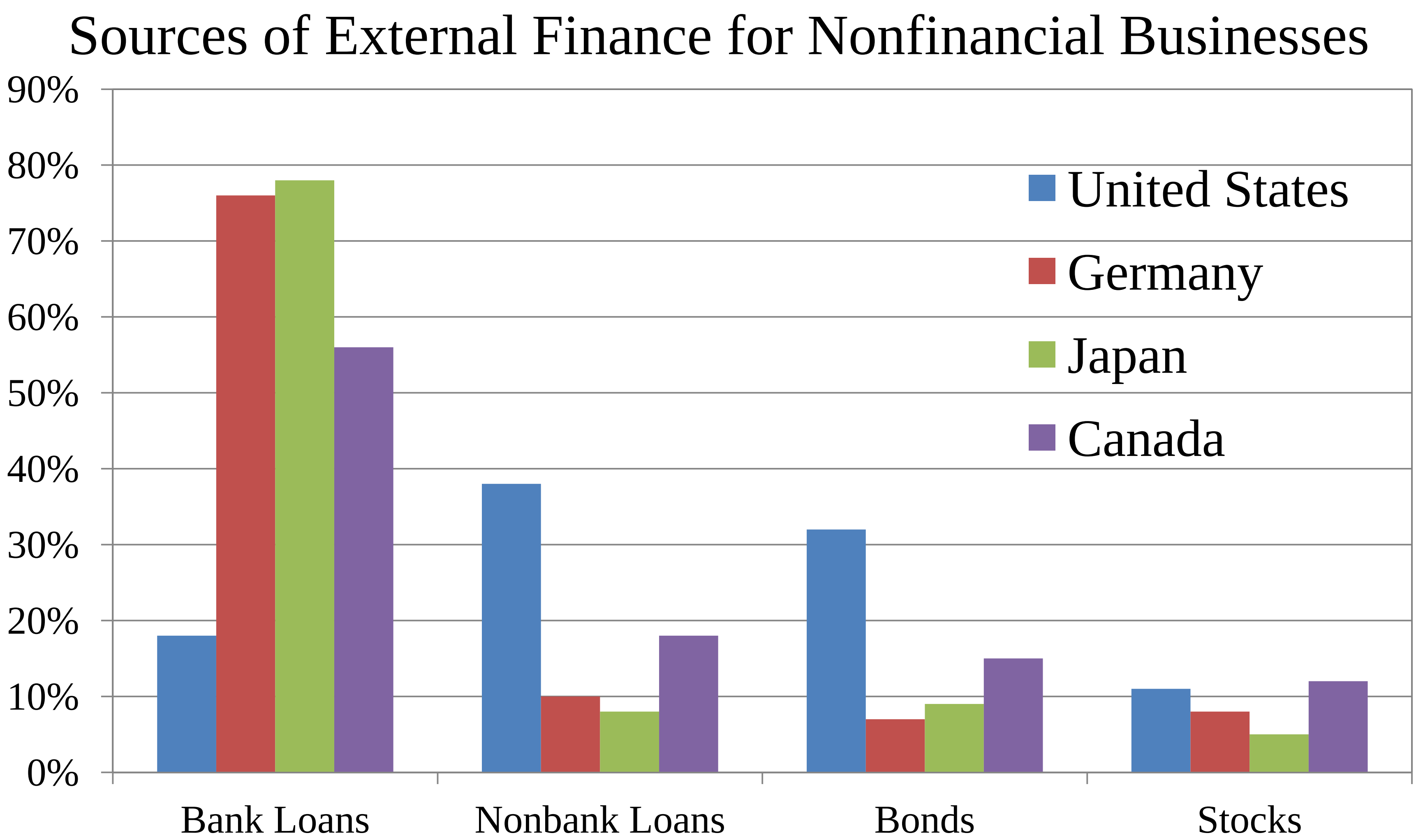
An Economic Analysis of Financial Structure

This lecture examines how the financial system promotes economic efficiency.



6 Basic Facts about the Financial System

A. The issuance of new stock and bond offerings are not popular ways for businesses to externally finance their operations.

