INTERMEDIATE MACROECONOMICS-II

B.A.(H) Economics, Semester-IV

Topic-3: Fiscal & Monetary Policy,
Lecture Notes-IV
(Ref: Mishkin, *Macroeconomics*, Chapter-14)

Department of Economics,
Hansraj College, Delhi University.

The Financial System and Economic Growth

- This chapter looks at the role the financial system plays in an economy.

The Financial System and Economic Growth

- This chapter looks at the role the financial system plays in an economy.
- This chapter focuses on the long run, that is, on what role the financial system plays in promoting economic growth and how it is a key condition for high economic growth.

The Financial System and Economic Growth

- This chapter looks at the role the financial system plays in an economy.
- This chapter focuses on the long run, that is, on what role the financial system plays in promoting economic growth and how it is a key condition for high economic growth.
- This also discusses the role the financial system plays channeling funds in the economy.

The Financial System and Economic Growth

- This chapter looks at the role the financial system plays in an economy.
- This chapter focuses on the long run, that is, on what role the financial system plays in promoting economic growth and how it is a key condition for high economic growth.
- This also discusses the role the financial system plays channeling funds in the economy.
- There appear two kinds of information problems that interfere with the flow of funds in the financial system, where banks and governments play a role in resolving those problems.

The Role of the Financial System

- Households and firms' savings generate surplus funds, which can be used for productive investment opportunities.

The Role of the Financial System

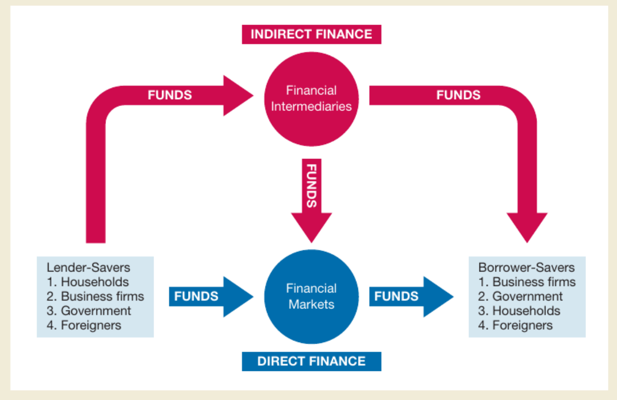
- Households and firms' savings generate surplus funds, which can be used for productive investment opportunities.
- The financial system provides a coordinating function of channeling funds from households and firms with surplus funds to those individuals and firms with both a shortage of funds and productive investment opportunities.

The Role of the Financial System

- Households and firms' savings generate surplus funds, which can be used for productive investment opportunities.
- The financial system provides a coordinating function of channeling funds from households and firms with surplus funds to those individuals and firms with both a shortage of funds and productive investment opportunities.
- Channeling funds efficiently through the financial system is a complex task.

Flow of Funds through the Financial System

Two channels of the flow of fund: (1) Direct finance: Borrowers borrowing funds directly from savers. (2) Indirect finance: Financial intermediaries stand between savers and borrowers.



Direct Finance

- Direct finance refers to funds moving directly from lender-savers (investors) to borrower- spenders via financial markets.

Direct Finance

- Direct finance refers to funds moving directly from lender-savers (investors) to borrower- spenders via financial markets.
- Borrowers borrow funds directly from savers via financial markets by selling them financial instruments namely, securities.

Direct Finance

- Direct finance refers to funds moving directly from lender-savers (investors) to borrower- spenders via financial markets.
- Borrowers borrow funds directly from savers via financial markets by selling them financial instruments namely, securities.
- Securities are claims on the borrowers' future income or assets in the form of common stock or bonds.

Direct Finance

- Direct finance refers to funds moving directly from lender-savers (investors) to borrower- spenders via financial markets.
- Borrowers borrow funds directly from savers via financial markets by selling them financial instruments namely, securities.
- Securities are claims on the borrowers' future income or assets in the form of common stock or bonds.
- Securities are assets for the firm or person who buys them, but they are liabilities for the individual or firm that sells (issues) them.

