

Economics of Financial Markets – Lecture 1

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Today's Plan

- Talk about the instructor.
- Talk about the course.
- Introduction
 - Why do we study financial markets?
 - What is money?

About the Team

- Instructor: Shino Takayama (s.takayama1@uq.edu.au)
- Consultation: 3.00 to 4.00 on Thursday or by Appointment
- Room: Colin Clark 617
- If you have any questions, **please email me.**
- Tutors:
 1. Nhan Phan (b.phan@uq.edu.au)
 2. Abhishek Ramakrishnan (a.ramakrishnan@uq.edu.au)
 3. Terence Yeo (t.yeo@uq.edu.au)

About this Course

- To understand how financial markets and intermediaries operate to allocate resources.
- To understand how financial instruments are valued.
- To learn how central banks can affect the real economy by influencing the financial markets.
- To learn how the current financial crisis has emerged and propagated to various sectors and countries.

Textbook and Content

- Mishkin, Frederic (2016) *The Economics of Money, Banking, and Financial Markets*, Pearson Global edition, 11th edition

L1: Introduction	Chapter 1 to 3
L2: The Meaning of Interest Rates	Chapter 4
L3: The Behaviour of Interest Rates	Chapter 5
L4: The Risk and Term Structure of Interest Rates	Chapter 6
L5: Stock Markets and Rational Expectations	Chapter 7 (-- Mid Semester)
L6: An Economic Analysis of Financial Structure	Chapter 8
L7: Banking and the Financial Management	Chapter 9
L8: An Economic Analysis of Financial Regulation	Chapter 10
L9: Banking Industry	Chapter 11 to 12
L10: Money Supply and Monetary Policy	Chapter 15 to 16
L11: The Conduct of Monetary Policy	Chapter 17

