

ECO342: Money and Banking

Fall 2017
MW, 8:30AM-9:50AM
JRRB A97

Markus Brunnermeier
Edward S. Sanford Professor
Director of the Bendheim Center for Finance
Department of Economics
International Economics Section
Julis-Romo-Rabinowitz Building
Princeton, NJ 08544
markus@princeton.edu
<http://scholar.princeton.edu/markus>

Eco 342: Money and Banking

Course Description:

This course explores the interaction between money, financial markets and institutions. We examine (1) the three roles of money – using cryptocurrencies as leading example, (2) the core principles of asset pricing, (3) how financial institutions help to overcome financial frictions, but may lead to financial crisis and bank runs – with the Great Depression, the Great Recession and the Euro crisis as prominent examples, (4) how monetary and macroprudential policy manage inflation and can help to mitigate financial crises, (5) the international financial architecture, especially the role of the International Monetary Fund, and the impact of FinTech on the financial sector.

Textbooks:

There is no ideal textbook for this course. You might want to pick one of the following textbooks for background reading.

- Frederic S. Mishkin, (2016) "*The Economics of Money, Banking, and Financial Markets*", 11th Edition, Pearson.
- R. Glenn Hubbard and Anthony P. O'Brien, (2017), "*Money, Banking and the Financial System*", 3rd Edition, Pearson.
- Stephen G. Cecchetti and Kermit L. Schoenholtz, (2017), "*Money, Banking and Financial Markets*", 5th Edition, MacGraw Hill.

More popular books give you further insights:

- Mervyn King, (2016), "*The End of Alchemy: Money, Banking and the Future of the Global Economy*", W. W. Norton
- Markus K. Brunnermeier, Harold James and Jean-Pierre Landau, (2016), "*The Euro and the Battle of Ideas*", Princeton University Press. [BJL]
- Liaquat Ahamed, (2009), "*Lords of Finance: The Bankers who Broke the World*", Penguin

More technical readings can be downloaded

- Harold L. Cole, (2017), "*Advanced Macro: Money, Credit and Policy*",
<https://drive.google.com/file/d/OB6yh95AXPKbzSTIiTWNvVTdUX1k/view>

Video:

- YouTube: Markus Economicus
<https://www.youtube.com/playlist?list=PLZwmltpoGuWIAIHwc0EI5ssbAuyx2ke4h>

Structure of the Course:

The Roles of the Financial System & Money

- Trust and Cryptocurrencies
 - o <https://www.youtube.com/watch?v=I9jOJk30eQs>
 - o <https://www.lrb.co.uk/v38/n08/john-lanchester/when-bitcoin-grows-up>

Asset Pricing

- Bond pricing and Money Markets
 - o Pietro Veronesi (2016), “*Handbook of Fixed Income Securities*“ (Chapter 1) Wiley Handbooks,
http://media.wiley.com/product_data/excerpt/95/11187091/1118709195-4.pdf
- Stock market
- Derivatives
- Bubbles
 - o M.K. Brunnermeier “Bubbles”
<https://scholar.princeton.edu/markus/publications/bubbles-entry-new-palgrave-dictionary-economics>
 - o M.K. Brunnermeier and M. Oehmke „Bubbles Financial Crisis, and Systemic Risk”
https://scholar.princeton.edu/sites/default/files/05c_Brunnermeier_Oehmke_Systemic_Risk_website_0.pdf
 - o M.K. Brunnermeier and I. Schnabel, “Bubbles and Central Banks: Historical Perspectives. (400 years of bubbles)”
<https://scholar.princeton.edu/markus/publications/bubbles-and-central-banks-historical-perspectives>

Intermediation

- Trust and reputation
- Role of banks
 - o [I Theory video \(Part 1\)](#)
- Traditional vs. Modern Banking and Shadow Banking [*BJL, chapter 9*]
 - o <https://scholar.princeton.edu/markus/publications/crash-course-euro-crisis>
- Securitization
 - o M.K. Brunnermeier „Deciphering the Liquidity and Credit Crunch 2007-2008”
<https://scholar.princeton.edu/markus/publications/deciphering-liquidity-and-credit-crunch-2007-2008>
- FinTech

Financial Crises, Systemic Risk, Financial Regulation

- Amplification, multiple equilibria, liquidity spiral, endogenous risk, volatility paradox
- Liquidity vs. Solvency
 - o <https://scholar.princeton.edu/markus/publications/crash-course-euro-crisis>
- Bank Runs, LOLR
 - o [I Theory video \(Part 2\)](#)

- D. Diamond and Ph. Dybvig, (1983) “Bank runs, deposit insurance, and liquidity”, *Journal of Political Economy*, pp. 401-419.
- Systemic Risk Measures and Financial Regulation ()
- Great Recession:
 - M.K. Brunnermeier, (2009) “Deciphering the Liquidity and Credit Crunch 2007–2008”, *Journal of Economic Perspectives* 23(1), p. 77–100
- Euro crisis [BJL]:
 - also attend presentation by president of Estonian central bank

Monetary Theory, value of money, inflation, etc.

