

## Session 10

### Temporal Patterns

#### *Test*

1. There is evidence that January is the best month of the year to invest in stocks. One story that has been told to explain this is that tax loss selling at the end of the prior year pushes down the stock prices of the companies where there is such selling and that it is the rebound that creates the January effect. If this were true, which of the following groups of stocks should be the biggest beneficiaries of the January effect?
  - a. Stocks that went down the most in the prior year
  - b. Stocks that went up the most in the prior year
2. There is also evidence that a significant portion of the small cap premium (the excess returns earned by small companies over the market) is generated in the first few days in January. Which of the following stories provides an explanation for the phenomenon?
  - a. Small cap stocks are riskier than large cap companies
  - b. Small cap companies are less liquid than large market cap companies
  - c. Small cap companies are less likely to be held by institutions than large market cap stocks
  - d. Small cap companies are followed by fewer analysts than large market cap companies
  - e. All of the above.
3. Looking at returns across the weekdays, it seems likely that Mondays have been the worst day of the week to invest in stocks over the last few decades. One explanation that is offered for the Monday effect is that companies report a disproportionate amount of bad news after the close of trading on Friday and that the Monday reaction reflects the bad news. If this story holds, which of the following would you expect to see in Monday returns?
  - a. Almost all of the negative return should come from stocks opening lower on Monday than from returns over the course of the day.
  - b. The negative Monday returns should be reversed over the course of the remaining weekdays.
  - c. The Monday return should be most negative for companies that had large positive returns on Friday.
  - d. The Monday return should be most negative for companies that had large negative returns on Friday.
  - e. The Monday return should be more negative for companies that are most liquid.
4. Assume that Monday returns are caused by companies sitting on bad news until after the close of trading on Friday. Is there a strategy that you can use to exploit this tendency to make money?
  - a. Yes
  - b. No

Explain.

5. There is some evidence that the weekend effect has shifted over the last two decades, with Fridays (rather than Mondays) becoming the worst day of the week to invest in US stocks over the last decade.
  - a. True
  - b. FalseIf true, what might explain this shift?

*Solution*

1. There is evidence that January is the best month of the year to invest in stocks. One story that has been told to explain this is that tax loss selling at the end of the prior year pushes down the stock prices of the companies where there is such selling and that it is the rebound that creates the January effect. If this were true, which of the following groups of stocks should be the biggest beneficiaries of the January effect?
  - a. **Stocks that went down the most in the prior year**
  - b. Stocks that went up the most in the prior year

*Explanation: If the January effect is due to tax loss selling at the end of the prior year, it is those stocks that went down the most over the year which will be most susceptible to this tax loss selling and hence most likely to benefit from a January bounce back.*

2. There is also evidence that a significant portion of the small cap premium (the excess returns earned by small companies over the market) is generated in the first few days in January. Which of the following stories provides an explanation for the phenomenon?
  - a. Small cap stocks are riskier than large cap companies
  - b. Small cap companies are less liquid than large market cap companies
  - c. Small cap companies are less likely to be held by institutions than large market cap stocks
  - d. Small cap companies are followed by fewer analysts than large market cap companies
  - e. **All of the above.**

*Explanation: All of the above have been offered as explanations for the small cap premium though none of them individually seems to explain it fully. Small companies may be riskier and less liquid than larger companies, and the lack of analyst/institutional following does make them more susceptible to unexpected surprises.*

3. Looking at returns across the weekdays, it seems likely that Mondays have been the worst day of the week to invest in stocks over the last few decades. One explanation that is offered for the Monday effect is that companies report a disproportionate amount of bad news after the close of trading on Friday and that the Monday reaction reflects the bad news. If this story holds, which of the following would you expect to see in Monday returns?
  - a. **Almost all of the negative return should come from stocks opening lower on Monday than from returns over the course of the day.**
  - b. The negative Monday returns should be reversed over the course of the remaining weekdays.
  - c. The Monday return should be most negative for companies that had large positive returns on Friday.
  - d. The Monday return should be most negative for companies that had large negative returns on Friday.

- e. The Monday return should be more negative for companies that are most liquid.

*Explanation: If bad news released after close of trading on Friday is the cause of the Monday effect, the companies that release that bad news should see a drop in the stock price at the open on Monday. The returns over the rest of the day may be positive.*

- 4. Some companies have significant variation in revenues/operating income across the seasons. For these companies, you should expect to see seasonal variation in stock prices as well.
  - a. True
  - b. False**

Explain.

*Explanation: If there is a seasonal effect that everyone is aware of (the Christmas season effect with retailers, for instance), the stock price should not move seasonally.*

- 5. There is some evidence that the weekend effect has shifted over the last two decades, with Fridays (rather than Mondays) becoming the worst day of the week to invest in US stocks over the last decade.
  - a. True**
  - b. False

If true, what might explain this shift?

*Explanation: The worst day of the week to invest over the last two decades in the US has been Friday (rather than Monday). The globalization of trading and the multiple sources for information used to value these stocks, has made firms less powerful in determining when bad news hits the market.*