Money and Banking
Introduction: Financial System

Gu, Xin

School of Finance
Zhejiang Gongshang University

Outline

Contact Information

- Instructor: Gu, Xin, PhD in Economics from School of Economics and Asia-Pacific Economic Cooperation Research Center, Nankai University.

Contact Information

- Instructor: Gu, Xin, PhD in Economics from School of Economics and Asia-Pacific Economic Cooperation Research Center, Nankai University.
- Email address: *richardgu26@zjgsu.edu.cn*. When making an appointment to meet me, please input a proper subject in your email. Strongly suggest you to have an outlook email account for communication.

Contact Information

- Instructor: Gu, Xin, PhD in Economics from School of Economics and Asia-Pacific Economic Cooperation Research Center, Nankai University.
- Email address: *richardgu26@zjgsu.edu.cn*. When making an appointment to meet me, please input a proper subject in your email. Strongly suggest you to have an outlook email account for communication.
- Office: Room 840, School of Finance, the Main Executive Building.

Contact Information

- Instructor: Gu, Xin, PhD in Economics from School of Economics and Asia-Pacific Economic Cooperation Research Center, Nankai University.
- Email address: *richardgu26@zjgsu.edu.cn*. When making an appointment to meet me, please input a proper subject in your email. Strongly suggest you to have an outlook email account for communication.
- Office: Room 840, School of Finance, the Main Executive Building.
- The course web site is https://github.com/richardgu26zh/Money-and-Banking-Fall-Semester-2018.

Attendance

- Each student is required to attend the lectures. Each student is allowed to report to the instructor for one absence for an appropriate reason.

Attendance

- Each student is required to attend the lectures. Each student is allowed to report to the instructor for one absence for an appropriate reason.
- That one absence from the course counts from the first lecture.

Attendance

- Each student is required to attend the lectures. Each student is allowed to report to the instructor for one absence for an appropriate reason.
- That one absence from the course counts from the first lecture.
- **Any student who is late for the lecture 40 minutes is considered as absence from this lecture**.

Attendance

- Each student is required to attend the lectures. Each student is allowed to report to the instructor for one absence for an appropriate reason.
- That one absence from the course counts from the first lecture.
- **Any student who is late for the lecture 40 minutes is considered as absence from this lecture**.
- Any student that leaves early without any reason from the lecture is marked as absence for the whole lecture. Please don't use "I just used the toilet" excuses.

Attendance

- Each student is required to attend the lectures. Each student is allowed to report to the instructor for one absence for an appropriate reason.
- That one absence from the course counts from the first lecture.
- **Any student who is late for the lecture 40 minutes is considered as absence from this lecture**.
- Any student that leaves early without any reason from the lecture is marked as absence for the whole lecture. Please don't use "I just used the toilet" excuses.
- Any student that is absent from the lectures for more than 6 times is not allowed to take the final exam, or make-up exam in the next semester.

Attendance

- Emergency cases have to go through the procedure: a sick leave should be verified by official document from hospitals within a week, any leave more than three weeks should be verified by Dean of the faculty (if you were business major, School of Management should provide an official statement about your reason to take such a long leave). In the latter case, the statement should be submitted to Room 840 within a week as well.

Attendance

- Emergency cases have to go through the procedure: a sick leave should be verified by official document from hospitals within a week, any leave more than three weeks should be verified by Dean of the faculty (if you were business major, School of Management should provide an official statement about your reason to take such a long leave). In the latter case, the statement should be submitted to Room 840 within a week as well.
- **No hospital documents or statements from School are accepted just before the final exam**.

Attendance

- Emergency cases have to go through the procedure: a sick leave should be verified by official document from hospitals within a week, any leave more than three weeks should be verified by Dean of the faculty (if you were business major, School of Management should provide an official statement about your reason to take such a long leave). In the latter case, the statement should be submitted to Room 840 within a week as well.
- **No hospital documents or statements from School are accepted just before the final exam**.
- The registry of the attendance starts 5 minutes before the lecture. If you told me "I just a few second late", you can choose to be "a few seconds" early in the class.

Attendance

- Those rules are to protect the majority who follow rules.

Attendance

- Those rules are to protect the majority who follow rules.
- Whoever late for the lecture for the first time will be deducted **2 points** from your final scores **for the first time**. If you late for the second time, **4 points** deducted. If third time, **8 points**. The maximum points to be deducted are 50 points.