Direct Finance

- Direct finance refers to funds moving directly from lender-savers (investors) to borrower- spenders via financial markets.
- Borrowers borrow funds directly from savers via financial markets by selling them financial instruments namely, securities.
- Securities are claims on the borrowers' future income or assets in the form of common stock or bonds.
- Securities are assets for the firm or person who buys them, but they are liabilities for the individual or firm that sells (issues) them.
- Financial institutions engaged in direct finance facilitate transactions in financial markets e.g. exchanges, investment banks etc.

Indirect Finance

- Indirect finance refers to the channel of the flow of funds between lenders and borrowers through a financial intermediary e.g. bank, insurance company, finance company, mutual fund, pension fund etc.

Indirect Finance

- Indirect finance refers to the channel of the flow of funds between lenders and borrowers through a financial intermediary e.g. bank, insurance company, finance company, mutual fund, pension fund etc.
- Another way of the indirect flow of funds is when funds flow from financial intermediaries to financial markets, and then from financial markets to borrower spenders. e.g. funds in mutual fund or pension funds used to purchase securities in the financial markets.

Indirect Finance

- Indirect finance refers to the channel of the flow of funds between lenders and borrowers through a financial intermediary e.g. bank, insurance company, finance company, mutual fund, pension fund etc.
- Another way of the indirect flow of funds is when funds flow from financial intermediaries to financial markets, and then from financial markets to borrower spenders. e.g. funds in mutual fund or pension funds used to purchase securities in the financial markets.
- Financial intermediaries supply close to 60% of the funds flowing to nonfinancial businesses.

Indirect Finance

- Indirect finance refers to the channel of the flow of funds between lenders and borrowers through a financial intermediary e.g. bank, insurance company, finance company, mutual fund, pension fund etc.
- Another way of the indirect flow of funds is when funds flow from financial intermediaries to financial markets, and then from financial markets to borrower spenders. e.g. funds in mutual fund or pension funds used to purchase securities in the financial markets.
- Financial intermediaries supply close to 60% of the funds flowing to nonfinancial businesses.
- In developing countries, households and firms borrow through rural moneylenders, savings and credit associations, family networks, or programs for microcredit.

Financial Intermediaries

There are six basic types of financial intermediaries.

1. **Banks**, also known as *depository institutions*, which include commercial banks, savings and loan associations, mutual savings banks, and credit unions, are financial institutions that acquire funds by issuing deposits and use the proceeds to make loans.
2. **Insurance companies**, which include life insurance companies and fire and casualty insurance companies, acquire funds from premiums paid by policyholders and in turn insure policyholders against financial hazards like death or against loss from theft, fire, or accidents.
3. **Pension funds**, which include private and government pension funds, acquire funds through contributions from employees and their employers and provide retirement income to the employees covered by the pension plan.
4. **Finance companies** raise funds by selling commercial paper (a short-term debt instrument) and by issuing stocks and bonds. They then use the funds to lend to consumers and businesses.
5. **Mutual funds** acquire funds by selling shares to individuals and use the proceeds to buy securities such as stocks and bonds.
6. **Hedge funds** are a special type of mutual fund that also acquires funds by selling shares but only to very wealthy people, so they are less regulated than mutual funds. They then use the proceeds to purchase securities and engage in complex financial transactions.

To understand these financial intermediaries better, we can look at their **balance sheet**, a list of the institution's assets and liabilities. As the name implies, the list balances; that is, it has the characteristic that

Total assets = Total liabilities + Capital

In other words, **capital** (also referred to as **net worth**) equals the value of the institution's assets minus its liabilities. If the value of the assets falls, holding the value of liabilities constant, then the net worth or capital of the institution has fallen. Table 14.1 provides a guide to these financial intermediaries by describing their primary assets (uses of funds) and their primary liabilities (sources of funds).

