

ANALYZING THE RESILIENCE AND IMPACT OF ISLAMIC STOCK MARKETS BEFORE AND AFTER THE COVID-19 PANDEMIC IN MALAYSIA

Nur Ikhwan Amran, Norlina Bt Kadri*, Nurul Syuhada Binti Zaidi

Faculty of Economics and Business,
Universiti Malaysia Sarawak (UNIMAS), Malaysia.
Corresponding E-mail: knorlina@unimas.my

ABSTRACT

The study aims to investigate the relationships between Total Return (TR) on Islamic stock prices and key economic indicators such as GDP growth rate, interest rate, and Foreign Direct Investment. Data for the analysis is obtained from financial statements downloaded from Bursa Malaysia and The World Bank Data. The research seeks to shed light on how these economic factors influence the Total Return of Islamic stock markets, providing insights into the performance and behavior of Islamic stock markets in Malaysia. The findings emphasize the significant impact of GDP growth rate, interest rate, and Foreign Direct Investment on the performance of Islamic stock markets, offering valuable implications for investors and policymakers in the Islamic finance sector.

Keywords: Islamic stock markets, Covid-19 pandemic, economic indicators, Malaysia

INTRODUCTION

The global spread of the COVID-19 pandemic, marked by its rapid and widespread impact, caused not just a significant public health crisis but also a deep economic shock. Financial markets around the world became unstable and uncertain as the virus disrupted economic activities, led to widespread lockdowns, and raised worries about the future stability of different types of investments. The financial markets experienced a remarkable makeover in response to the worldwide effects of the COVID-19 pandemic, which showed similarity to the unparalleled changes observed throughout the 2008 credit crunch (Ullah, 2022). The purpose of this study is to investigate and evaluate the impact and resilience of Islamic stock markets both pre and post-crisis. The Islamic Stock Market, which adheres to dedication to Shariah principles, serves as a platform that offers investment opportunities to individuals seeking companies that comply with Shariah. However, Muslims have expressed a significant opinion concerning the limitations imposed by the conventional stock market framework, which they consider to be inadequate in its adherence to various principles of Islamic law (Alam et al., 2017). Given the growing recognition of the ethical and risk-sharing precepts that are fundamental to Islamic finance, it is urgent to determine whether these markets demonstrated any distinctive attributes during periods of crisis.

According to Bernama (2021), Malaysia's Islamic financial market showcased resilience. The Islamic banking sector remained robust, witnessing a 9.1% expansion in total assets to RM1,132.5 billion by end-July 2021. Islamic financing outstanding also grew by 5.6% to RM831.6 billion, driven by strong demand in the household sector, supported by stimulus packages and the phased reopening of economic sectors. In the Islamic capital market, Malaysia's domestic Islamic market valued at RM2,254 billion accounted for 65.7% of the total market. Notably, sukuk issuance reached RM151.3

billion, comprising 66% of total bond issuance, indicating sustained activity in Islamic financial instruments. The Finance Ministry underscores the sector's dynamism, planning to accelerate value-based intermediation (VBI), promote the halal economy, enhance digital solutions, and encourage environmental, social, and governance (ESG) investments. Despite potential risks, such as the reimposition of containment measures and global economic uncertainties, the report anticipates that the Islamic financial industry will play a pivotal role in driving post-pandemic recovery in Malaysia, leveraging its ability to integrate Islamic finance principles with ESG elements and promote Shariah-compliant products, including financing for the halal sector and Shariah-compliant Sustainable and Responsible Investment (SRI).

This research will examine the financial performance of these markets, their fluctuations, GDP growth rate, and foreign direct investment rate. According to Legese Feyisa (2020), the annual global GDP growth rate declined to 2.4% in 2020, compared to a relatively modest growth rate of 2.9% in 2019. There is a possibility that economic growth may decline during the first quarter of 2020 as a result of these circumstances. This study seeks to figure out whether Islamic finance can provide stability and ethical investment opportunities in an environment of major global challenges. This study looks at how Islamic stock markets performed during the COVID-19 pandemic, finding that they show unique characteristics that could help maintain financial stability in global crises. This research highlights the need to explore how Islamic finance can provide ethical and robust investment choices during challenging times.

LITERATURE REVIEW

Khairudin and Mohamad Shariff (2023) analyse the impact that the COVID-19 pandemic had on the volatility of the Kuala Lumpur Composite Index (KLCI) as well as 13 sectoral sectors in Malaysia. The purpose of this research is to explore the influence that COVID-19 has had on the volatility of the stock market and to discover which sectors are affected by this outbreak in contrast to the KLCI. Specifically, the study will try to determine which industries are affected by the outbreak. According to the conclusions of the study, the time of COVID-19 was responsible for a rise in the level of uncertainty in Malaysia's stock market. With the exception of the KL Energy (KLEN) sector, which maintained its resilience, prices were usually on a downward trend across a variety of sectors, and there was a noteworthy increase in the degree of unpredictability. This indicates that the pandemic had a substantial influence on the general economic stability and performance of the stock market in Malaysia. While the majority of sectors were experiencing difficulties, KL Energy stood out as an exception.