Attendance

- Those rules are to protect the majority who follow rules.
- Whoever late for the lecture for the first time will be deducted **2 points** from your final scores **for the first time**. If you late for the second time, **4 points** deducted. If third time, **8 points**. The maximum points to be deducted are 50 points.
- Whoever late for lectures within 5 minutes (with solid proof, e.g., a picture with the time you in the class) is eligible for **second chance request for once**.

Attendance

- Those rules are to protect the majority who follow rules.
- Whoever late for the lecture for the first time will be deducted **2 points** from your final scores **for the first time**. If you late for the second time, **4 points** deducted. If third time, **8 points**. The maximum points to be deducted are 50 points.
- Whoever late for lectures within 5 minutes (with solid proof, e.g., a picture with the time you in the class) is eligible for **second chance request for once**.
- Such a request need to be stated clearly about your NAME, STUDENT ID, and most importantly, state clearly that you know if you were late again, you would not have another chance.

Attendance

- Those rules are to protect the majority who follow rules.
- Whoever late for the lecture for the first time will be deducted **2 points** from your final scores **for the first time**. If you late for the second time, **4 points** deducted. If third time, **8 points**. The maximum points to be deducted are 50 points.
- Whoever late for lectures within 5 minutes (with solid proof, e.g., a picture with the time you in the class) is eligible for **second chance request for once**.
- Such a request need to be stated clearly about your NAME, STUDENT ID, and most importantly, state clearly that you know if you were late again, you would not have another chance.
- No second chance for absence without any appropriate reasons (including leaving lecture earlier).

Grade Policy

- Grade of this course is composed of the following parts: (1) 20% reading notes, (2) 15% first homework, (3) 15% second homework, and (4) 50% final exam.

Grade Policy

- Grade of this course is composed of the following parts: (1) 20% reading notes, (2) 15% first homework, (3) 15% second homework, and (4) 50% final exam.
- Reading notes are asking each student to take notes of chapter readings related to each lecture. **It should be based on the recommended textbook**. Any reading notes borrowed from online material without quotation is considered as plagiarism, and graded zero.

Grade Policy

- Grade of this course is composed of the following parts: (1) 20% reading notes, (2) 15% first homework, (3) 15% second homework, and (4) 50% final exam.
- Reading notes are asking each student to take notes of chapter readings related to each lecture. **It should be based on the recommended textbook**. Any reading notes borrowed from online material without quotation is considered as plagiarism, and graded zero.
- Reading notes MUST be conducted with LaTeXby using the faculty proposed template, and printed out with a4 paper. Any handwritten or self-designed reading notes are considered illegal copies. No grades on those reading notes.

Grade Policy

- Grade of this course is composed of the following parts: (1) 20% reading notes, (2) 15% first homework, (3) 15% second homework, and (4) 50% final exam.
- Reading notes are asking each student to take notes of chapter readings related to each lecture. **It should be based on the recommended textbook**. Any reading notes borrowed from online material without quotation is considered as plagiarism, and graded zero.
- Reading notes MUST be conducted with LaTeXby using the faculty proposed template, and printed out with a4 paper. Any handwritten or self-designed reading notes are considered illegal copies. No grades on those reading notes.
- Instructors would ask students to bring the reading notes to the classes. Anyone's reading notes that fails to submit as required is graded zero.

Grade Policy

- Two homeworks are based on what you have learned in the lecture. Each homework has very specific requirements. Anyone's homework that fails to follow the instruction is graded zero.

Grade Policy

- Two homeworks are based on what you have learned in the lecture. Each homework has very specific requirements. Anyone's homework that fails to follow the instruction is graded zero.
- Students are encouraged to discuss each homework with your friends or classmates, but not allowed to copy others' work. If any two homeworks with highly similar answers were found, both homeworks are graded ZERO.

Grade Policy

- Two homeworks are based on what you have learned in the lecture. Each homework has very specific requirements. Anyone's homework that fails to follow the instruction is graded zero.
- Students are encouraged to discuss each homework with your friends or classmates, but not allowed to copy others' work. If any two homeworks with highly similar answers were found, both homeworks are graded ZERO.
- Homework should be WRITTEN with BLUE or BLACK PENS, but PENCIL.

