北京大学汇丰商学院

Course Code
Theoretic foundation for Banking
4 thModule, 2023

Course Information

Instructor:
Office: PHBS Building, Room
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Office Hour: Wednesday 4:00-5:30 or by appointment

Teaching Assistant:
Phone:
Email:

Classes:
Lectures: Tue & Fri 10:30-12:20
Venue: PHBS Building, Room

Course Website:
If any.

1. Course Description

1.1 Context

Course overview:

The objective of this course is to study the implications of financial market imperfections for macroeconomics and finance. These imperfections include uninsurable idiosyncratic risks, asymmetric information, moral hazard, agency costs, adjustment costs, and taxation. I will teach half of the class focusing the theoretical foundation of financial imperfections and their qualitative implications. The students are expected to present papers for the rest the class. Computational methods are necessary for solving and estimating the models presented in class. The best way to learn computational and empirical methods is learning-by-doing. Thus, students are expected to complete a computation/estimation project.
Motivated MSc students are also welcomed to take the course. The instructor will provide enough background training for students who are not familiar with the modern business cycle theory.
Prerequisites:

1.2 Textbooks and Reading Materials

L. Ljungqvist and T. Sargent, Recursive Macroeconomic Theory
D.Romer, Advanced Macroeconomics
Taylor and Uhlig, Handbook of macroeconomics

2. Learning Outcomes

2.1 Intended Learning Outcomes

Learning Goals	Objectives	Assessment (YES with details or NO)
1. Our graduates will be effective communicators.	1.1. Our students will produce quality business and research-oriented documents.	**YES**
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	**YES**
2. Our graduates will be skilled in team work and leadership.	2.1. Students will be able to lead and participate in group for projects, discussion, and presentation.	**YES**
	2.2. Students will be able to apply leadership theories and related skills.	YES
3. Our graduates will be trained in ethics.	3.1. In a case setting, students will use appropriate techniques to analyze business problems and identify the ethical aspects, provide a solution and defend it.	NO
	3.2. Our students will practice ethics in the duration of the program.	YES
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	NO
5. Our graduates will be skilled in problem-solving and critical thinking.	5.1. Our students will have a good understanding of fundamental theories in their fields.	YES
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	YES
	5.3. Our students will demonstrate competency in critical thinking.	YES

2.2 Course specific objectives

Students are expected to be familiar with the models with frictions in macroeconomics and are expected to be able to apply these models to analyse real economy problems. These models are

a. Theory of financial frictions
b. Resource misallocation
c. Financial crisis and Bubbles
d. Models with information frictions
e. Behaviour Macroeconomics

2.3 Assessment/Grading Details

Class attendance is required. Students are also expected to present recent research papers and replicate some published papers. The final course performance is based on the following weights:
· Class participation and presentation: 20%. Each students need to present at least one paper from the paper list in the session under student presentation, or a paper which is not in the list after explicit permission from instructor.

· Computation project: 20%: students who enrol in the class need to replicate one paper. The paper can either in the list or not in the list. In the latter case, permission from instructor is needed.

- Final Exam: 40%
- Home works: 20%

2.4 Academic Honesty and Plagiarism

It is important for a student's effort and credit to be recognized through class assessment. Credits earned for a student work due to efforts done by others are clearly unfair. Deliberate dishonesty is considered academic misconducts, which include plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.

All assessments are subject to academic misconduct check. Misconduct check may include reproducing the assessment, providing a copy to another member of faculty, and/or communicate a copy of this assignment to the PHBS Discipline Committee. A suspected plagiarized document/assignment submitted to a plagiarism checking service may be kept in its database for future reference purpose.

Where violation is suspected, penalties will be implemented. The penalties for academic misconduct may include: deduction of honour points, a mark of zero on the assessment, a fail grade for the whole course, and reference of the matter to the Peking University Registrar.

For more information of plagiarism, please refer to *PHBS Student Handbook*.

3. Topics, Teaching and Assessment Schedule

Financial Intermediaries and Business Cycles

Introduction (1 week)

• Kiminori Matsuyama, 2007, Aggregate Implications of Credit Market Imperfections. (Feb 14/ 19)

Theory (two weeks)

• Modigliani, Franco, and Merton H. Miller, 1958, The cost of capital, corporation finance and the theory of investment, American Economic Review 48, 267-297.
• Kiyotaki, N. and J. Moore, 1997, Credit Cycles, Journal of Political Economy 105, 211-248.
• Douglas Gale, Martin Hellwig, "Incentive-Compatible Debt Contracts: The One- Period Problem", The Review of Economic Studies, Vol. 52, No. 4. (Oct., 1985), pp. 647-663.
• Holmstrom, Bengt, and Jean Tirole, 1997, Financial Intermediation, Loanable Funds, and the Real Sector, Quarterly Journal of Economics, Vol. 112, No. 3, pp. 663-691.
• Lecture notes on Trade off(Tax Benefit VS bankruptcy cost) Theory
• Azariadis, Costas, Leo Kaas, and Yi Wen. "Self-fulfilling credit cycles." The Review of Economic Studies 83.4 (2016): 1364-1405.

