# 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 2018

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## 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, including unemployment fluctuations in the new Keynesian model, related empirical tests, monetary and fiscal interactions, liquidity trap and quantitative easing. The second part of the course will focus on topics in banking and financial markets which are useful for understanding the global 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- **Refereeing an article (30%):** Pick up an unpublished article, subject to my approval, and write a detailed referee report.
- **Term paper (50%)**
- **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 (articles with * will be covered in class)

### Part I: New Keynesian Monetary Economics

### Week 1: Introduction and a classical monetary model

1. *Gali Chapter 1-2

### Week 2: The Basic New Keynesian Model

2. *Gali Chapter 3

### Week 3: Monetary policy in the new Keynesian model

3. *Gali Chapter 4-5
4. *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.

5. Clarida, R., J. Gali, and M. Gertler (1999), "The Science of Monetary Policy: A New Keynesian Perspective", Journal of Economics Literature, 37, 1661-1707
6. Romer, David, and Christina Romer. 2000. “Federal Reserve Information and the Behavior of Interest Rates.” The American Economic Review 90(3): 429–57.
7. Taylor, John B. 1993. “Discretion Practice versus Policy Rules in Practice.” Carnegie-Rochester Conference Series on Public Policy 39: 195–214.
8. Romer, David, and Christina Romer. 2000. “Federal Reserve Information and the Behavior of Interest Rates.” The American Economic Review 90(3): 429–57.

## Week 4: Unemployment fluctuations in the new Keynesian model

9. *Gali Chapter 7

## Week 5-6: Empirics

10. *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.
11. *Monticini, Andrea, and Giacomo Vaciago. 2005. “Are Euro Interest Rates Led by FED Announcements?”
12. *Christiano, L., M. Eichenbaum and C. Evans. "Nominal Rigidities and the Dynamic Effects of a Shock to Monetary Policy," Journal of Political Economy, 2005.
13. 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.
14. Gali and Gertler, Inflation Dynamics: A structural Econometric Analysis," JME 1999.
15. DeJong, " A Bayesian Approach to Dynamic Macroeconomics ", Journal of Econometrics 2000.
16. Canova and Sala, Back to Square One: Identification Issues in DSGE Models," JME 2009.
17. Fernandez-Villaverde, The Econometrics of DSGE Models," 2010.
18. Christiano, L., M. Eichenbaum and R. Vigfusson. "Assessing Structural VARs," NBER Working Papers 12353, 2006

## Week 7: Monetary and fiscal interactions

19. * Woodford (2011): Simple analytics of the government expenditure multiplier, AEJ: Macroeco-nomics.
20. Christiano, Eichenbaum and Evans, When is the Government Spending Multiplier Large," JPE 2011.
21. Favero and Monacelli, Fiscal Policy Rules and Regime (In)Stability: Evidence from the U.S," 2005.
22. Cochrane, Determinacy and Identification with Taylor Rules," JPE 2011.
23. Leeper, Eric (2016), "Should central banks care about fiscal rules?", NBER Working Paper 22800
24. Reis, Ricardo (2017b), "Can the central bank alleviate fiscal burdens?", NBER Working Paper 23014
25. Sims, Christopher (2016), "Fiscal policy, monetary policy and central bank independence", Jackson Hole Symposium, Federal Reserve Bank of Kansas City
26. Woodford, Michael (2013), "Forward guidance by inflation-targeting central banks", Sveriges Riksbank, Economic Review 2013(3), 81-120

## Week 8: Liquidity trap and quantitative easing

27. *Eggertsson, Gauti, and Paul R. Krugman. 2012. "Debt, Deleveraging, and the Liquidity Trap: A Fisher-Minsky-Koo Approach." Quarterly Journal of Economics: 1469–1513.
28. *Werning (2012): Managing a liquidity trap: Monetary and fiscal policy, MIT working paper.
29. *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.
30. *Galí, Jordi. "The State of New Keynesian Economics: A Partial Assessment." Journal of Economic Perspectives—Volume 32, Number 3—Summer 2018—Pages 87–112
31. Blinder, Alan S. 2010. "Quantitative Easing : Entrance and Exit Strategies." Federal Reserve Bank of St. Louis Review 92(6): 465–80.
32. Mckay, Alisdair, Emi Nakamura, and Jon Steinsson. 2014. "The Power of Forward Guidance Revisited."
33. Eggertsson, Gauti and Michael Woodford (2003), "The zero bound on interest rates and optimal monetary policy", Brookings Papers on Economic Activity 34(1), 139-211

34. Buiter, Willem H, and Nikolaos Panigirtzoglou. 2003. "Overcoming the Zero Bound on Nominal Interest Rates with Negative Interest On Currency: Gesell's Solution." The Economic Journal (113): 723–46.