Grade Policy

- Two homeworks are based on what you have learned in the lecture. Each homework has very specific requirements. Anyone's homework that fails to follow the instruction is graded zero.
- Students are encouraged to discuss each homework with your friends or classmates, but not allowed to copy others' work. If any two homeworks with highly similar answers were found, both homeworks are graded ZERO.
- Homework should be WRITTEN with BLUE or BLACK PENS, but PENCIL.
- Any student is not allowed to submit the assignments after the deadline. NO EXCUSES.

Recommended Textbooks

- The course is largely based on Frederic S. Mishkin's ***The Economics of Money, Banking, and Financial Markets*** (10th edition).

RECOMMENDED TEXTBOOKS

- The course is largely based on Frederic S. Mishkin's ***The Economics of Money, Banking, and Financial Markets*** (10th edition).
- This 9th edition textbook can be ordered from Amazon.cn, while the 10th edition can be order from School of Finance. The deadline of School order is 10:00 AM, 27th September, 2018. It requires 90 RMB down-payment first.

Recommended Textbooks

- The course is largely based on Frederic S. Mishkin's ***The Economics of Money, Banking, and Financial Markets*** (10th edition).
- This 9th edition textbook can be ordered from Amazon.cn, while the 10th edition can be order from School of Finance. The deadline of School order is 10:00 AM, 27th September, 2018. It requires 90 RMB down-payment first.
- Strongly suggest you to have a textbook for two reasons. First, you need it for reading notes (it is 20% of your total score). Second, you need it for final review.

Connections With What We Have Learned

- Money and Banking is considered as an extension of *Macroeconomics*.

Connections With What We Have Learned

- Money and Banking is considered as an extension of *Macroeconomics*.
- How do you define *economics* in your own words?

Connections With What We Have Learned

- Money and Banking is considered as an extension of *Macroeconomics*.
- How do you define *economics* in your own words?
- Rational agents optimize their decisions given resource constraints.

Connections With What We Have Learned

- Money and Banking is considered as an extension of *Macroeconomics*.
- How do you define *economics* in your own words?
- Rational agents optimize their decisions given resource constraints.
- In *Macroeconomics*, we study the optimization of households, producers, and government decision jointly.

What is Financial System?

- A quick question: What is financial system according to your knowledge?

What is Financial System?

- A quick question: What is financial system according to your knowledge?
- A country's financial system includes its banks, securities markets, pension and mutual funds, insurers, financial infrastructures and central banks, as well as its regulatory and supervisory authorities (IMF, 2018).

What is Financial System?

- A quick question: What is financial system according to your knowledge?
- A country's financial system includes its banks, securities markets, pension and mutual funds, insurers, financial infrastructures and central banks, as well as its regulatory and supervisory authorities (IMF, 2018).
- Financial infrastructure is the set of institutions that enable effective operation of financial intermediaries.

What is Financial System?

- A quick question: What is financial system according to your knowledge?
- A country's financial system includes its banks, securities markets, pension and mutual funds, insurers, financial infrastructures and central banks, as well as its regulatory and supervisory authorities (IMF, 2018).
- Financial infrastructure is the set of institutions that enable effective operation of financial intermediaries.
- It includes such elements as *payment systems*, *credit information bureaus* and *collateral registries*. It also includes legal and regulatory framework for financial sector operations.

What is Financial System?

- A commercial bank (a.k.a bank) is a type of financial institutions that accepts *deposits*, makes business, personal and mortgage loans.

What is Financial System?

- A commercial bank (a.k.a bank) is a type of financial institutions that accepts *deposits*, makes business, personal and mortgage loans.
- It makes money by providing loans and earning interest income from those loans.

What is Financial System?

- A commercial bank (a.k.a bank) is a type of financial institutions that accepts *deposits*, makes business, personal and mortgage loans.
- It makes money by providing loans and earning interest income from those loans.
- There are several dominant banks in China, e.g., Industrial and Commercial Bank of China (ICBC), Construction Bank of China (CBC), Bank of China (BoC), and Agriculture Bank of China (ABC).

What is Financial System?

- A commercial bank (a.k.a bank) is a type of financial institutions that accepts *deposits*, makes business, personal and mortgage loans.
- It makes money by providing loans and earning interest income from those loans.
- There are several dominant banks in China, e.g., Industrial and Commercial Bank of China (ICBC), Construction Bank of China (CBC), Bank of China (BoC), and Agriculture Bank of China (ABC).
- In financial world, banks are not investment banks.

What is Financial System?

