Reference:
Tsai, Bi-Huei & Liu, Nien-Chieh, *The Market Response to the United States COVID-19 in Taiwan's PCB and Network Communication Industries*, Global Business & Economics Anthology, ISSN:1553–1392, Volumes I & II, December 2023, pp 1-15.

DOI: 10.47341/GBEA.23121

The Market Response to the United States COVID-19 in Taiwan's PCB and Network Communication Industries (*)

Bi-Huei Tsai
Management Science, College of Management,
National Yang Ming Chiao Tung University, Taiwan
Email: bhtsai@nycu.edu.tw

Nien-Chieh Liu
Management Science, College of Management,
National Yang Ming Chiao Tung University, Taiwan

Abstract

This study investigates how COVID-19 in the United States affects the stock prices of the Taiwanese printed circuit board (PCB) and network communication industries. We utilize the event study method to evaluate the market response to the announcements of the United States COVID-19 and the sample period is from February 2020 to April 2020. This study examines whether the COVID-19 caused stock price variations and generated abnormal returns for Taiwanese companies. Finally, this study also evaluates whether there is a significant difference in abnormal returns among companies who have reported corporate social responsibility (CSR) and companies who have not. This study finds that the United States prevention policies have caused a significant influence on abnormal returns in Taiwan's PCB and network communication industries. Because Taiwan exports PCB to the United States, the stocks price decrease to the United States COVID-19 due to the investors' expectation of the substantial order decline from the United States in in Taiwan's PCB and network communication industries. We use ANOVA to prove the difference among the abnormal returns generated by the first, second and third U.S. COVID-19 announcements. The empirical results show that the first announcement caused the largest reactions, and the third announcement caused the least. Furthermore, the United States government's social distancing policy has caused positive abnormal returns for Taiwan's PCB and network communication industries due to the great demand for online meeting. Furthermore, we find the significant difference between the implementation and loosening of the social distancing polices. This suggests that investors regard the loosening of the United States social distancing policy signal that the order decline in Taiwan's PCB and network communication industries. There is no significant difference between the abnormal returns of companies that have reported their CSR practices and that of companies that have not reported.

Keyword: Abnormal return, COVID-19, ANOVA, Corporate social responsibility, Event study