Financial Constraints and Resource Misallocation (1 week)

- Hsieh, Chang-Tai, and Peter J. Klenow. "Misallocation and manufacturing TFP in China and India." The Quarterly journal of economics 124.4 (2009): 1403-1448.
- Buera, Francisco J., Joseph P. Kaboski, and Yongseok Shin. "Finance and development: A tale of two sectors." American economic review 101.5 (2011): 1964-2002.
- Midrigan, Virgiliu, and Daniel Yi Xu. "Finance and misallocation: Evidence from plant-level data." American economic review 104.2 (2014): 422-58.
- Moll, Benjamin. "Productivity losses from financial frictions: Can self-financing undo capital misallocation?." American Economic Review 104.10 (2014): 3186-3221.
- Liu, Zheng, and Pengfei Wang. "Credit constraints and self-fulfilling business cycles." American Economic Journal: Macroeconomics 6.1 (2014): 32-69.

Application (Student Computation Project)

- Liu Zheng, Pengfei Wang, and Tao Zha,2013, Land-Price Dynamics and Macroeconomic Fluctuation, Econometrica
- Wang, Pengfei and Yi Wen, 2012, Hayashi meets Kiyotaki and Moore: A micro foundation for adjustment cost.
- Bernanke, B., M. Gertler and S. Gilchrist, 1999, Financial Accelerator in a Quantitative Business Cycle Framework, In: J. Taylor and M. Woodford (eds.), Handbook of Macroeconomics, Elsevier Science, Amsterdam.
- Gertler, Mark, and Nobuhiro Kiyotaki. "Financial intermediation and credit policy in business cycle analysis." Handbook of monetary economics. Vol. 3. Elsevier, 2010. 547-599.
- Carlstrom, C.T. and T.S. Fuerst, 1997, Agency Costs, Net Worth, and Business Fluctuations: A Computable General Equilibrium Analysis, American Economic Review 87, 893-910.
- Christiano, Lawrence J., Roberto Motto, and Massimo Rostagno. "Risk shocks." American Economic Review 104.1 (2014): 27-65.
- Gertler, Mark, and Peter Karadi. "A model of unconventional monetary policy." Journal of monetary Economics 58.1 (2011): 17-34.
- Kosuke Aoki, Gianluca Benigno and Nobuhiro Kiyotaki, 2009, Adjusting to Capital Account Liberalization.
- Greenwood, Jeremy, Juan M. Sanchez, and Cheng Wang. "Financing development: The role of information costs." American Economic Review 100.4 (2010): 1875-91.
- Miao, Jianjun and Pengfei, Wang, 2010, Credit Risk and Business Cycles, working paper, Boston University.
- Leduc, Sylvain, and Zheng Liu. "Uncertainty shocks are aggregate demand shocks." Journal of Monetary Economics 82 (2016): 20-35.
- Guerrieri, Luca, and Matteo Iacoviello. "Collateral constraints and macroeconomic asymmetries." *Journal of Monetary Economics* 90 (2017): 28-49.
- Bigio, Saki. "Endogenous liquidity and the business cycle." American Economic Review 105.6 (2015): 1883-1927.

- Liu, Zheng, Pengfei Wang, and Zhiwei Xu. "Interest-rate liberalization and capital misallocations." Federal Reserve Bank of San Francisco, 2020.

- Cui, Wei, and Leo Kaas. "Default cycles." Journal of Monetary Economics 117 (2021): 377-394.

- Perri, Fabrizio, and Vincenzo Quadrini. "International recessions." American Economic Review 108.4-5 (2018): 935-84.

- Bianchi, Javier. "Overborrowing and systemic externalities in the business cycle." American Economic Review 101.7 (2011): 3400-3426.

- Mendoza, Enrique G. "Sudden stops, financial crises, and leverage." American Economic Review 100.5 (2010): 1941-66.

Financial Crisis, Bubbles and Crashes

Rational Bubbles (Two weeks,)

- Allen, F. and Gale, D., 2007, Understanding Financial Crises, Oxford University Press.
- Allen, F. and Gale, D., 2008, Financial Crisis, Edward Elgar Publishing Ltd.
- Diamond, P., “National Debt in a Neoclassical Growth Model,” American Economic Review 55:1126-1150, 1965.
- Tirole, Jean, 1985, Asset Bubbles and Overlapping Generations, Econometrica 6, 1499-1528.
- Farhi, Emmanuel, and Jean Tirole. "Bubbly liquidity." The Review of Economic Studies 79.2 (2012): 678-706.
- Pengfei Wang and Wen Yi, Speculative Bubbles and Financial Crisis, AEJ Macro 2012.

