

Comparing Islamic and Conventional Stock Market Models: Implications for Economic Growth in Malaysia

Khaled Moussa Embarek¹, Zoheir Berkem²

¹ Oum El-Bouaghi University, Algeria; moussaembarekkhaled@gmail.com

² Innovation and Financial Engineering Laboratory (INIF), Oum El-Bouaghi University, Algeria. berkem_zr@yahoo.fr

Article Information

Article history

Received: 21 February 2025

Accepted: 26 September 2025

Published: 30 September 2025

Corresponding Author

Zoheir Berkem

berkem_zr@yahoo.fr

Copyright © 2025, University center of Abdelhafid Boussof, Mila. This is an open access article under the CC BY-NC-ND license.

Suggested Citation

Moussa Embarek, K., & Berkem, Z. (2025). Comparing Islamic and Conventional Stock Market Models: Implications for Economic Growth in Malaysia, Finance and Business Economics Review, Vol. 9, No. 3, pp. 49-67. DOI : 10.58205/fber.v9i3.2007

Abstract: This study investigates and compares the behavior of Malaysia's Islamic and conventional stock markets, emphasizing their distinct contributions to economic growth during the period 2008–2023. Adopting an inductive methodology that integrates descriptive comparative analysis, cross-correlation, and the ARDL modeling framework, the research examines both short-term and long-term dynamics between financial market indices and real GDP. The results demonstrate that Islamic stock indices exhibit higher resilience, enhanced stability, and a more consistent adjustment process during episodes of financial turbulence, particularly the 2008 mortgage crisis and the COVID-19 pandemic. Their performance is strongly linked to real economic sectors such as utilities, food, and telecommunications, reflecting a structural alignment with sustainable economic activity. Furthermore, Islamic indices reveal a stronger cointegration relationship with GDP and display superior predictive ability for future economic performance. They also ensure faster correction of macroeconomic disequilibria. These findings underline the strategic relevance of Islamic finance as a stabilizing force that fosters financial resilience, market efficiency, and long-term economic sustainability within Malaysia's dual financial system..

Keywords: ARDL; Financial markets; GDP; Islamic stock indices; Malaysia.

1. Introduction

Financial systems, particularly stock markets, have been a major focus in economic studies due to their vital role in driving economic growth. Significant contributions to the theoretical literature on stock market development and economic growth have been made by Levine (1991), Bencivenga and Smith (1991), Diamond (1984), and Fulghieri and Rovelli (1998), who supported the role of stock markets in fostering economic growth and emphasized that stock market liquidity is essential for this purpose (Masoud, 2013). However, financial markets frequently experience disturbances and crises, undermining their ability to function effectively. Such crises are often associated with substantial declines across a wide range of macroeconomic indicators. For instance, recessions that follow financial crises exhibit significantly larger declines in consumption, investment, industrial production, employment, and trade compared to those occurring without crises (Claessens and Kose, 2013).

Over the past five decades, the frequency of stock market crises has increased, intensifying the focus on understanding their causes and their implications for market functionality. These crises have raised critical questions about the effectiveness of stock markets in driving economic activity, particularly given their recurrent nature and associated economic disruptions. For example, the 2008 Financial Crisis had profound and lasting

effects, fundamentally altering volatility patterns in cyclical sectors such as materials, industrials, and consumer discretionary industries (Claessens and Kose, 2013).

In this context, Islamic finance has emerged as a rapidly growing sector, introducing distinctive financial instruments such as sukuk (Islamic bonds) and Islamic stocks, which are traded globally. The resilience of Islamic finance during financial crises, such as the robust performance of Islamic banks in the Gulf Cooperation Council (GCC) region during the 2008 global financial crisis, has drawn significant academic interest (Hossien et al., 2021). Researchers have explored factors underpinning this success, focusing on the practical application of Sharia principles and the link between financial markets and the real economy to promote stability and sustainable growth.

Malaysia is recognized as a global leader in Islamic finance, operating a dual banking system and hosting the largest sukuk market, which accounts for 52% of global outstanding sukuk. Key components of Malaysia's Islamic finance sector include a robust Islamic money market, dominated by Commodity Murabahah, and a wide range of innovative financial products. Compared to GCC countries and regional peers like Indonesia, Malaysia excels in terms of market size and product diversity (Islamic Financial Market Committee, 2023). These attributes make the Malaysian financial market particularly suitable for comparative studies.

This study aims to analyze potential differences between Malaysia's Islamic and conventional stock markets, focusing on their respective contributions to economic growth. It also seeks to understand the underlying reasons for these differences within the Malaysian context. While research on the relationship between stock markets and economic growth has garnered significant attention, studies specifically examining Islamic stock markets remain limited due to their relatively recent emergence and smaller scale, which present challenges in acquiring sufficient data for robust empirical analysis.

Comparative research further necessitates homogeneous data for Islamic and conventional markets, particularly regarding study periods and standardized variables. Addressing their contributions to economic growth involves additional complexities arising from differences in the nature of economic and stock market data, which complicates analytical processes. This study aims to fill these gaps in comparative research.

The methodology employs an inductive approach, incorporating descriptive comparative analysis, cross-correlation analysis, and autoregressive distributed lag analysis, alongside the comparative method. It primarily utilizes a quantitative approach to analyze economic data. The study examines data from the first quarter of 2008 to the fourth quarter of 2023, comparing conventional and Islamic stock indices in the Malaysian financial market. It evaluates their relationship with and contribution to economic growth, as well as their role in ensuring financial market stability.

The remainder of the paper is organized as follows:

- Section I reviews significant related studies to identify the research gap and formulate the study's hypotheses.
- Section II details the research methodology, including study design, methods, and data sources.
- Section III interprets the results of the econometric analysis and compares them with prior findings. This section discusses the comparative analysis of index behavior, cross-correlation findings, and cointegration study outcomes.
- Section IV concludes the study by summarizing key findings and their implications.