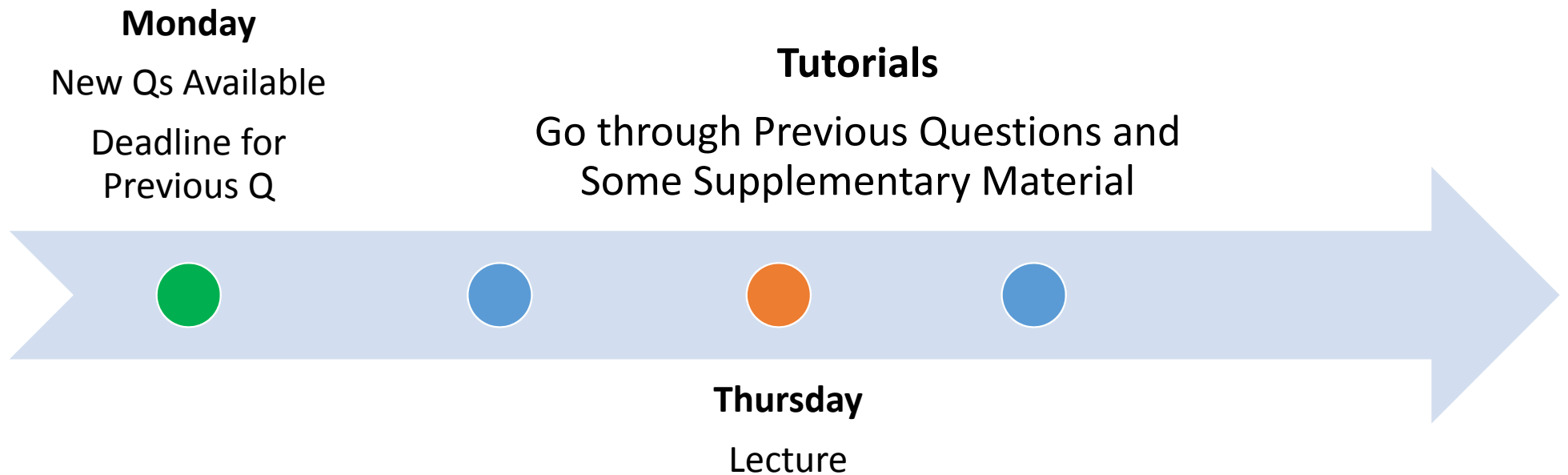
Assessments

Assessment Task	Due Date	Weighting
<i>Engagement</i> Tutorial attendance and preparation	30 Jul 18 10:00 - 29 Oct 18 10:00	10%
<i>Exam - Mid Semester During Class</i> Mid-Semester Exam	6 Sep 18	20%
<i>Project</i> Group Project	14 Oct 18 23:00	30%
<i>Exam - during Exam Period (Central)</i> Final exam	Examination Period	40%

Tutorials

- Attendance to a tutorial is 5 marks per tutorial.
- The submission for each tutorial is marked out of 5 marks per tutorial. Only the 10 highest marks will count towards the final mark for engagement.
- You have to attempt all the questions but do not need to be correct.
- If your attempt is inadequate, then you receive a half score.
- Questions will be available a week before the deadline.
- You can submit in Blackboard and please use an openable file format for tutors, .docx, or .pdf.

Snapshot for one week



Lecture, Tutorials, and Tutorials Questions

W1	L1: Chapter 1 to 3	No Tutorials	
W2	L2: Chapter 4	T1: L1 (Ch 1 to 3)	30/7 Due T1 Material
W3	L3: Chapter 5	T2: L2 (Ch 4)	6/8 Due T2 Material
W4	L4: Chapter 6	T3: L3 (Ch 5)	13/8 Due T3 Material
W5	L5: Chapter 7	T4: L4 (Ch 6)	20/8 Due T4 Material
W6	L6: Chapter 8	T5: L5 (Ch 7)	27/8 Due T5 Material
W7	Midterm Examination	T6: Revisions	No Tutorial Questions Due, No Attendance
W8	L7: Chapter 9	T7: L6 (Ch 8)	10/9 Due T7 Material
W9	L8: Chapter 10	T8: L7 (Ch 9)	17/9 Due T8 Material
W10	L9: Chapter 11 to 12	T9: L8 (Ch 10)	1/10 Due T9 Material
W11	L10: Chapter 15 to 16	T10: L9 (Ch 11-12)	8/10 Due T10 Material
W12	L11: Chapter 17	T11: L10 (Ch 15-16)	15/10 Due T11 Material
W13	Revisions	T12: L11 (Ch 17)	22/10 Due T12 Material

Group Project

- Students are required to work in groups of 4 to 5.
- The assignment questions will be made available on Blackboard.
- Each group has to submit one essay.
- Please try to form your group with your friends in the same tutorial session.
- Please inform your tutor about your group once formed.
- If there is an issue, please let us know.

Preview for Lecture 1

- Textbook Chapter 1 to 3
- To examine how financial markets work
- To examine the role of money in the economy
- To explore the functions of money, looking at why and how it promotes economic efficiency, tracing how its forms have evolved over time, and examining how money is currently measured

Learning Objectives

- Describe what money is
- List and summarize the functions of money
- Identify different types of payment systems
- Compare and contrast the M1 and M2 money supplies

Why Study Financial Institutions and Banking?

- **Financial crises:** major disruptions in financial markets that are characterized by sharp declines in asset prices and the failures of many financial and nonfinancial firms.

Hyperinflation in Germany

- To fund **WWI**, Germany decided to **borrow money**, instead of imposing income tax.
- German government expected that **they would win** and so they would obtain massive **reparations** from other defeated nations.
- Germany lost the war with a massive war debt and reparations (130 Billion Mark by Versailles Treaty).
- One strategy that Germany used was the **mass printing of bank notes** to buy foreign currency, which was then used to pay reparations.
- The Government issued Rentenmark (1 trillion Mark).

