(s): John B. Taylor, Harald Uhlig, *Handbook of Macroeconomics*, Elsevier, Volume 2, 2016, Pages 2263-2303
31. Tirole (2011): Illiquidity and all its friends, *Journal of Economic Literature*.
32. Egan, Mark, Ali Hortaçsu, and Gregor Matvos. "Deposit competition and financial fragility: Evidence from the us banking sector." *American Economic Review* 107.1 (2017): 169-216.
33. Qi Chen, Itay Goldstein, Zeqiong Huang, Rahul Vashishtha, 2020, Liquidity Transformation and Fragility in the US Banking Sector, NBER Working Paper No. 27815
34. Buchak, Greg, et al. The limits of shadow banks. No. w25149. National Bureau of Economic Research, 2018.

35. Gorton and Metrick (2009): Securitized banking and the run on repo, NBER working paper.
36. Stiglitz, Joseph. 2009. "A Bank Bailout That Works." *The Nation*: 1–8.
37. Dam, Lammertjan and Michael Koetter. 2012. "Bank Bailouts and Moral Hazard: Evidence from Germany." *The Review of Financial Studies* 25(8): 2343-2380.
38. Holmstrom H. and J. Tirole, (1998), "Private and Public Supply of Liquidity", *Journal of Political Economy*, 106, 1-40.
39. Diamond, D. (1991) "Monitoring and Reputation: The Choice between Bank Loans and Directly Placed Debt", *Journal of Political Economy*, 99, 689-721.
40. Diamond D. and R. Rajan (2001), "Liquidity Risk, Liquidity Creation, and Financial Fragility: A Theory of Banking", *Journal of Political Economy*, 94, 691-719.
41. Shin, Hyun Song. 2009. "Reflections on Northern Rock : The Bank Run That Heralded the Global Financial Crisis." *The Journal of Economic Perspectives* 23(1): 101–20.
42. Gale D. and M. Hellwig (1985), "Incentive Compatible Debt Contracts: The One-Period Problem". *Review of Economic Studies*, 52, 647-663.
43. Diamond D.(1984), "Financial Intermediation and Delegated Monitoring", *Review of Economic Studies*, 51, 393-414.
44. Leland H. and D. Pyle (1977) "Informational Asymmetries, Financial Structure, and Financial Intermediation", *Journal of Finance*, 31, 371-387.
45. Aghion P. and P. Bolton (1992), "An Incomplete Contracts Approach to Financial Contracting", *Review of Economic Studies*, 59

Lecture 8 (1 week): Agency cost

46. *Kiyotaki N. and J. Moore (1997), "Credit Cycles" *Journal of Political economy*, 105, 211-248.
47. *Nobuhiro Kiyotaki and John Moore, "Liquidity, Business Cycles, and Monetary Policy," *Journal of Political Economy*, forthcoming
48. *Bernanke, Ben and Mark Gertler, "Agency Costs, Net Worth and Business Fluctuations." *American Economic Review*, March 1989.
49. *Holm, Martin Blomhoff, Pascal Paul, and Andreas Tischbirek. "The transmission of monetary policy under the microscope." *Journal of Political Economy* 129.10 (2021)
50. Caglio, Cecilia R., R. Matthew Darst, and Şebnem Kalemli-Özcan. Risk-Taking and Monetary Policy Transmission: Evidence from Loans to SMEs and Large Firms. No. w28685. National Bureau of Economic Research, 2021.