2. Literature Review and Hypotheses Development

2.1. Conventional Financial Markets and Economic Growth

Numerous studies have explored the relationship between conventional stock markets and

economic growth, with findings generally indicating that the development of financial markets positively influences economic growth, particularly in advanced economies. Examples of such studies include (Choong et al., 2010; Levine & Zervos, 1998; Boubakari & Jin, 2010; Sulaiman et al., 2023; Hossain et al., 2013; Njemcevic, 2016; Alfaro et al., 2004; Acha & Akpan, 2019; Pan & Mishra, 2017; Adamopoulos, 2010; Wanaset, 2018; Nordin & Nordin, 2016; Pradhan, 2018).

However, findings from emerging economies reveal inconsistencies due to structural inefficiencies and contextual factors. Certain studies suggest negative or inconclusive effects of financial market development on economic growth, including (Khataybeh & Omet, 2021; Pan & Mishra, 2017; Filer et al., 2000).

These findings imply that the causality and nature of the relationship between financial markets and economic growth vary depending on the economic and institutional frameworks of the countries analyzed.

2.2 Islamic Financial Markets and Economic Growth

In the context of Islamic financial markets, researchers broadly agree that these markets contribute significantly to economic growth. However, outcomes vary depending on the financial instruments employed and the specific economic conditions of the case studies. Examples include (Adewiyah & Bawono, 2023; Kamarudin et al., 2023; Anugerah et al., 2023; Farid et al., 2022; Ledhem & Mekidiche, 2022; Khavarinezhad et al., 2021; Saleem et al., 2021; Marsi & Wardani, 2020; Musa et al., 2020; Muharam et al., 2019; Ayaz et al., 2019; Sari et al., 2018; Yusof & Majid, 2008).

An exception was identified by Ayaz et al. (2019), who reported a potential negative impact of Islamic market capitalization on economic growth in specific countries, such as the UAE.

2.3 Comparative Studies of Financial Markets and Economic Growth

Comparative studies of Islamic and conventional financial markets exhibit diversity in their contexts and methodologies, with a primary focus on countries like Malaysia, Indonesia, and Pakistan. Analytical approaches include statistical t-tests to analyze differences, GARCH models to examine return and risk volatility during crises, and ARDL models to investigate long-term relationships, such as the influence of financial instruments on economic growth.

Table .1. Key Findings from Studies on the Role of Islamic and Conventional Finance in Economic Growth

Study	Objective	Sample	Methodology	Key Findings
Tan & Shafi (2021)	Role of sukuk, bonds, and equities in Malaysia's economic growth.	1998–2018, Malaysia.	ARDL	Equities positively impact long-term growth; sukuk and bonds have insignificant effects.
Firdaus et al. (2024)	Compare growth in Islamic vs. conventional finance countries.	10 Islamic, 10 non Islamic countries (2018–2022).	t-test, Mann-Whitney	No significant differences; Islamic countries showed slightly higher, insignificant growth.
Grassa & Gazdar (2014)	Impact of Islamic and conventional finance on GCC economic growth.	1996–2011, 5 GCC countries.	GLS	Islamic finance boosts growth; conventional finance and sukuk have negligible impact.

Source: Compiled by researchers based on multiple sources (Tan & Shafi, 2021; Firdaus et al., 2024 ; Grassa & Gazdar , 2014).

Table .2. Comparative Analysis of Islamic and Conventional Stock Markets and Their Economic

Impacts

Study	Objective	Sample	Methodology	Key Findings
Hanif & Bhatti (2018)	Analyze the causal relationship between Islamic and conventional stock markets and macroeconomic variables in Pakistan.	July 2011–October 2016, Pakistan.	OLS regression, causality tests.	Islamic markets are more strongly linked to real economic variables (e.g., industrial production, remittances) than conventional markets.
Altarturi & Abduh (2016)	Compare the impact of Islamic and conventional stock markets on economic performance in Malaysia.	2000–2007, Malaysia.	Cointegration, VAR, VDC, IRF.	Islamic markets have a bidirectional relationship with economic growth, while conventional markets have a unidirectional impact and contribute more to growth.
Abduh & Sukmana (2013)	Compare the effect of Islamic and conventional stock markets on economic growth in Malaysia.	2000–2011, Malaysia.	ARDL	Islamic markets show long-term integration with economic growth and bidirectional causality, unlike conventional markets.

Source: Compiled by researchers based on multiple sources (Hanif & Bhatti, 2018; Altarturi & Abduh, 2016; Abduh & Sukmana, 2013).

FBER

52

Key findings from these studies include the following:

- Performance of Sukuk and Bonds: Islamic sukuk outperformed conventional bonds in Indonesia, while their performance was comparable in Malaysia.

- Risk and Returns: Islamic stocks demonstrated higher returns and lower risks, particularly during economic crises.

- Impact on Economic Growth: Some studies found no significant impact of sukuk on economic growth in Malaysia and Gulf countries, whereas others indicated that Islamic stocks were more strongly associated with economic growth in Pakistan and Malaysia. However, conventional stocks outperformed Islamic ones in certain contexts.

These observations highlight a notable gap in the comparative analysis of Islamic and conventional stock markets and their relationship with economic growth. Only three studies explicitly addressed this comparison, yielding conflicting results, particularly concerning the Malaysian market. Specific limitations in existing research include:

- Limited Time Periods: Studies often focus on short durations, such as 2000–2007 or 2000–2011.

- Methodological Shortcomings: A lack of diagnostic tests for residuals and structural stability undermines the robustness of results.

- Control Variables: The absence of control variables in certain studies may introduce bias in estimations and findings.

This study seeks to address these limitations by conducting a comprehensive analysis covering a longer timeframe, utilizing a larger dataset, and employing robust econometric models to ensure reliable findings.

