

## *Tutorial Assignments for Topic 8*

1. In an efficient market, the price of a security will:
  - A. always rise immediately upon the release of new information with no further price adjustments related to that information.
  - B. react to new information over a two-day period after which time no further price adjustments related to that information will occur.
  - C. rise sharply when new information is first released and then decline to a new stable level by the following day.
  - D. react immediately to new information with no further price adjustments related to that information.
  - E. be slow to react for the first few hours after new information is released allowing time for that information to be reviewed and analyzed.
  
2. According to the efficient market hypothesis, financial markets fluctuate daily because they:
  - A. are inefficient.
  - B. slowly react to new information.
  - C. are continually reacting to new information.
  - D. offer tremendous arbitrage opportunities.
  - E. only reflect historical information.
  
3. According to theory, studying historical prices in order to identify mispriced stocks will not work in markets that are \_\_\_\_\_ efficient.
  - (I) weak form
  - (II) semi-strong form
  - (III) strong form
  - A. I only
  - B. II only
  - C. I and II only
  - D. II and III only
  - E. I, II, and III
  
4. Which of the following tend to reinforce the argument that the financial markets are efficient?
  - (I) Information spreads rapidly in today's world.
  - (II) There is tremendous competition in the financial markets.
  - (III) Market prices continually fluctuate.
  - (IV) Market prices react suddenly to unexpected news announcements.
  - A. I and III only
  - B. II and IV only
  - C. I, II, and III only
  - D. II, III, and IV only
  - E. I, II, III, and IV

5. Which of the following would be indicative of inefficient markets?
  - A. Overreaction and reversion
  - B. Delayed response
  - C. Immediate and accurate response
  - D. Both A and B.
  - E. Both A and C.
  
6. An investor discovers that predictions about weather patterns published two years ago and found in the Farmer's Almanac are amazingly accurate. In fact, these predictions still enable the investor to predict the health of the farm economy and therefore certain security prices. This finding is a violation of the:
  - A. moderate form of the efficient market hypothesis.
  - B. semistrong form of the efficient market hypothesis.
  - C. strong form of the efficient market hypothesis.
  - D. weak form of the efficient market hypothesis.
  - E. None of the above.
  
7. According to the semi-strong form of the EMH, investors who invest in a stock after a highly positive announcement concerning the stock can expect to earn a(n)
  - A. normal return because the stock will be fairly priced when purchased.
  - B. extraordinary return because the new information will not affect the price until later.
  - C. loss because things often are not what they seem.
  - D. zero return because the next price is expected to be the same as the last price.
  - E. excess return because the stock is a risky asset
  
8. You bought 100 shares of a leading diamond mining company with an expected return of 20 percent per year. The following day the company's president announced a major new discovery in Arkansas. The stock price immediately doubled. This scenario probably best illustrates that
  - A. weak form EMH is not valid
  - B. semi-strong form of EMH is not valid
  - C. market prices are random
  - D. strong form of EMH is not valid
  - E. you are lucky
  
9. The Food and Drug Administration (FDA) just announced yesterday that they would approve a new cancer-fighting drug from King. You observe that King had an abnormal return of 0% yesterday. This suggests that
  - A. the market is not efficient.
  - B. King stock will probably rise in value tomorrow.
  - C. King stock will probably fall in value tomorrow.
  - D. the approval was already anticipated by the market.
  - E. None of these is correct.
  
10. The most realistic APT model would likely include:
  - A. multiple factors.
  - B. only one factor.
  - C. a factor to measure inflation.
  - D. Both A and C.
  - E. Both B and C.

11. Which of the following is true about the impact on market price of a security when a company makes an announcement and the market has discounted the news?
- The price will change a great deal; even though the impact is primarily in the future, the future value is discounted to the present.
  - The price will change little, if at all, since the impact is primarily in the future.
  - The price will change little, if at all, since the market considers this information unimportant.
  - The price will change little, if at all, since the market considers this information untrue.
  - The price will change little, if at all, since the market has already included this information in the security's price.
12. A growth equity portfolio and a value portfolio might be characterized:
- each by their P/E relative to the index P/E; high P/E for growth and lower for value.
  - as earning a high rate of return for a growth security and a low rate of return for value security irrespective of risk.
  - low unsystematic risk and high systematic risk respectively.
  - moderate systematic risk and zero systematic risk respectively.
  - None of the above.
13. Both the APT and the CAPM imply a positive relationship between expected return and risk. The APT views risk:
- very similarly to the CAPM via the beta of the security.
  - in terms of individual inter-security correlation versus the beta of the CAPM.
  - via the industry wide or market-wide factors creating correlation between securities.
  - the standardized deviation of the covariance.
  - None of the above.
14. Suppose that we have identified three important systematic risk factors given by exports, inflation, and industrial production. In the beginning of the year, growth in these three factors is estimated at -1%, 2.5%, and 3.5% respectively. However, actual growth in these factors turn out to be 1%, -2%, and 2%. The factor betas are given by  $\beta_{ex} = 1.8$ ,  $\beta_I = 0.7$ , and  $\beta_{IP} = 1.0$ . If the expected return on the equity is 6%, and no unexpected news concerning the equity surfaces, calculate the equity's total return.
- 2.95%
  - 4.95%
  - 6.55%
  - 7.40%
  - 8.85%
- Note: According to APT:  $R_i = E(R_i) + \beta_{ex} \times \text{Exports} + \beta_I \times \text{Inflation} + \beta_{IP} \times \text{Industrial Production} + \epsilon$
15. The unexpected return on a security, U, is made up of:
- market risk and systematic risk.
  - systematic risk and idiosyncratic risk.
  - idiosyncratic risk and unsystematic risk.
  - expected return and market risk.
  - expected return and idiosyncratic risk.

16. Three factors likely to occur in the APT model are:
- A. unemployment, inflation, and current rates.
  - B. inflation, GNP, and interest rates.
  - C. current rates, inflation and change in housing prices.
  - D. unemployment, college tuition, and GNP.
  - E. This cannot be determined or even estimated.

17. 2015 Exam Paper Q2

You have collected returns on 4S Corp and the NYSE index for five years:

Year	4S Corp	NYSE
2011	10%	5%
2012	5%	15%
2013	-5%	8%
2014	20%	12%
2015	-5%	-5%

Estimate the slope (beta) of the SML of 4S Corp.