51. Stiglitz, Joseph and Andrew Weiss (1981), "Credit Rationing in Markets with Imperfect Information," *American Economic Review*, 71(3), pp. 393-410.
52. Townsend, Robert M. (1979), "Optimal Contracts and Competitive Markets with Costly State Verification," *Journal of Economic Theory* 21, pp. 265-293.
53. Akerlof, George A. and Paul M. Romer (1993), Looting: The Economic Underworld of Bankruptcy for Profit, *Brookings Papers on Economic Activity* 1993(2), pp. 1-73.
54. Carlstrom C. and T. Fuerst (1997) "Agency Costs, Net Worth and Business Fluctuations: A Computable General Equilibrium Analysis", *American Economic Review*, 87, 893-910.
55. Bernanke, Gertler and Gilchrist (1999): The financial accelerator in a quantitative business cycle framework, *Handbook of Macroeconomics*.
56. Christiano, Lawrence J., Roberto Motto, and Massimo Rostagno. 2014. "Risk Shocks." *American Economic Review* 104 (1): 27–65.
57. Brunnermeier and Pedersen (2009): Market liquidity and funding liquidity, *Review of Financial Studies*.

Lecture 9 (1 week): Liquidity, risk premia, and monetary policy

58. *Bernanke, Ben S., and Kenneth N. Kuttner. "What explains the stock market's reaction to Federal Reserve policy?." *The Journal of finance* 60.3 (2005): 1221-1257.
59. *Drechsler, Itamar, Alexi Savov, and Philipp Schnabl. "The deposits channel of monetary policy." *The Quarterly Journal of Economics* 132, no. 4 (2017): 1819-1876.
60. *Gertler, Mark, and Peter Karadi. "Monetary policy surprises, credit costs, and economic activity." *American Economic Journal: Macroeconomics* 7, no. 1 (2015): 44-76.
61. *Choudhary, Ali M., and Nicola Limodio. "Liquidity risk and long-term finance: evidence from a natural experiment." forthcoming, *Review of Economic Studies*
62. *Samuel G Hanson, David O Lucca, Jonathan H Wright, Rate-Amplifying Demand and the Excess Sensitivity of Long-Term Rates, *The Quarterly Journal of Economics*, Volume 136, Issue 3, August 2021, Pages 1719–1781, <https://doi.org/10.1093/qje/qjab011>
63. *Hanson, Samuel G., and Jeremy C. Stein. "Monetary policy and long-term real rates." *Journal of Financial Economics* 115, no. 3 (2015): 429-448.

64. *Chodorow-Reich, Gabriel, et al. "Bank liquidity provision across the firm size distribution." *Journal of Financial Economics* (2021).
65. *Greenwald, Daniel L., John Krainer, and Pascal Paul. "The credit line channel." Federal Reserve Bank of San Francisco, 2021.
66. Darmouni, Olivier, and Kerry Siani. "Crowding out bank loans: Liquidity-driven bond issuance." *CEPR Covid Economics* 51.7 (2020): 74-133.
67. Drechsler, Itamar, Alexi Savov, and Philipp Schnabl. "A model of monetary policy and risk premia." *The Journal of Finance* 73, no. 1 (2018): 317-373.
68. Krishnamurthy, Arvind, and Annette Vissing-Jorgensen. "The aggregate demand for treasury debt." *Journal of Political Economy* 120, no. 2 (2012): 233-267.
69. Nagel, Stefan. "The liquidity premium of near-money assets." *The Quarterly Journal of Economics* 131, no. 4 (2016): 1927-1971.
70. Drechsler, Itamar, Alexi Savov, and Philipp Schnabl. "Liquidity, risk premia, and the financial transmission of monetary policy." *Annual Review of Financial Economics* 10 (2018): 309-328.

Lecture 10 (1 week): Financial intermediation in DSGE models

71. *Gertler, M., & Kiyotaki, N. (2010). Financial intermediation and credit policy in business cycle analysis. In *Handbook of monetary economics* (Vol. 3, pp. 547-599). Elsevier.
72. *Monika Piazzesi, Ciaran Rogers and Martin Schneider, 2019, "Money and banking in a New Keynesian model", Stanford University
73. *Vadim Elenev, Tim Landvoigt, Stijn Van Nieuwerburgh, "A Macroeconomic Model with Financially Constrained Producers and Intermediaries" forthcoming, *Econometrica*
74. *Brunnermeier and Sannikov (2014): A macroeconomic model with a financial sector, *American Economic Review*.
75. *Bianchi, Javier, and Saki Bigio. Banks, liquidity management and monetary policy. forthcoming *Econometrica*
76. Gianluca Benigno and Pierpaolo Benigno. Interest, Reserves, and Prices. Federal Reserve Bank of New York Staff Reports, no. 971. June 2021
77. *Maryam Farboodi and Péter Kondor, 2021, Heterogeneous Global Booms and Busts. NBER Working Paper No. 28834. May 2021
78. Baron, Matthew, and Wei Xiong. "Credit expansion and neglected crash risk." *The Quarterly Journal of Economics* 132.2 (2017): 713-764.

