

Finance 34600 – Investment Theory

Outline for Lecture 5 The Efficient Markets Hypothesis and Behavioral Finance

Lecture 5 is a discussion of the Efficient Markets Hypothesis (EMH). We will develop the concept of efficient markets and define the three forms of the Efficient Markets Hypothesis (Weak form, Semi-strong form, and Strong form efficiency). We will also discuss the evidence for and against EMH, including event studies, market anomalies, and predictability in stock returns.

Suggested Problems:

Ch. 8: 1, 2, 3, 5, 13, 14, 15, 17, 24, 26.

Concept checks 1 through 4 in Ch. 8 are also very useful for understanding the efficient markets hypothesis.

1. If markets are efficient, what should be the correlation coefficient between stock returns for two non-overlapping time periods?
2. Which of the following most appears to contradict the proposition that the stock market is weak form efficient? Explain.
 - (a) Over 25% of mutual funds outperform the market on average.
 - (b) Company insiders tend to earn abnormal trading profits.
 - (c) Every January, the stock market earns abnormal returns.
3. Suppose that, after conducting an analysis of past stock prices, you come up with the following observations. Which would appear to contradict the weak form of the efficient markets hypothesis? Explain.
 - (a) The average rate of return on stocks is significantly greater than zero.
 - (b) The correlation between the return during a given week and the return during the following week is zero.
 - (c) One could have made superior risk-adjusted returns by buying stock after a 10% rise in price and selling after a 10% fall.
 - (d) One could have made higher-than-average capital gains by holding stocks with low dividend yields.
5. Which of the following observations would provide evidence against the semi-strong form of the efficient markets hypothesis? Explain.
 - (a) Mutual fund managers do not make superior risk-adjusted returns, on average.
 - (b) You cannot make superior risk-adjusted profits by buying (or selling) stocks after the announcement of an unexpected increase in dividends.

- (c) Low P/E stocks tend to have positive abnormal returns.
 - (d) In any year, approximately 50% of pension funds outperform the market.
13. You are a portfolio manager meeting with a client. During the conversation that follows your formal review of her account, your client asks the following question:
- ”My grandson, who is studying investments, tells me that one of the best ways to make money in the stock market is to buy the stocks of small capitalization stocks in late December and to sell the stocks one month later. What is he talking about?”*
- (a) Identify the apparent market anomalies that would justify the proposed strategy.
 - (b) Explain why you believe such a strategy might or might not work in the future.
14. A successful firm like Microsoft has consistently generated large profits for years. Is this a violation of the efficient markets hypothesis?
15. Suppose you find that, on average, prices of stocks show consistently positive abnormal returns prior to large dividend increases. Is this a violation of the efficient markets hypothesis?
17. Which of the following phenomena would be either consistent with or a violation of the efficient markets hypothesis? Explain.
- (a) Nearly half of all professionally managed mutual funds are able to outperform the S&P 500 in a typical year.
 - (b) Money managers that outperform the market (on a risk-adjusted basis) in one year are likely to outperform in the following year.
 - (c) Stock prices tend to be predictably more volatile in January than in other months.
 - (d) Stock prices of companies that announce increased earnings in January tend to outperform the market in February.
 - (e) Stocks that perform well in one week perform poorly in the following week.
24. You know that firm XYZ is very poorly run. On a scale of 1 (worst) to 10 (best), you would give it a score of 3. The market consensus evaluation is that the management score is only 2. Should you buy or sell the stock?
26. Good News, Inc. just announced an increase in its annual earnings, yet its stock price fell. Is there a rational explanation for this phenomenon?