Financial Intermediaries

TABLE 14.1
Primary Assets and Liabilities of Financial Intermediaries

Type of Financial Intermediary	Primary Assets (Uses of Funds)	Primary Liabilities (Sources of Funds)
Banks	Business and consumer loans, mortgages, government securities	Deposits
Insurance companies	Corporate bonds, mortgages, business loans, government securities	Premiums from policies
Pension funds	Corporate bonds, mortgages, business loans, government securities	Employer and employee contributions
Finance companies	Consumer and business loans	Commercial paper, stocks, and bonds
Mutual funds	Stocks and bonds	Shares
Hedge funds	Numerous types of securities and financial derivatives	Shares

Information Challenges and the Financial System

Asymmetric Information

- This refers to an information problem in which one party to a transaction has much less accurate information than the other.

Information Challenges and the Financial System

Asymmetric Information

- This refers to an information problem in which one party to a transaction has much less accurate information than the other.
- This lack of symmetry in information impedes the direct movement of funds to those with the best investment opportunities.

Information Challenges and the Financial System

Asymmetric Information

- This refers to an information problem in which one party to a transaction has much less accurate information than the other.
- This lack of symmetry in information impedes the direct movement of funds to those with the best investment opportunities.
- In a financial system, asymmetric information creates two types of problems, namely, adverse selection, and moral hazard.

Information Challenges and the Financial System

Asymmetric Information

- This refers to an information problem in which one party to a transaction has much less accurate information than the other.
- This lack of symmetry in information impedes the direct movement of funds to those with the best investment opportunities.
- In a financial system, asymmetric information creates two types of problems, namely, adverse selection, and moral hazard.
- **Adverse selection** is the problem that arises because the party who is most eager to engage in a transaction is the one most likely to produce an undesirable (adverse) outcome.

- **Adverse selection** occurs before a transaction is completed and makes it more likely that loans will be made to bad credit risks. As a result, lenders may decide not to make any loans at all.

- **Adverse selection** occurs before a transaction is completed and makes it more likely that loans will be made to bad credit risks. As a result, lenders may decide not to make any loans at all.
- **Moral hazard** is the risk (hazard) that the borrower will engage in activities that are undesirable (immoral) from the point of view of a lender. This arises after a transaction occurs.

- **Adverse selection** occurs before a transaction is completed and makes it more likely that loans will be made to bad credit risks. As a result, lenders may decide not to make any loans at all.
- **Moral hazard** is the risk (hazard) that the borrower will engage in activities that are undesirable (immoral) from the point of view of a lender. This arises after a transaction occurs.
- **Moral hazard** occurs when after borrowing the money, borrowers may use the fund for a high-risk activity.

Free-Rider Problem

- In order to eliminate the problem of adverse selection and moral hazard, investors need to collect information to eliminate the information asymmetry.

Free-Rider Problem

- In order to eliminate the problem of adverse selection and moral hazard, investors need to collect information to eliminate the information asymmetry.
- But the collection of information gives rise to another problem referred to as a free-rider problem.

Free-Rider Problem

- In order to eliminate the problem of adverse selection and moral hazard, investors need to collect information to eliminate the information asymmetry.
- But the collection of information gives rise to another problem referred to as a free-rider problem.
- Free-riders refers to investors who do not spend their resources on collecting information and take advantage of the information that other investors collect.

Free-Rider Problem

- In order to eliminate the problem of adverse selection and moral hazard, investors need to collect information to eliminate the information asymmetry.
- But the collection of information gives rise to another problem referred to as a free-rider problem.
- Free-riders refers to investors who do not spend their resources on collecting information and take advantage of the information that other investors collect.
- Due to the presence of these free-riders, a private investor might not be able to capture most of the profits from their collected information.

Financial Intermediaries Address Asymmetric Information Problems

- Financial intermediaries play a key role in solving asymmetric information problems.