79. Wang, Yifei, et al. "Bank market power and monetary policy transmission: Evidence from a structural estimation." Available at SSRN 3049665 (2018).
80. Gertler, Mark, and Peter Karadi. "A model of unconventional monetary policy." *Journal of monetary Economics* 58.1 (2011): 17-34.
81. Winston W. Dou, Andrew W. Lo, Ameya Muley, Harald Uhlig, 2017, *Macroeconomic Models for Monetary Policy: A Critical Review from a Finance Perspective*
82. Brunnermeier, Eisenbach and Sannikov (2012): *Macroeconomics with financial frictions: a survey*, NBER working paper.
83. Christiano, L., M. Rostagno, and R. Motto (2010, May). *Financial factors in economic fluctuations*. Working Paper Series 1192, European Central Bank.
84. Gilchrist, Simon, and Egon Zakrajsek. 2012. "Credit Spreads and Business Cycle Fluctuations." *American Economic Review* 102 (4): 1692–1720.
85. Freixas, X., A. Martin, and D. Skeie (2011). *Bank liquidity, interbank markets, and monetary policy*. *Review of Financial Studies* 24 (8), 2656-2692.
86. He, Z. and A. Krishnamurthy (2013). *Intermediary asset pricing*. *American Economic Review* 103 (2), 732-70.
87. He, Z. and A. Krishnamurthy (2012, October). *A macroeconomic framework for quantifying systemic risk*. Working Paper Research 233, National Bank of Belgium.
88. Dewachter, H. and R. Wouters (2012, October). *Endogenous risk in a dsge model with capital-constrained financial intermediaries*. Working paper research, National Bank of Belgium.

Lecture 11 (1 week): Heterogeneity, Reallocation, and Redistribution Effects

89. *Davide Debortoli & Jordi Galí, 2017. "Monetary policy with heterogeneous agents: Insights from TANK models," *Economics Working Papers* 1686, Department of Economics and Business, Universitat Pompeu Fabra, revised Jun 2018.
90. *Acharya, Sushant, and Keshav Dogra. "Understanding HANK: Insights from a PRANK." *Econometrica* 88.3 (2020): 1113-1158.
91. *Auclert, Adrien. 2019. "Monetary Policy and the Redistribution Channel." *American Economic Review*, 109 (6): 2333-67.
92. *Pablo Ottonello and Thomas Winberry, 2020 *Financial Heterogeneity and the Investment Channel of Monetary Policy*, *Econometrica*
93. *Kaplan, Greg, Benjamin Moll, and Giovanni L. Violante. "Monetary policy according to HANK." *American Economic Review* 108, no. 3 (2018): 697-743.