### Part II: Frictions in Banking and Financial Markets

## General Readings:

35. *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.
36. Haldane, Andrew (2010), The $100 Billion Question, Bank of England.
37. Rosenblum, Harvey (2011), Choosing the Road to Prosperity: Why We Must End Too Big to Fail – Now, Federal Reserve Bank of Dallas Annual Report.
38. Korinek, Anton (2015), Thoughts on DSGE Macroeconomics, October 2015, working paper prepared for Joe Stiglitz's festschrift conference.

## Week 9: Bank runs, and bailouts

39. *Diamond, Douglas W., and Philip H. Dybvig. 1983. "Bank Runs, Deposit Insurance, and Liquidity." Journal of Political Economy 91(3)
40. *Gorton and Metrick (2009): Securitized banking and the run on repo, NBER working paper.
41. *Tirole (2011): Illiquidity and all its friends, Journal of Economic Literature.
42. *Bocola, Luigi, and Guido Lorenzoni. Financial crises and lending of last resort in open economies. No. w23984. National Bureau of Economic Research, 2017.
43. Stiglitz, Joseph. 2009. "A Bank Bailout That Works." The Nation: 1–8.
44. Dam, Lammertjan and Michael Koetter. 2012. "Bank Bailouts and Moral Hazard: Evidence from Germany." The Review of Financial Studies 25(8): 2343-2380.
45. Holmstrom H. and J. Tirole, (1998), "Private and Public Supply of Liquidity", Journal of Political Economy, 106, 1-40.
46. Diamond, D. (1991) "Monitoring and Reputation: The Choice between Bank Loans and Directly Placed Debt", Journal of Political Economy, 99, 689-721.
47. Diamond D. and R. Rajan (2001), "Liquidity Risk, Liquidity Creation, and Financial Fragility: A Theory of Banking", Journal of Political Economy, 94, 691-719.

48. 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.
49. Gale D. and M. Hellwig (1985), "Incentive Compatible Debt Contracts: The One-Period Problem". Review of Economic Studies, 52, 647-663.
50. Diamond D.(1984), "Financial Intermediation and Delegated Monitoring", Review of Economic Studies, 51, 393-414.
51. Leland H. and D. Pyle (1977) "Informational Asymmetries, Financial Structure, and Financial Intermediation", Journal of Finance, 31, 371-387.
52. Aghion P. and P. Bolton (1992), "An Incomplete Contracts Approach to Financial Contracting", Review of Economic Studies, 59

**Week 10: Agency cost**

53. *Stiglitz, Joseph and Andrew Weiss (1981), "Credit Rationing in Markets with Imperfect Information," American Economic Review, 71(3), pp. 393-410.
54. *Townsend, Robert M. (1979), "Optimal Contracts and Competitive Markets with Costly State Verification," Journal of Economic Theory 21, pp. 265-293.
55. *Bernanke, Ben and Mark Gertler, "Agency Costs, Net Worth and Business Fluctuations." American Economic Review, March 1989.
56. *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.
57. *Kiyotaki N. and J. Moore (1997), "Credit Cycles" Journal of Political economy, 105, 211-248.
58. Carlstrom C. and T. Fuerst (1997) "Agency Costs, Net Worth and Business Fluctuations: A Computable General Equilibrium Analysis", American Economic Review, 87, 893-910.
59. Bernanke, Gertler and Gilchrist (1999): The financial accelerator in a quantitative business cycle framework, Handbook of Macroeconomics.
60. Kiyotaki, Nobuhiro, and John Moore. 2012. "Liquidity, Business Cycles, and Monetary Policy." National Bureau of Economic Research Working Paper 17934.
61. Christiano, Lawrence J., Roberto Motto, and Massimo Rostagno. 2014. "Risk Shocks." American Economic Review 104 (1): 27–65.
62. Brunnermeier and Pedersen (2009): Market liquidity and funding liquidity, Review of Financial Studies.

**Week 11: Externalities and Amplification**

63. *Greenwald, Bruce and Joseph E. Stiglitz (1988), Externalities in Economies with Imperfect Information and Incomplete Markets, Quarterly Journal of Economics 101(2), pp. 229-264.
64. *Jeanne, Olivier and Anton Korinek (2010), “Excessive Volatility in Capital Flows,” American Economic Review 100(2), pp. 403-407.
65. *Dávila, Eduardo, and Anton Korinek. "Pecuniary externalities in economies with financial frictions." The Review of Economic Studies 85.1 (2017): 352-395.
66. Lorenzoni, Guido (2008), “Inefficient Credit Booms,” Review of Economics Studies 75(3), pp. 809-833.
67. Korinek, A. and Simsek, A., 2016. Liquidity trap and excessive leverage. American Economic Review, 106(3), pp.699-738.

