

# THE FINANCIAL ENVIRONMENT: MARKETS, INSTITUTIONS AND INTEREST RATES

1. Capital Formation Process
2. Financial Institutions & Financial Markets
3. Capital Markets
4. Market Efficiency
5. Interest Rate Concepts

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# Types Of Markets

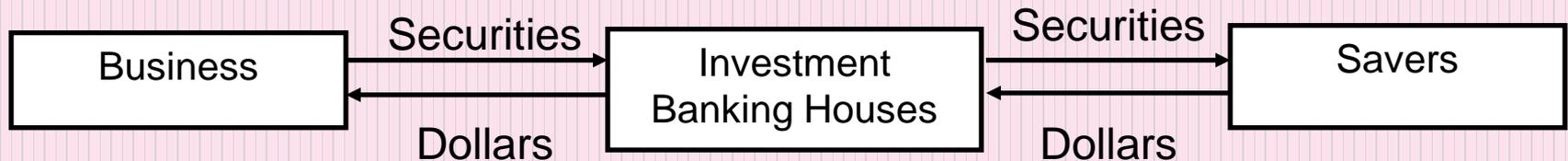
- Physical asset vs financial asset markets
- Spot vs future markets
- Money vs capital markets
- Primary vs secondary markets
- Private vs public markets

# The Capital Formation Process

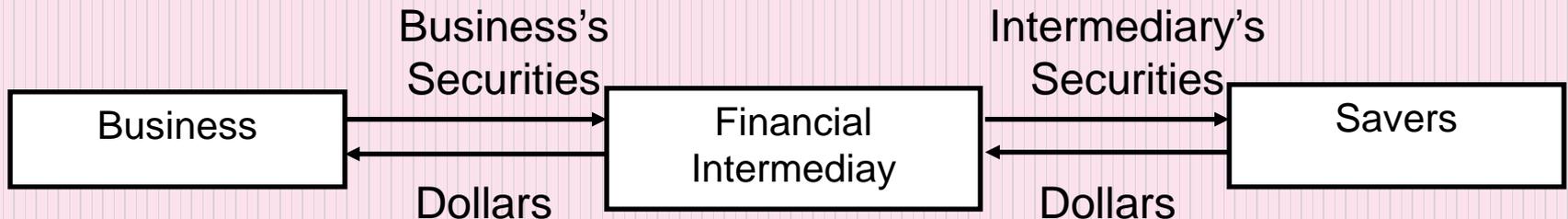
## 1. Direct transfers



## 2. Indirect transfers through investment bankers



## 3. Indirect transfers through financial intermediary



# Money Market & Capital Market

- Types of financial instrument:
  1. Indonesia Treasury Bills (“SBI”)
  2. Commercial paper
  3. Government securities (“*SUN*”)
  4. Certificate of deposits, etc
- Types of financial instrument:
  1. Stock
  2. Bond
  3. Derivatives (option, future, forward)

# Financial Institutions

- Types of financial institutions:
  1. Bank (commercial bank, rural bank, sharia bank)
  2. Non bank (insurance, pension funds, financing company, microfinance company, Indonesian Export Financing Agency, etc)

# Indonesia Financial Services Authority (OJK)

- Objectives:

The Financial Services Authority (OJK) is established in a bid to ensure that the overall activities within the financial services sector are:

- Implemented in an organized, fair, transparent and accountable manner;
- Able to realize the financial system that grows in a sustainable and stable manner; and
- Capable of protecting the interests of consumers and the society.