Germany in 1922 - 23



<https://mashable.com/2016/07/27/german-hyperinflation/#fzzVyTBpVsqh>

The US Subprime Crisis

- What it led to:
 1. Large Fall in Housing Prices
 2. The Collapse of Housing Bubbles
 3. Mortgage Delinquencies and Foreclosures
- The crisis had severe, long-lasting consequences for the U.S. and European economies.
- The U.S. entered a deep recession, with nearly 9 million jobs lost during 2008 and 2009.

Lehman Shock

- **Lehman Brothers** was fourth-largest investment bank.
- Their bankruptcy remains the largest bankruptcy filing in U.S. history, with Lehman holding over US\$600 billion in assets.
- **Bear Stearns** was also sold to JPMorgan Chase.

Why Study Financial Markets?

- Financial markets are markets in which funds are transferred from people and firms who have an excess of available funds to people and firms who have a need of funds

The Bond Market and Interest Rates

- A **security** (financial instrument) is a claim on the issuer's future income or assets.
- A **bond** is a debt security that promises to make payments periodically for a specified period of time.
- An **interest rate** is the cost of borrowing or the price paid for the rental of funds.

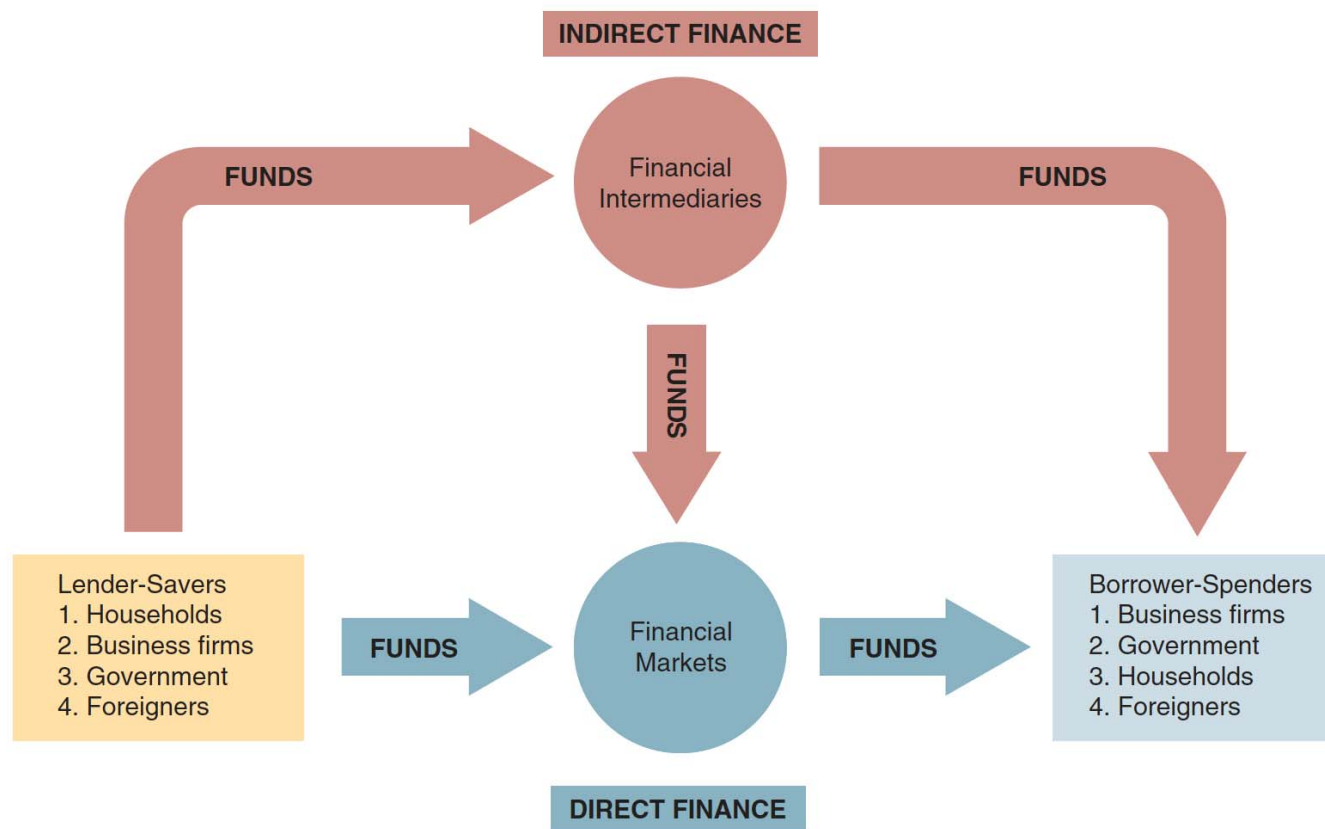
Function of Financial Markets

- Performs the essential function of channeling funds from economic players that have saved surplus funds to those that have a shortage of funds
- **Direct finance:** borrowers borrow funds directly from lenders in financial markets by selling them securities

Function of Financial Markets

- Promotes economic efficiency by producing an efficient allocation of **capital**, which increases production
- Directly improve the well-being of consumers by allowing them to time purchases better

Figure 1 Flows of Funds Through the Financial System



Structure of Financial Markets

- Debt and Equity Markets
 - A firm can obtain funds in two ways:
 - Debt instruments (**maturity**). The maturity is the number of years until that instrument's expiration date.
 - **Equities (dividends)**
- Primary and Secondary Markets
 - **Investment banks *underwrite*** securities in **primary markets**. It guarantees a price for a corporation's securities and sells them to the public.
 - **Brokers and dealers** work in **secondary markets**.

