

When the prices of investment securities, like stocks, already reflect all available information about them, the market is said to be efficient (Thune, 2021). No matter how many analyses are done, no one can outperform the market if it is genuinely efficient. Although EMH views individual investors as irrational, it believes that the market is always correct (Thune, 2021).

There are three levels of market efficiency - weak form, semi-strong form, and strong form. Weak form efficiency means that historical price and volume data cannot be used to predict future stock movements. In the semi-strong form, stock prices quickly reflect newly released public information. This prevents investors from profiting by trading based on that information. Under the strong form efficiency, stock prices reflect all public and private information. Technical analysis, fundamental analysis, and insider information offer no advantage in predicting returns.

Fama's view was that with efficient markets, no investor can consistently outperform the market by predicting returns since everyone has access to the same information. Information systems refer to the databases companies utilize for operations and planning. Such systems have enabled businesses to easily manage workflows. Markets rely on quality information to determine supply and demand dynamics for securities. Information systems can promote market efficiency by removing arbitrage opportunities, optimizing asset allocation, and eliminating unexploited profit situations.

Information systems play a vital role in enabling financial markets to operate efficiently. They facilitate the rapid distribution of relevant data to investors and analysts, promoting information symmetry. Advanced systems also expand the depth of available data, providing more signals to incorporate into price discovery. For example, real-time trade data, earnings reports, and news analysis from information systems all get integrated into stock valuations quickly under an efficient framework. This means current prices accurately reflect business fundamentals, technical indicators, and sentiment variables. Investors have confidence in the integrity of the pricing mechanism.

References:

Wright, R.E. & Quadrini, V. (2009). Money and Banking. Saylor Foundation.
<https://www.saylor.org/site/textbooks/Money%20and%20Banking.pdf>

Thune, Kent (2021). Efficient Market Hypothesis (EMH). The Balance.

<https://www.thebalance.com/efficient-markets-hypothesis-emh-2466619>