Financial Intermediaries Address Asymmetric Information Problems

- Financial intermediaries play a key role in solving asymmetric information problems.
- Financial intermediaries collect information to overcome adverse selection and moral hazard problems.

Financial Intermediaries Address Asymmetric Information Problems

- Financial intermediaries play a key role in solving asymmetric information problems.
- Financial intermediaries collect information to overcome adverse selection and moral hazard problems.
- Financial intermediaries can avoid the free-rider problem primarily by making **private loans**.

Financial Intermediaries Address Asymmetric Information Problems

- Financial intermediaries play a key role in solving asymmetric information problems.
- Financial intermediaries collect information to overcome adverse selection and moral hazard problems.
- Financial intermediaries can avoid the free-rider problem primarily by making **private loans**.
- As private loans are not traded in financial markets, it is hard for anyone else to free ride on the financial intermediary's information.

Financial Intermediaries Address Asymmetric Information Problems

- Financial intermediaries play a key role in solving asymmetric information problems.
- Financial intermediaries collect information to overcome adverse selection and moral hazard problems.
- Financial intermediaries can avoid the free-rider problem primarily by making **private loans**.
- As private loans are not traded in financial markets, it is hard for anyone else to free ride on the financial intermediary's information.
- The intermediary making private loans thus benefits from its information collection.

- Among different financial intermediaries, **banks** are the most important.

- Among different financial intermediaries, **banks** are the most important.
- A bank's basic business is taking in deposits and using these funds to make loans.

- Among different financial intermediaries, **banks** are the most important.
- A bank's basic business is taking in deposits and using these funds to make loans.
- Banks are particularly significant in the financial system because they have unique advantages over other financial intermediaries.

- Among different financial intermediaries, **banks** are the most important.
- A bank's basic business is taking in deposits and using these funds to make loans.
- Banks are particularly significant in the financial system because they have unique advantages over other financial intermediaries.
- Collecting information about potential borrowers before a transaction occurs to avoid adverse selection problems is called **screening**.

- Among different financial intermediaries, **banks** are the most important.
- A bank's basic business is taking in deposits and using these funds to make loans.
- Banks are particularly significant in the financial system because they have unique advantages over other financial intermediaries.
- Collecting information about potential borrowers before a transaction occurs to avoid adverse selection problems is called **screening**.
- Banks are particularly good at screening because they develop long-term relationships with potential borrowers and collect information about income, employment, etc.

- Collecting information after a transaction occurs to prevent moral hazard is called **monitoring**.

- Collecting information after a transaction occurs to prevent moral hazard is called **monitoring**.
- Banks have a natural advantage in monitoring a borrowing firm's behavior because they observe their checking account, which yields a great deal of information about the borrower's financial condition.

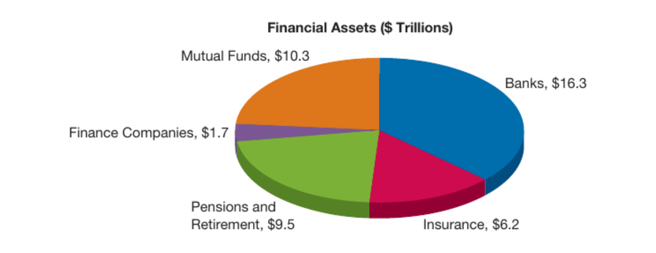
- Collecting information after a transaction occurs to prevent moral hazard is called **monitoring**.
- Banks have a natural advantage in monitoring a borrowing firm's behavior because they observe their checking account, which yields a great deal of information about the borrower's financial condition.
- Banks' long-term relationships with their customers also give them an advantage in monitoring borrowers.