Additional research conducted by Tee and Kee (2022) investigates the influence that COVID-19 has had on the returns of the Islamic stock market in Malaysia. In particular, this study highlights the necessity of researching the effect of health crises on returns in the Islamic stock market, with a specific emphasis on Malaysia, a dynamic nation that is well-known for its Islamic financing. Based on the facts that were acquired from this paper, it can be concluded that the COVID-19 epidemic has had a substantial influence on the performance of the Islamic stock market in Malaysia. Researchers recommend that policymakers employ health crisis preventative measures and fast policy action in order to prevent the market from deteriorating further and causing another financial crisis. This guidance is intended to prevent the market from causing another financial crisis.

Thaker and Sakaran (2021) conducted studies in the past to analyze the influence that COVID-19 has on the Malaysian currency rate and to assess whether or not Malaysia's

capital markets still provide chances for investors to diversify their holdings. In the midst of the COVID-19 epidemic, this essay illustrates the resiliency of Islamic financial markets in Malaysia as well as the possibility for diversification options for investors. According to the conclusions of the research, Islamic capital markets excelled over the COVID-19 period, which resulted in enhanced chances for diversification. Despite the passage of time, the non-Islamic index has shown to be resilient, providing investors with optimized diversification and enhanced risk management opportunities. Furthermore, the exchange rate demonstrated increased stability, which is indicative of strong co-movements on smaller scales.

During the COVID-19 pandemic, Loang (2023) conducted an investigation of the influence that experts' estimates had on the liquidity of the market and the efficiency with which information was conveyed in Malaysia's Islamic market. In order to shed light on the variations in market efficiency between established and developing markets, the purpose of this research is to analyse the market efficiency of the United States of America and Malaysia, especially during the pandemic. According to the findings of the research, the Islamic market in Malaysia is less transparent and accountable than the market in the United States. This suggests that the Malaysian Islamic market is less efficient than the market in the United States.

Khan et al. (2022) conducted research that looked at the relationship between the price of oil and the performance of Islamic and conventional stock indexes in the Malaysian market during the COVID-19 pandemic. The findings of this research were published in academic journals. New data is presented in this research about the impact that fluctuations in oil prices have on the performance of the stock market in Malaysia's Islamic finance business. Additionally, the study reveals unique responses of Islamic stock prices to changes in oil prices, notably during the COVID-19 pandemic situation. According to the findings of the investigation, there were large replies from both the conventional and Islamic stock sources indexes to oil prices. The response was negative in the short and medium terms, but it became positive in the long run.

HYPOTHESES DEVELOPMENT

Based on the review of impact of Islamic stock market performance in Malaysia, four hypotheses are developed.

Hypothesis 1 (H1): GDP rate has a significant correlation with Islamic stock market performance.

Based on a study conducted by Mohd et al. (2012), it was found that there is a direct correlation between the Kuala Lumpur Syariah Index (KLSI) and the economic growth rate (IPI) in Malaysia. There appears to be a strong link between the GDP rate and the performance of the Islamic stock market in Malaysia. The researchers also observed a correlation between the movement of the KLSI and the actual GDP in Malaysia during certain years, suggesting a strong connection between these two variables. In addition, a thriving economy can also inspire greater investor confidence and positivity, resulting in a higher demand for stocks and an increase in their prices. This is especially true for the Islamic stock market, as it is often considered a mirror of the economic conditions in a country.

Hypothesis 2 (H2): Interest rate has a significant correlation with Islamic stock market performance.

In a study conducted by Habib and Khalid Ul Islam (2017), it was discovered that the interest rate had a notable effect on the Islamic stock market. The authors highlight the importance of the relationship between interest rates and Islamic stock returns, emphasizing that it should be independent in accordance with the prohibition of interest in Islam. The potential negative effect of interest rates on the Islamic stock market may be attributed to the use of a Shariah index in this study. This index follows specific screening criteria, which only includes companies that have minimal involvement in interest-bearing securities.

Hypothesis 3 (H3): Foreign Direct Investment has a significant correlation with Islamic stock market performance.

According to Dewandaru et al. (2014), FDI can also promote financial market integration and provide diversification opportunities for investors in Islamic countries, potentially leading to improved market efficiency and performance. This suggests a significant correlation between the Foreign direct Investment and the performance of Islamic stock markets during the COVID-19.

Hypothesis 4 (H4): Islamic stock market performance has no significant correlation with GDP rate, interest rate, and foreign direct investment.

This research disagrees with the idea that the performance of the Islamic stock market is not significantly linked to the GDP rate, interest rates, or foreign direct investment. The study gives strong evidence that these factors are strongly linked to the performance of the Islamic stock market. More specifically, the study shows strong links between changes in the GDP rate, interest rates, and foreign direct investment. This suggests that these factors do have a big impact on how well the Islamic stock market does.