94. *Rubbo, Elisa. Networks, Phillips Curves and Monetary Policy. mimeo, Harvard University, 2020.
95. David Baqaee, Emmanuel Farhi, and Kunal Sangani, 2021, The Supply-Side Effects of Monetary Policy. NBER Working Paper No. 28345
96. Atif Mian, Ludwig Straub, Amir Sufi, Indebted Demand, The Quarterly Journal of Economics, 2021;, qjab007, <https://doi.org/10.1093/qje/qjab007>
97. Bilbiie, Florin Ovidiu. "Monetary policy and heterogeneity: An analytical framework." (2018).
98. CARAMP, NICOLAS, and DEJANIR H. SILVA. "Monetary Policy and Wealth Effects: The Role of Risk and Heterogeneity." (2020).
99. Gomes, Joao, Urban Jermann, and Lukas Schmid. "Sticky leverage." American Economic Review 106.12 (2016): 3800-3828.
100. Jennifer, La'O., and Alireza Tahbaz-Salehi. Optimal Monetary Policy in Production Networks. No. 27464. National Bureau of Economic Research, Inc, 2020.
101. Guerrieri, Veronica, and Guido Lorenzoni. "Credit crises, precautionary savings, and the liquidity trap." The Quarterly Journal of Economics 132.3 (2017): 1427-1467.
102. Eifeldt, A. L. and A. A. Rampini (2006, April). Capital reallocation and liquidity. Journal of Monetary Economics 53 (3), 369-399.
103. Thomas, C. (2008, July). Search and matching frictions and optimal monetary policy. Journal of Monetary Economics 55 (5), 936-956.
104. Algan, Y. and X. Ragot (2010, April). Monetary policy with heterogeneous agents and borrowing constraints. Review of Economic Dynamics 13 (2), 295-316.
105. Gornemann, N., K. Kuester, and M. Nakajima (2012). Monetary policies with heterogeneous agents. Technical report.
106. Eifeldt, A. L. and A. A. Rampini (2008, January). Managerial incentives, capital reallocation, and the business cycle. Journal of Financial Economics 87 (1), 177-199.
107. Shourideh, A. and A. Zetlin-Jones (2012). External financing and the role of financial frictions over the business cycle: Measurement and theory. Technical report.

Lecture 12 (1 weeks): Monetary Policy in China

108. *Chen, Kaiji, Jue Ren, and Tao Zha. The Nexus of Monetary Policy and Shadow Banking in China. American Economic Review

109. *Chun Chang, Zheng Liu, Mark M. Spiegel, Jingyi Zhang, "Reserve requirements and optimal Chinese stabilization policy", *Journal of Monetary Economics*, Volume 103, 2019, Pages 33-51.
110. *Chang, Chun, Zheng Liu, and Mark M. Spiegel. "Capital controls and optimal Chinese monetary policy." *Journal of Monetary Economics* 74 (2015): 1-15.
111. *Hachem, Kinda, and Zheng Song. "Liquidity rules and credit booms." *Journal of Political Economy* 129.10 (2021).
112. Chen, Kaiji, Patrick Higgins, Daniel F. Waggoner, and Tao Zha. China pro-growth monetary policy and its asymmetric transmission. No. 2016-9. Working Paper, Federal Reserve Bank of Atlanta, 2016.
113. Chen, Kaiji, Jue Ren, and Tao Zha. What we learn from China's rising shadow banking: Exploring the nexus of monetary tightening and banks' role in entrusted lending. No. w21890. National Bureau of Economic Research, 2016.
114. Chen, Kaiji, and Yi Wen. "The great housing boom of China." *American Economic Journal: Macroeconomics* 9.2 (2017): 73-114.
115. Chen, Kaiji, Yiqing Xiao, and Tao Zha. "bank wholesale funding, monetary transmission and systemic risk: evidence from china." (2021).
116. Chang, Chun, Kaiji Chen, Daniel F. Waggoner, and Tao Zha. "Trends and cycles in China's macroeconomy." *NBER Macroeconomics Annual* 30, no. 1 (2016): 1-84.
117. Geng, Zhe, and Jun Pan. The SOE Premium and Government Support in China's Credit Market. No. w26575. National Bureau of Economic Research, 2019.
118. Charoenwong, Ben, Meng Miao, and Tianyue Ruan. "Hidden Non-Performing Loans in China." Available at SSRN (2021).

Lecture 13 (1 week): Monetary Policy and Financial Stability (More readings)

119. *Farhi, Emmanuel, and Iván Werning. "A theory of macroprudential policies in the presence of nominal rigidities." *Econometrica* 84, no. 5 (2016): 1645-1704.
120. *Mark Gertler, Nobuhiro Kiyotaki, Andrea Prestipino, 2019, "Credit Booms, Financial Crises and Macroprudential Policy"
121. *Moritz Lenel, Monika Piazzesi and Martin Schneider, 2019, "The short rate disconnect in a monetary economy"
122. *Hanson, Samuel G, Anil K Kashyap, and Jeremy C Stein. 2011. "A Macroprudential Approach to Financial Regulation." *Journal of Economic Perspectives* 25(1): 3–28.