2.4 Hypotheses Development

The theoretical perspectives on the relationship between conventional financial markets and economic growth can be categorized as follows:

- Unidirectional Relationship: Financial markets drive economic growth (supply-leading), or economic growth stimulates financial market development (demand-following).
- Bidirectional Relationship: Financial markets and economic growth mutually reinforce one another.
- No Relationship: In certain economic contexts, no significant relationship exists (Lucas, 1988).

Based on these perspectives, the first research hypothesis is:

Hypothesis 1: The Malaysian stock market positively influences economic growth, regardless of its compliance with Shariah principles.

Regarding Islamic financial markets, the relationship with economic growth is examined through three dimensions:

- Performance Efficiency: Shariah constraints may reduce diversification or enhance efficiency through ethical investments and sustainable finance (Ali et al., 2018).
- Stability: Islamic finance enhances stability through risk-sharing mechanisms, real economy linkages, and ethical responsibility (Mirakhor & Krichen, 2009; Hasan, 2015).
- Economic Growth Support: Investment in real assets promotes economic growth while minimizing speculative practices (Mustafa et al, 2017; Erbaş & Mirakhor, 2013).

Based on these dimensions, the following hypotheses are proposed:

- Hypothesis 2: Islamic stocks are more linked to real economic activity than conventional stocks.
- Hypothesis 3: Islamic stocks outperform conventional stocks in fostering economic growth in Malaysia.

FBER**53**

3. Study Methodology

3.1. Study Variables

The primary variables in this study include Gross Domestic Product (GDP) as a measure of economic growth and financial market indices. A set of control variables is also incorporated to account for external influences.

3.1.1. Gross Domestic Product: The dependent variable in this study is the seasonally adjusted real GDP, denoted as "RGDPSA" in econometric analysis.

3.1.2. Financial Market Indices: Financial market indices serve as tools for evaluating the performance of financial assets, such as stocks, bonds, and other securities. These indices are specifically designed to reflect financial market or economic sector dynamics, aiding in the analysis of price trends and overall market performance (Bailey, 2005).

- FTSE Bursa Malaysia EMAS Index : Known as EMAS, this index encompasses securities within the FTSE Bursa Malaysia Top 100 Index, representing the largest index in Malaysia's stock market. The banking sector significantly influences this index's performance, as highlighted in the June 2024 update. EMAS includes both Sharia-compliant and non-compliant companies.

- FTSE Bursa Malaysia EMAS Shariah Index: Referred to as EMAS_shar, this index comprises Sharia-compliant shares classified by the Shariah Advisory Council (SAC) (Russell, 2024). The banking sector contributes only 0.84% to this index's total market capitalization.

- FTSE Bursa Malaysia KLCI Index: Also called the Kuala Lumpur Composite Index (KLCI), this index includes the top 30 companies by market capitalization within the EMAS index. The banking sector dominates the KLCI index, contributing 50% of its market capitalization, of which a significant portion is Sharia-compliant (as of June 2024).

- FTSE Bursa Malaysia Hijrah Shariah Index: Abbreviated as HIJRAH, this index consists of the top 30 companies by market capitalization within the EMAS_shar index. It primarily focuses on real economic activities tied to household needs, including utilities, telecommunications, food, and healthcare sectors.

3.1.3. Control Variables: Control variables are incorporated to mitigate the impact of unobserved external factors that may introduce bias into the analysis. This study employs five control variables: inflation rate (infla), interest rate (inter), exchange rate changes relative to the US dollar (exch), export growth rate (export), and import growth rate (import).

3.2. Data sources

This study employs key economic and financial indicators from reputable sources to ensure data reliability and analytical accuracy. Quarterly GDP data covering the period from Q1 2008 to Q4 2023 is obtained from the Central Bank of Malaysia¹ and is expressed in billion Malaysian Ringgit (MYR). Financial market indices, sourced from Investing.com, are recorded as end-of-quarter values to align with GDP measurements.

Additionally, the study incorporates key control variables, including inflation, interest rates, exchange rates, exports, and imports, all derived from the Central Bank of Malaysia. Except for the interest rate, which is reported as an absolute value, all other variables are expressed as quarter-over-quarter (QoQ) percentage changes to maintain consistency in comparative analysis

2. 3. Study Methods

The study employs three methodological approaches: comparative behavior analysis of indices, cross-correlation analysis, and cointegration analysis.

2.3.1. Comparative Analysis of Indices Behavior : The behavior of the four selected indices is analyzed using quarterly price data from 2008 to 2023. This period is divided into three phases: the 2008 mortgage crisis, the 2020 COVID-19 crisis, and an interval of relative stability between these two crises. Visualization techniques are employed to illustrate index trends.

2.3.2 Cross-Correlation Analysis : To measure and compare the correlation between variables, cross-correlation analysis with time lags will be applied (Zalgiryte, Guzavicius, & Tamulis, 2014). Correlation coefficients between quarterly percentage changes in the four indices and seasonally adjusted real GDP changes will be calculated for eight lag periods on both sides.

To calculate the correlation coefficients between two time series, and, with lags for the series, the following formula is applied:

$$r_{xy}(k) = \frac{\sum_{i=1}^{n-k} (x_i - \bar{x}_k)(y_{i-k} - \bar{y}_k)}{\sqrt{\sum_{i=1}^{n-k} (x_i - \bar{x}_k)^2 \sum_{i=1}^{n-k} (y_{i-k} - \bar{y}_k)^2}}$$

Where:

- $r_{xy}(k)$: The correlation coefficient between variable x and variable y lagged by k periods.
- i: The observation rank.
- n: The number of observations.
- $\bar{x}_k$: The arithmetic mean of the time series x_t , where t spans from 1 to n-.
- $\bar{y}_k$ k : The arithmetic mean of the time series y_t lagged by k periods.
- The number of lags k ranges from 0 to 8.

¹ <https://www.bnm.gov.my/publications>

This formula will be applied to the time series of the variation rates for the four indices and the variation rates of the seasonally adjusted real GDP, with a lag of eight periods. This analysis covers two periods: 2008–2023 (the mortgage crisis and the COVID-19 pandemic) and 2010–2019.