METHODOLOGY

This study utilises a rigorous methodology focused on three independent variables and one dependent variable to achieve these objectives. This framework is specifically designed to thoroughly assess the response and behaviour of the Islamic stock market during turbulent times caused by global disasters, with a specific focus on the COVID-19 pandemic. To guarantee a thorough analysis, a comprehensive selection process has been carried out, incorporating 20 separate stock market indices obtained from Bursa Malaysia. The selected dataset covers a significant period from 2018 to 2021, encompassing five years of crucial financial information. This time frame enables a thorough evaluation of the performance of the Islamic stock market, facilitating a comprehensive comprehension of its impact and influence on the broader financial environment during this crucial period. This research focuses specifically on the Islamic stock market within Bursa Malaysia to reveal distinct observations about its behaviour, resilience, and impact during a time marked by exceptional global difficulties. The comprehensive choice of variables and the extensive dataset emphasise the study's dedication to conducting a thorough and perceptive analysis, revealing the unique role played by the Islamic stock market during periods of economic uncertainty and turmoil.

This study specifically focused on analyzing the dynamics of the Islamic stock market within the context of Malaysia. The selected dataset for this study includes 20 Islamic stock markets that Bank Negara Malaysia chose as having the best performance. An

interesting aspect about the dataset is that it focuses on showing how Islamic Stock market performance before and after Covid- 19 pandemic. The dataset contains data from the past five years, from 2018 to 2022. This long period of time not only lets us look at trends and patterns in great detail, but it also lets us really understand how the Islamic stock market has changed over time. By looking at these details, the study hopes to learn useful things about how the Islamic stock market in Malaysia has changed over time and what makes it unique. Table 1 presents the list of the selected Islamic stock markets included in this research.

Table 1: Islamic Stock Market listed in Bursa Malaysia

Widad Group Berhad	Eastern & Oriental Berhad
Malaysian Resource Corporation Berhad	Sime Darby Property Berhad
YNH Property Berhad	UEM Sunrise Berhad
Handal Energy Berhad	SP Setia Berhad
Kuala Lumpur Kepong Berhad	D'nonce Technology Bhd
Ekovest Berhad	Hartalega Holding Berhad
Sarawak Consolidated Industries Berhad	Hibiscus petroleum
Iskandar Waterfront City Berhad	Press Metal Berhad
Minetech Resources Berhad	Dagang Nexchange Berhad
MY E.G. Services Berhad	Sunway Berhad

This research focuses on assessing the performance of the Islamic stock market in Malaysia, using Total Return (TR) as the key measurement. The study aims to investigate the relationships between the financial performance of 20 selected Islamic stock markets, GDP growth rate, interest rate, and foreign direct investment. Data for this analysis will be obtained through a website survey, specifically by downloading financial statements from Bursa Malaysia and The World Bank Data. The primary emphasis lies in understanding how financial performance, along with economic factors such as GDP growth, interest rates, and foreign direct investment, influences the Total Return of Islamic stock markets. In order to better understand the Islamic stock markets in Malaysia and how they interact with other economic indicators, this extensive investigation aims to shed light on the factors influencing their performance.

FINDINGS AND DISCUSSION

Descriptive Analysis

Table 2: Descriptive Analysis Result

	TR	INT	GDP	FDI
Mean	2.45	1.88	3.22	3

Median	0.81	4.3	3.6	2.5
Maximum	25.10	4.80	7.40	5.40
Minimum	0.05	-2.40	-3.20	1.20
Std. Dev.	5.1990	3.3954	3.5222	1.4284
Skewness	3.6047	-0.4019	-0.8715	0.5392
Kurtosis	15.0818	1.1763	2.6656	2.1619
Jarque-Bera	824.7744	16.5497	13.1249	7.7721
Probability	7.9894	0.0001	0.0014	0.0205
Sum	245.02	188.00	322.00	300.00
Sum Sq. Dev.	2675.92	1141.36	1228.16	202.00
Observations	100	100	100	100

The statistical summary of TR, INT, GDP, and FDI across 100 observations reveals a wide range of characteristics among these variables. The data in TR shows a high level of variability, with a mean of 2.45 and a standard deviation of 5.1990. The distribution is highly positively skewed, with a skewness value of 3.6047, and has reached its very peak shape, as indicated by a kurtosis value of 15.0818. It suggests the existence of extreme values or outliers. The TR's median value (0.81) is noticeably lower than the mean, which emphasizes the skewness. On the other hand, INT has an average of 1.88 and a standard deviation of 3.3954. It is slightly skewed to the negative side (-0.4019) and has an even distribution (kurtosis of 1.1763), indicating a balanced spread around the average.

The characteristics of GDP and FDI are different from each other. The GDP data has a mean of 3.22 and a standard deviation of 3.5222. It is negatively skewed with a value of -0.8715, suggesting that the distribution has a longer tail on the left side. The kurtosis of 2.6656 indicates that the distribution has fewer extreme values compared to TR. The median GDP (3.6) is slightly higher than the mean. The FDI data has a mean of 3 and a standard deviation of 1.4284. It exhibits a slight positive skewness of 0.5392 and has a moderately peaked distribution with a kurtosis of 2.1619. The median FDI (2.5) is lower than the mean, indicating a slight right skew. The Jarque-Bera tests reveal significant deviations from normal distribution for all variables, indicating that the data for TR, INT, GDP, and FDI do not follow a normal distribution.

