

LESSON 2**FIVE CORE PRINCIPLES OF MONEY AND BANKING****1. Time has Value**

- Time affects the value of financial instruments.
- Interest payments exist because of time properties of financial instruments

Example

- At 6% interest rate, 4 year loan of \$10,000 for a car
- Requires 48 monthly installments of \$235 each
- Total repayment = $\$235 \times 48 = \$11,280$
- $\$11,280 > \$10,000$
(Total repayment) (Amount of loan)
- Reason: you are compensating the lender for the time during which you use the funds

2. Risk Requires Compensation

- In a world of uncertainty, individuals will accept risk only if they are compensated in some form.
- The world is filled with uncertainty; some possibilities are welcome and some are not
- To deal effectively with risk we must consider the full range of possibilities:
- Eliminate some risks,
- Reduce others,
- Pay someone else to assume particularly onerous risks, and
- Just live with what's left
- Investors must be paid to assume risk, and the higher the risk the higher the required payment
- Car insurance is an example of paying for someone else to shoulder a risk you don't want to take. Both parties to the transaction benefit
- Drivers are sure of compensation in the event of an accident
- The insurance companies make profit by pooling the insurance premiums and investing them
- Now we can understand the valuation of a broad set of financial instruments
- E.g., lenders charge higher rates if there is a chance the borrower will not repay.

3. Information is the basis for decisions

- We collect information before making decisions
- The more important the decision the more information we collect
- The collection and processing of information is the basis of foundation of the financial system.
- Some transactions are arranged so that information is NOT needed
- Stock exchanges are organized to eliminate the need for costly information gathering and thus facilitate the exchange of securities
- One way or another, information is the key to the financial system

4. Markets set prices and allocate resources

- Markets are the core of the economic system; the place, physical or virtual,
- Where buyers and sellers meet
- Where firms go to issue stocks and bonds,
- Where individuals go to purchase assets
- Financial markets are essential to the economy,

- Channeling its resources
- Minimizing the cost of gathering information
- Making transactions
- Well-developed financial markets are a necessary precondition for healthy economic growth
- The role of setting prices and allocation of resources makes the markets vital sources of information
- Markets provide the basis for the allocation of capital by attaching prices to different stocks or bonds
- Financial markets require rules to operate properly and authorities to police them
- The role of the govt. is to ensure investor protection
- Investor will only participate if they perceive the markets are fair

5. Stability improves welfare

- To reduce risk, the volatility must be reduced
- Govt. policymakers play pivotal role in reducing some risks
- A stable economy reduces risk and improves everyone's welfare.
- By stabilizing the economy as whole monetary policymakers eliminate risks that individuals can't and so improve everyone's welfare in the process.
- Stabilizing the economy is the primary function of central banks
- A stable economy grows faster than an unstable one

Financial System Promotes Economic Efficiency

- The Financial System makes it Easier to Trade
- Facilitate Payments - bank checking accounts
- Channel Funds from Savers to Borrowers
- Enable Risk Sharing - Classic examples are insurance and forward markets

1. Facilitate Payments

- Cash transactions (Trade “value for value”). Could hold a lot of cash on hand to pay for things
- Financial intermediaries provide checking accounts, credit cards, debit cards, ATMs
- Make transactions easier.

2. Channel Funds from Savers to Borrowers

- Lending is a form of trade (Trade “value for a promise”)
- Give up purchasing power today in exchange for purchasing power in the future.
- Savers: have more funds than they currently need; would like to earn capital income
- Borrowers: need more funds than they currently have; willing and able to repay with interest in the future.
- Why is this important?

A) Allows those without funds to exploit profitable investment opportunities.

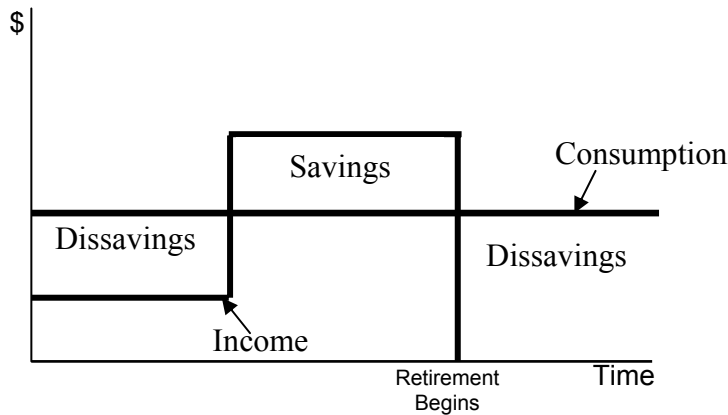
- Commercial loans to growing businesses;
- Venture capital;
- Student loans (investment in human capital);
- Investment in physical capital and new products/processes to promote economic growth

B) Financial System allows the timing of income and expenditures to be decoupled.

- Household earning potential starts low, grows rapidly until the mid 50s, and then declines with age.

- Financial system allows households to borrow when young to prop up consumption (house loans, car loans), repay and then accumulate wealth during middle age, then live off wealth during retirement.

Figure: Channel Funds from Savers to Borrowers



3. Enable Risk Sharing

- The world is an uncertain place. The financial system allows trade in risk. (Trade “value for a promise”)
- Two principal forms of trade in risk are insurance and forward contracts.
- Suppose everyone has a 1/1000 chance of dying by age 40 and one would need \$1 million to replace lost income to provide for their family.
- What are your options to address this risk?

Summary

- Five Core Principles of Money and Banking
- Time has Value
- Risk Requires Compensation
- Information is the basis for decisions
- Markets set prices and allocate resources
- Stability improves welfare
- Financial System Promotes Economic Efficiency
- Facilitate Payments
- Channel Funds from Savers to Borrowers
- Enable Risk Sharing