

FIN3380 Group Assignment #2. Evaluate the value of public announcement.

In this project, you are asked to evaluate the price impact on one of provided major corporate event announcements.

According to Semi-Strong Form Efficient Market Hypothesis, security prices should quickly reflect all available information. Therefore, price changes can measure the importance of a newly released event of interest. An event that affects a firm's valuation may be within the firm's control, e.g., M&A, and outside the firm's control, such as the addition to a primary stock index. In addition, event study has been extensively used in litigation and policy discussions to detect leaked information and measure irrationality. Many famous results in finance are also derived from event studies. In this project, you are given seven different corporate events, many of which have been extensively investigated by academic researchers and investigators. Each team would only choose one unique case to report in their final report, and please get in touch with our teaching assistants to reserve the case you would like to discuss first. The ten different types of corporate events are provided below.

Type	Type Code	# Events
26	Corporate Guidance - Lowered	1,861
27	Corporate Guidance - Raised	2,059
46	Dividend Increases	1,859
47	Dividend Decreases	595
80	M&A Transaction Announcements -Target	1,986
86	Follow-on Equity Offerings	3,774
89	Bankruptcy - Filing	216

You are provided hundreds of representative cases for each type of corporate event, and all the event cases are uploaded into Blackboard in SAS format.

Part I. Describe the reason why the market reacts to the selected event.

Please try to explain the underlying reasons why the selected corporate event impacts the stock price. What would be the general direction of the impact? In other words, please describe whether a given would positively or negatively affect a company's stock prices. Do these stock price movements reflect fundamental changes of the firm itself or market reaction to some external influence? What would you do if you could predict those events with public information or insider from your roommate?

Part II. Calculate abnormal returns

Please use Market Model and Fama and French 3 Factor Model or Fama and French 3 + momentum Model to calculate abnormal returns. Please specify the estimation window (length and relative days to event) used to generate OLS coefficient estimates and the size of the gap period. You need to provide summary statistics of coefficient of estimates for the 100 hundred

firms. If you cannot find the trading records for all one hundred firms, please document which firms are missing and why they are missing.

Part III. Plot the cumulated abnormal returns CARs

For the selected event, please calculate $CAR(-5, 5)$, $CAR(-2, 2)$, and $CAR(0, 1)$. In addition, please calculate the mean, standard t-value, and p-value of those CAR measures to determine if they are economically and statistically different from zero. The most important piece of this assignment is to produce a graph where the average CARs are plotted on the vertical axis, and the days in the event window (-10 through +10) are plotted on the horizontal axis.

Do those findings confirm your thought in Part I? Do you see any speculative or insider trading pattern before the announcement in your selected event? Would those activities affect market fairness and efficiency if you see a suspicious trading pattern? (Hint: Read our case study.)