2.3.3. Cointegration Analysis: Cointegration refers to the existence of a long-term relationship between two or more variables that diverge only due to temporary fluctuations (Gebhard, Jürgen, & Uwe, 2013). To determine cointegration between variables, the ARDL model will be applied using the bounds testing technique (Pesaran, Shin, & Smith, 2001).

The analysis is conducted in two phases:

- Examining the Existence of a Long-Term Relationship ;
- Estimating Short- and Long-Term Relationship Coefficients

To study the existence of a cointegration relationship between the two time series y_t and x_t , the ARDL(p, q) model is formulated as follows:

$$\Delta y_t = \alpha_0 + \sum_{i=1}^p \alpha_{1i} \Delta y_{t-i} + \sum_{j=0}^q \alpha_{2j} \Delta x_{t-j} + \beta_1 y_{t-1} + \beta_2 x_{t-1} + u_t \dots \dots \dots (1)$$

Where:

- y and x : Represent the dependent and independent variables, respectively.
- α_0 : The constant term.
- α_1 and α_2 : Short-term dynamic coefficients.
- β_1 and β_2 : Long-term relationship coefficients.
- u_t : The random error term.
- p and q : The lag lengths or time gaps for the dependent and independent variables, respectively.

To test for a long-term relationship in the model, the following hypotheses are examined:

- H_0 : Null hypothesis, indicating no long-term relationship, valid when $\beta_1 = \beta_2 = 0$.
- H_1 : Alternative hypothesis, indicating the existence of a long-term relationship, valid when $\beta_1 \neq \beta_2 \neq 0$.

The hypothesis is tested using the bounds test approach. This involves comparing the calculated F-statistic (Fisher statistic) and t-statistic with critical values defined by Pesaran, Shin, and Smith (2001) for sample sizes between 80 and 190 observations, and by Narayan (2004) for sample sizes between 30 and 80 observations. The null hypothesis is rejected if the computed F-statistic exceeds the upper critical bounds and the computed t-statistic is less than the lower critical bounds, indicating a long-term relationship or cointegration between the variables. In such a case, the long-term relationship can be formulated as:

$$y_t = \alpha_0 + \sum_{i=1}^p \alpha_{1i} y_{t-i} + \sum_{j=0}^q \alpha_{2j} x_{t-j} + u_t \dots \dots \dots (2)$$

Subsequently, the short-term relationship is modeled, and the error correction term is extracted by taking the first differences of the dependent and independent variables with their lags, along with adding the error correction term, as follows:

$$\Delta y_t = \alpha_0 + \phi EC_{t-1} + \sum_{i=1}^p \alpha_{1i} \Delta y_{t-i} + \sum_{j=0}^q \alpha_{2j} \Delta x_{t-j} + u_t \dots \dots \dots (3)$$

Where EC represents the error correction term or the deviation between the short-term and long-term relationships. The error correction coefficient must be negative and statistically significant, indicating the speed of short-term adjustments to correct deviations toward the long-term cointegration relationship between the variables.

4. Study Results

4.1. Assessing Long-Run and Short-Run Dynamics through ARDL Modeling

4.1.1 Testing the Stationarity of Time Series : The Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests were employed to assess the stationarity of variables. Results indicated non-stationarity at levels but stationarity at the first difference (I(1)). For instance, LnRGDPSA had a probability of stationarity of 0.8849 at levels (non-stationary) but 0.0000 at the first difference (stationary).

4.1.2 Building the Model and Determining Optimal Lags : The Akaike Information Criterion (AIC) was used to identify optimal lag structures, with six quarterly lags proving ideal for all primary models, reflecting dynamic responses extending over 18 months. The best AIC value was -5.304610, with the model involving LnRGDPSA and LnEMAS using six lags for both dependent and independent variables.

4.1.3 Diagnostic Tests : The model's assumptions were validated through diagnostic tests:

- Serial Correlation (Breusch-Godfrey LM Test): No serial correlation was detected (e.g., F-statistic = 0.006183; p-value = 0.9938 for LnRGDPSA and LnEMAS).
- Heteroskedasticity (Breusch-Pagan-Godfrey Test): Residuals exhibited constant variance (e.g., F-statistic = 1.616082; p-value = 0.1851).
- Normality (Jarque-Bera Test): Residuals were normally distributed (e.g., Jarque-Bera = 0.234549; p-value = 0.889341).
- Structural Stability (CUSUM and CUSUM of Squares): Models demonstrated stability as curves remained within critical bounds.

4.1.4 Bounds Testing : Bounds testing identified long-run relationships at a 1% significance level. For example, the model with LnRGDPSA and LnEMAS yielded an F-statistic of 6.850102, exceeding critical bounds at the 5% level (lower = 2.04, upper = 3.24).

4.1.5 Estimation of Long-Run and Short-Run Relationships: Using the ARDL approach, both long-run and short-run coefficients were estimated. The Error Correction Mechanism (ECM) was negative and statistically significant, implying rapid adjustment to equilibrium (e.g., ECM = -0.35; p-value < 0.01).

4.1.6 Comparative Analysis of Regression Models : The following table presents key statistical indicators for each regression model, focusing on standard error, sum of squared residuals, and adjusted R².

Table .3. Summary of Regression Model Performance

Model	Index Used	SER (Standard Error of Regression)	SSR (Sum of Squared Residuals)	Adjusted R ²
Equation 4	Conventional Market (EMAS)	Moderate	Moderate	Moderate
Equation 5	Islamic Market (EMAS_shar)	Low	Low	High
Equation 6	Conventional Index (KLCI)	Moderate	Lowest	High
Equation 7	Shariah-Compliant Index (HIJRAH)	Low	Low	High

Source: prepared by researchers using EViews software outputs

All models demonstrate strong statistical validity, yet Equations 5 and 7 exhibit superior precision, as reflected in their lower Standard Error of Regression (SER) and higher adjusted R² values. Additionally, Equation 6, which records the lowest Sum of Squared Residuals

(SSR), also demonstrates excellent data-fitting capabilities. These results suggest that Models 5, 6, and 7 are the most statistically robust.