- Collecting information after a transaction occurs to prevent moral hazard is called **monitoring**.
- Banks have a natural advantage in monitoring a borrowing firm's behavior because they observe their checking account, which yields a great deal of information about the borrower's financial condition.
- Banks' long-term relationships with their customers also give them an advantage in monitoring borrowers.
- Banks also try to prevent moral hazard by writing provisions into debt contracts, called **restrictive covenants**, that restrict borrowers' activities.

FIGURE 14.2

Assets of Different U.S. Financial Intermediaries, 2009

Banking institutions are the most important financial intermediary, with total assets of $16.3 trillion in 2009.

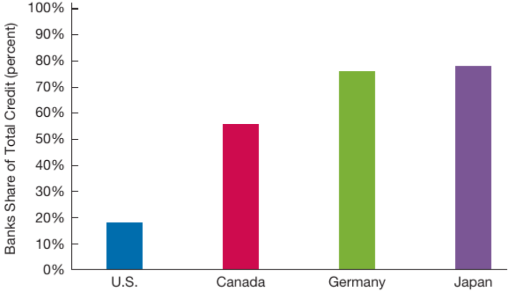


Source: Federal Reserve Flow of Funds Accounts. www.federalreserve.gov/releases/z1

FIGURE 14.3

Banks' Share of Total Credit to Nonfinancial Businesses in United States, Canada, Germany, and Japan

Banks are even more dominant in financial markets in other countries than they are in the United States. Banks supply 18% of total credit to U.S. nonfinancial businesses, 56% in Canada, 76% in Germany, and 78% in Japan.



Source: Andreas Hackethal and Reinhard H. Schmidt. 2004. Financing patterns: Measurement concepts and empirical results. Johann Wolfgang Goethe-Universitat Working Paper No. 125, January. The data are from 1970 to 2000 and are gross flows as percentage of the total, not including trade and other credit data, which are not available.

Banks' Role as Economies Develop

- Developing countries face difficult challenges from asymmetric information.

Banks' Role as Economies Develop

- Developing countries face difficult challenges from asymmetric information.
- Due to problems related to asymmetric information, Securities markets in developing countries are typically underdeveloped.

Banks' Role as Economies Develop

- Developing countries face difficult challenges from asymmetric information.
- Due to problems related to asymmetric information, Securities markets in developing countries are typically underdeveloped.
- Therefore, banks, which are particularly well-suited to avoid free-rider problems, play an even more dominant role in the financial system.

Banks' Role as Economies Develop

- Developing countries face difficult challenges from asymmetric information.
- Due to problems related to asymmetric information, Securities markets in developing countries are typically underdeveloped.
- Therefore, banks, which are particularly well-suited to avoid free-rider problems, play an even more dominant role in the financial system.
- As financial systems develop overtime, banks ensure that information about firms becomes easier to acquire, and so asymmetric information problems will be less severe and it will be easier for firms to issue securities.

Collateral and Asymmetric Information Problems

- **Collateral** refers to the property a borrower promises in the loan contract to the lender if it defaults on its debt.

Collateral and Asymmetric Information Problems

- **Collateral** refers to the property a borrower promises in the loan contract to the lender if it defaults on its debt.
- So collateral is another tool used by financial intermediaries to solve adverse selection and moral hazard problems.

Collateral and Asymmetric Information Problems

- **Collateral** refers to the property a borrower promises in the loan contract to the lender if it defaults on its debt.
- So collateral is another tool used by financial intermediaries to solve adverse selection and moral hazard problems.
- Most of the household debt is collateralized: a house is collateral for a mortgage and an automobile is collateral for an auto loan.

Collateral and Asymmetric Information Problems

- **Collateral** refers to the property a borrower promises in the loan contract to the lender if it defaults on its debt.
- So collateral is another tool used by financial intermediaries to solve adverse selection and moral hazard problems.
- Most of the household debt is collateralized: a house is collateral for a mortgage and an automobile is collateral for an auto loan.
- Collateral is prevalent in loan contracts because it eliminates both adverse selection and moral hazard problems.