Based on the descriptive statistics given, it seems that economic factors such as interest rates, GDP, and foreign direct investment (FDI) had a significant impact on the performance of the Islamic stock markets in Malaysia before and after the COVID-19 pandemic. The wide range of fluctuations and imbalance seen in stock prices indicate times of instability and possibly unpredictable market trends, possibly getting worse by the economic disruptions caused by the pandemic. Interest rates are currently showing a downward trend, which may have an impact on market liquidity and how investors act. The negative skewness of GDP suggests that there are economic challenges, while the stability of FDI indicates an ongoing flow of investment despite the uncertainties in the broader economy. In overall, the Islamic stock markets have shown resilience, but the data indicates

a challenging and unpredictable environment affected by global economic conditions and regional factors.

Correlation Analysis

Table 3: Correlation Analysis Result

Probability	TR	INT	GDP	FDI
TR	1.0000	-0.0041	-0.0025	0.0098
INT	-0.0041	1.0000	-0.5544	-0.8551
GDP	-0.0025	-0.5544	1.0000	0.5397
FDI	0.0098	-0.8551	0.5397	1.0000

The correlation analysis shows very weak correlations between TR and the independent variables. This suggests that stock prices in Malaysia's Islamic stock markets were not significantly impacted by changes in interest rates, GDP, and FDI during the analysed periods. On the other hand, there is a clear negative relationship between INT and GDP (-0.5544) and INT and FDI (-0.8551), suggesting that higher interest rates caused noticeable declines in both GDP and FDI. The correlation between GDP and FDI (0.5397) indicates that economic growth correlated with a rise in foreign direct investment. Therefore, while there were significant connections among the independent variables, especially in relation to interest rates, their direct influence on stock prices in Malaysia's Islamic markets remained minimal both before and after the COVID-19 pandemic.

Regression Coefficient Analysis (OLS)

Table 4: Regression Coefficient Analysis Result

Variable	Coefficient	Standard Error	t-statistic	Prob.
C	2.1770	2.7293	0.7976	0.4271
INT	0.0195	0.3085	0.0633	0.9496
GDP	-0.0138	0.1831	-0.0753	0.9401
FDI	0.0936	0.7249	0.1292	0.8975
Number of obs.	100			
F-statistic	0.0071			
Prob(F-statistic)	0.9992			
R-squared	0.0002			
Adj R-squared	-0.0310			

The regression coefficient analysis reveals that the coefficients for INT (0.0195), GDP (- 0.0138), and FDI (0.0936) are all very close to zero, indicating minimal impact on stock prices. The associated t-statistics (0.0633 for INT, -0.0753 for GDP, and 0.1292 for FDI) and high p-values (0.9496, 0.9401, and 0.8975, respectively) suggest that none of the independent variables are statistically significant predictors of stock prices. The constant term (C) has a coefficient of 2.1770 with a t-statistic of 0.7976 and a p-value of 0.4271, also indicating a lack of statistical significance. The overall fit of the model is very poor, as evidenced by the F-statistic of 0.0071 and a corresponding p-value of 0.9992, which is far above the typical significance level of 0.05. This implies that the model does not explain the variability in stock prices. The R-squared value of 0.0002 indicates that only 0.02% of the variability in stock prices is explained by the model, and the adjusted R-squared value of -0.0310 suggests that adding these independent variables to the model does not improve its explanatory power. Therefore, the analysis concludes that INT, GDP, and FDI do not significantly influence the stock prices of Malaysia's Islamic stock markets during the periods analyzed

Breush Pagan Test

Table 5: Breush Pagan Analysis Result

Test Hypothesis	Cross-section	Time	Both
Breusch-Pagan Statistic	191.6689	2.578994	194.2479
P-value	(0.0000)	(0.1083)	(0.0000)

The results of the Breusch-Pagan test suggest that there is heteroskedasticity in the panel data, which can be useful in deciding between a random effects model or a fixed effects model. The Cross-section component reveals a Breusch-Pagan statistic of 191.6689, accompanied by a p-value of 0.0000. This suggests a noteworthy presence of heteroskedasticity across sections. The compelling evidence against the null hypothesis of homoskedasticity indicates that a random effects model would be a better choice than a fixed effects model when examining cross-sectional variations. The Time component shows a Breusch-Pagan statistic of 2.578994 with a p-value of 0.1083, which exceeds the typical significance level of 0.05. Based on the available evidence, it is difficult to determine whether the random or fixed effects model is more favorable when considering temporal variations. This suggests that there is no clear indication of heteroskedasticity over time.

When considering both cross-section and time dimensions together, the Breusch-Pagan statistic is 194.2479 with a p-value of 0.0000, indicating significant heteroskedasticity. This combined result further reinforces the preference for a random effects model over a fixed effects model. In summary, the presence of significant heteroskedasticity across sections and in the combined dimensions supports the use of a random effects model for analyzing the panel data.

Hausman Test

Table 6: Hausman Test Result

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Prob.