- An investment bank is a financial intermediary that perform s a variety of services.

What is Financial System?

- An investment bank is a financial intermediary that perform s a variety of services.
- It specializes in large and complex financial transactions, such as underwriting, acting as an intermediary between a securities issuer and the investing public, facilitating mergers and other corporate reorganizations, and acting as a broker and/or financial advisor for institutional clients.

What is Financial System?

- An investment bank is a financial intermediary that perform s a variety of services.
- It specializes in large and complex financial transactions, such as underwriting, acting as an intermediary between a securities issuer and the investing public, facilitating mergers and other corporate reorganizations, and acting as a broker and/or financial advisor for institutional clients.
- Major investment banks around the world include Barclays, Bank of America Merrill Lynch, Goldman Sachs, Deutsche Bank, Morgan Stanley, UBS, Credit Suisse, and Citibank.

What is Financial System?

- Securities markets are where securities (financial instruments) are traded on the basis of supply and demand.

What is Financial System?

- Securities markets are where securities (financial instruments) are traded on the basis of supply and demand.
- Securities markets encompass equity (stock) markets, bond markets, and derivatives markets.

What is Financial System?

- Securities markets are where securities (financial instruments) are traded on the basis of supply and demand.
- Securities markets encompass equity (stock) markets, bond markets, and derivatives markets.
- A (common) stock represents ownership of corporations, while a bond debt obligations of corporations, governments, and government agencies.

What is Financial System?

- Securities markets are where securities (financial instruments) are traded on the basis of supply and demand.
- Securities markets encompass equity (stock) markets, bond markets, and derivatives markets.
- A (common) stock represents ownership of corporations, while a bond debt obligations of corporations, governments, and government agencies.
- The value of derivatives depends on the underlying assets (e.g. stocks, bonds, commodities).

What is Financial System?

- A central bank or monetary authority is a monoplized and often nationalized institution given privileged control over the production and distribution of money and credit.

What is Financial System?

- A central bank or monetary authority is a monoplized and often nationalized institution given privileged control over the production and distribution of money and credit.
- A central bank is NOT a BANK, but a government agency.

What is Financial System?

- A central bank or monetary authority is a monoplized and often nationalized institution given privileged control over the production and distribution of money and credit.
- A central bank is NOT a BANK, but a government agency.
- Usually, it is responsible for *monetary policy*.

What is Financial System?

- A central bank or monetary authority is a monoplized and often nationalized institution given privileged control over the production and distribution of money and credit.
- A central bank is NOT a BANK, but a government agency.
- Usually, it is responsible for *monetary policy*.
- *Price stability* is the primary goal of monetary policy.

What is Financial System?

- A central bank or monetary authority is a monoplized and often nationalized institution given privileged control over the production and distribution of money and credit.
- A central bank is NOT a BANK, but a government agency.
- Usually, it is responsible for *monetary policy*.
- *Price stability* is the primary goal of monetary policy.
- The world most influential central banks are the Federal Reserve (U.S.A), the People's Bank of China, the European Central Bank, and Bank of Japan.

What is Financial System?

- The regulatory and supervisory institutions in financial system are very complicated.

What is Financial System?

- The regulatory and supervisory institutions in financial system are very complicated.
- Central banks in many countries or economies, for example, serve as a regulatory and supervisory institution for the banking sector.

What is Financial System?

- The regulatory and supervisory institutions in financial system are very complicated.
- Central banks in many countries or economies, for example, serve as a regulatory and supervisory institution for the banking sector.
- Securities Exchange Committee, on the other hand, oversees securities markets.

What is Financial System?

- The regulatory and supervisory institutions in financial system are very complicated.
- Central banks in many countries or economies, for example, serve as a regulatory and supervisory institution for the banking sector.
- Securities Exchange Committee, on the other hand, oversees securities markets.
- It puzzles many that why financial system is probably the most regulated sector in the economy. To answer this question, we need to investigate the importance of financial system.

The Importance of Financial System

- A simple and frictional case to illustrate the importance of financial system (not the whole picture yet).

The Importance of Financial System

- A simple and frictional case to illustrate the importance of financial system (not the whole picture yet).
- Suppose you want to start up your own business, say, a computer store near campus. The rent, electricity, water bills, and staff wage are going to cost you every 30,000 RMB per month. It is 360,000 RMB per year; yet you only have 10,000 RMB to invest. How to fill the gap of 350,000 RMB for the first year?