- Quantity equation with exogenous velocity ()
 - McCandless, George T., Jr., and Warren E. Weber, “Some Monetary Facts” *Federal Reserve Bank of Minneapolis Quarterly Review*, Vol 19., No. 3, Summer 1995
- Fiscal Theory of the Price Level
 - German hyperinflation ()
- Price rigidities: Short-run Philipps curve
 - Babysitter co-op. analogy
Sweeney, J.; Sweeney, R. J. (1977). ”Monetary Theory and the Great Capitol Hill Baby Sitting Co-op Crisis: Comment”, *Journal of Money, Credit and Banking*, 9 (1): 86–89. doi:10.2307/1992001. JSTOR 1992001
 - Keynesian model (with backward looking price stickiness)
 - New Keynesian models (dynamic & expectations augmented)
 - J. Gali, (2008), “*Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework*”, Princeton University Press
 - Clarida, R., J. Gali, and M. Gertler, “Monetary Policy Rules and Macroeconomic Stability: Evidence and some Theory,” *Quarterly Journal of Economics* 115(1), 2000, p. 147–180 (technical)
- Financial frictions: Long-run Philipps curve
 - M.K. Brunnermeier and Y. Sannikov 2015 “On the Optimal Inflation Rate”, *American Economic Review*.
<https://scholar.princeton.edu/markus/publications/optimal-inflation-rate>
 - Role of safe asset
- With Intermediation
 - The I Theory of Money
 - Liquidity and disinflationary spiral

Monetary Policy, Macroprudential Theory

- Mandates and goals of monetary policy, inflation targeting, Taylor rules
- Time inconsistency and reputation
- Accounting basics (Central banks, banks, and households’ balance sheets) ()
- Transmission mechanism time-inconsistency problem
- Central banks and bubbles
- Risky government debt, diabolic loop, stability and dominance concepts
 - [I Theory video \(Part 3 and 4\)](#)

International Financial Architecture

- Mundell Fleming Trilemma, Pegs, dollarization,
- Role of the IMF (chapter 14 of [BJL]), Swap lines, Flight to safety

Student presentation (*if time permits)

Course material:

Additional course material (if necessary) will be made available on the course website <http://scholar.princeton.edu/markus/classes/eco342> and/or on BlackBoard after classes. All students who are registered for this class will also have access to Princeton's blackboard webpage.

Preceptor:

Simon Schmickler

Office: BCF 303A

E-mail: simon.schmickler@princeton.edu

- The preceptor's job is to act as a catalytic in the process. Please
 - **Ask** him when something is not clear – if you did not understand something, the odds are that somebody else did not either

Assignments and Precepts:

Time: Wednesday 12:30-1:30pm and/or 7:30-8:30pm

Location: JRRB A97

The purpose of the homework assignments and precepts is to help you better understand the rather abstract material from the lectures. To that end, careful **preparation** of the precepts as well as the lectures will help you a lot. Moreover, it is only possible to grasp the concepts by **thinking through concrete examples by yourself**. Many students find it helpful to **discuss** the problems with their peers.

To align your incentives with these goals, and to give you a commitment device...

- Collaboration is explicitly allowed and desirable. Help each other prepare for the precepts, make stuff available to each other, and discuss your solutions.
- **Use the Blackboard Discussion Board** to discuss problems before emailing me. I will look into it and give comments if needed.
- Everyone should submit the written homework assignment. You should also be ready to individually present your solutions to the precept class. Your performance (not your presentation skills) and participation in the discussion will enter your overall grade.

Furthermore, he will answer questions of general concern and respond to feedback in the precepts. Do not hesitate to email him your questions in advance, especially if they might require preparation. You can also point them out to him during the office hours.

Office hours (preliminary):

Instructor: Mondays 4:30 to 5:45 pm

Preceptor: Tuesdays 11:00-12:00 am

The purpose of office hours is to allow you to ask additional questions outside the classroom setting. These could be issues you did not understand in the lecture or in the last precept, or more personal concerns. The preceptor will be very happy to assist you with any of these. For the sake of fairness

to your fellow students, the preceptor will, however, make an effort to answer questions that are of general concern in the precepts.

To make the best use of office hours, **come prepared**. A clear question is the best way to elicit a clear answer.

Grading:

The overall grade is calculated based on the following weighting scheme:

Class Participation:		10 %
Problem Sets/Presentations	:	20 %
Midterm test:		30 %
Final examination:		40 %

The midterm test will be held in class on Wednesday, October 26th, 2017. The final will be held in January 2017.

Although the exams are closed book, you may bring into the exam one 8 ½ x 11 sheet of paper. You can write on both sides and as small as you wish, but I recommend using this only as a psychological support to have a formula available “just in case.” The exams won’t be “fill in the blanks” exercises, nor will they rely on intensive formula-based computations. Preparing lots of pre-fabricated solutions from previous exams or assignments will only be distracting during the exam.

You will be allowed to use a silent battery operated calculator during the exams (but not during the “precept tests”). Laptops, while useful for assignments, are not needed (nor allowed) in my exams.

Appeals policy:

Since the preceptor will grade all assignments and exams, all appeals of grades should first be addressed to the preceptor within one week. Verbal appeals of grades will not be accepted. We will be glad to regrade any assignment or exam. However, you must provide a statement in writing as to where and why there is a problem. Importantly, the entire exam or assignment will be regraded. As a result, the regraded score may increase, remain the same, or decrease. Exams or assignments written with pencil cannot be regraded.