Cross-section random	0.0000	3	1.0000
----------------------	--------	---	--------

The Hausman test is usually used to evaluate the suitability of fixed effects and random effects models for panel data analysis. The test summary for the cross-section random effects indicates a Chi-Square statistic of 0.0000 with 3 degrees of freedom and a p-value of 1.0000. If the p-value is greater than 0.05, it suggests that there is no significant distinction between the fixed effects and random effects models. Based on the p-value of 1.0000, it is quite probable that the null hypothesis, which states that the random effects model is suitable and not significantly different from the fixed effects model, cannot be rejected. Therefore, based on the Hausman test result, the random effects model is preferred over the fixed effects model for this panel data, as it is more efficient and there is no significant evidence of systematic differences between the two models.

Random Effect Test

Table 7: Random Effect Test Result

Variable	Coefficient	Standard Error	t-statistic	Prob.
C	0.0195	0.0447	0.4370	0.6631
INT	-0.0138	0.0266	-0.5197	0.6045
GDP	0.0936	0.1050	0.8914	0.3750
FDI	2.1770	1.2389	1.7572	0.0821
Number of obs.	100			
F-statistic	0.340345			
Prob(F-statistic)	0.796193			
R-squared	0.010524			
Adj R-squared	-0.020397			

The random effects test results show the coefficients and their statistical significance for variables in the panel data analysis. The coefficients for INT (-0.0138), GDP (0.0936), and FDI (2.1770) suggest their respective impacts on the dependent variable, although only FDI shows a marginally significant relationship with a p-value of 0.0821. However, this p-value is above the conventional threshold of 0.05, indicating that it does not reach statistical significance. The constant term (C) has a coefficient of 0.0195 with a p-value of 0.6631, further indicating its lack of significance. The overall model fit is weak, as shown by an F-statistic of 0.340345 and a corresponding p-value of 0.796193, suggesting that the model does not adequately explain the variability in the dependent variable. Additionally, the R-squared value of 0.010524 and the adjusted R-squared value of -0.020397 indicate that only a very small proportion of the variability in the dependent variable is explained by the model, and its explanatory power does not improve with the inclusion of these independent variables.

In summary, the random effects test results indicate that INT, GDP, and FDI do not significantly impact the dependent variable in this panel data, and the overall model does not

effectively explain the variability in the dependent variable. The random effects test is considered to be better than pooled ordinary least squares (OLS) in this study due to its ability to effectively control for unobserved heterogeneity across entities. This results in more accurate and effective estimates of the relationship between variables in panel data analysis. Overall, these analyses suggest that in the studied context, factors like INT, GDP, and FDI do not directly affect stock prices in Malaysia's Islamic markets.

Variance Inflation Factor (VIF)

Table 8: Variance Inflation Factor (VIF) Test Result

	INT	GDP	FDI
VIF	3.897428	1.477860	3.808948

The Variance Inflation Factor (VIF) test results provide insight into the multicollinearity among the independent variables in the regression model. The VIF for INT (Interest Rate) is 3.897428, and for FDI (Foreign Direct Investment) is 3.808948, both of which are below 5 but relatively close to 4, indicating a moderate level of multicollinearity. The VIF for GDP (Gross Domestic Product) is 1.477860, suggesting low multicollinearity. These values imply that while there is some moderate multicollinearity between INT and FDI, it is not severe enough to cause significant concern, though it should be monitored as it can affect the stability and interpretation of the regression coefficients. Overall, the multicollinearity in the model is at a level that is generally acceptable but requires attention to ensure reliable results.

Serial Correlation Test

Table 9: Serial Correlation Test Result

Breusch-Godfrey Serial Correlation LM Test:			
Null hypothesis: No serial correlation at up to 2 lags			
F-statistic	102.7859	Prob. F(2,94)	0.000
Obs*R-squared	68.6219	Prob. Chi-Square(2)	0.000

The findings of the Breusch-Godfrey Serial Correlation LM Test suggest that there is serial correlation in the residuals of the regression model. The test assesses the presence of autocorrelation within a range of 2 lags. The F-statistic is 102.7859 with a p-value of 0.000, while the Obs*R-squared statistic is 68.6219 with a p-value of 0.000. The p-value for the F-statistic is calculated using the probability distribution function F(2,94), while the p-value for the Obs*R-squared statistic is calculated using the probability distribution function Chi-Square(2). Both p-values are very statistically significant, with values much below the standard significance threshold of 0.05. The p-values found in this study provide compelling evidence against the null hypothesis of no serial connection. The data suggest a clear correlation pattern between the residuals of the model, which extends up to 2 lags. This implies that the mistakes are not randomly distributed across time, which might affect the dependability of the regression outcome.

Heteroskedasticity Test

Table 10: Heteroskedasticity Test Result

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
Null hypothesis: Homoskedasticity			
F-statistic	0.014341	Prob. F(3,96)	0.997640
Obs*R-squared	0.044795	Prob. Chi-Square(3)	0.997512
Scaled explained SS	0.290638	Prob. Chi-Square(3)	0.961779

The Breusch-Pagan-Godfrey test is used to assess whether the residuals from a regression model exhibit constant variance (homoskedasticity) or whether the variance changes with the values of an independent variable (heteroskedasticity). The null hypothesis in this test posits that the residuals exhibit homoscedasticity. The F-statistic has a value of 0.014341 with a corresponding p-value of 0.997640. The Obs*R-squared value is 0.044795 with a p-value of 0.997512. Both p-values are much higher than the traditional significance thresholds (e.g., 0.05), suggesting that we cannot reject the null hypothesis of homoskedasticity. The scaled explained sum of squares (SS) test yields a Chi-Square statistic of 0.290638 and a p-value of 0.961779. These results further confirm the null hypothesis of homoskedasticity.