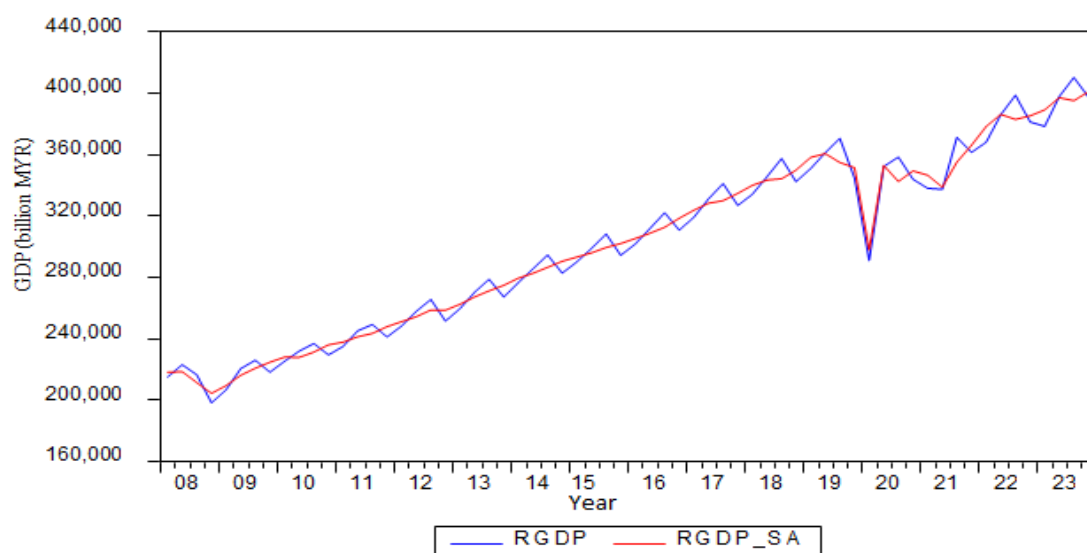
The equations evaluate the impact of conventional and Islamic financial indices on economic performance:

- Equation 4: Analyzes the effect of the conventional financial market (EMAS) on economic growth.
- Equation 5: Investigates the role of the Islamic market (EMAS_shar) in shaping macroeconomic trends.
- Equation 6: Utilizes the Kuala Lumpur Composite Index (KLCI), which includes companies that may not conform to Shariah financial principles.
- Equation 7: Employs the Shariah-compliant HIJRAH index, consisting exclusively of firms that adhere to Islamic financial standards.

4.2 Performance of Financial Market Indices During the Study Period

4.2.1 Evolution of Gross Domestic Product (GDP) : Figure 1 presents a comparative illustration of Malaysia's original GDP data and seasonally adjusted GDP values over the period 2008–2023. The data, expressed in billion Malaysian Ringgit (MYR), highlight the impact of seasonal adjustments on GDP trends.

Fig. 1. Seasonal Adjustment Effects on GDP Data (2008–2023)



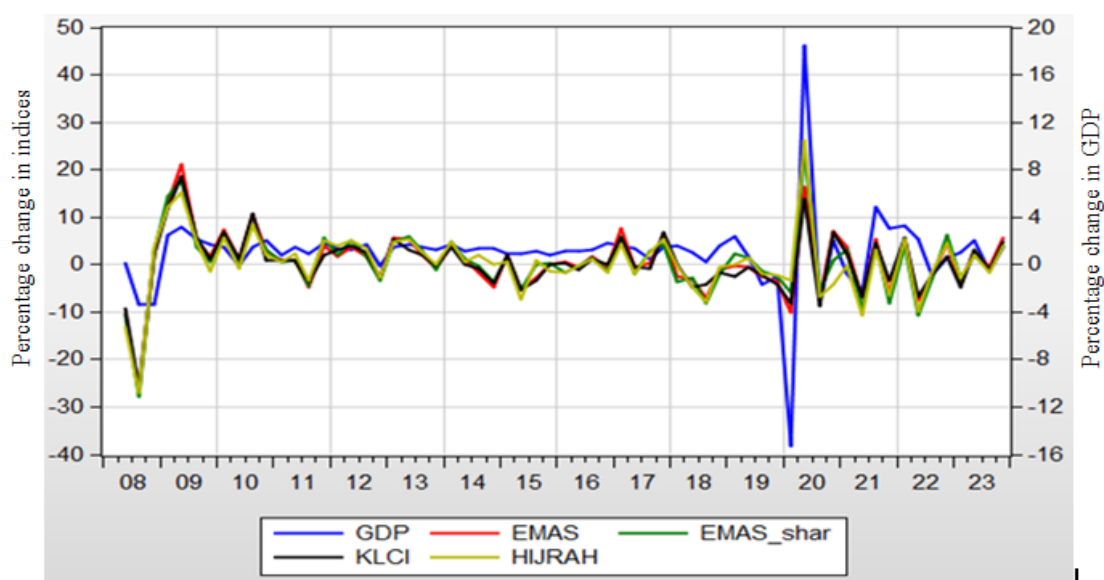
Source: Authors' calculations based on data from the Central Bank of Malaysia and analysis using EViews software.

The presence of recurring seasonal effects (represented by the blue curve) manifests as periodic fluctuations of relatively consistent proportions. These fluctuations can obscure structural economic changes, making it difficult to distinguish long-term economic trends. By applying seasonal adjustment techniques (red curve), the data exhibit a more stable trajectory, emphasizing variations associated with fundamental economic growth rather than short-term cyclical fluctuations.