Collateral and Asymmetric Information Problems

- **Collateral** refers to the property a borrower promises in the loan contract to the lender if it defaults on its debt.
- So collateral is another tool used by financial intermediaries to solve adverse selection and moral hazard problems.
- Most of the household debt is collateralized: a house is collateral for a mortgage and an automobile is collateral for an auto loan.
- Collateral is prevalent in loan contracts because it eliminates both adverse selection and moral hazard problems.
- Adverse selection interferes with the functioning of financial markets only if a lender suffers a loss when a borrower defaults on its loan payments.

- Collateral reduces the consequences of adverse selection because, if a borrower defaults on a loan, the lender can sell the collateral and use the proceeds to make up for its losses on the loan.

- Collateral reduces the consequences of adverse selection because, if a borrower defaults on a loan, the lender can sell the collateral and use the proceeds to make up for its losses on the loan.
- Borrowers are willing to supply collateral because the reduced risk for the lender makes it more likely they will get the loan, and perhaps lower the interest rate.

- Collateral reduces the consequences of adverse selection because, if a borrower defaults on a loan, the lender can sell the collateral and use the proceeds to make up for its losses on the loan.
- Borrowers are willing to supply collateral because the reduced risk for the lender makes it more likely they will get the loan, and perhaps lower the interest rate.
- Collateral also reduces moral hazard by decreasing the incentives for borrowers to take on too much risk.

The Tyranny of Collateral

- Provision of collateral to borrow money requires legal ownership of the collateral at the time of borrowings.

The Tyranny of Collateral

- Provision of collateral to borrow money requires legal ownership of the collateral at the time of borrowings.
- Hernando De Soto documented in The *Mystery of Capital*, that it is extremely expensive and time consuming for the poor in developing countries to make their ownership of property legal.

The Tyranny of Collateral

- Provision of collateral to borrow money requires legal ownership of the collateral at the time of borrowings.
- Hernando De Soto documented in The *Mystery of Capital*, that it is extremely expensive and time consuming for the poor in developing countries to make their ownership of property legal.
- Even when people have legal title to their property, the legal system in most developing countries is so inefficient that collateral does not mean much.

The Tyranny of Collateral

- Provision of collateral to borrow money requires legal ownership of the collateral at the time of borrowings.
- Hernando De Soto documented in The *Mystery of Capital*, that it is extremely expensive and time consuming for the poor in developing countries to make their ownership of property legal.
- Even when people have legal title to their property, the legal system in most developing countries is so inefficient that collateral does not mean much.
- Obtaining title of the collateral provided by the borrower at the time of borrowing is a time-consuming task, usually complicated by the legal procedures involved.

- At times governments also block lenders from foreclosing on borrowers in politically powerful sectors of a society, such as agriculture.

- At times governments also block lenders from foreclosing on borrowers in politically powerful sectors of a society, such as agriculture.
- With the above-mentioned problems, the collateral becomes ineffective. This worsens the adverse selection problem, as the lender will need even more information about the quality of the borrower to distinguish a good loan from a bad one.

- At times governments also block lenders from foreclosing on borrowers in politically powerful sectors of a society, such as agriculture.
- With the above-mentioned problems, the collateral becomes ineffective. This worsens the adverse selection problem, as the lender will need even more information about the quality of the borrower to distinguish a good loan from a bad one.
- Therefore, the poor have an even harder time obtaining loans because it is too costly for them to get title to their property and they, therefore, have no collateral to offer. This phenomena, given by Raghuram Rajan and Luigi Zingales, is referred to as the **tyranny of collateral**.

Government Regulation and Supervision of the Financial Sector

- The government can intervene to ensure better collection of information required for efficient lending and eliminate the possibility of the free-rider problem.

Government Regulation and Supervision of the Financial Sector

- The government can intervene to ensure better collection of information required for efficient lending and eliminate the possibility of the free-rider problem.
- Governments can decrease information asymmetry by directly promoting transparency.