### Week 12: Financial intermediation in DSGE models

68. *Brunnermeier, Eisenbach and Sannikov (2012): Macroeconomics with financial frictions: a survey, NBER working paper.
69. *Brunnermeier and Sannikov (2014): A macroeconomic model with a financial sector, American Economic Review.
70. *Winston W. Dou, Andrew W. Lo, Ameya Muley, Harald Uhligy, 2017, Macroeconomic Models for Monetary Policy: A Critical Review from a Finance Perspective
71. *Gertler, Mark, and Peter Karadi. "A model of unconventional monetary policy." Journal of monetary Economics 58.1 (2011): 17-34.
72. 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.
73. Christiano, L., M. Rostagno, and R. Motto (2010, May). Financial factors in economic fluctuations. Working Paper Series 1192, European Central Bank.
74. Gilchrist, Simon, and Egon Zakrajsek. 2012. “Credit Spreads and Business Cycle Fluctuations.” American Economic Review 102 (4): 1692–1720.
75. Freixas, X., A. Martin, and D. Skeie (2011). Bank liquidity, interbank markets, and monetary policy. Review of Financial Studies 24 (8), 2656-2692.
76. He, Z. and A. Krishnamurthy (2013). Intermediary asset pricing. American Economic Review 103 (2), 732-70.
77. He, Z. and A. Krishnamurthy (2012, October). A macroeconomic framework for quantifying systemic risk. Working Paper Research 233, National Bank of Belgium.

78. 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.

### Week 13: Heterogeneity, Reallocation, and Redistribution Effects

79. *Guerrieri, Veronica, and Guido Lorenzoni. "Credit crises, precautionary savings, and the liquidity trap." The Quarterly Journal of Economics 132.3 (2017): 1427-1467.
80. *Gomes, Joao, Urban Jermann, and Lukas Schmid. "Sticky leverage." American Economic Review 106.12 (2016): 3800-3828.
81. *Eisfeldt, A. L. and A. A. Rampini (2006, April). Capital reallocation and liquidity. Journal of Monetary Economics 53 (3), 369-399.
82. *Thomas, C. (2008, July). Search and matching frictions and optimal monetary policy. Journal of Monetary Economics 55 (5), 936-956.
83. Algan, Y. and X. Ragot (2010, April). Monetary policy with heterogeneous agents and borrowing constraints. Review of Economic Dynamics 13 (2), 295-316.
84. Gornemann, N., K. Kuester, and M. Nakajima (2012). Monetary policies with heterogeneous agents. Technical report.
85. Eisfeldt, A. L. and A. A. Rampini (2008, January). Managerial incentives, capital reallocation, and the business cycle. Journal of Financial Economics 87 (1), 177-199.
86. Shourideh, A. and A. Zetlin-Jones (2012). External financing and the role of financial frictions over the business cycle: Measurement and theory. Technical report.

### Week 14: Monetary Policy in China

87. *Chang, Chun, Zheng Liu, and Mark M. Spiegel. "Capital controls and optimal Chinese monetary policy." Journal of Monetary Economics 74 (2015): 1-15.
88. *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.
89. *Chen, Kaiji, Jue Ren, and Tao Zha. The Nexus of Monetary Policy and Shadow Banking in China. No. w23377. National Bureau of Economic Research, 2017. Forthcoming, American Economic Review
90. Chang, Chun, Zheng Liu, Mark M. Spiegel, and Jingyi Zhang. "Reserve requirements and optimal Chinese stabilization policy." Federal Reserve Bank of San Francisco, 2016.

91. 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.
92. Chen, Kaiji, and Yi Wen. "The great housing boom of China." American Economic Journal: Macroeconomics 9.2 (2017): 73-114.
93. 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.

### Week 15: Monetary Policy and Financial Stability (More readings)

94. 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.
95. Lim, C et al. 2011. "Macroprudential Policy: What Instruments and How to Use Them? Lessons from Country Experiences."
96. Bank for International Settlements (2014), Re-thinking the Lender of Last Resort, BIS Papers No 79
97. Benes, Jaromir and Michael Kumhof (2012), "The Chicago Plan revisited", IMF Working Paper 12/202
98. Smets, Frank (2013), "Financial stability and monetary policy: How closely interlinked?", Sveriges Riksbank, Economic Review 2013(3), 121-160

### Week 16: Students presents their research proposals