

1. Suppose you observed a high-level executive of a company make superior returns on their investments in their company's stock. Which of the following statement is correct?

a. This would be a violation of the weak-form of market efficiency.

No, the statement is not correct.

b. This would be a violation of the semi-strong-form market efficiency.

No, the statement is not correct.

c. This would be a violation of the strong-form market efficiency.

Yes, that is correct. In the case of the strong-form market efficiency, when we are talking about "available information", we mean the publicly available information (past prices, all the fundamental data on a firm's product line, financial data and accounting data) and also information only available to insiders is reflected into stock prices. Therefore, if a high-level executive of a company make superior returns on their investments in their company's stock, this means that not all inside information is reflected into prices.

d. This would not be a violation of market efficiency.

No, the statement is not correct.

Answer:

The correct answer is c.

2. Assume that a company announces an unexpectedly large cash dividend to its shareholders. In an efficient market without information leakage, you would expect:

a. An abnormal price change at the announcement

Yes, that is correct. The prices reflect the new information, like an unexpectedly large cash dividend, immediately.

b. An abnormal price change before the announcement

No, this is not correct. In an efficient market without information leakage, we would not expect any abnormal change in price before the announcement.

c. An abnormal price change after the announcement

No, this is not correct. The prices reflect the new information, like an unexpectedly large cash dividend, immediately. After the announcement the price practically stays constant.

d. No abnormal price change before or after the announcement

Yes, this is correct. In an efficient market without information leakage, we would not expect any abnormal change in price before the announcement. The prices reflect the new information immediately, at the announcement. After the announcement the price practically stays constant.

Answer:

The correct answers are a and d.

3. If you believe in the \_\_\_\_\_ form of the efficient markets hypothesis, you believe that stock prices only reflect market trading information such as the history of past stock prices, trading volume or short interest.

a. Strong

No, this is not the correct answer. In the case of the strong form market efficiency, when we are talking about “available information”, we mean the publicly available information (past prices, all the fundamental data on a firm’s product line, financial data and accounting data) and also information only available to insiders.

b. Semi-strong

No, this is not the correct answer. In the case of the semi-strong form market efficiency, when we are talking about “available information”, we mean the publicly available information (past prices, all the fundamental data on a firm’s product line, financial data and accounting data).

c. Weak

This is the correct answer since the statement is accurate. In the case of the weak form market efficiency, when we are talking about “available information”, we mean that prices reflect all marketing data (past prices, trading volume, short interests).

d. None of the above

No, this is not the correct answer.

Answer:

The correct answer is c.

4. Which of the following is a common strategy for passive management?

a. Investing only in summer months

No, this is not the correct answer.

b. Investing in an investment club

No, this is not the correct answer.

c. Investing in a small firm fund

No, this is not the correct answer.

d. Investing in an index fund

Yes, this is the correct answer. A strategy for passive investment would be not to look for mispriced securities, but rely on the efficient market hypothesis. So it makes sense to invest in an index fund that replicates the performance of a broad base market index.

Answer:

The correct answer is d.

5. Which of the following would provide evidence against the semi-strong form of market efficiency?

a. Low P/E stocks on average have positive abnormal returns

Yes, this is the correct answer. In the case of semi-strong form of market efficiency, stock prices should reflect all publicly available information. In the case of low P/E stocks that on average have positive abnormal returns, the stock prices do not reflect that information adequately.

b. Trend analysis does not help determining future stock prices

No, this is not the correct answer. In the case of semi-strong form of market efficiency, trend analysis is practically useless in determining future stock prices.

c. It is possible to outperform the market by following a contrarian strategy illustrated by the reversal effect.

No, this is not the correct answer.

d. Past volume does not help predict future returns.

No, this is not the correct answer. In the case of semi-strong form of market efficiency, past volume does not help predict future returns.

Answer:

The correct answer is a.

6. Which of the following statements is incorrect?

a. Cumulative abnormal returns (CAR) are measures of security returns due to firm-specific events.