4.2.2. Performance of Financial Market Indices Across Distinct Phases (2009–2022) : The Malaysian stock market revealed notable differences in the performance of Islamic and conventional market indices during the study period. These variations were observed across three distinct phases: the recovery phase from the mortgage crisis (2009–2010), the relative stability phase (2011–2019), and the COVID-19 pandemic crisis (2020–2022).

During the recovery phase, both types of indices demonstrated growth; however, conventional indices outperformed Islamic indices. The relative stability phase was characterized by an overall decline in performance, with conventional indices experiencing sharper declines than their Islamic counterparts. During the COVID-19 pandemic, the divergence between the two types of indices became more pronounced. Conventional indices exhibited steeper declines at the onset of the crisis, while Islamic indices, characterized by their focus on defensive sectors, demonstrated greater resilience and recovered more robustly.

Fig. 2. Trends in Financial Indices and GDP (2008–2023)



FBER

58

Source: Authors' calculations based on data from the Central Bank of Malaysia (2008–2023) and Investing.com (2008–2023), analyzed using EViews software.

These performance differences can be attributed to the nature of the stocks comprising the indices. Shariah-compliant stocks, which avoid interest-based debt and focus on essential sectors, tend to exhibit defensive characteristics. This makes them less susceptible to market volatility during crises, although they may offer lower speculative appeal during periods of economic growth. Conversely, conventional stocks, which include sectors like banking and telecommunications, are more sensitive to economic activity and credit risks, particularly during crises.

The findings suggest that Islamic indices provide greater stability during periods of economic turbulence, making them a more attractive option for long-term investors. In contrast, conventional indices are better positioned to deliver higher returns during periods of economic expansion.

4.2.3 Correlation Between Financial Market Indices and GDP and Differences Between Islamic and Conventional Indices : The study examines the relationship between financial market indices and GDP fluctuations, analyzing their correlations both during and outside of economic crises. The findings indicate that financial market indices exhibit significant sensitivity to economic growth, with notable differences between Islamic and conventional indices.

Cross-Correlation Including Crisis Periods :

Table .4. Cross-Correlation Coefficients Between Changes in Indices and Changes in Seasonally Adjusted GDP (Including Crisis Periods)

	RGDPSA lagged on indices			
lags	EMAS	EMAS SHAR	KLCI	HIJRAH
0	0,622703	0,606542	0,604619	0,617881
1	-0,491477	-0,530518	-0,505449	-0,555163
2	0,261576	0,071550	0,319812	0,012307
3	-0,092072	-0,010309	-0,128909	0,018219
4	-0,211150	-0,191254	-0,195509	-0,142027
5	0,305621	0,351861	0,289378	0,351278
6	-0,240240	-0,235223	-0,186356	-0,163462
7	0,209499	0,205258	0,185729	0,198181
8	-0,273367	-0,269653	-0,298867	-0,278309
	indices lagged on RGDPSA			
lags	EMAS	EMAS SHAR	KLCI	HIJRAH
0	0,622703	0,606542	0,604619	0,617881
1	-0,231749	-0,194386	-0,182418	-0,146849
2	0,027361	0,022457	0,006966	0,030760
3	-0,003663	-0,067854	0,006409	-0,109193
4	-0,055170	-0,098005	-0,020800	-0,089589
5	0,182734	0,228447	0,143084	0,167334
6	0,097916	0,117908	0,060647	0,143853
7	-0,016372	0,003161	0,025129	0,033066
8	-0,006991	0,013745	-0,063542	-0,037481

Source: Author's Own

Table 04 presents the cross-correlation coefficients between changes in financial market indices and seasonally adjusted GDP, including crisis periods. The results indicate a strong correlation between GDP and all indices at lag 0, with EMAS (0.6227) and the Islamic HIJRAH index (0.6179) demonstrating the highest immediate responses. This suggests that both conventional and Islamic markets react promptly to economic changes.

In the short term (lag 1), correlations turn negative, with HIJRAH (-0.5552) experiencing the steepest decline, highlighting its greater sensitivity to immediate GDP fluctuations. Conversely, EMAS (-0.4915) exhibits the least negative correlation, indicating relatively lower susceptibility to short-term economic shocks.

During the medium term (lag 3), correlations remain weak, with KLCI (-0.1289) showing the lowest negative impact, whereas HIJRAH (0.0182) retains a marginally positive relationship, suggesting a more stable reaction among Islamic indices. By lag 5, indices begin to recover, as seen in EMAS_SHAR (0.3519) showing the strongest rebound, while KLCI (0.2894) exhibits the weakest recovery. These results emphasize that financial market indices, particularly Islamic ones, tend to exhibit a defensive nature during economic downturns.

Cross-Correlation Excluding Crisis Periods :

Table .5. Cross-Correlation Coefficients Between Changes in Indices and Changes in Seasonally Adjusted GDP (Excluding Crisis Periods).

	RGDPSA lagged on indices			
lags	EMAS	EMAS_SHAR	KLCI	HIJRAH
0	0,451921	0,398965	0,433881	0,433862
1	0,143120	0,172015	0,139969	0,140134
2	-0,054543	-0,077544	0,046420	-0,076332
3	-0,097612	-0,100228	-0,064762	0,043429
4	0,217203	0,252588	0,141706	0,236430
5	-0,137929	-0,170226	-0,044166	-0,098210
6	-0,150310	-0,093007	-0,097035	-0,012189
7	-0,129232	-0,160915	-0,142248	-0,259771
8	-0,167159	-0,206555	-0,226327	-0,261189
	indices lagged on RGDPSA			
lags	EMAS	EMAS_SHAR	KLCI	HIJRAH
0	0,451921	0,398965	0,433881	0,433862
1	0,222547	0,096136	0,232346	0,129168
2	-0,081736	-0,200638	-0,010679	-0,162391
3	0,046130	0,026913	0,047440	0,009835
4	0,278608	0,250209	0,349476	0,289026
5	0,491012	0,523471	0,494309	0,584027
6	0,088649	0,215193	0,033194	0,147065
7	-0,084990	-0,025024	-0,207702	-0,149662
8	-0,038194	-0,135161	0,005362	-0,125268

Source: Author's Own

Table 05 presents the correlation coefficients when excluding crisis periods, revealing a more stable and moderate relationship between financial market indices and GDP. At lag 0, the immediate correlation is slightly lower than during crisis periods, with EMAS (0.4519) maintaining the strongest response, followed by KLCI (0.4339) and HIJRAH (0.4339). EMAS_SHAR (0.3990) reacts slightly less immediately.