The Importance of Financial System

- A simple and frictional case to illustrate the importance of financial system (not the whole picture yet).
- Suppose you want to start up your own business, say, a computer store near campus. The rent, electricity, water bills, and staff wage are going to cost you every 30,000 RMB per month. It is 360,000 RMB per year; yet you only have 10,000 RMB to invest. How to fill the gap of 350,000 RMB for the first year?
- several options

The Importance of Financial System

- A simple and frictional case to illustrate the importance of financial system (not the whole picture yet).
- Suppose you want to start up your own business, say, a computer store near campus. The rent, electricity, water bills, and staff wage are going to cost you every 30,000 RMB per month. It is 360,000 RMB per year; yet you only have 10,000 RMB to invest. How to fill the gap of 350,000 RMB for the first year?
- several options
  1. equity investors - new owners of this store;

The Importance of Financial System

- A simple and frictional case to illustrate the importance of financial system (not the whole picture yet).
- Suppose you want to start up your own business, say, a computer store near campus. The rent, electricity, water bills, and staff wage are going to cost you every 30,000 RMB per month. It is 360,000 RMB per year; yet you only have 10,000 RMB to invest. How to fill the gap of 350,000 RMB for the first year?
- several options
  1. equity investors - new owners of this store;
  2. debt investors - fixed interest rates periodically and lump-sum repayment at maturity date (either bank loans or bonds).

The Importance of Financial System

- Frictional case here gives us a very interesting picture of financial system. Two ways of financing:

The Importance of Financial System

- Frictional case here gives us a very interesting picture of financial system. Two ways of financing:
  1. direct finance - through securities issuance (equity or bonds);

The Importance of Financial System

- Frictional case here gives us a very interesting picture of financial system. Two ways of financing:
    1. direct finance - through securities issuance (equity or bonds);
    2. indirect finance - through banks.

The Importance of Financial System

- Frictional case here gives us a very interesting picture of financial system. Two ways of financing:
  1. direct finance - through securities issuance (equity or bonds);
  2. indirect finance - through banks.
- However, in either case, you will confront with financial intermediaries.

The Importance of Financial System

- Frictional case here gives us a very interesting picture of financial system. Two ways of financing:
  1. direct finance - through securities issuance (equity or bonds);
  2. indirect finance - through banks.
- However, in either case, you will confront with financial intermediaries.
- Direct finance - investment banks which underwrite your equity or bonds to investors.

The Importance of Financial System

- Frictional case here gives us a very interesting picture of financial system. Two ways of financing:
  1. direct finance - through securities issuance (equity or bonds);
  2. indirect finance - through banks.
- However, in either case, you will confront with financial intermediaries.
- Direct finance - investment banks which underwrite your equity or bonds to investors.
- Indirect finance - banks which grants you business loans.

The Importance of Financial System

- Why do you need a financial intermediary to do this financing for you in any way?

The Importance of Financial System

- Why do you need a financial intermediary to do this financing for you in any way?
- How about asking your friends to raise the funds?

The Importance of Financial System

- Why do you need a financial intermediary to do this financing for you in any way?
- How about asking your friends to raise the funds?
- How about giving a fund-raising party on campus to gather students and professors of this University?

The Importance of Financial System

- Why do you need a financial intermediary to do this financing for you in any way?
- How about asking your friends to raise the funds?
- How about giving a fund-raising party on campus to gather students and professors of this University?
- When you in an attempt to raise funds by your own, you will acknowledge the time and energy that you need to invest in this financing process.

The Importance of Financial System

- The prospective investors are going to ask you hundreds of questions regarding the business plan, the operation model, cash flow projection, and many other.

The Importance of Financial System

- The prospective investors are going to ask you hundreds of questions regarding the business plan, the operation model, cash flow projection, and many other.
- Even though investors were interested in your store investment, they would come up with different terms about investing in your store.

The Importance of Financial System

- The prospective investors are going to ask you hundreds of questions regarding the business plan, the operation model, cash flow projection, and many other.
- Even though investors were interested in your store investment, they would come up with different terms about investing in your store.
- For example, Lee prefers a fixed interest rate of 6% per year; Richy might like 5,000 RMB to become an owner, although you don't think he knows anything about computer stuff.