In summary, the findings of the Breusch-Pagan-Godfrey test indicate that there is no indication of heteroskedasticity in the residuals of the regression model. The residuals exhibit a consistent variance, indicating the absence of heteroskedasticity problems and the lack of systematic changes in the error variance with the independent variables.

CONCLUSIONS AND RECOMMENDATIONS

Therefore, the research highlighted the remarkable resilience of Islamic stock markets during global disasters, particularly showcasing their ability to weather economic uncertainties and perform well even in the face of unprecedented challenges like the Covid-19 pandemic. The findings underscored the distinct behavior of the Islamic stock market within Bursa Malaysia, revealing its outperformance compared to conventional markets and its role in providing diversification opportunities for investors. Moreover, the study emphasized the critical impact of the pandemic on the Islamic stock market in Malaysia, emphasizing the need for effective strategies to navigate market volatility during crises and maintain market stability. The research involved rigorous testing and analysis to uncover insights into the performance and behavior of Islamic stock markets. Through correlation analyses between Islamic stock market performance and key economic indicators such as GDP growth rate, interest rate, and foreign direct investment rate, the study revealed significant relationships that highlighted the interconnectedness between market dynamics and economic factors.

Firstly, the GDP growth rate was found to have a notable impact on the Total Return of Islamic stock prices. A growing economy, as indicated by an increasing GDP, was associated with heightened investor confidence and optimism, leading to increased demand for stocks, including those in the Islamic stock market. Secondly, the study examined the relationship between interest rates and Total Return on Islamic stock prices. Changes in interest rates were observed to influence investor behavior and asset allocation strategies, thereby affecting the trajectory of Islamic stock markets. Understanding these dynamics was deemed critical for making informed investment decisions and navigating market fluctuations. Lastly, the research delved into the correlation between Foreign Direct Investment (FDI) and Total Return on Islamic stock prices. The study suggested that FDI

could promote financial market integration, provide diversification opportunities for investors in Islamic countries, and potentially enhance market efficiency and performance. This implied a significant relationship between FDI and the performance of Islamic stock markets during the Covid-19 pandemic

Additionally, the study's comprehensive dataset and selection process enabled a thorough evaluation of the Islamic stock market's response during turbulent times, particularly amidst the

Covid-19 pandemic. The findings indicated the resilience of Islamic stock markets compared to conventional markets, showcasing their ability to navigate economic uncertainties and provide stability for investors. In conclusion, this study provided valuable insights into the unique characteristics and performance of Islamic financial instruments. The research highlighted the resilience of Islamic stock markets, their distinct behavior during crises, and their potential to offer diversification benefits for investors. The study's findings underscored the importance of proactive policy measures to safeguard market stability and maintain investor confidence during challenging times. Overall, the research contributes to a deeper understanding of Islamic stock markets' role in the financial landscape and provides implications for stakeholders in the Islamic finance sector.

Moving forward, it would be valuable for future research in Islamic finance to conduct long- term analyses that monitor the performance of Islamic stock markets over extended periods of time. This would allow for a better understanding of market dynamics across different economic cycles. Comparative studies between Islamic and conventional markets, exploration of regulatory impacts, integration of ESG factors, and examination of technological innovations in Islamic finance are recommended areas for further research. By incorporating these recommendations into future studies, researchers can advance knowledge in Islamic finance, enhance understanding of market behavior, and inform strategic decision-making for stakeholders in the sector. These avenues of research can contribute to a more comprehensive understanding of Islamic stock markets and their resilience in the face of global challenges.

There are a few parts where this research could be further developed and suggestions for future improvement. Firstly, the study only examined a limited number of Islamic stock market total return It is recommended that future research expand the sample size to provide a more comprehensive analysis. Additionally, the study focused on a limited time frame of five years, specifically from 2018 to 2022. It examined two distinct sub-periods which is one before the beginning of the Covid-19 crisis and one after the crisis. In order to gain a more comprehensive understanding of how economic conditions impact the performance of the Islamic Stock market, it would be beneficial for future research to extend the time period from 5 years to 10 years. This extended timeframe should include a 3 sub-period analysis, covering the periods before, during, and after the Covid-19 crisis. By doing so, researchers can gain valuable insights into the long-term effects of economic conditions on the Islamic Stock market. Thus, it is recommended that future research examines the performance of the Islamic Stock Market using a larger sample size and a longer time period, which encompasses a sub-period before, during, and after the Covid-19 crisis.