Government Regulation and Supervision of the Financial Sector

- The government can intervene to ensure better collection of information required for efficient lending and eliminate the possibility of the free-rider problem.
- Governments can decrease information asymmetry by directly promoting transparency.
- The government can regulate financial markets to require that firms distribute full and accurate information about their sales, assets, and earnings, to enable investors to evaluate their true performance.

Government Regulation and Supervision of the Financial Sector

- The government can intervene to ensure better collection of information required for efficient lending and eliminate the possibility of the free-rider problem.
- Governments can decrease information asymmetry by directly promoting transparency.
- The government can regulate financial markets to require that firms distribute full and accurate information about their sales, assets, and earnings, to enable investors to evaluate their true performance.
- Despite this provision, poor-performing firms, and executives have strong incentives to falsify reports.

Government Regulation and Supervision of the Financial Sector

- The government can intervene to ensure better collection of information required for efficient lending and eliminate the possibility of the free-rider problem.
- Governments can decrease information asymmetry by directly promoting transparency.
- The government can regulate financial markets to require that firms distribute full and accurate information about their sales, assets, and earnings, to enable investors to evaluate their true performance.
- Despite this provision, poor-performing firms, and executives have strong incentives to falsify reports.
- Also, strong-looking firms fetch a high price for their securities.

Government-Directed Credit

- In many developing countries, governments have programs to direct credit to particular sectors of the economy.

Government-Directed Credit

- In many developing countries, governments have programs to direct credit to particular sectors of the economy.
- Governments direct credit by creating development financial institutions to make specific types of loans at artificially low rates, or by directing existing institutions to lend to certain entities or sectors of the economy.

Government-Directed Credit

- In many developing countries, governments have programs to direct credit to particular sectors of the economy.
- Governments direct credit by creating development financial institutions to make specific types of loans at artificially low rates, or by directing existing institutions to lend to certain entities or sectors of the economy.
- Governments can also effectively direct credit by owning banks; state-owned banks are very common in many developing countries.

Government-Directed Credit

- In many developing countries, governments have programs to direct credit to particular sectors of the economy.
- Governments direct credit by creating development financial institutions to make specific types of loans at artificially low rates, or by directing existing institutions to lend to certain entities or sectors of the economy.
- Governments can also effectively direct credit by owning banks; state-owned banks are very common in many developing countries.
- Government-directed credit helps get funds to sectors of the economy, such as manufacturing or high tech, that are key drivers of economic growth.

Government Safety Net

- Banks are particularly well-suited to solve adverse selection and moral hazard problems because they make private loans that help avoids the free-rider problem.

Government Safety Net

- Banks are particularly well-suited to solve adverse selection and moral hazard problems because they make private loans that help avoids the free-rider problem.
- This gives rise to two additional problems in the banking system.

Government Safety Net

- Banks are particularly well-suited to solve adverse selection and moral hazard problems because they make private loans that help avoids the free-rider problem.
- This gives rise to two additional problems in the banking system.
- First, depositors might be reluctant to put their money into a bank if they cannot easily tell whether bank managers are engaging in moral hazard and taking on too much risk or are outright crooks.

Government Safety Net

- Banks are particularly well-suited to solve adverse selection and moral hazard problems because they make private loans that help avoids the free-rider problem.
- This gives rise to two additional problems in the banking system.
- First, depositors might be reluctant to put their money into a bank if they cannot easily tell whether bank managers are engaging in moral hazard and taking on too much risk or are outright crooks.
- Second, depositors' lack of information about the quality of a bank's assets can lead to the wholesale collapse of many banks at the same time.

- The government can intervene in the financial system to encourage depositors to put their money in banks and prevent multiple, simultaneous bank failures by creating a safety net for depositors.

- The government can intervene in the financial system to encourage depositors to put their money in banks and prevent multiple, simultaneous bank failures by creating a safety net for depositors.
- This ensures depositors protection, and they will be more willing to provide the bank with funds.

