ABSTRACT

The Role of Investor Sentiment in Moderating the Impact of Exogenous Shocks on Stock Prices

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The research problem investigated in this thesis concerns the role of investor sentiment in shaping stock prices during exogenous shocks. In particular, the study aims to deepen the understanding of the role of market-based company-specific investor sentiment in moderating the impact of exogenous shocks on stock prices. The exogenous shocks analyzed in this thesis are three significant events that occurred during the outbreak and initial spread of COVID-19 in 2020, which are (1) the announcement of the first confirmed positive COVID-19 case in the U.S., (2) the declaration of COVID-19 as a public health emergency in the U.S., and (3) the World Health Organization's official declaration of COVID-19 as a global pandemic. The research utilizes data from 367 US companies, constituents of the S&P 500, and constructs a daily investor sentiment indicator using principal component analysis of market variables. It analyzes the development of the investor sentiment indicator over the period from January 2019 to April 2020 and evaluates its predictive accuracy for daily stock returns. The study analyzes abnormal returns and volatility surrounding these events using event study methodology, GARCH modeling, and non-parametric tests. The findings indicate that IS exhibited varying movement patterns across different sectors, with synchronized downturns during the period of external shock. The study revealed Granger causality between the overall sentiment indicator (OSI) and daily stock returns. Additionally, significant differences in cumulative abnormal returns were found between high- and low-IS firms, especially during the initial shock, suggesting that IS influences stock return reactions. However, no corresponding moderating effect of IS on stock price volatility was observed. These results imply that while IS impacts stock prices' sensitivity to unexpected external shocks, it does not mitigate the effects of volatility. The study offers

practical insights into the role of IS during periods of external shock and emphasizes the importance of market-based sentiment measures.

Keywords: investor sentiment, exogenous shock, behavioral finance, stock market volatility, S&P 500