

Solution

1. While growth stocks have historically delivered lower returns than value stocks, on a risk-adjusted basis, there have been periods in history where growth stocks have outperformed. In which of the following macroeconomic scenarios are growth stocks most likely to outperform value stocks?
 - a. Low interest rates and strong economic growth
 - b. Low interest rates and weak economic growth
 - c. High interest rates and strong economic growth
 - d. High interest rates and weak economic growth
 - e. Upward sloping yield curve and strong economic growth
 - f. **Flat/downward sloping yield curve and weak economic growth**

Explanation: High PE stocks seem to do better than low PE stocks when economic growth is weak (perhaps because growth becomes a scarce resource in those periods) and the yield curve is flat or downward sloping (which may be another proxy for upcoming economic growth, since flat or downward sloping yield curves have been associated with lower economic growth)

2. There is an argument that activity (on the part of investors) is more likely to pay off with growth stocks than with value stocks. Which of the following best measures the payoff to activity among growth investors?
 - a. Growth index funds earn higher returns than value index funds
 - b. Active growth funds earn higher returns than value index funds
 - c. Active growth funds earn higher returns than active value funds
 - d. Active growth funds earn higher returns than growth index funds
 - e. **None of the above**

Explanation: While (d) comes closest, the reality is that all active funds underperform their respective indices, but active growth funds underperform the growth index by less than active value funds underperform the value index.

3. Which of the following may provide an explanation for why activity is more likely to pay off with growth investing than with value investing?
 - a. Growth companies tend to be smaller and less followed by analysts.
 - b. Growth companies are more difficult to value.
 - c. Growth companies face more uncertainty in the future.
 - d. Growth companies are more dependent upon management quality and decisions for success.
 - e. **All of the above**

Explanation: Since growth companies face more uncertainty, many investors don't even try to value them (instead going with momentum). The absence of analysts also increases the payoff to those who do their homework and collect information.

4. As growth companies get bigger, they tend to see their growth rates decrease and PE ratios go down. Therefore, investing in growth companies cannot generate high returns.

- a. True
- b. False

Explanation: Even if growth rates decrease and PE ratios go down, you can still make money. Consider, for instance, a company with EPS of \$1 and a PE of 50. Assume that the EPS growth will be 30% for the next 5 years and drop to 5% thereafter and that the PE ratio will drop to 25 by the end of year 5. The expected price at the end of year 5 is \$92.82; the EPS in year 5 is \$3.71. That translates into a return of 13.17% a year.

5. Many investors in growth stocks are momentum investors, buying growth stocks that have gone up in the recent past and selling growth stocks that have dropped. Which of the following will be the most likely consequence?

- a. Growth stocks are likely to be over valued by more than value stocks
- b. Growth stocks are likely to be under valued by more than value stocks
- c. Growth stocks are likely to be misvalued by more than value stocks.**

Explanation: Momentum pushes the price in whichever direction it is going (up or down) too much. Thus, it will exaggerate the misvaluation in growth stocks in both directions.