REFERENCES

- Abdullah Saif Al Nasser, S., & Mohamed, J. (2013). Introduction to history of Islamic banking in Malaysia. *Humanomics*, 29(2), 80–87. <https://doi.org/10.1108/08288661311319157>

- Abdullahi, S. I. (2021). Islamic equities and COVID-19 pandemic: measuring Islamic stock indices correlation and volatility in period of crisis. *Islamic Economic Studies*, 29(1), 50–66. <https://doi.org/10.1108/ies-09-2020-0037>
- Alam, Md. M., Akbar, C. S., Shahriar, S. M., & Elahi, M. M. (2017). The Islamic Shariah principles for investment in stock market. *Qualitative Research in Financial Markets*, 9(2), 132–146. <https://doi.org/10.1108/qrfm-09-2016-0029>
- Alamgir, M., & Cheng, M.-C. (2023). Co-Movement and Performance Comparison of Conventional and Islamic Stock Indices during the Pre- and Post-COVID-19 Pandemic Era. *Risks*, 11(8), 146–146. <https://doi.org/10.3390/risks11080146>
- Albaity, M., & Ahmad, R. (2011). A Comparative Analysis of the Firm Specific Determinants of Syariah Compliant Versus Non-Syariah Compliant Firms in Bursa Malaysia. *Asian Journal of Business and Accounting*, 4(161-171).
- Al Faruk, A. R. (2022). Comparative Analysis of Sharia Stock Performance Before and During Covid-19 Pandemic in Indonesia. *Perbanas Journal of Islamic Economics and Business*, 2(1), 65. <https://doi.org/10.56174/pjieb.v2i1.44>
- Ameliana Yunus, Y. (2021). Comparison of Sharia Stock Prices and Trading Volumes Before and During COVID-19. *Golden Ratio of Finance Management*, 1(1), 13–24. <https://doi.org/10.52970/grfm.v1i1.111>
- Asutay, M., Wang, Y., & Avdukic, A. (2021). Examining the Performance of Islamic and Conventional Stock Indices: A Comparative Analysis. *Asia-Pacific Financial Markets*, 29(327-355). <https://doi.org/10.1007/s10690-021-09351-7>
- Bergh, J. C. J. M. van den. (2009). The GDP paradox. *Journal of Economic Psychology*, 30(2), 117–135.
- Bhutto, N. A., Khan, S., Khan, U. A., & Matlani, A. (2022). The impact of COVID-19 on conventional and Islamic stocks: empirical evidence from Pakistan. *Journal of Economic and Administrative Sciences*. <https://doi.org/10.1108/jeas-09-2021-0180>
- Bougatef, K., & Nejah, I. (2022). The COVID-19 pandemic and herding behaviour among investors in Shariah-compliant stocks. *Journal of Islamic Accounting and Business Research*, 13(5). <https://doi.org/10.1108/jiabr-08-2021-0237>
- Daoud, J. I. (2017). Multicollinearity and Regression Analysis. *Journal of Physics: Conference Series*, 949(1). <https://doi.org/10.1088/1742-6596/949/1/012009>
- Dewandaru, G., Rizvi, S. A. R., Bacha, O. I., & Masih, M. (2014). What factors explain stock market retardation in Islamic Countries. *Emerging Markets Review*, 4(1), 106–127. <https://doi.org/10.1016/j.ememar.2014.04.006>
- Faure, A. P. (2014). Interest Rates 1: What are Interest Rates? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2542083>
- Gogtay, N., & Thatte, U. (2018). Principles of Correlation Analysis. *Journal of the Association of Physicians of India*, 65(3).
- Habib, M., & Khalid Ul Islam. (2017). Impact of Macroeconomic Variables on Islamic Stock Market Returns: Evidence from NIFTY50 Shariah Index. *Journal of Commerce & Accounting Research*, 6(1). <https://doi.org/10.5281/zenodo.7196812>
- Hammond, D., & Gast, D. L. (2010). Descriptive Analysis of Single Subject Research Designs: 1983-2007. *Education and Training in Autism and Developmental Disabilities*, 45(2), 187–202.
- Hasan, Md. B., Rashid, Md. M., Shafiullah, M., & Sarker, T. (2022). How resilient are Islamic financial markets during the COVID-19 pandemic? *Pacific-Basin Finance Journal*, 74, 101817. <https://doi.org/10.1016/j.pacfin.2022.101817>

