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Indonesian Islamic Stock Returns Performance in the Time of the COVID-19 Outbreak

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Abstract:

The purpose of this research is to compare Indonesia's Islamic stock index before and during COVID-19. The paper traces the impact of the market crash on Indonesia's Islamic equity investment. Given the rising concern of the performance of Islamic equity returns, the findings in this paper are useful for investors interested in stock return performance and Shariah-compliant assets. To investigate the differences in daily equity returns of Indonesian Islamic stocks during the COVID-19 pandemic market crash, we applied a one-sample paired t-test using Stata. Data collection and analysis were conducted quantitatively. We obtained daily stock prices and converted them into daily returns, which were used for financial returns prior to and during the COVID-19 financial market crash. The results showed no significant differences before and during the market crash, indicating that the Indonesian Islamic stock does not react significantly to the COVID-19 market crash. Therefore, the impact of the market crash during the COVID-19 outbreak on the performance of the stock returns does not apply to the Indonesian Islamic stock index. Performance measurement is one of the major concerns for investors in Islamic capital markets. Given the rising concern of equity assets in Islamic finance in general and in the performance of Islamic equity returns in particular, the findings in this paper are useful for investors interested in stock return performance and Shariah-compliant assets. This paper contributes to assessing Islamic financial assets under the financial market crisis, as this research mainly focused on the short-term analysis before and during the COVID-19 market crash. The Islamic financial market growth has been severely impacted during the observed period due to COVID-19 lockdowns.

Keywords: Islamic index, stock performance, COVID-19.

印度尼西亚伊斯兰股票在新冠肺炎爆发期间的回报表现

摘要:

本研究的目的是比较 新冠肺炎之前和期间的印度尼西亚伊斯兰股票指数。该论文追溯了市场崩盘对印度尼

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西亚伊斯兰股权投资的影响。为了研究在新冠肺炎大流行市场崩盘期间印度尼西亚伊斯兰股票的每日股票回报差异，我们使用斯塔塔应用了单样本配对 t 检验。数据收集和分析是定量进行的。我们获得了每日股票价格并转换为每日回报，用于在新冠肺炎金融市场崩盘之前和期间的财务回报。结果表明，在市场崩盘之前和期间没有显著差异，这表明印度尼西亚伊斯兰股票对新冠肺炎市场崩盘没有显著反应。因此，新冠肺炎爆发期间市场崩盘对股票回报表现的影响不适用于印度尼西亚伊斯兰股票指数。绩效衡量是伊斯兰资本市场投资者的主要关注点之一。鉴于对伊斯兰金融中股票资产的普遍关注，尤其是对伊斯兰股票回报表现的关注，本文的研究结果对于对股票回报表现以及符合伊斯兰教法的资产感兴趣的投资者很有用。本文有助于评估金融市场危机下的伊斯兰金融资产，因为这项研究主要集中在新冠肺炎市场崩盘之前和期间的短期分析。考虑到在观察期内，由于新冠肺炎封锁，伊斯兰金融市场的增长受到了严重影响。

关键词：伊斯兰指数、股票表现、新冠肺炎。

1. Introduction

The COVID-19 outbreak since early 2020 has been hugely impacted by health-related issues and raised social and economic crises globally. The pandemic and the restrictions on business and personal activities have triggered a global recession (World Bank Group, 2020). The COVID-19 outbreak also resulted in inefficiency in the stock market due to panic situations (Anh, & Gan, 2020; Chowdhury & Abedin, 2020; Kulal, & Kumar, 2021; Lalwani & Meshram, 2020). Like the conventional one, the Islamic financial industry is also affected by this crisis (Abdullahi, 2021). Major equity markets such as S&P have forecasted the Islamic finance industry to slow down to a single-digit growth from double-digit growth in the previous years. S&P also predicted a recession in the major Islamic finance markets in 2020 and a mild recovery in 2021 (Damak et al., 2021).

Islamic financial assets offer alternate investment preferences and diversity since they have a lower leverage ratio among investment products. They are asset-backed, whereby the Islamic stocks provide better risk-adjusted performance than conventional ones, as observed during the global financial crisis (Asutay et al., 2021; Jawadi et al., 2014). It also gives hedging protections during severe market breakdowns, particularly those implementing the market value of security-based Shariah screening criteria (Ashraf et al., 2020). Hence, performance measurement is one of the major challenges for investors in Islamic capital markets (Ashraf, 2016).