B. Financial intermediaries (ex., banks) are the primary source of external finance for businesses.

C. The financial system is one of the most heavily regulated sectors of the economy.

D. Only large companies can easily raise funds in the stock and bond markets.

E. Many debt contracts (business and household) are secured with <u>collateral</u> (property pledged to the lender in the event the borrower defaults).

F. Debt contracts are complicated legal documents that place restrictions on the borrower. (ex., Most car loans require the borrower to maintain insurance on the purchased vehicle.)

Transaction Costs

A. Small investors and small businesses encounter sizeable transaction costs when interacting with the direct finance channel of the financial market.

B. Financial intermediaries, via indirect finance, provide small investors and businesses access to financial markets by reducing transaction costs.

   1. By pooling funds from these participants, financial intermediaries reduce the per-unit transaction costs (<u>economies of scale</u>).

   2. Financial intermediaries have developed an <u>expertise</u> in evaluating financial opportunities.

Asymmetric Information in Financial Markets

A. <u>Adverse selection</u> is an asymmetric information problem that occurs *before* a transaction takes place.

1. The lemons problem

    a. If a buyer cannot assess the quality of an asset, he/she, at most, is willing to pay a price that reflects the average quality.

    b. The seller of a high quality item, however, will not want to sell at that lower average price.

    c. The buyer then will not purchase anything because the only things that remain in the market are the low quality items (i.e., the lemons).

2. Tools to help solve the adverse selection problem
    a. Private firms collect and produce information distinguishing good and bad firms, and then sell that information to saver/lenders.
        i. <u>Free-rider problem</u> - non-paying people use information other people have paid for.
        ii. Paying customers might not want to buy information others are getting for free.
    b. The government regulates the securities market by requiring firms to provide certain information about themselves free of charge.

c. Financial intermediaries are experts in producing information to distinguish between good and bad firms.

    i. Banks avoid the free-rider problem by directly lending to good credit risks.

    ii. Large, well-known firms are more likely to borrow directly from savers because savers have better information on the firm, and the firm does not incur the costs from using financial intermediaries.

d. Collateral reduces the consequences of adverse selection by reducing the saver/lender’s loss in the event of a default.

e. A high net worth gives firms more cushion against a default in case an investment goes bad. That is, it reduces the consequences of the adverse selection problem.

B. Moral hazard is an asymmetric information problem that occurs *after* a transaction takes place.

1. Moral hazard in equity contracts: the principle-agent problem.

    a. Mangers who own a small fraction of a business (agent) have incentives to act in their own interest and not maximize profits for the equity owners (principles).

    b. Tools to minimize the principle-agent problem.

        i. Stockholders can monitor management via frequent auditing and checking in on management, but this process is costly and reduces profits.

        ii. Government regulations make profit verification easier (standard accounting principles) and impose stiff criminal penalties on people who commit fraud by hiding and stealing profits.

iii. Venture capital firms pool resources of investors to help budding businesses expand, but usually insist on having their own people participate as mangers of the business (i.e., board of directors) to monitor operations.

iv. A debt contract is an alternative to equity investment because it can be structured to pay investors a monthly payment. As long as the payment is being made, investors do not care if the managers are acting in the best interest of the business.

2. Moral hazard in debt markets
    a. Borrowers have an incentive to undertake riskier investments than lenders/savers would prefer.
    b. Tools to minimize moral hazard in debt contracts.
        i. <u>Collateral</u> provides the borrower with an incentive to behave in a way the lender expects.
        ii. <u>Restrictive covenants</u> can be included in debt contracts but need to be monitored and enforced.
            a. Covenants to discourage undesirable behavior
            b. Covenants to encourage desirable behavior
            c. Covenants to keep collateral valuable
            d. Covenants to provide information

Example: Financial Development and Economic Growth in Developing Countries

A. Countries with underdeveloped financial systems (financial repression) often have slower economic growth because they cannot resolve the problems from asymmetric information.

   1. Countries with poor private property rights cannot take full advantage of collateral.

   2. Countries with a poor legal system cannot enforce covenant restrictions.

   3. Countries with weak accounting standards make it difficult to determine good firms from bad firms.

B. The banks in many of these countries have no profit motive because they are owned by the government. They direct capital to themselves or their favorite sectors and not to the most productive uses.