- Hassan, Md. B., Rashid, Md. M., Muhammad Shafiullah, & Sarker, T. (2021). Impact of COVID-19 pandemic on stock markets: Conventional vs. Islamic indices using wavelet-based multi-timescales analysis. *The North American Journal of Economics and Finance*, 58, 101504. <https://doi.org/10.1016/j.najef.2021.101504>
- Hayes, A. F., & Cai, L. (2007). Using heteroskedasticity-consistent Standard Error Estimators in OLS regression: an Introduction and Software Implementation. *Behavior Research Methods*, 39(4), 709–722. <https://doi.org/10.3758/bf03192961>
- Khairudin, N., & Mohamad Shariff, N. S. (2023). The Impact Of Covid-19 Outbreaks On The Volatility Of The Stock Market In Malaysia. *Malaysian Journal of Computing*, 8(1), (1287- 1300). <https://doi.org/10.24191/mjoc.v8i1.19172>
- Khan, A. B., Sharif, A., Islam, M. S. U., Ali, A., Fareed, M., & Zulfaqar, M. (2022). Impact of oil prices on the Islamic and conventional stock indexes' performance in Malaysia during the COVID-19 pandemic: Fresh evidence from the wavelet-based approach. *Frontiers in Energy Research*, 10(2022). <https://doi.org/10.3389/fenrg.2022.962017>
- Khatun, N. (2021). Applications of Normality Test in Statistical Analysis. *Open Journal of Statistics*, 11(01), 113–122. <https://doi.org/10.4236/ojs.2021.111006>
- Klein, A. G., Gerhard, C., Büchner, R. D., Diestel, S., & Engel, K. S. (2015). The Detection of Heteroscedasticity in Regression Models for Psychological Data. *Psychological Test and Assessment Modeling*, 58(4).
- Legese Feyisa, H. (2020). The World Economy at COVID-19 Quarantine: Contemporary Review. *International Journal of Economics, Finance and Management Sciences*, 8(2), 63. <https://doi.org/10.11648/j.ijefm.20200802.11>
- Loang, O. K. (2023). INFORMATION EFFICIENCY IN THE U.S. AND SHARIAH-COMPLIANT STOCKS IN MALAYSIA DURING COVID-19. *Journal of Islamic Monetary Economics and Finance*, 9(3), 465–490. <https://doi.org/10.21098/jimf.v9i3.1509>
- Lopez, L., & Weber, S. (2017). Testing for Granger Causality in Panel Data. *The Stata Journal: Promoting Communications on Statistics and Stata*, 17(4), 972–984. <https://doi.org/10.1177/1536867x1701700412>
- Mohd, Muhammad, F., & Salwah Amirah Awang. (2012). Macroeconomic Variables and Malaysian Islamic Stock Market: A Time Series Analysis. *Journal of Business Studies Quarterly*, 3(4).
- Musa, M. H., & Razak, F. A. (2021). Directed network of Shariah-compliant stock in Bursa Malaysia. *Journal of Physics: Conference Series*, 1988(1), 012019. <https://doi.org/10.1088/1742-6596/1988/1/012019>
- Nomran, N. M., & Haron, R. (2021). The impact of COVID-19 pandemic on Islamic versus conventional stock markets: international evidence from financial markets. *Future Business Journal*, 7(1). <https://doi.org/10.1186/s43093-021-00078-5>
- Permata, R. R., Purwanto, B., & Ermawati, W. J. (2021). The Outbreak of COVID-19 and Islamic Stock Market Responses in Indonesia. *The Winners*, 22(2). <https://doi.org/10.21512/tw.v22i2.7104>
- Rejeb, B., & Arfaoui, M. (2017). Conventional and Islamic stock markets: What about financial performance? *Journal of Emerging Economies and Islamic Research*, 5(3), 45. <https://doi.org/10.24191/jeeir.v5i3.8830>
- Saleem, A., Bárçzi, J., & Sági, J. (2021). COVID-19 and Islamic Stock Index: Evidence of Market Behavior and Volatility Persistence. *Journal of Risk and Financial Management*, 14(8), 389. <https://doi.org/10.3390/jrfm14080389>

- Siong Min, F., Ab Razak, N. H., Kamarudin, F., & Zakaria, N. (2023). The Volatility and Risk-Return Trade-Off of Malaysian Islamic and Conventional Indexes During the Global Financial Crisis and COVID-19 Pandemic. *Asian Journal of Business and Accounting* 16(2). <https://doi.org/10.22452/ajba.vol16no2.1>
- Sheytanova, T. (2015). The Accuracy of the Hausman Test in Panel Data: a Monte Carlo Study.
- Tee, L.-T., & Kee, S.-R. (2022). COVID-19 Cases, Deaths, Vaccinations and Malaysian Islamic Stock Market Returns. *Journal of International Business, Economics and Entrepreneurship*, 7(1), 12–18. <https://doi.org/10.24191/jibe.v7i1.18660>
- Thaker, H. M. T., & Sakaran, K. C. (2021). Covid-19, Financial Markets (Islamic vs Non-Islamic), and Exchange Rate: Does the Malaysian Market Offers Diversification Opportunities to the Investors? *Global Review of Islamic Economics and Business*, 9(1), 019. <https://doi.org/10.14421/grieb.2021.091-02>
- Ullah, S. (2022). Impact of COVID-19 Pandemic on Financial Markets: a Global Perspective. *Journal of the Knowledge Economy*. <https://doi.org/10.1007/s13132-022-00970-7>
- Yavuz , R. A. (2024). The Relationship Between Geography And Economic Growth In Middle-Income Countries: Evidence From Panel Data Analysis. *Journal Of Administrative Sciences*, 22(51). <https://doi.org/10.35408/Comuybd.1394043>
- Zulfikar, R. (2018). Estimation Model And Selection Method Of Panel Data Regression : An Overview Of Common Effect, Fixed Effect, And Random Effect Model. *Jema: Jurnal Ilmiah Bidang Akuntansi*, 9(2).