**Introduction**

More than one year after its outbreak, the coronavirus pandemic continues to wreak havoc on the world’s economy. We must understand the consequences of this pandemic on the economy to better respond to future outbreaks of diseases. Its long-term impact cannot be analysed at the current time, but there is plenty of literature around the short-term effects of covid-19 on different areas of the economy. Although investigating the impact of covid-19 on the health of the overall economy is an important topic, I will leave that for other researchers to investigate. Hence, the purpose of this investigative research is to determine the short-term impact of different announcements on stock market returns.

The S&P 500 index has grown by 24.63% since the US encountered the first coronavirus case in its borders, on January 21st, 2020 (Google, 2021). The index fluctuations can be explained in part by the different unexpected announcements, and in part by insider information. This paper aims to identify whether there were significant cumulative abnormal returns (CARs) around 2 vaccine distribution approval announcements during the pandemic using an event study methodology. The abnormal returns of each company will be calculated then aggregated per industry to find industry-specific CARS.

The companies in the S&P 500 are grouped in 11 sectors, namely Energy, Materials, Industrials, Consumer Discretionary, Consumer Staples, Health Care, Financials, Information Technology, Communication Services, Utilities, Real Estate (MSCI, 2021). Of these, the energy, real estate, financials, utilities, consumer staples, industrials, and healthcare sectors have underperformed in 2020 when compared to the average returns of these industries between 2010-2019. (Statista Research Department, 2021). Previous studies also suggest that specific sectors may be affected in different ways in the event of a pandemic, such as hotels, pharmaceutical, and biotech sectors (Al-Awadhi, Alsaifi, Al-Awadhi, Alhammadi, 2020).

Hence, the following research question is put forward:

What is the effect of covid-19 vaccine approval announcements on equity market returns per industry within the S&P 500?

It is important to tackle this question to test the efficiency of the market as well as identify industries that are less conducive to virus transmission. The answer to this question is therefore important for investors, as well as for the general workforce. What is more, the above question can be broken down into multiple sub-questions, as per the literature review below. One such question is: “Does the ownership structure matter? i.e. do different levels of insider vs institutional ownership lead to larger abnormal returns? Another sub-question is “Which company fundamentals affect the (abnormal return) in a company or industry?”. And “Are the results of the analysis of the chosen event dates consistent with each other?”.