Structure of Financial Markets

- Exchanges and Over-the-Counter (OTC) Markets:
 - **Exchanges:** NYSE, Chicago Board of Trade
 - **OTC markets:** Foreign exchange, Federal funds
- Money and Capital Markets:
 - **Money markets** deal in short-term debt instruments
 - **Capital markets** deal in longer-term debt and equity instruments

Regulation of the Financial System

- To increase the information available to investors:
 - Reduce **adverse selection** and **moral hazard** problems
 - Reduce **insider trading** (SEC)
- **Asymmetric information** refers to the situation where one party does not have enough information about the other party.
- **Adverse selection** is the problem created by **asymmetric information** **before** the transaction occurs.
- **Moral hazard** is the problem created by **asymmetric information** **after** the transaction occurs.

Regulation of the Financial System

- To ensure the soundness of financial intermediaries:
 - Restrictions on entry (chartering process).
 - Disclosure of information.
 - Restrictions on Assets and Activities (control holding of risky assets).
 - Deposit Insurance (avoid bank runs).
 - Limits on Competition (mostly in the past):
 - Branching
 - Restrictions on Interest Rates

Meaning of Money

- Money (or the “money supply”): anything that is generally accepted as payment for goods or services or in the repayment of debts.
- Money, currency?
- A rather broad definition

Meaning of Money

- Money (a stock concept) is different from:
 - **Wealth**: the total collection of pieces of property that serve to store value
 - **Income**: flow of earnings per unit of time
(a flow concept)

Functions of Money

- **Medium of Exchange:**

- Eliminates the trouble of finding a double coincidence of needs (reduces transaction costs)
- Promotes specialization

- A medium of exchange must:

- be easily standardized
- be widely accepted
- be divisible
- be easy to carry
- not deteriorate quickly

Functions of Money

- **Unit of Account:**

- Used to measure value in the economy
- Reduces transaction costs

- **Store of Value:**

- Used to save purchasing power over time
- Other assets also serve this function.
- Money is the most liquid of all assets but loses value during inflation.

