Executive Summary

Problem

Events in the past, such as the Global Financial Crisis (GFC) or Severe Acute Respiratory Syndrome (SARS), suggest that traditional market models cannot fully explain stock fluctuations. As a result, behavioural finance and investor sentiment are being studied more thoroughly. This is due to the fact that when financial markets fall into difficult times, investors tend to become pessimistic and are influenced by irrational behavioural patterns, which consequently affect the market and its performance (Kaplanski et al., 2015). Anxiety, fear, and uncertainty among investors, therefore, have a direct impact on stock prices. The question arises whether the recent and ongoing COVID-19 crisis has affected stock prices. As a contagious virus that is spreading worldwide at a rapid pace, it has brought the world to a standstill. Isolation, travel bans, lockdowns, and other restrictions have severely constrained various sectors of the economy and daily life. As an exogenous shock, this crisis affects not only the financial market, but also the health sector, the hospitality sector, and many more. Thus, the importance of the consequences of COVID-19 on the market and different sectors have become apparent and vital to understand.

Despite the fact that academics have conducted considerable research regarding the recent crisis of COVID-19, there are still only a handful of studies on the impact of COVID-19 on the Chinese stock market and its sectors. This study contributes to the limited research of the impact of COVID-19 on the Chinese stock market, where the outbreak was originally discovered, and thus differs from existing literature, which mainly focuses on the Western market. This study also provides first insights into the difference between exogenous and endogenous shocks to the financial system, as it compares the exogenous shock of COVID-19 with the endogenous shock of the GFC.

Methodology

The study uses a data sample of the 180 firms within the SSE 180 index during the period of January 2008 to September 2008 for the GFC and from May 2019 to January 2020 for COVID-19. In order to analyse the impact of events on the index, the event study methodology by S. J. Brown and Warner (1985) and MacKinlay (1997) is used, which is an empirical methodology often used to determine the impact of events on a market, stocks or indices. The results are tested using two hypothesis tests - the simple t-test and the Patell Z-test. In addition, several aspects of the event study framework are adjusted to test the robustness of the findings including adjustments to the estimation window, the benchmark, the return generating model and the sub-samples. To compare the impacts of the two events (COVID-19 and the GFC), the event study is conducted separately for the GFC and its sectors.

Results

Unlike other studies, this study finds no substantial evidence that COVID-19 had a negative effect on the SSE 180 index immediately after the World Health Organization (WHO) published their first official statement on COVID-19. However, the industrial sector presents significant negative Cumulative Abnormal Return (CAR), and the information technology sector shows significantly positive CARs after the event date. The latter result is not surprising as many employees had to work from home due to lockdowns and isolations, resulting in full utilisation of digital infrastructure. Since the GFC does not imply the same restrictions as COVID-19, the results are consistent with expectations that other sectors were affected during the GFC than during COVID-19. Additionally, the results of the GFC show that the SSE 180 was negatively affected after Lehman Brothers collapsed. Nevertheless, compared to studies from other countries, the overall impact of both events on the Chinese stock market is relatively small.

Evaluation

This thesis provides insights into the impact of COVID-19 on the Chinese stock market and the related sectors and how the unique features of the Chinese market structure, such as the high number of state-owned firms, served as a buffer during times of crises. Nevertheless, various limitations and shortfalls must be considered when analysing the results of the event study. It remains an open research question whether COVID-19 will generate abnormal returns on the SSE 180 in future periods. Nonetheless, as the COVID-19 crisis continues, the issue and its connection to the stock market will gain even more importance for further developments. Likewise, this issue also prepares investors for other infectious diseases and their consequences. Since the results are inconclusive, further research in the area of the relationship between COVID-19 and the Chinese stock market is needed. Other exogenous events such as SARS, swine flu, or even natural disasters and endogenous events like the Asian financial crisis can be included to improve the understanding.