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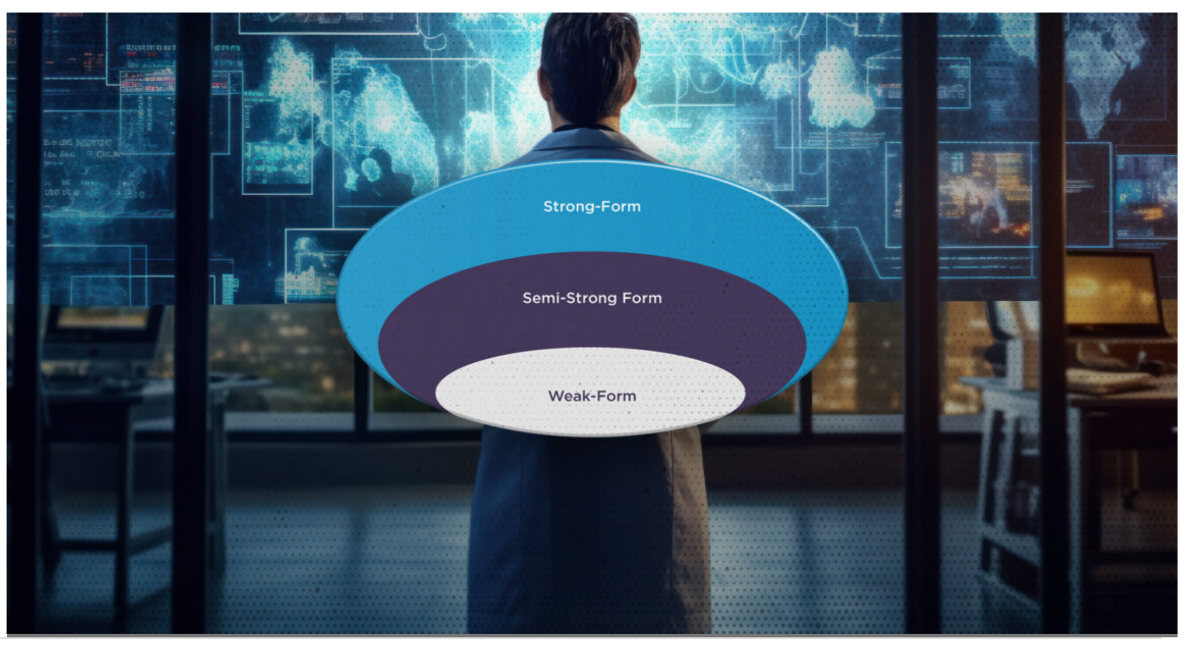
Discussing efficient market hypothesis theory and arbitrage as an anomaly



By Komal Motwani

The efficient market hypothesis theory states that the market prices securities fairly and efficiently, and investors are unable to outperform the market consistently. Moreover, EMH theory proposes that stock prices fully reflect all the historical information (and is available to all market participants), making it difficult to generate excess return. Thus, analyzing a security using fundamental and technical tools may not provide any advantage. For example, a company's news on higher earnings growth will be available to all investors, resulting in higher stock prices as investors flock to purchase the company's shares.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Also called the "Random Walk Theory," EMH theory suggests that all the available information is already "priced in" and timing the market is inherently difficult. If new information affecting a security is released, the price of the security will increase if the information is positive and will decrease if the information is negative. Because new information is, by its very nature, unknown, it is random or unpredictable. Thus, security prices should follow a random walk, or an unpredictable pattern.

EMH theory is further categorized into three forms: weak, semi-strong and strong. Each of these forms differs as to the level of information that is thought to be efficiently incorporated into a security's price.

The weak form means that all past information is already reflected in the stock price. Fundamental analysis may help the investor to generate excess returns for a short period of time. However, over the long term, fundamental analysis will not be able to provide a consistent advantage over markets.

The semi-strong form implies that all publicly available information is reflected in the current price and no fundamental or technical analysis will be able to provide an advantage.

Finally, the strong form suggests that any private or public information, even insider information, is priced into stocks; therefore, investors cannot gain an advantage over markets.

Now, let's look at an anomaly that provides a counter argument to the validity of EMH theory. Anomalies are occurrences in the stock market that are not supported by the concept of an efficient market. One such irregularity (markets not behaving with perfect efficiency) is when arbitrage trading provides superior results. Arbitrage opportunities arise when an asset is available in different markets at varying prices.

In an arbitrage trading, an investor can profit from simultaneously buying and selling the same asset at different prices in different markets. These price inefficiencies are usually acted upon quickly, as they disappear promptly as they are discovered.

There are various types of strategies. For example, let's say company ABC is listed on two exchanges - on Indian stock exchange BSE and on the New York Stock Exchange. At BSE, the stock is trading at Rs. 325 and the stock is trading on the NYSE at $4 (or Rs. 300 considering the exchange rate of $1 = Rs. 75). The trader will short (sell) at Rs. 325 shares on BSE and buy NYSE at $4. Thus, the trader will benefit from the spread of Rs. 25. However, one must be cognizant of the trading cost involved in such strategies.

If you look at arbitrage trading from another angle, then you could argue that it helps to resolve market inefficiency. Just taking the above example, the ABC trading on NYSE will increase the buy bid price, and price of ABC trading on BSE will lower as stock was sold off, narrowing the price difference and making the market price less inefficient.

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