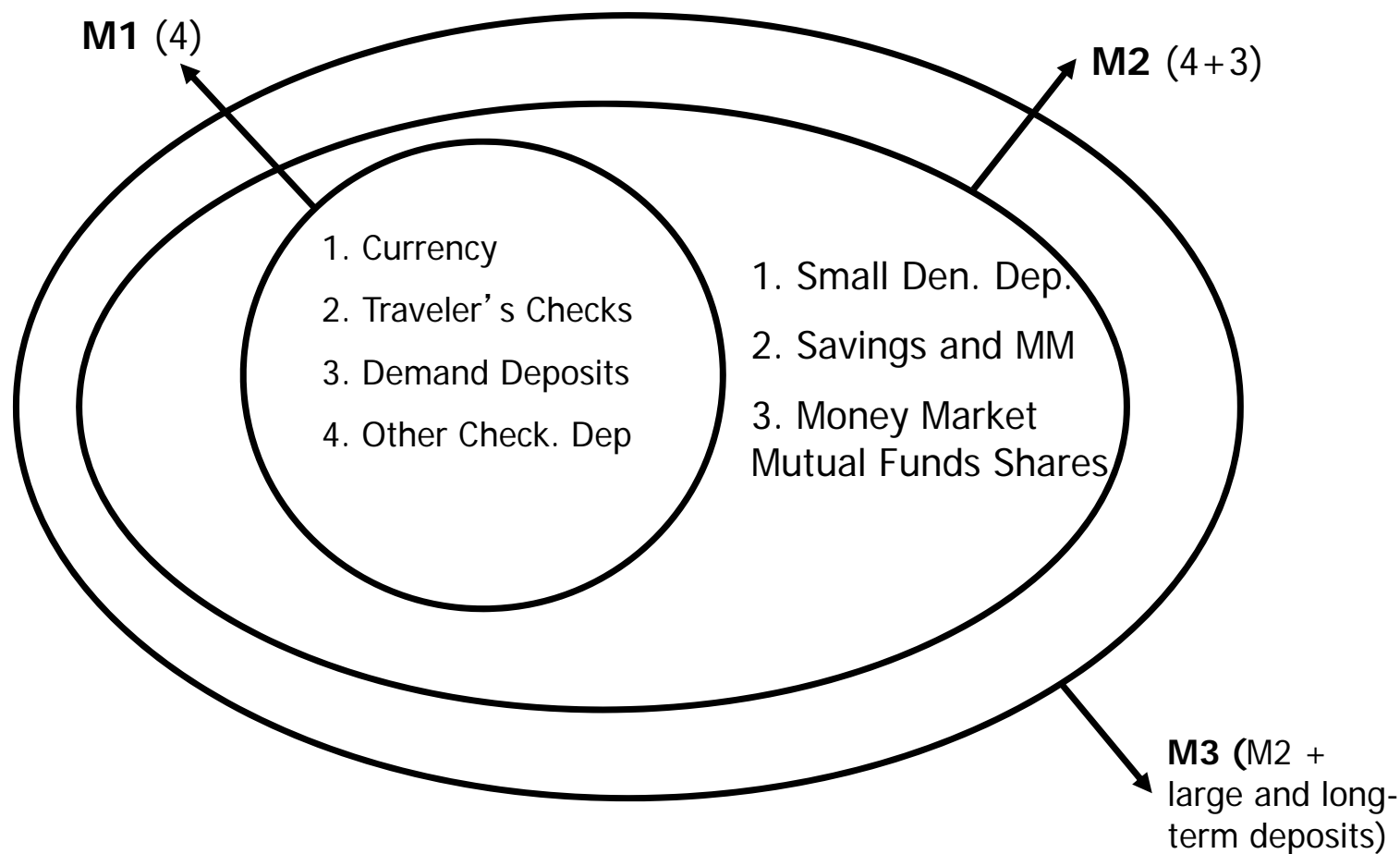
Measuring Money

- How do we measure money? Which particular assets can be called “money”?
- Construct **monetary aggregates** using the concept of liquidity:
 - **M1** (most liquid assets) = currency + traveler’s checks + demand deposits + other checkable deposits