- Jianjun Miao and Pengfei Wang, Asset Bubbles and Credit Constraints, 2018 AER.
- Jianjun Miao, Pengfei Wang, Zhiwei Xu, 2015, A Bayesian DSGE Model of Stock Market Bubbles and Business Cycles, Quantitative Economics
- *Lorenzoni and Hellwig, Bubbles and Self-Enforcing Debt, Econometrica, 2009

Speculative Bubbles (One week)

- Harrison, J. M. and D. M. Kreps, 1978, Speculative Investor Behavior in a Stock Market with Heterogeneous Expectations, Quarterly Journal of Economics 92, 323-336.
- Tirole, Jean, 1982, On the Possibility of Speculation under Rational Expectations, Econometrica 50, 1163-1182.
- *Scheinkman Jose and Wei Xiong, 2003, Overconfidence and Speculative Bubbles, Journal of Political Economy 111, 1183-1219.
- *Abreu D. and M. Brunnermeier, “Bubbles and Crashes,” Econometrica, 71:173-204, 2003.
- Allen, Franklin, and Gary Gorton, 1993, Churning Bubbles, Review of Economic Studies 60, 813--836.
- Allen, F. and Gale, D, 2000, Bubbles and Crises, Economic Journal, vol. 110, pp. 236-255.
- Xiong, Wei, and Jialin Yu. "The Chinese warrants bubble." *American Economic Review* 101.6 (2011): 2723-53.

Bank Run and Crises (one week)

- Diamond, D. and P. Dybvig, 1983, Banks Runs, Deposit Insurance, and Liquidity, Journal of Political Economy 91, 401-419.
- Allen, F. and Gale, D, 1998, Optimal Financial Crises, Journal of Finance, 1245-1284.
- Chang, R. and A. Velasco, 2001, A Model of Financial Crisis in Emerging Markets, Quarterly Journal of Economics 116, 489-517.
- Diamond, D., 1997, Liquidity, banks, and markets, Journal of Political Economy 105, pp. 928 – 956.
- Gertler, Mark, and Nobuhiro Kiyotaki. "Banking, liquidity, and bank runs in an infinite horizon economy." American Economic Review 105.7 (2015): 2011-43.
- Boissay, Frédéric, Fabrice Collard, and Frank Smets. "Booms and banking crises." *Journal of Political Economy* 124.2 (2016): 489-538.

Student Presentation
Credit Externality

- Greenwald, Bruce and Joseph E. Stiglitz (1986). "Externalities in economies with imperfect information and incomplete markets," Quarterly Journal of Economics, 101(2), pp.229-264
- Guido Lorenzoni (2008), "Inefficient Credit Booms", The Review of Economic Studies Vol. 75, No. 3, Jul., 2008
- Jeanne, Olivier and Anton Korinek (2010). "Managing credit booms and busts," NBER Working Paper w16377
- Javier, Bianchi, Overborrowing and Systemic Externalities in the Business Cycle, American Economic Review, December 2011, Vol 101 (7).
- Korinek, Anton, 2009, "Regulating Capital Flows to Emerging Markets: An Externality View," manuscript, Department of Economics, University of Maryland.

Aggregate Liquidity (Student Presentation)

- Brunnermeier, M. ,Deciphering the 2007/8 Liquidity and Credit Crunch, 2009.
- *Holmstrom, B. and J.Tirole, Private and Public Supply of Liquidity, Journal of Political Economy 106:1-40, 1998
- Diamond, D. and R.Rajan ,Liquidity Risk, Liquidity Creation and Financial Fragility, Journal of Political Economy, 109:287-327, April 2001.
- *Eisfeldt, A., "Endogenous Liquidity in Asset Markets." Journal of Finance, 59:1-30, February 2004.
- Myers, S. and R. Rajan, 1998, "The paradox of liquidity," Quaterly Jounral of Economics 113, pp. 733 – 739.
- Diamond, D., 1984, "Financial intermediation and delegated monitoring," Review of Economic Studies 51, pp. 393 – 414.
- Douglas W. Diamond and Raghuram G. Rajan, Fear of fire sales and the credit freeze, Forthcoming at QJE.
- *Brunnermeier and Pedersen, Market Liquidity and Funding Liquidity, The Review of Financial Studies, 2009.

Information Frictions

- Stephen Morris and Hyun Song Shi, Global Games: Theory and Applications.
- Stephen Morris; Hyun Song Shin, 1998, Unique Equilibrium in a Model of Self-Fulfilling Currency Attacks, The American Economic Review, Vol. 88, No. 3. (Jun., 1998), pp. 587-597
- Grossman, Sanford J. and Joseph E. Stiglitz (1980), On the Impossibility of Informationally Efficient Markets, AER, 70 (3), 393-408.

- Jess Benhabib, Pengfei Wang and Yi Wen, Sentiments and aggregate demand fluctuations, Econometrica, 2015
- Jess Benhabib, Xuewen Liu， and Pengfei Wang Sentiments, financial markets, and macroeconomic fluctuations, Journal of Financial Economics, 2016
- Kamenica, Emir, and Matthew Gentzkow. "Bayesian persuasion." *American Economic Review* 101.6 (2011): 2590-2615.
- Kamenica, Emir. "Bayesian persuasion and information design." *Annual Review of Economics* 11 (2019): 249-272.
- Gorton, Gary, and Guillermo Ordonez. "Collateral crises." *American Economic Review* 104.2 (2014): 343-78.