Unlike in crisis periods, short-term correlations (lag 1) remain positive, with EMAS_SHAR (0.1720) and EMAS (0.1431) maintaining moderate associations with GDP changes. However, by lag 2, correlations turn negative, with HIJRAH (-0.0763) and EMAS_SHAR (-0.0775) experiencing the sharpest declines. Notably, HIJRAH stabilizes earlier (0.0434 at lag 3) compared to KLCI (-0.0648), suggesting that Shariah-compliant indices recover more quickly.

In the medium term, EMAS_SHAR (0.2526) and HIJRAH (0.2364) show the strongest rebounds at lag 4. However, a market correction follows at lag 5, where EMAS_SHAR declines to -0.1702. Over the long term (lags 7-8), all indices register sustained negative correlations, with HIJRAH (-0.2598) and KLCI (-0.2263) experiencing the most significant declines, suggesting prolonged market adjustments.

Comparative Insights and Stability: When financial market indices are lagged on GDP, the correlation patterns differ. The strongest medium-term impact occurs at lag 5, where HIJRAH (0.5840) and EMAS_SHAR (0.5235) demonstrate the highest correlation. This suggests that GDP growth significantly influences Islamic indices with a time delay. Short-term responses (lag 1) are less pronounced compared to crisis periods, with EMAS (0.2225)

leading. However, long-term corrections persist, as evidenced by KLCI (-0.2077) and HIJRAH (-0.1497) at lag 7-8, reinforcing the notion of extended economic effects.

In terms of dispersion, HIJRAH exhibits the highest volatility (Standard Deviation: 0.2663), while EMAS remains the most stable (Standard Deviation: 0.2202). These findings suggest that although Islamic indices experience stronger medium-term rebounds, they are also more susceptible to long-term instability. Overall, the exclusion of crisis periods results in less extreme fluctuations, with Islamic indices displaying greater resilience in the medium term but heightened sensitivity in the long run.

Key Observations: The results highlight the distinct behavior of Islamic and conventional indices during economic fluctuations. Islamic indices exhibit a higher correlation with GDP during crisis periods, reinforcing their defensive nature. Their focus on essential sectors, such as utilities, and their avoidance of speculative practices contribute to their relative stability. Conversely, conventional indices, which are more exposed to speculative influences, tend to experience higher volatility during economic downturns.

Outside of crisis periods, the correlation between financial market indices and GDP weakens, yet lagged correlations remain significant, illustrating the delayed impact of financial markets on economic growth. The findings underscore the differing sensitivities of Islamic and conventional indices to broader economic changes. Islamic indices appear to serve as valuable indicators for assessing economic performance, particularly during times of uncertainty, due to their stability and risk-averse nature.

4.2.4 Cointegration Between Financial Market Indices and GDP : The analysis employed the ARDL cointegration method to evaluate the long-term relationship between financial indices and seasonally adjusted GDP. The findings revealed a more pronounced cointegration relationship for Islamic indices compared to conventional indices.

FBER

61

The Bounds Test results indicate the presence of cointegration among certain variables. While the F-test confirmed cointegration for all equations, the t-test revealed discrepancies. Specifically, the F-test demonstrated that the Islamic HIJRAH index exhibited the strongest long-term relationship with GDP ($F = 10.36269$), highlighting its alignment with economic performance and suggesting greater stability compared to conventional indices. In contrast, the t-test did not confirm cointegration for the KLCI index ($t = -0.765434$), implying that its long-term relationship is unstable over time. This suggests that Islamic indices tend to exhibit more stable cointegration relative to conventional indices, potentially indicating a stronger link to economic growth.

Conventional indices demonstrated weaker cointegration values, implying less alignment with broader economic trends. Among the control variables examined, inflation rate, exports, imports, and interest rates played pivotal roles in shaping the relationship between financial indices and GDP. Exports were positively associated with economic growth, whereas imports and interest rates had a negative impact. Inflation, in most cases, had an insignificant effect; however, its relationship with Islamic indices proved uniquely positive in certain contexts.

Islamic indices outperformed conventional indices in terms of statistical accuracy and alignment with economic growth. The HIJRAH index emerged as a particularly effective indicator for long-term economic assessment due to its strong correlation with economic trends and inclusion of significant coefficients in its model.

Finally, our study concludes that Islamic indices offer greater stability and a stronger connection to economic growth, particularly during crises. This makes them a suitable choice for long-term investors and a reliable tool for assessing economic performance. By contrast, conventional indices, while more sensitive to economic cycles, excel in capturing opportunities during periods of economic recovery and expansion.

Control variables such as exports, imports, and interest rates are critical to understanding the relationship between financial indices and GDP. These factors significantly influence the

effectiveness of financial indices as tools for evaluating economic trends. The findings reinforce the relevance of Islamic indices as stable and economically significant benchmarks in a global context.

5. Discussion of Results

5.1 Performance During Crises and Stability Periods

Financial markets react differently to economic crises depending on the nature of the assets involved. This study finds that Islamic and conventional indices exhibit distinct behaviors in response to market downturns. Islamic indices tend to experience a slower recovery after major financial crises, such as the 2008 subprime mortgage crisis. However, during economic downturns, they decline less sharply than conventional indices due to their structural composition.

During the COVID-19 crisis, Islamic indices demonstrated greater resilience during the initial shock, experiencing a stronger rebound compared to conventional indices. Despite this initial recovery, Islamic indices eventually declined, while conventional indices remained relatively stable after the shock.