# Indonesia Financial Services Authority (OJK)

- **Function:**

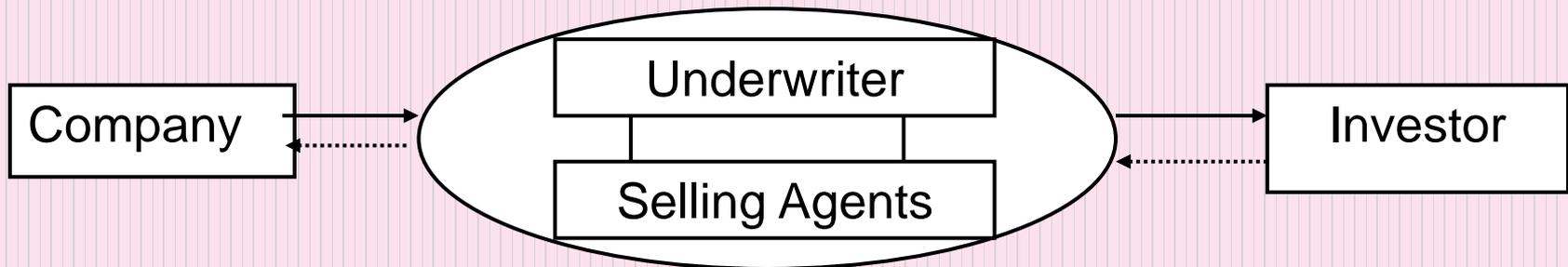
The main function of OJK is to promote and organize a system of regulations and supervisions that is integrated into the overall activities in the financial services sector.

- **Duties:**

OJK performs its regulatory and supervisory duties over financial services activities in banking, capital markets, and non-bank financial industries sectors.

# Security Markets

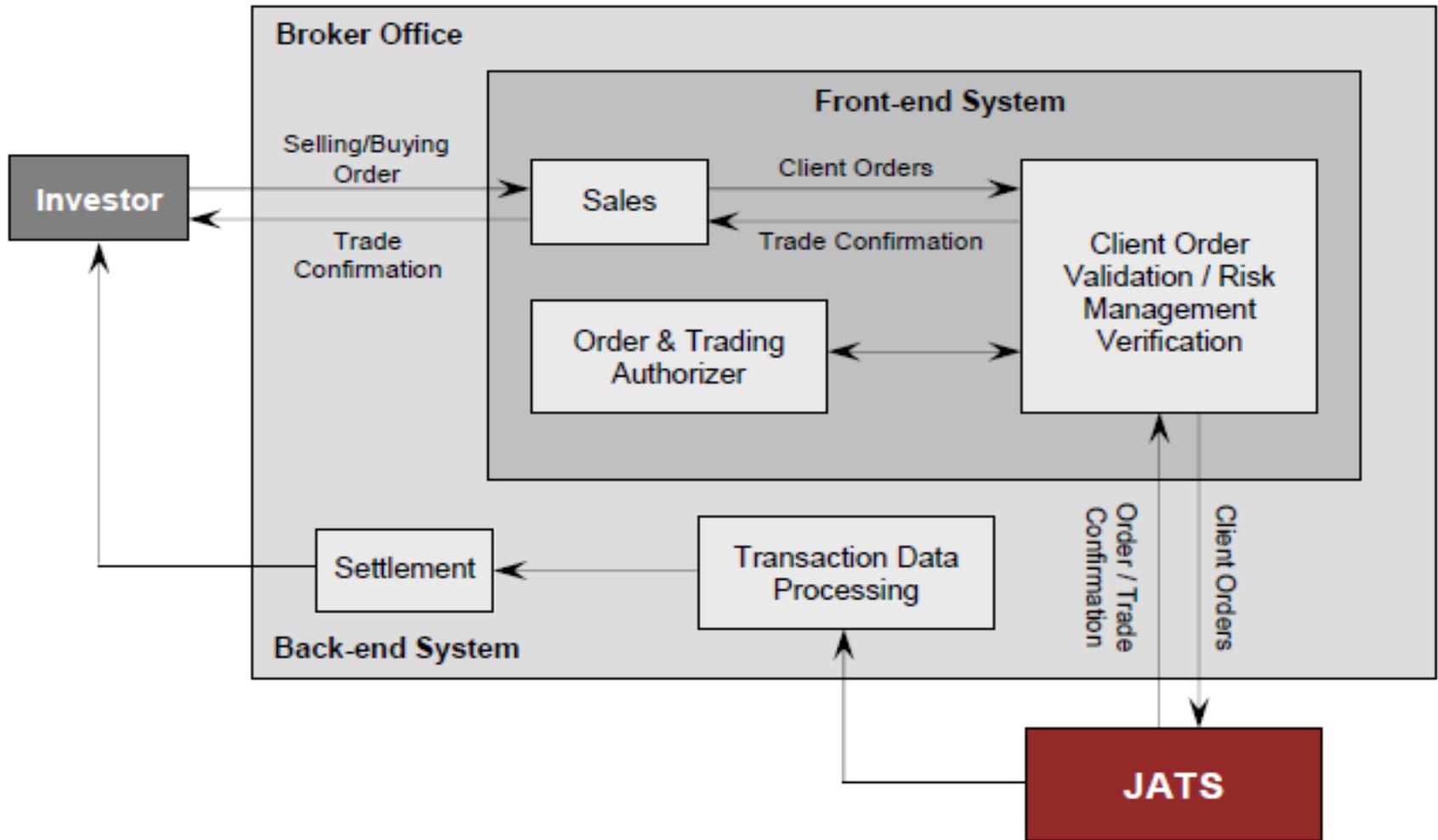
1. Primary market (*Initial Public Offering*): a market in which a firm offers securities for the first time to public



