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You've Got to Speculate to Accumulate: Financial Markets and Portfolio Investments

Key Stage 5 Business

Resource 1

2019

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Resource One Overview

Topic	Introduction to Financial Markets
A-Level Modules	Market mechanism. Market failure.
Objectives	After completing this resource you should be able to understand: ✓ How financial markets enable individuals to make intertemporal exchanges ✓ What are mutually beneficial transactions ✓ What is risk and how can it affect decision-making ✓ Economic function of financial markets
Instructions	1. Read the data source 2. Complete the activities 3. Explore the further reading
Context	A financial market brings buyers and sellers together to trade in financial assets such as stocks, bonds, commodities, derivatives and currencies. The purpose of a financial market is to set prices for global trade, raise capital, and transfer liquidity and risk. Although there are many components to a financial market, two of the most commonly used are money markets and capital markets.

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Section A

Intertemporal Exchange

An intertemporal exchange is one in which the two sides of the exchange occur at different times.

Example: Person A will give something of value to Person B at time X in exchange for a commitment by Person B to give something of value to Person A at a later time. In some cases, Person B may promise to deliver things of value to Person A at several future times.

An essential property of an intertemporal exchange is the ***risk*** that Person B will be unable to make the promised delivery, or will refuse to do so. Another form of risk arises if what Person B promises to deliver depends on an outcome (such as the size of a crop) that will not be known until some future time.

Mutually beneficial intertemporal exchanges

Financial markets promote three kinds of intertemporal exchanges:

- Mutually beneficial exchanges between current and future consumption that do not involve net capital accumulation for the economy
- Mutually beneficial exchanges between current and future consumption that do involve net capital accumulation for the economy
- Mutually beneficial exchanges of claims to uncertain future outcomes

Now let's consider examples for each of them.

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Exchanges that do not involve capital accumulation

Individuals may exchange claims to current and future consumption without increasing the stock of capital goods in the economy.

- Mr. Black will decrease the rate of his consumption next year by as much as $125 in exchange for increasing his rate of consumption this year by $100.
- Mr. Green will decrease his current rate of consumption by $100 in exchange for an increase in his rate of consumption next year by at least $115.
- That is, Mr. Black is willing to borrow at rates of interest up to 25%, and Mr. Green is willing to lend at rates of interest no less than 15%.
- Obviously, the two men can construct a mutually beneficial exchange.

Two

Exchanges that do involve capital accumulation

Saving and investment in capital goods

- We say that Mr. Green saves if he spends less than his current income.
- If Mr. Green's savings enables the economy to accumulate capital goods, then Mr. Green can be repaid out of the net increase in future production that the expanded stock of capital goods will make possible.

Three

Exchanges of claims to uncertain future outcomes

- Ms. Tall and Ms. Short operate identical farms.
- Each year the output of each farm is either 800 tons or 1,200 tons.
- Each of the two states occurs with a probability equal to 50% - so average annual product of each farm is 1,000 tons.

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- The two women differ in their willingness to tolerate uncertainty:
  - Ms. Tall is risk averse. She prefers to have a guaranteed annual product of 900 tons, rather than tolerating unpredictable fluctuations between 800 and 1,200 tons.
  - Ms. Short is risk preferring. She will accept an increase in the range over which her product fluctuates, if she can gain a sufficiently large increase in the average level of her product.
- Ms. Tall and Ms. Short can construct a mutually beneficial exchange (thanks to the difference in their attitudes towards uncertainty).
- Ms. Tall and Ms. Short combine their farms into a single firm.
- The risk-averse Ms. Tall will hold a contractual claim: she will receive 900 tons of corn each year regardless of the state of nature.
- Ms. Short will absorb the vagaries of nature by holding a residual claim: each year she will receive whatever is left over from the aggregate output after Ms. Tall is paid her contractual 900 tons.

Section B

Economic function of a financial market

Financial markets facilitate this kind of exchanges by enabling firms to offer different kinds of securities.

The contractual claim that Ms. Tall holds is similar to a bond and the residual claim that Ms. Short holds is similar to a common stock.

For any two persons to conduct mutually beneficial exchanges, they must first find each other (meet), then they must agree on the terms of the exchange. An essential function of any system of markets, including financial markets, is to reduce the costs of meeting these conditions.

Resource One Activities

Activities

1. Imagine a barter economy, where there is no money and people only can exchange products. Person A work as a farmer and Person B owns a bakery. They agree that each Sunday they make an exchange: person A gives milk to person B in exchange for some bread. Can this action be called intertemporal exchange? Explain your answer.
2. Explain the difference between risk-averse and preferring individuals.
3. Ms. White and Ms. Black own farms next to each other. When the weather is good, each farm produces 2,000 tons of apples per year. When the weather is bad, each farm produces 1,000 tons per year. Ms. White is risk-averse. Ms. Black is willing to accept additional risk in exchange for a sufficient increase in her average rate of return.
    a) If good weather and bad weather occur with equal probability, and if Ms. White will accept a guaranteed return of 1,000 apples per year, can the two women effect a mutually beneficial exchange?
    b) What type of claim would each woman hold?
4. Ms. White and Ms. Black own farms next to each other. When the weather is good, each farm produces 2,000 tons of apples per year. When the weather is bad, each farm produces 1,000 tons per year. Ms. White is risk-averse. Ms. Black is willing to accept additional risk in exchange for a sufficient increase in her average rate of return.

Resource One
Further Reading

Explore

Book: “Introduction to Economics of Financial Markets” by James Bradfield:

Chapter 1: The Economics of Financial Markets

Chapter 2: Financial Markets and Economic Efficiency

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www.access-ed.ngo

@_AccessEd

hello@access-ed.ngo

100 Black Prince Road
London, SE1 7SJ

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