The Importance of Financial System

- The prospective investors are going to ask you hundreds of questions regarding the business plan, the operation model, cash flow projection, and many other.
- Even though investors were interested in your store investment, they would come up with different terms about investing in your store.
- For example, Lee prefers a fixed interest rate of 6% per year; Richy might like 5,000 RMB to become an owner, although you don't think he knows anything about computer stuff.
- By comparison, we find out that raising funds through financial intermediaries is time-saving. What more does financial system do for us?

The Importance of Financial System

- The first role that financial system provides us is clearing and settling payments.

The Importance of Financial System

- The first role that financial system provides us is clearing and settling payments.
- A life example here for this is Alipay and Bank Union in China.

The Importance of Financial System

- The first role that financial system provides us is clearing and settling payments.
- A life example here for this is Alipay and Bank Union in China.
- It is very likely to have a QR code for customers to buy a computer in your store.

The Importance of Financial System

- The first role that financial system provides us is clearing and settling payments.
- A life example here for this is Alipay and Bank Union in China.
- It is very likely to have a QR code for customers to buy a computer in your store.
- Besides, you don't need to line up in banks to buy mutual funds or fund wire.

The Importance of Financial System

- The second role that financial system is pooling resources and subdividing share.

The Importance of Financial System

- The second role that financial system is pooling resources and subdividing share.
- It is very hard to you to raise funds from one person or entity even when it is the most economical way.

THE IMPORTANCE OF FINANCIAL SYSTEM

- The second role that financial system is pooling resources and subdividing share.
- It is very hard to you to raise funds from one person or entity even when it is the most economical way.
- Banks, in this case, pool funds from various entities (e.g., households and corporations), and then to distribute to units which are in need.

The Importance of Financial System

- From investors' perspective, it is hard to pool and than lend 350,000 RMB to your computer store.

The Importance of Financial System

- From investors' perspective, it is hard to pool and than lend 350,000 RMB to your computer store.
- Securities markets provide such convenience for investors. You could start investment with 1,000 RMB.

The Importance of Financial System

- From investors' perspective, it is hard to pool and than lend 350,000 RMB to your computer store.
- Securities markets provide such convenience for investors. You could start investment with 1,000 RMB.
- The third role that financial system is transferring resources across time and space.

The Importance of Financial System

- From investors' perspective, it is hard to pool and than lend 350,000 RMB to your computer store.
- Securities markets provide such convenience for investors. You could start investment with 1,000 RMB.
- The third role that financial system is transferring resources across time and space.
- e.g. insurance companies and pension funds would give investors contingency payment and retirement annuities.

The Importance of Financial System

- The fourth role that financial system is managing risk.

The Importance of Financial System

- The fourth role that financial system is managing risk.
- It is important for us to find risk, price risk and transfer risk with appropriate ways.

The Importance of Financial System

- The fourth role that financial system is managing risk.
- It is important for us to find risk, price risk and transfer risk with appropriate ways.
- You buy some shares of a company, say, China Mobile, to expect 5% return. Higher risk, higher return. The price you paid to hold China Mobile shares includes risk.

The Importance of Financial System

- The fourth role that financial system is managing risk.
- It is important for us to find risk, price risk and transfer risk with appropriate ways.
- You buy some shares of a company, say, China Mobile, to expect 5% return. Higher risk, higher return. The price you paid to hold China Mobile shares includes risk.
- When you sold shares to others, you transfer risk that you previously held to others who are willing to hold it.

The Importance of Financial System

- The fourth role that financial system is managing risk.
- It is important for us to find risk, price risk and transfer risk with appropriate ways.
- You buy some shares of a company, say, China Mobile, to expect 5% return. Higher risk, higher return. The price you paid to hold China Mobile shares includes risk.
- When you sold shares to others, you transfer risk that you previously held to others who are willing to hold it.
- If you wanted to sell it quickly, you would choose investment banks, for instance.

The Importance of Financial System

- The fifth role that financial system is providing information.

The Importance of Financial System

- The fifth role that financial system is providing information.
- Why your prospective investors would ask you so many question before deciding to invest in you?

The Importance of Financial System

- The fifth role that financial system is providing information.
- Why your prospective investors would ask you so many question before deciding to invest in you?
- Because you know the business that you intend to engage than most of them. They worry that your "unobservable" actions before and after the transaction would jeopardize their investment.