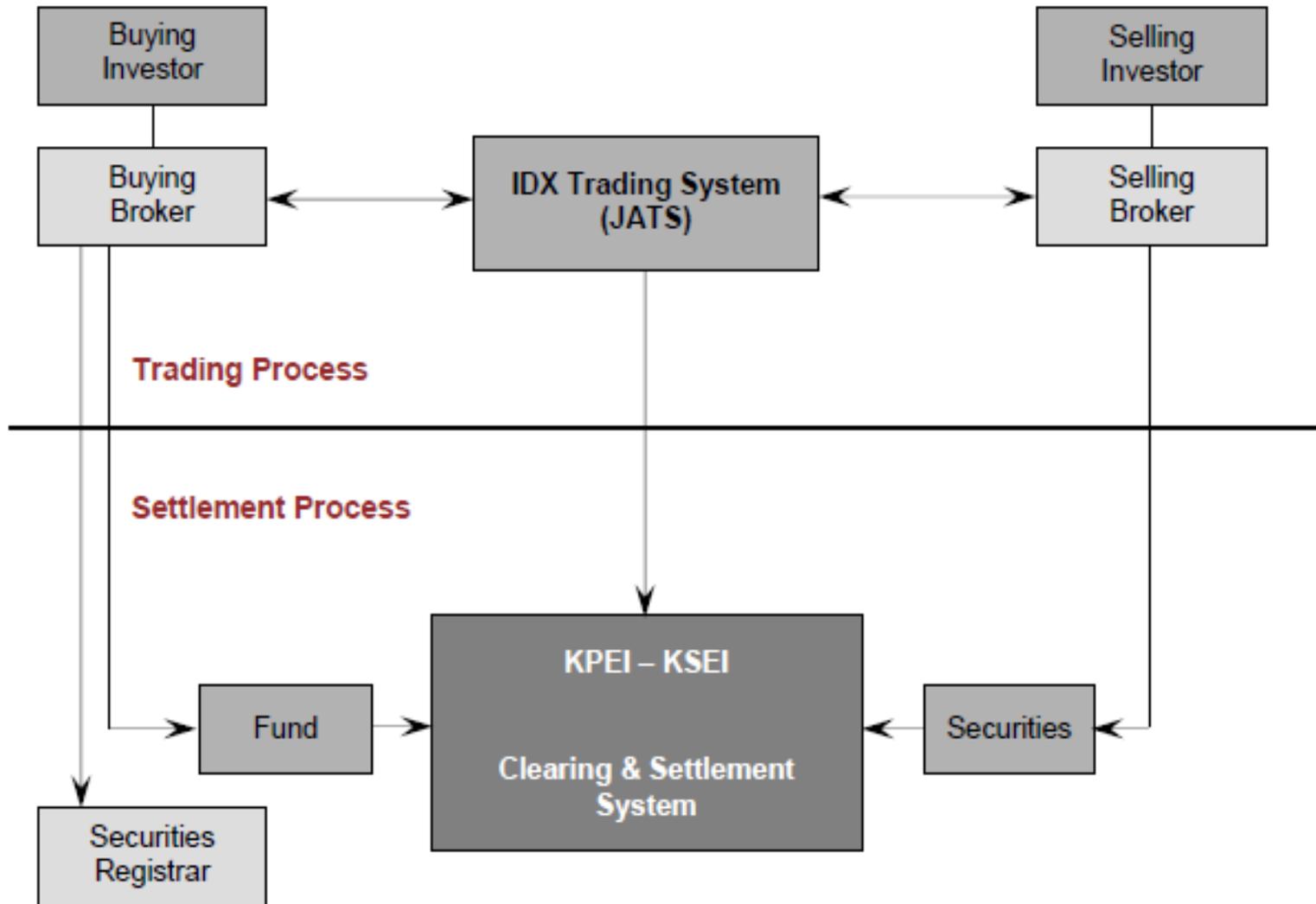
2. Secondary market: a market in which securities are traded among investors