- The government can intervene in the financial system to encourage depositors to put their money in banks and prevent multiple, simultaneous bank failures by creating a safety net for depositors.
- This ensures depositors protection, and they will be more willing to provide the bank with funds.
- Depositor protection also means that depositors no longer have reasons to pull their money out of the bank at the first sign of trouble.

- The government can intervene in the financial system to encourage depositors to put their money in banks and prevent multiple, simultaneous bank failures by creating a safety net for depositors.
- This ensures depositors protection, and they will be more willing to provide the bank with funds.
- Depositor protection also means that depositors no longer have reasons to pull their money out of the bank at the first sign of trouble.
- Depositor protection therefore greatly reduces contagion from one bank failure potentially leading to another.

- The government can intervene in the financial system to encourage depositors to put their money in banks and prevent multiple, simultaneous bank failures by creating a safety net for depositors.
- This ensures depositors protection, and they will be more willing to provide the bank with funds.
- Depositor protection also means that depositors no longer have reasons to pull their money out of the bank at the first sign of trouble.
- Depositor protection therefore greatly reduces contagion from one bank failure potentially leading to another.
- The presence of a government safety net also increases the incentive for banks to take on greater risk than they otherwise would, with taxpayers paying the bill if the bank subsequently fails.

Role of Prudential Regulation and Supervision

- **Prudential regulation** are rules set by the government to prevent banks from taking on too much risk.

Role of Prudential Regulation and Supervision

- **Prudential regulation** are rules set by the government to prevent banks from taking on too much risk.
- Governments can limit banks' risk level by adopting regulations to promote disclosure of their activities.

Role of Prudential Regulation and Supervision

- **Prudential regulation** are rules set by the government to prevent banks from taking on too much risk.
- Governments can limit banks' risk level by adopting regulations to promote disclosure of their activities.
- The government can also encourage banks to diversify, promote accurate disclosure of banks' financial condition to the markets, and require that banks hold minimum levels of capital as a cushion against bad loans.

Role of Prudential Regulation and Supervision

- **Prudential regulation** are rules set by the government to prevent banks from taking on too much risk.
- Governments can limit banks' risk level by adopting regulations to promote disclosure of their activities.
- The government can also encourage banks to diversify, promote accurate disclosure of banks' financial condition to the markets, and require that banks hold minimum levels of capital as a cushion against bad loans.
- The government can also engage in **prudential supervision**, in which it monitors banks by examining them on a regular basis.

Financial Development and Economic Growth: The Evidence

- The evidence that financial development, often called **financial deepening**, and economic growth are linked is quite strong.

[1] Robert King and Ross Levine, "Finance and Growth: Schumpeter Might Be Right," Quarterly Journal of Economics 108 (1993): 717–737.

Financial Development and Economic Growth: The Evidence

- The evidence that financial development, often called **financial deepening**, and economic growth are linked is quite strong.
- A study by Robert King and Ross Levine using a sample of eighty countries found that those with large financial sectors back in 1960 experienced greater economic growth over the subsequent thirty years than countries with small financial sectors[1].

[1] Robert King and Ross Levine, "Finance and Growth: Schumpeter Might Be Right," Quarterly Journal of Economics 108 (1993): 717–737.

Financial Development and Economic Growth: The Evidence

- The evidence that financial development, often called **financial deepening**, and economic growth are linked is quite strong.
- A study by Robert King and Ross Levine using a sample of eighty countries found that those with large financial sectors back in 1960 experienced greater economic growth over the subsequent thirty years than countries with small financial sectors[1].
- Later studies using more sophisticated techniques have confirmed this finding, associating a doubling of the size of private credit in an average developing country with a two-percentage-point annual increase in economic growth.

[1] Robert King and Ross Levine, "Finance and Growth: Schumpeter Might Be Right," Quarterly Journal of Economics 108 (1993): 717–737.