

**Essentials of Investments (BKM 5<sup>th</sup> Ed.)**  
**Answers to Selected Problems – Lecture 5**

**Chapter 8:**

2. Zero. If not, one could use returns from one period to predict returns in later periods and make abnormal profits.
3. c. “The January Effect” implies that one can predict January prices based on past January prices. This is a predictable pattern in returns which should not occur if weak-form EMH is valid.
4. c. This is a classic filter rule which should not be profitable in an efficient market.
7. c. The P/E ratio is public information and should not predict abnormal security returns.
8. No. This empirical tendency does not provide investors with a tool to earn abnormal returns - in other words, it does not suggest that investors are failing to use all available information. You could not use this information to choose undervalued stocks today. This phenomenon actually reflects the fact that stock splits usually occur because the firm has performed well in the past.
9. No. This empirical tendency does not provide investors a tool to earn abnormal returns -- in other words, it does not suggest that investors are failing to use all available information. You could not use this phenomenon to choose undervalued stocks today. The phenomenon instead reflects the fact that stock splits occur as a response to good performance (positive abnormal returns) which drives up the stock price above a desired "trading range" and leads managers to split the stock. After the fact, the stocks that happen to have performed the best will be split candidates, but this does not imply that you can identify the best performers early enough to earn abnormal returns.
14. Buy. The firm is in your view not as bad as everyone else believes it to be. Therefore, you view the firm as undervalued by the market. You are less pessimistic about the firm's prospects than the beliefs built into the stock price.
16. a) The grandson is referring to (i) the small-firm effect (which can also be described as the January effect) and (ii) the weekend anomaly.  
b) 1 - Building a portfolio of only small firms results in increased risk, as the portfolio is less diversified.  
2 - Because the anomaly has existed in the past is not a predictor that the anomaly will exist in the future.  
3 - After the results of these studies became publicly known, investors may bid up the prices of these securities to reflect the now-known opportunity.
17. a. Consistent. Half of managers should beat the market based on pure luck in any year.

- b. Inconsistent. This would be the basis of an "easy money" rule: simply invest with last year's best managers.
  - c. Consistent. Predictable *volatility* does not convey a means to earn abnormal returns.
  - d. Inconsistent. The abnormal performance ought to occur in January when earnings are announced.
  - e. Inconsistent. Reversals offer a means to earn easy money: just buy last week's losers.
21. If one could expect the effects to continue in the future, the firm might wish to add more small firms and more firms with low P/E ratios to their portfolio. However, in doing so, the firm must be certain that it is not taking on more risk and achieving less diversification than desired. That is, small firms are more risky than larger firms; also, there is some indication that low P/E ratio firms sell for lower prices because these firms are more risky. In addition, by investing heavily in small firms, a portfolio manager is investing heavily in similar type firms and thus decreasing diversification (and increasing risk).
22. The firm might not want to adopt this new strategy for the following reasons: (1) the diversification of the portfolio would likely decrease resulting in more risk in the portfolio - in other words, the risk-adjusted performance may not be higher, (2) investment constraints written into the statement of investment policy might make it necessary to obtain permission from the fund owners to implement such a strategy, (3) these effects may not continue in the future now that they are widely known.