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 optional textbooks for background reading.


More popular books give you further insights:


More technical readings can be downloaded


Video:

- YouTube: Markus Economicus
  https://www.youtube.com/playlist?list=PLZwmItpoGuWIAjHwcoELjssbAuyx2ke4h
Structure of the Course:

01. Introduction

02. Rolf of Financial System and Money
   - Double coincidence of wants, Gresham’s Law
   - Trust and Cryptocurrencies
     - https://www.youtube.com/watch?v=l6j0Jk30eQs
     - https://www.lrb.co.uk/v38/no8/john-lanchester/when-bitcoin-grows-up

03. Bonds and Money Markets
   - Forward rates, term structure, expectation hypothesis, ...

04. Asset Pricing: Stocks
   - Gordon Growth Model, Efficient Market Hypothesis, Leverage, ...
   - Bubbles
     - M.K. Brunnermeier “Bubbles”
     - 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_o.pdf
     - M.K. Brunnermeier and I. Schnabel, “Bubbles and Central Banks: Historical Perspectives.” (Classifying 400 years of bubbles)

05. Derivatives Basics
   - Absolute vs. relative asset pricing, futures/forwards, options, CDOs, CDS

06. Financial Frictions
   - Adverse selection, moral hazard, debt overhang, commitment problems, solvency vs. liquidity,
   - Mitigation via collateral, securitization, intermediaries, ...

07. Intermediation
   - Trust and reputation
   - Role of banks
     - I Theory video (Part 1)
   - Traditional vs. Modern Banking and Shadow Banking [BJL, chapter 9]
- Securitization
  o M.K. Brunnermeier “Deciphering the Liquidity and Credit Crunch 2007-2008”
- FinTech

08. 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)
- Systemic Risk Measures and Financial Regulation
- Great Recession:
- Euro crisis [BJL]:
  o also attend presentation by president of Estonian central bank

09. Financial Regulation
- Micro- vs. macroprudential regulation, Fallacy of Composition

10. Monetary Theory, value of money, inflation, etc.
- Quantity equation with exogenous velocity
- Fiscal Theory of the Price Level
  o German hyperinflation
- Price rigidities: Short-run Philipps curve
  o Babysitter co-op. analogy
  o Keynesian model (with backward looking price stickiness)
  o New Keynesian models (dynamic & expectations augmented)
- Financial frictions: Long-run Philipps curve
  o Role of safe asset
- With Intermediation
  o The I Theory of Money
    ▪ Liquidity and disinflationary spiral

11. Monetary and Macroprudential Policy
- 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
  o I Theory video (Part 3 and 4)

- Mundell Fleming Trilemma, Pegs, dollarization,
- Role of the IMF (chapter 14 of [BJL]), Regional Finance Arrangements (RFAs), Swap lines, Flight to safety, Global Safe Asset

Student presentation (*if time permits)

Course material:
Additional course material (if necessary) will be made available on a shared Google Drive and/or on BlackBoard after classes.

Preceptor:
Name: Joseph Abadi Lunyang Huang
E-mail: jaabadi@princeton.edu lunyangh@princeton.edu
Precept: Time, location Time, location
Office: BCF A03 BCF A09
Office Hour: TBA TBA

• The preceptor’s job is to act as a catalytic in the process. Please
  o 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: Tuesday 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.
- We set up the following assignment policies: There is an absolute discount of 20% per day an assignment is submitted late. You have one free shot; we will ignore your worst assignment score when determining grades.

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 3:15 to 4:15 pm
Preceptor: TBA

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.