123. *Correa, Ricardo, Wenxin Du, and Gordon Y. Liao. US banks and global liquidity. No. w27491. National Bureau of Economic Research, 2020.
124. Carlo Altavilla, Luc Laeven, José-Luis Peydró. 2020. Monetary and macroprudential policy complementarities: evidence from European credit registers. ECB working paper No 2504 / December 2020
125. Clayton, Christopher, and Andreas Schaab. "Multinational Banks and Financial Stability." Available at SSRN 3512148 (2020).
126. Drechsler, Itamar, Alexi Savov, and Philipp Schnabl. "A model of monetary policy and risk premia." *The Journal of Finance* 73.1 (2018): 317-373.
127. Caballero, Ricardo J. and Simsek, Alp, A Risk-Centric Model of Demand Recessions and Macroprudential Policy (August 21, 2018). BIS Working Paper No. 733. Available at SSRN: <https://ssrn.com/abstract=3212474>
128. Farhi, Emmanuel, and Iván Werning. 2019. "Monetary Policy, Bounded Rationality, and Incomplete Markets." *American Economic Review*, 109 (11): 3887-3928.
129. Gabriel Jiménez, Steven Ongena, José-Luis Peydró, and Jesús Saurina, "Macroprudential Policy, Countercyclical Bank Capital Buffers, and Credit Supply: Evidence from the Spanish Dynamic Provisioning Experiments," *Journal of Political Economy* 125, no. 6 (December 2017): 2126-2177.
130. Di Tella, Sebastian. 2019. "Optimal Regulation of Financial Intermediaries." *American Economic Review*, 109 (1): 271-313.
131. Alejandro Van der Gote, 2018 "Coordinating Monetary and Financial Regulatory Policies", European Central Bank
132. Tobias Adrian and Fernando Duarte, 2017, "Financial Vulnerability and Monetary Policy", Federal Reserve Bank of New York Staff Reports, no. 804
133. Lim, C et al. 2011. "Macroprudential Policy: What Instruments and How to Use Them? Lessons from Country Experiences."
134. Bank for International Settlements (2014), Re-thinking the Lender of Last Resort, BIS Papers No 79
135. Benes, Jaromir and Michael Kumhof (2012), "The Chicago Plan revisited", IMF Working Paper 12/202
136. Smets, Frank (2013), "Financial stability and monetary policy: How closely interlinked?", Sveriges Riksbank, *Economic Review* 2013(3), 121-160

Lecture 14 (1 week): Digital Currency and Central Bank

137. *Yermack, David. "Is Bitcoin a real currency? An economic appraisal." *Handbook of digital currency*. Academic Press, 2015. 31-43.

