

NPTEL

Course Name: Security Analysis and Portfolio Management

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Session 7: Efficient Market: Concepts and Forms of Market efficiency

1. What is Market Efficiency and Conditions of an Efficient Market?

Ans.

Issues in Efficient Market

- Markets respond to new information
- Possible to distinction for a decision between a profitable and unprofitable investment given current information
- Types of Efficiency: Operational efficiency, Informational efficiency (efficient market hypothesis)

Conditions of an Efficient Market:

- A large number of competing profit-maximizing participants analyze and value securities, each independently of the others
- Active participation in the market
- Individuals can not affect the market prices
- Information must be free
- Free entry and exit by market players must be uninhibited

2. Explain Efficient Market Hypothesis?

Ans.

- Efficient Market: The market in which the price for any security effectively represents the expected net present value of all future profits. Buying or selling the stock should, on average, return you only a fair measure of return for the associated risk.
- Types of Efficiency: Operational efficiency, Informational efficiency (efficient market hypothesis)

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Efficient Market Hypothesis

- The current prices of securities reflect all information about the security (Random Walk Hypothesis)

- New information regarding securities comes to the market in a random fashion
- Profit-maximizing investors adjust security prices rapidly to reflect the effect of new information. The expected returns implicit in the current price of a security should reflect its risk (Fair Game Model)

3. What are the different forms of Market Efficiency?

Ans.

Efficient market hypothesis: To what extent do securities markets quickly and fully reflect different available information?

Three levels of Market Efficiency

- I. Weak form - prices reflect all security-market information
 - Current prices reflect all security-market information, including the historical sequence of prices, rates of return, trading volume data, and other market-generated information
 - This implies that past rates of return and other market data should have no relationship with future rates of return
 - Technical analysis, which relies on the past history of prices, is of little or no value in assessing future changes in price

- II. Semi strong form - prices reflect all public information
 - Current security prices reflect all public information such as earnings, stock and cash dividends, splits, mergers and takeovers, interest rate changes etc. It also says that prices adjust to such information quickly and accurately so abnormal profits on a consistent basis can not be earned.
 - This implies that decisions made on new information after it is public should not lead to above-average risk-adjusted profits from those transactions

- III. Strong form - prices reflect all public and private information
 - Stock prices fully reflect all information from public and private sources
 - This implies that no group of investors should be able to consistently derive above-average risk-adjusted rates of return
 - This assumes perfect markets in which all information is cost-free and available to everyone at the same time

4. What is the Implications of Efficient Market Hypothesis for investment decisions?

Ans.

Implications of Efficient Market Hypothesis

For investors:

- Technical analysis is no valuable if weak form holds
- Fundamental analysis of intrinsic value will be of no use if semi strong form holds

For professional money managers

- Less time spent on individual securities: Passive investing favored, Otherwise must believe in superior insight

- Tasks if markets informationally efficient: Maintain correct diversification, Achieve and maintain desired portfolio risk, Manage tax burden, Control transaction costs