# Trading Process



# IDX Process



# Efficient Market Hypothesis

- ☺ Efficient markets hypothesis (EMH) states that the price of an asset reflects all relevant information that is available
- ☺ A direct implication of an efficient market is that no group of investors should be able to consistently beat the market using a common investment strategy
- ☺ Conditions for an efficient market:
  - Large number of rational, profit-maximizing investors that actively participate in the market
  - Individuals cannot affect market prices (price takers)
  - Information is costless, widely available, generated in a random fashion
  - Investors react quickly and fully to new information

# Classification of Market Efficiency

- *Weak form efficiency*

The current price reflects the information contained in all past prices, suggesting that charts and technical analyses that use past prices alone would not be useful in finding under valued stocks.

- *Semi-strong form efficiency*

The current price reflects the information contained not only in past prices but all public information (including financial statements and news reports) and no approach that was predicated on using and massaging this information would be useful in finding under valued stocks.

- *Strong form efficiency,*

The current price reflects all information, public as well as private, and no investors will be able to consistently find under valued stocks

# The Determinants of Market Interest Rates

- In general, the quoted (or nominal) interest rate ( $k$ ), is composed of a real risk-free rate of interest,  $k^*$ , plus several premiums that reflect inflation, the riskiness of the security and the security's marketability (or liquidity). This relationship can be expressed as follows:
- Quoted interest rate =  $k = k^* + IP + DRP + LP + MRP$

# The Determinants of Market Interest Rates

- Inflation premium (IP):  
A premium equal to expected inflation that investors add to the real risk-free rate of return.
- Default risk premium (DRP):  
The difference between the interest rate on government treasury bond and a corporate bond of equal maturity and marketability
- Liquidity premium (LP):  
A premium added to the equilibrium interest rate on a security if that security cannot be converted to cash in a short notice and at close to fair market value
- Maturity risk premium (MRP):  
A premium that reflects interest rate risk → the risk of capital losses to which investors are exposed because of changing interest rates.

# The Term Structure of Interest Rates

- Term structure of interest rates:  
The relationship between bond yields and maturities
- Yield curve:  
A graph showing the relationship between bond yields and maturities
- Yield curve shapes:
  1. Normal yield curve  
An upward-sloping yield curve → normally short-term rates are lower than long-term rates
  2. Inverted (abnormal) yield curve  
A downward-sloping yield curve
  3. Humped yield curve  
Interest rates on medium-term maturities are higher than rates on both short and long-term maturities.

# The Pure Expectations Hypothesis (PEH)

- The PEH contends that the shape of the yield curve depends on investor's expectations about future interest rates.
- If interest rates are expected to increase, L-T rates will be higher than S-T rates, and vice-versa.
- Investors are indifferent with respect to maturity in the sense that they do not view long term bonds as being riskier than short-term bonds → assume that the maturity risk premium is zero.
- Long-term rates are an average of current and future short-term rates.
- If PEH is correct, you can use the yield curve to “back out” expected future interest rates.

# Notes About PEH

- Some would argue that the  $MRP \neq 0$ , and hence the PEH is incorrect.
- Most evidence supports the general view that lenders prefer S-T securities, and view L-T securities as riskier.
- Thus, investors demand a MRP to get them to hold L-T securities (i.e.,  $MRP > 0$ )

# Risks associated with investing overseas

- Exchange rate risk – If an investment is denominated in different currency, the investment's value will depend on what happens to exchange rates.
- Country risk – Arises from investing or doing business in a particular country and depends on the country's economic, political, and social environment.