No, this is not the correct answer. Cumulative abnormal returns are measures of security returns due to firm-specific events.

b. Cumulative abnormal returns (CAR) are constructed by adding abnormal returns prior to the firm-specific event.

Yes, this is the correct answer. CARs are constructed by adding abnormal returns after the date of an event. The event date is considered to be date 0.

c. Cumulative abnormal returns (CAR) are used in event studies.

No, this is not the correct answer. CAR are indeed used in event studies.

d. Cumulative abnormal returns (CAR) are constructed by adding abnormal returns after the firm-specific event.

No, this is not the correct answer. CAR are constructed by adding abnormal returns around the date of an event that also includes the time after the firm-specific event.

Answer:

The correct answer is b.

7. Jones Corporation has a beta of 1.3. The annualized market return yesterday was 11%, and the risk-free currently is 3%. You observe that Jones Corporation had an annualized return of 21%. If markets are efficient, based on Jones' stock return, you guess that

a. Bad news about Jones was announced yesterday.

No, it is not correct. Recall that if CAPM holds, the expected return-beta relationship is the following:

$$E(r_i) = r_f + \beta_i \cdot E(r_m - r_f)$$

where,

$E(r_i)$  is the expected return of asset i

$E(r_m)$  is the expected return of the market portfolio

$r_f$  is the risk-free rate

$\beta_i$  is the beta of asset i

Compare the observed return with the one based on the CAPM calculation.

b. Good news about Jones was announced yesterday.

Yes, this is the correct answer. Recall that if CAPM holds, the expected return-beta relationship is the following:

$$E(r_i) = r_f + \beta_i \cdot E(r_m - r_f)$$

where,

$E(r_i)$  is the expected return of asset i

$E(r_m)$  is the expected return of the market portfolio

$r_f$  is the risk-free rate

$\beta_i$  is the beta of asset i

Hence,  $E(r) = 3\% + 1.3 (11\% - 3\%) = 13.4\% < 21\%$

Since the observed return is higher than the one calculated based on the CAPM calculation, we identify that there is an abnormal positive return that can be related with good news about Jones the previous day.

c. No news about Jones was announced yesterday.

No, it is not correct. Recall that if CAPM holds, the expected return-beta relationship is the following:

$$E(r_i) = r_f + \beta_i \cdot E(r_m - r_f)$$

where,

$E(r_i)$  is the expected return of asset i

$E(r_m)$  is the expected return of the market portfolio

$r_f$  is the risk-free rate

$\beta_i$  is the beta of asset i

Compare the observed return with the one based on the CAPM calculation.

d. There was good news about the market as a whole yesterday.

No, it is not correct. Recall that if CAPM holds, the expected return-beta relationship is the following:

$$E(r_i) = r_f + \beta_i \cdot E(r_m - r_f)$$

where,

$E(r_i)$  is the expected return of asset i

$E(r_m)$  is the expected return of the market portfolio

$r_f$  is the risk-free rate

$\beta_i$  is the beta of asset i

Compare the observed return with the one based on the CAPM calculation.

Answer:

The correct answer is b.

8. Which of these statements is incorrect?

a. The momentum effect refers to the fact that good or bad performance of individual stocks continues over time.

This is not the correct answer. The statement is correct.

b. The reversal effect refers to the fact that stocks that have performed the best in recent past seem to underperform the rest of the market in subsequent periods.

This is not the correct answer. The statement is correct.

- c. Small-firm effect refers to the fact that the average return of large-cap stock portfolios is consistently higher than small-firm portfolios.

Yes, this is the incorrect statement. Small-firm effect refers to the fact that small-firms (low market capitalization) have historically high returns relative to their systematic risk.

- d. Studies of short- to intermediate horizon returns have documented momentum, but longer horizon returns show reversals.

This is not the correct answer. The statement is correct.

Answer:

The correct answer is c.