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The Impact of Strict Cancellation of Public Events Policy on the Stock Market Globally During the COVID-19: An Event Study

Kefan Jiang

Xiamen University, Xiamen 361005, China

Abstract: The article aims to evaluate the impact of cancellation of public events policy on the stock markets on a global scale. Three questions related to the policy would be researched. First, what are the patterns of the thirty countries' abnormal returns during the event window? Second, how to explain the patterns of the average abnormal return and cumulative abnormal return of the sample during the event window? Third, does the strict cancellation of public events have a positive impact on the stock markets in terms of abnormal return? Researcher finds that the policy on aggregate has a negative impact on the stock markets among the thirty countries in the short term while a positive impact on the stock markets in the long term. The results indicate that the investors at first consider the policy would reduce economic activities so as to lead a negative effect on stock markets, but the policy has a great positive impact on restricting the growth of the confirmed cases due to COVID-19 which boosts the investors' confidence on resumption of economic activities. Finally, the stock indices have an upward trend after the announcement of policy in the long term. The article can provide investment advice for investors when governments imposing the policy. The investors can invest in the stock indices on a global scale when there is a deep decrease in the stock markets due to the policy. Then it would earn a positive return around 20 days later.

Keywords: Event Study; COVID-19; Abnormal Returns; Cancellation of Public Events

1. Introduction

COVID-19 heavily affects people's daily life and operation of companies. Because of fear of the virus among people and interruption of economic activities, the global stock indices decrease sharply. To handle the pandemic governments around the world imposed a series of policies in terms of physical restriction, economic support and medicine development. The measures may have both positive and negative impact. For example, social distancing measures could be effective in reducing the infectious cases while lead millions of people lost their jobs because of the requirement on staying at home. Students and teachers can only have classes online inconveniently. People staying at home suffer mental disorders. So how would the stock markets react to the policies? The research would focus on one of the social distancing measures: cancellation of public events. The research would evaluate it on a global scale as many countries around the world have imposed this policy to slow the spread of the COVID-19.

The research aims to evaluate the impact of the policy on the stock markets globally using an event study method. This article intends to find whether strict cancellation of public events could boost the investors' confidence therefore trigger the stock indices globally to go up. The research is important as it can help people get to know how the stock indices react to the policy and make investors have a better understanding on the stock market. This can help investors to make more rational investment decisions when facing a pandemic.

2. Literature Review

Phan and Narayan (2020) studied the impact of lockdown, travel ban and stimulus package on the stock markets among 25 countries. They concluded that it is difficult to concretely tell what precisely worked for countries. Judging by the reaction of the stock markets it seems a combination of travel bans, lockdown and stimulus packages did work in containing stock

markets. However, Narayan et al. (2021) argued that lockdown was most effective in cushioning the effects of COVID-19 by evaluating the G7 countries. Their analysis unravels that while all policies on aggregate had a positive effect on the G7 country stock market excess returns, country lockdown influenced returns in most (5/7) countries followed by stimulus packages (3/7 countries) and travel bans (2/7 countries). The average abnormal return in the present lockdown stage was positive while in the pre-lockdown period, the average abnormal return was negative in India evaluated by event study analysis, indicating that the lockdown boosted the investors' confidence (ALAM et al., 2020).

According to Oxford COVID-19 Government Response Tracker (Hale et al., 2020), the database used in Ashraf(2020a)'s research, social distancing measures include the closure of schools, workplaces, public transport, cancellation of public events, stay-at-home requirement, restrictions on gatherings and internal movement, international travel controls. The scope of social distancing measures overlaps with that of lockdown and travel bans mentioned above. In contrast, Ashraf(2020a) argued that the announcements of government social distancing have a direct negative effect on stock market returns due to their adverse effect on economic activity, while an indirect positive effect through the reduction in COVID-19 confirmed cases. Government announcements regarding public awareness programs, testing and quarantining policies, and income support packages largely result in positive market returns. Consistent with Ashraf(2020a), Eleftherioua and Patsoulis(2020) found a negative relationship between stock market returns and changes in the intensity of COVID-19 social distancing measures. Moreover, the authors found the existence of negative spillover effects, since an increase in the government response intensity in a given country leads to a decrease in the stock market returns in the interrelated countries. Askitas et al. (2020) found that cancelling public events and imposing restrictions on private gatherings followed by school closures have quantitatively the most pronounced effects on reducing the daily incidence of COVID-19. They are followed by workplace as well as stay-at-home requirements, whose statistical significance and levels of effect are not as pronounced. What's more, they found no effects for international travel controls, public transport closures and restrictions on movements across cities and regions.

3. Discussion

The COVID-19 affects the stock markets intensely and the stock indices fluctuated sharply at the time when plenty of people got infected. The appendix shows the abnormal return in the event window among thirty countries in the sample. What is interesting is that all the abnormal returns of the countries fluctuate at different intense level in the event window except Denmark. Its abnormal return is stable around zero. It seems that not only the pandemic but also the strict cancellation of public events policy didn't affect the stock market. This may be because that Denmark imposed the policy on the November, 2020 when it was much later than other countries that imposed policy from January to March, 2020. As Ashraf(2020b) and Ramelli and Wagner (2020) explained that the strong market reaction is from January 20 to March 20, 2020, the stock market in Denmark maybe already not affected by COVID-19 when the strict cancellation of public events policy was implemented. On the point of view of investors, the investors in Denmark knew that many countries had imposed the policy and they would predict that Denmark would do so. This information was already included in the stock market so that when the policy was announced, investors didn't treat it as a new information to the stock market.

4. Limitation

The article only researched thirty countries in the sample so the results can't be applicable for all the countries in the world. Event study is based on the effective market hypothesis but there may be some inefficient stock markets in the sample so the price may not reflect all the information immediately. It's difficult to estimate the abnormal return precisely as the mean-adjusted method produces upwardly and downwardly biased abnormal returns in bull and bear markets. This article only studies one of the social distancing measures: cancellation of public events. The other measures are left for future research.

5. Conclusion

First, the article has a glance of patterns of abnormal return in the event window of thirty countries. The researcher

found that Denmark's pattern was stable all the way. On the other hand, China's pattern was stable except the the day after the announcement of the strict cancellation of public events policy when there was a deep decrease on the abnormal return. It may be because that the investors in China considered that the policy would have a negative impact on the economic activities. Besides, the policy had both positive and negative impacts on other countries in the sample. So, the research evaluates the policy's impact on the thirty countries as a whole.

Second, the article evaluates the impact of the strict cancellation of public events on the stock markets on a global scale. The results show that the strict cancelling public events has a negative impact on the stock markets in the short term as the investors consider that the measure would reduce the economic activities so as to lead a negative effect on the stock markets. However, the stock markets react positively to the policy in the long term because the policy has a great positive impact on restricting the growth of confirmed cases due to the COVID-19. As a result, the policy boosts the investors' confidence on resumption of economic activities.

Third, the average abnormal return after the event day is significantly greater than that before the event day, which proves that the policy has a positive impact on the stock markets in the long term. These results are applicable for a global scale but may not be a special country. How the policy would impact a certain country needs further study. As for investment advice for investors, the investors could invest the stock indices globally when the stock indices decrease due to the announcement of strict cancellation of public events and keep holding them until around 20 days later than the announcement day. In this way may help investors gain a profit from the event.

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