This paper contributes to the assessment of Islamic financial assets under unique circumstances, as this research mainly focused on the short-term analysis before and during the COVID-19 market crash. The Islamic financial market growth has been severely impacted during the observed period due to COVID-19 lockdowns (Damak et al., 2021). This research aims to compare Indonesia shariah stock returns before and during COVID-19. The paper traces the impact of the crisis on Indonesia's Islamic equity investment.

Given the rising concern of equity assets in Islamic finance in general and in the performance of Islamic equity returns in particular, the findings in this paper are

useful for investors interested in stock return performance and Shariah-compliant assets.

The paper is structured as follows: Section 2 reviews the recent literature from theoretical perspectives, Section 3 gives a brief explanation of the methodology used. The empirical analysis is discussed in Section 5, while Section 6 provides a conclusion.

2. Method

We used daily stock prices were sourced from Investing. The daily prices were converted into daily returns, used for financial returns prior to and during the COVID-19 pandemic financial market crash. The days prior to the COVID-19 market crash are from February 7, 2019, to February 7, 2020. The days during the COVID-19 market crash are from March 2, 2020, to March 2, 2021. March 2, 2020, was selected because it was the first time a COVID-19 case was detected and reported by the Indonesian government.

To investigate the differences in daily equity returns of Indonesia Islamic stocks during the COVID-19 pandemic market crash, we use a one-sample paired t-test. The paired t-test performs to state the acceptance of null (H_0) and alternative (H_a) hypotheses. The null and alternative hypotheses assumed for this test are:

H_0 : The mean difference is equal to zero.

H_a : The mean difference is not equal to zero.

The main rules for rejecting or accepting the null hypothesis are the p-value and significance level ($\alpha = 0.05$). A p-value higher than the significance level fails to reject the null hypothesis, while a p-value lower than the significance level rejects the null hypothesis with a significance level of 95%.

3. Results and Discussion

3.1. Descriptive Statistics

Daily financial returns for the two-time phases, before and during the COVID-19 crash, are presented in Table 1. Mean returns of ISSI stocks during covid19 are higher than before COVID-19. Standard deviations during the COVID-19 crash are higher than before COVID-19 implying higher volatility of ISSI stocks during the COVID-19 crisis (Nomran, & Haron, 2021).

Table 1. Descriptive statistics of daily Indonesian Islamic stock index before and during COVID-19

	Before Covid19	During Covid19
Mean	-.000887	.0001446
Standard Deviation	.0066265	.0158815
Min	-.0222113	-.050155
Max	.0159948	.0907288
Skewness	-.2957181	.5836848
Kurtosis	3.268745	8.300437

Table 1 above also shows that the Indonesian Islamic stock index has negative mean returns before COVID-19. However, positive value during COVID-19, indicating the impact of the market crash on the performance of the indices, does not apply to the Indonesia Islamic stock index during COVID-19. Because mean value of stock returns before covid19 is $-0.0013203 < \text{during COVID-19 } 0.0001446$. It means that there is no difference between average returns before and during COVID-19.

3.2. One Sample Paired T-Test

The p -value of 0.1856 is larger than the significance level of $\alpha = 0.05$, implying that returns of ISSI stocks before the market crash are not significantly different compared to during the market crash. There are no significant differences before and during the market crash indicates that the market does not react significantly to the COVID-19 market crash. This may reflect that the market participants are still more vigilant about information dissemination and prioritizing long-term possibilities, so they are not in a hurry to stock trading activities.

Table 2. Results of one-sample paired t-test

Ha: mean(diff) < 0	Ha: mean(diff) = 0	Ha: mean(diff) > 0
Pr (T < t) = 0.0928	Pr (T > t) = 0.1856	Pr (T > t) = 0.9072

4. Conclusion

This study aims to compare Indonesian Shariah stock return before and during COVID-19. The result showed no significant differences before and during the market crash, indicating that the Indonesian Islamic stock did not react significantly to the COVID-19 market crash. Therefore, the impact of the market crash during COVID-19 on the performance of the stock returns does not apply to the Indonesia Islamic stock index. Future research should include a longer time span of the data and add more variables such as the financial performance of the listed firms of the index.

5. Limitations and Further Study

This study only used one single test. Further study should use another test such as an event study that presents more comprehensive findings.

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Authors' Contributions

Burhanuddin is the main researcher who introduced the idea of this research and was responsible for data collection. Musdalifah Azis Burhanuddin helped recommend some previous studies in the area of stock return performance. At the same time, Heni Rahayu Rahmawati assisted in finishing administrative-related works.

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