Syllabus: Money and Banking

Professor: Wendy Morrison

Summer 2023

1 Introduction

My name is Wendy Morrison, and I'm a 5th year PhD candidate studying monetary economics and macroeconomics. I've designed this course to help make sense of some of the most timely and important issues facing modern economies today. To that end, I've split the next 6 weeks into several topical units. Each week, we'll start with a motivating question or set of questions. To the degree that they are useful in answering these questions, I'll present simplified versions of relevant models to help you cement a good 'mental model' of the problem. We'll end each unit by taking the tools we've developed and applying them to real world questions.

While learning the mathematical models and relevant research methodology is useful if you plan to pursue a career in economics research and necessary to pass the class, translating these mathematical models into working mental models is the real goal here. In the famous words of Alfred Marshall, "(1) Use mathematics as a shorthand language, rather than an engine of inquiry. (2) Keep to them till you have done. (3) Translate into English. (4) Then illustrate by examples that are important in real life. (5) Burn the mathematics." Please don't actually burn your mathematics...at least until the end of the class.

Because of the emphasis on real world applicability, we'll assume the existence of money and of a financial system before we ask why they exist. We'll return to this question in Unit 5 and attempt to tackle conceptually difficult topics like cryptocurrency.

2 Logistics

My email: wam2133@columbia.edu Office hours: Tuesday nights at 7 pm on Zoom If this time doesn't work for you, we can meet one-on-one

Teaching assistant:

Ignacio Agustin Ugalde. Email: iau2106@columbia.edu Office hours: Thursday at 7 pm on Zoom Recitation sections: Mondays from 4-5:30 pm in IAB 1027.

Important dates:

July 6th: First day of class July 7th: Make-up class for July 4th holiday (same time, same room) August 3rd: Class on Zoom August 8th: Final presentations and exam review August 10th: Final Exam in class

3 Evaluation

You will be assigned 4 problem sets, and are strongly encouraged to work in groups. However, you must write up and turn in the problem sets individually. You will also be evaluated on your participation in class, so please do your best to attend every class. To earn class participation credit, you may either answer a question during lecture or volunteer to explain your problem set solutions. Finally, you will be expected to put together a group presentation on a relevant topic. The grade breakdown will be as follows:

Class Participation (10%) + Problem Sets (50%) + Final Exam (30%) + In-Class Presentation (10%)

A note on grades: I have designed the problem sets and exams so that a *minimum* of 15% of the class receives an A, 20% receives an A-, 20% receives a B+, 20% receives a B, 15% a B-, and 10% a C+ or below. The grade cut-off for final numerical scores is as follows:

A: [90-100) A-: [85:90) B+: [75:85) B:[70:75), B-: [60:70), C+: [50:60), C: [45:50), C-: [40:45), D: below 40

These numerical scores are *sufficient* to earn their respective letter grades. Therefore, if more than 15% of the class scores 90 or above, for example, all of those students will receive As. If however fewer than 15% score 90 or above, I will adjust the cut-offs downward.

In other words, to get a certain letter grade, you must *either* earn a final numerical score in the range above or be in the relevant percentile. For example, to earn a B+ you must either score between 75 and 85 (assuming at least 35% of the class has earned above 85) *or* have a score between the 45th and 65th percentile (assuming the cut-offs have been adjusted downward).

This grading rubric is final and not subject to change or interpretation. There will be no opportunity for extra credit.

4 Schedule

4.1 Unit 1: Inflation

Motivating Questions: (1) What causes hyper-inflation? (2) How do economists think about the determinants of inflation? What is the Phillips Curve? (3) Why was there such low inflation during the 1990s until recently? (4) Why is inflation so high now?

Readings:

Regis Barnichon, Luiz E. Oliveira, and Adam H. Shapiro. Is the American Rescue Plan Taking Us Back to the '60s?

The Fight Over Inflation in America and Europe.

4.2 Unit 2: Monetary Policy

Motivating Questions: How does traditional monetary policy work? Has the Fed had to adapt its tools to the modern technological age? (2) What is the zero-lower bound, and why is that a problem for monetary policy? (3) How should we think about the monetary policy transmission mechanism?

Readings:

Woodford. Monetary Policy in a World Without Money (2000)

Mishkin. The Economics of Money and Banking and Financial Markets, 9th Edition. Chapter 14 and Chapter 15.

4.3 Unit 3: Financial Crises

Motivating Questions: (1) What causes financial crises? (2) What is 'systemic risk'? (3) Can policy makers do anything to prevent financial crises?

Readings:

G. Richardson. *Banking Panics of 1930-31*. Federal Reserve Bank of Richmond.

E. Su. Money Market Mutual Funds: A Financial Stability Case Study. Congressional Research Service.

V. Giang. Banking Turmoil: What We Know

4.4 Unit 4: International Economics and Exchange Rates

Motivating Questions: (1) Is China 'manipulating' its currency? What does that mean and why does it matter? (2) Is it better to have a fixed or floating exchange rate system? (3) Why did the reubel fall in value following sanctions on Russia, and how did Putin respond?

Readings:

A. Krueber. Chinese Currency Policy Explained. Brookings (2011).

4.5 Unit 5: Fundamentals.

Motivating Questions: (1) What are the fundamental properties of a currency? (2) Why do we have financial markets? What role will/should cryptocurrency play in the economy in the future?

Final Exam: August 10th in class