The Importance of Financial System

- The fifth role that financial system is providing information.
- Why your prospective investors would ask you so many question before deciding to invest in you?
- Because you know the business that you intend to engage than most of them. They worry that your "unobservable" actions before and after the transaction would jeopardize their investment.
- It is a typical problem in economics, known as asymmetric information.

The Importance of Financial System

- The sixth role that financial system is dealing with incentive problems.

The Importance of Financial System

- The sixth role that financial system is dealing with incentive problems.
- Incentive problems arise because parties to transactions cannot easily observe or control one another, and because contractual enforcement mechanisms are not costless to invoke.

The Importance of Financial System

- The sixth role that financial system is dealing with incentive problems.
- Incentive problems arise because parties to transactions cannot easily observe or control one another, and because contractual enforcement mechanisms are not costless to invoke.
- It is known as "incomplete contract" in economics.

The Importance of Financial System

- The sixth role that financial system is dealing with incentive problems.
- Incentive problems arise because parties to transactions cannot easily observe or control one another, and because contractual enforcement mechanisms are not costless to invoke.
- It is known as "incomplete contract" in economics.
- For more readings, please consult Bodie, Z, and Merton, R.C. (1995). *A Conceptual Framework for Analyzing the Financial System*, Chapter 1 to 8, Harvard Business School Press.

Course Structure

- I build up a big picture of this course by three balance sheets.

Course Structure

- I build up a big picture of this course by three balance sheets.
- The economy generates various demand for funds. As a response, commercial banks provide *indirect finance channel*. On the assets side, banks produce loans. On the liability side, banks produce deposit money.

Course Structure

- I build up a big picture of this course by three balance sheets.
- The economy generates various demand for funds. As a response, commercial banks provide *indirect finance channel*. On the assets side, banks produce loans. On the liability side, banks produce deposit money.
- Investment banks provide *direct finance channel* by acting as intermediaries between issuers and investors. On the asset side, investment banks hold bonds and stocks corporations issued, for example. On the liability side, investment banks produce monetary assets (e.g., commercial papers).

Course Structure

- I build up a big picture of this course by three balance sheets.
- The economy generates various demand for funds. As a response, commercial banks provide *indirect finance channel*. On the assets side, banks produce loans. On the liability side, banks produce deposit money.
- Investment banks provide *direct finance channel* by acting as intermediaries between issuers and investors. On the asset side, investment banks hold bonds and stocks corporations issued, for example. On the liability side, investment banks produce monetary assets (e.g., commercial papers).
- The amount of monetary assets and non-monetary assets (e.g., stocks and bonds) are affected by the central bank. On the asset side, the central bank holds government securities; on the liability side, it produces base money.

Course Structure

- Fund demanders would access to direct finance channel or indirect finance channel for different reasons.

Course Structure

- Fund demanders would access to direct finance channel or indirect finance channel for different reasons.
- Commercial banks and investment banks, acting on the principle of *profit maximization*, provide financing for fund demanders.

Course Structure

- Fund demanders would access to direct finance channel or indirect finance channel for different reasons.
- Commercial banks and investment banks, acting on the principle of *profit maximization*, provide financing for fund demanders.
- Decisions of either fund demanders, banks, or investment banks are highly influenced by decisions of the central banks.

Course Structure

- Fund demanders would access to direct finance channel or indirect finance channel for different reasons.
- Commercial banks and investment banks, acting on the principle of *profit maximization*, provide financing for fund demanders.
- Decisions of either fund demanders, banks, or investment banks are highly influenced by decisions of the central banks.
- Decisions of the central bank are implemented by *monetary policy tools*, and generate influence on the economy through *monetary transmission channels*.

Preview

- To start with, we would grasp two key fundamental concepts in financial economics: (1) money has time value, and (2) higher risk, higher return.

Preview

- To start with, we would grasp two key fundamental concepts in financial economics: (1) money has time value, and (2) higher risk, higher return.
- To get those two concepts, we would take two lectures, one is *Understanding Interest Rates*, and the other *Risk and Term Structure of Interest Rates*.

Preview

- To start with, we would grasp two key fundamental concepts in financial economics: (1) money has time value, and (2) higher risk, higher return.
- To get those two concepts, we would take two lectures, one is *Understanding Interest Rates*, and the other *Risk and Term Structure of Interest Rates*.
- In *Understanding Interest Rates*, we will introduce a *plain vanilla bond*, interest rate measurement - *yield to maturity*, techniques of *present value*, and *calculation of rate of return*.