Measuring Money

- **M2** (adds to M1 other assets that are not so liquid) = M1 + small denomination time deposits + savings deposits and money market deposit accounts + money market mutual fund shares
- **M3** = M2 + large and long-term deposits

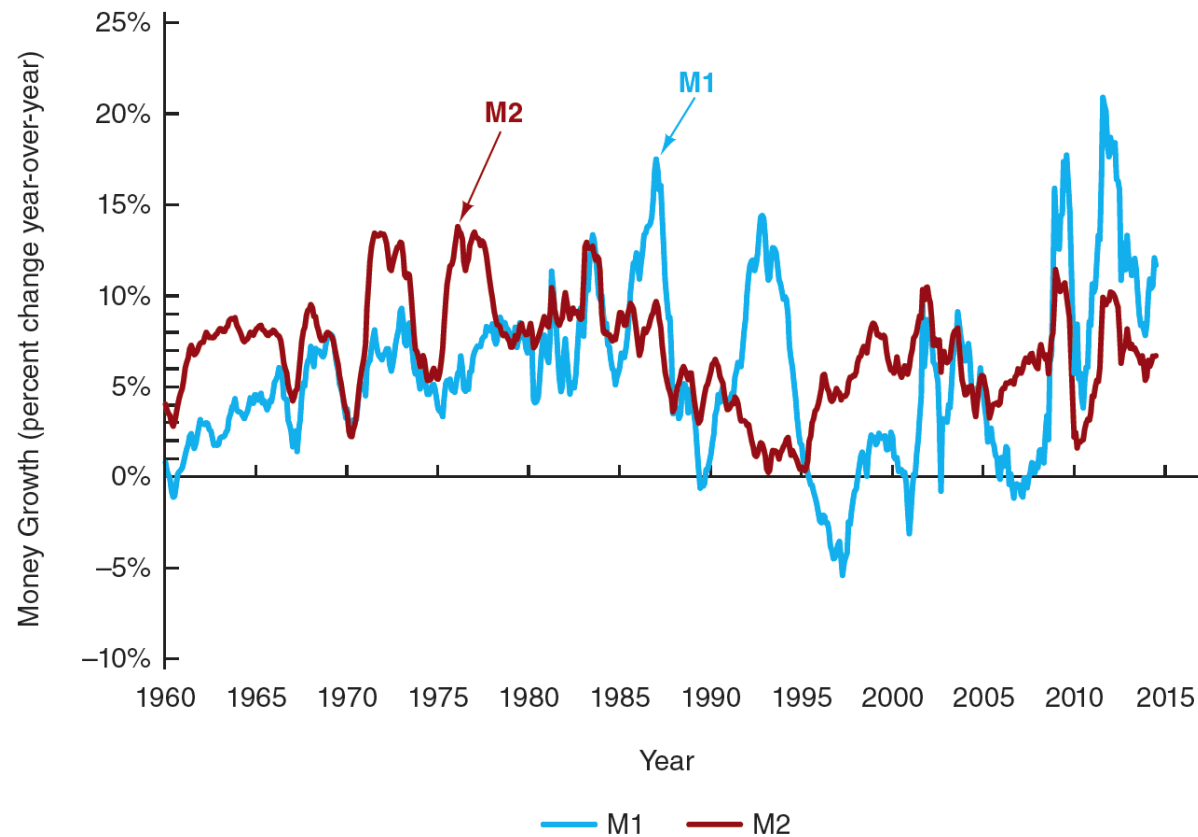
The Federal Reserve's Monetary Aggregates



The Federal Reserve's Monetary Aggregates

- M1 versus M2: Does it matter which measure of money is considered?
- M1 and M2 can move in different directions in the short run (see figure).
- Conclusion: the choice of monetary aggregate is important for policymakers.

Figure 1 Growth Rates of the M1 and M2 Aggregates, 1960–2014



Source: Federal Reserve Bank of St. Louis, FRED database: <http://research.stlouisfed.org/fred2>