138. *Schilling, Linda, and Harald Uhlig. "Some simple bitcoin economics." *Journal of Monetary Economics* 106 (2019): 16-26.
139. *Garratt, Rodney J., and Maarten RC Van Oordt. "Privacy as a public good: a case for electronic cash." *Journal of Political Economy* 129.7 (2021).
140. *Fernández-Villaverde, Jesús, et al. "Central bank digital currency: central banking for all?." *Review of Economic Dynamics* 41 (2021): 225-242.
141. *Leshno, Jacob D., and Philipp Strack. "Bitcoin: An axiomatic approach and an impossibility theorem." *American Economic Review: Insights* 2.3 (2020): 269-86.
142. *Brunnermeier, Markus K., and Dirk Niepelt. "On the equivalence of private and public money." *Journal of Monetary Economics* 106 (2019): 27-41.
143. *Piazzesi, Monika, and Martin Schneider. "Credit lines, bank deposits or CBDC? competition and efficiency in modern payment systems." Unpublished, Stanford University (2020).
144. *Uhlig, Harald, and Taojun Xie. *Parallel Digital Currencies and Sticky Prices*. No. w28300. National Bureau of Economic Research, 2021.
145. Schilling, Linda, Jesús Fernández-Villaverde, and Harald Uhlig. *Central bank digital currency: When price and bank stability collide*. No. w28237. National Bureau of Economic Research, 2020.
146. You, Yang, and Kenneth S. Rogoff. *Redeemable platform currencies*. No. w26464. National Bureau of Economic Research, 2019.
147. Howell, Sabrina T., Marina Niessner, and David Yermack. "Initial coin offerings: Financing growth with cryptocurrency token sales." *The Review of Financial Studies* 33.9 (2020): 3925-3974.
148. Yermack, David. "Corporate governance and blockchains." *Review of Finance* 21.1 (2017): 7-31.
149. Lin William Cong, Ye Li, and Neng Wang. *Token-Based Platform Finance*. NBER Working Paper No. 27810. September 2020
150. Benigno, Pierpaolo, Linda M. Schilling, and Harald Uhlig. *Cryptocurrencies, currency competition, and the impossible trinity*. No. w26214. National Bureau of Economic Research, 2019.
151. Fernandez-Villaverde, Jesus. "Cryptocurrencies and All That: Two Ideas from Monetary Economics." (2021).
152. Julia K. T. Lutz, 2018. *Coexistence of Cryptocurrencies and Central Bank Issued Fiat Currencies-A Systematic Literature Review*. Manuscript

Additional Topics

Topic 1: Monetary and fiscal interactions

1. * Canzoneri, M., Cumby, R., & Diba, B. (2010). The interaction between monetary and fiscal policy. In Handbook of monetary economics (Vol. 3, pp. 935-999). Elsevier.
2. *Bhandari, Anmol, David Evans, Mikhail Golosov, and Thomas J. Sargent. Inequality, Business Cycles, and Monetary-Fiscal Policy. forthcoming Econometrica
3. Bianchi, Francesco, Renato Faccini, and Leonardo Melosi. Monetary and fiscal policies in times of large debt: Unity is strength. No. w27112. National Bureau of Economic Research, 2020.
4. Woodford (2011): Simple analytics of the government expenditure multiplier, AEJ: Macroeconomics.
5. Christiano, Eichenbaum and Evans, When is the Government Spending Multiplier Large," JPE 2011.
6. Favero and Monacelli, Fiscal Policy Rules and Regime (In)Stability: Evidence from the U.S," 2005.
7. Cochrane, Determinacy and Identification with Taylor Rules," JPE 2011.
8. Leeper, Eric (2016), "Should central banks care about fiscal rules?", NBER Working Paper 22800
9. Reis, Ricardo (2017b), "Can the central bank alleviate fiscal burdens?", NBER Working Paper 23014
10. Sims, Christopher (2016), "Fiscal policy, monetary policy and central bank independence", Jackson Hole Symposium, Federal Reserve Bank of Kansas City
11. Woodford, Michael (2013), "Forward guidance by inflation-targeting central banks", Sveriges Riksbank, Economic Review 2013(3), 81-120

Topic 2: Liquidity trap and quantitative easing

12. *Eggertsson, Gauti, and Paul R. Krugman. 2012. "Debt, Deleveraging, and the Liquidity Trap: A Fisher-Minsky-Koo Approach." Quarterly Journal of Economics: 1469–1513.
13. *Werning (2012): Managing a liquidity trap: Monetary and fiscal policy, MIT working paper.
14. *Vissing-Jorgensen, Annette, and Arvind Krishnamurthy. 2011. "The Effects of Quantitative Easing on Interest Rates: Channels and Implications for Policy." Brookings Papers on Economic Activity (Fall): 215–87.

15. *Galí, Jordi. "The State of New Keynesian Economics: A Partial Assessment." *Journal of Economic Perspectives*—Volume 32, Number 3—Summer 2018—Pages 87–112
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