These findings align with prior academic research by Tükenmez et al. (2019), Asutay et al. (2022), and Nomran and Haron (2021), which indicate that Shariah-compliant stocks demonstrate greater stability than their conventional counterparts during economic downturns. These studies further highlight the resilience of Islamic financial markets in absorbing and mitigating financial shocks.

5.2. Factors Contributing to the Resilience of Islamic Indices

The superior stability of Islamic indices can be attributed to several key factors:

- Lower Financial Sector Representation: Islamic indices have limited exposure to conventional financial institutions, which are often heavily impacted during financial crises.
- Defensive Sector Weighting: They are more concentrated in stable sectors such as food, telecommunications, and utilities, which tend to be more resilient during economic crises.
- Lower Speculative Trading: Islamic stocks are less attractive to speculators, reducing their vulnerability to sharp price fluctuations and financial turmoil.

5.3 Relationship Between GDP and Market Indices

This study examines the correlation between GDP and financial market indices, focusing on differences during crises and stability periods. Findings indicate that:

- During crises, the correlation between GDP and market indices strengthens, with Islamic indices being more influenced by past GDP performance than conventional ones.
- During stable periods, the contemporaneous correlation weakens, but past market performance remains a significant predictor of future GDP movements.

Notably, the Islamic HIJRAH index exhibits greater predictive power for GDP movements compared to the conventional KLCI index, suggesting that Islamic indices may be better indicators of economic trends.

5.4 Superiority of Islamic Indices in Forecasting GDP

Islamic indices play a more significant role in forecasting GDP, particularly in stable periods. This trend can be explained by:

- Reduced speculative activity in Islamic markets during stability periods, allowing fundamental investment strategies to dominate.
- Greater accuracy in forecasting corporate performance, as Islamic indices prioritize investments in productive, real-economy sectors.

These findings align with Zalgiryte, Guzavicius, and Tamulis (2014), who confirmed that financial markets play a crucial role in economic forecasting, reinforcing the strong connection between stock markets and GDP movements.

5.5 Long-Term Relationship Between Financial Markets and Economic Growth

The study confirms a positive long-term relationship between both Islamic and conventional indices and economic growth. This is consistent with findings from:

- Pradhan (2018), Nordin and Nordin (2016), and Hossain et al. (2013) (conventional markets).
- Khavarinezhad et al. (2021), Ledhem and Mekidiche (2022), and Musa et al. (2020) (Islamic markets).

However, when comparing their long-term relationships, Islamic indices exhibit a stronger performance, particularly the EMAS_shar and HIJRAH indices, which show greater alignment with economic growth indicators.

5.6 Impact of Market Indices on GDP

Statistical analysis suggests that Islamic indices have a stronger influence on GDP compared to conventional indices. Specifically, a 1% increase in each index results in the following GDP changes:

Table 5. Impact of Market Indices (%)

Index	% GDP Increase per 1% Index Rise
HIJRAH	1.44%
EMAS_shar	1.41%
EMAS	1.25%
KLCI (Conventional)	0.58%

Source: Compiled by researchers based on (Central Bank of Malaysia, 2008-2023; Investing.com, 2008-2023).

These results highlight the greater economic integration of Islamic indices in comparison to conventional indices.

5.7 Relationship Between GDP and Macroeconomic Variables

This study explores how macroeconomic variables interact with GDP across different financial models. The findings are as follows:

- Inflation: Insignificant in most models, except for HIJRAH, where it positively correlates with GDP, aligning with Phillips Curve Theory (1958) and Keynesian Theory (1936).
- Interest Rates: A strong negative correlation with GDP in HIJRAH and EMAS_shar, supporting Keynesian Theory (1936) and Fisher's Theory (1930).
- Exchange Rates: A positive and significant relationship in HIJRAH and EMAS_shar, aligning with the Balance of Payments Theory (Krugman & Obstfeld, 2003).
- Exports: A positive impact on GDP in EMAS and EMAS_shar, consistent with the Export-Led Growth Hypothesis (Balassa, 1978).
- Imports: A negative impact on GDP in EMAS and EMAS_shar, in line with Dependency Theory (Prebisch, 1950).

These relationships demonstrate that Islamic indices exhibit stronger economic integration with macroeconomic variables compared to conventional indices

5.8 Short-Term Dynamics and Error Correction Mechanism

The study also examines short-term interactions between GDP, market indices, and macroeconomic variables. Findings suggest that:

- The KLCI (conventional) model exhibits the strongest short-term relationship, despite its weaker long-term integration with GDP.
- The HIJRAH index, in contrast, shows the strongest long-term integration but a weaker short-term relationship, indicating a robust error correction mechanism that stabilizes long-term economic equilibrium.

5.9 Comparative Superiority of Islamic Indices Over Conventional Indices

Through cointegration analysis, this study demonstrates that Islamic indices outperform conventional indices across multiple dimensions:

- Structural Stability: Islamic indices exhibit greater resilience to financial shocks.
- Macroeconomic Integration: A stronger alignment with GDP and key economic indicators.
- Error Correction Speed: Faster adjustment to economic fluctuations, ensuring long-term stability.
- Long-Term Cointegration: Stronger and more significant relationships with GDP.
- Impact Strength: The HIJRAH index has the highest influence on GDP, followed by EMAS_shar, while KLCI demonstrates the weakest effect.

FBER

6. Conclusion

This study examines the role of stock markets in fostering economic growth, with a particular focus on Islamic finance as an alternative approach to strengthening financial stability. It investigates the performance, stability, and relationship with GDP of Islamic and conventional stock indices, using the Malaysian stock market as a case study.

The findings indicate that Islamic stock indices demonstrate greater stability than conventional stocks, particularly during financial crises, as they are less susceptible to speculative trading and more closely aligned with real economic sectors such as utilities and food. Moreover, Islamic stocks exhibit a stronger cointegration relationship with GDP, underscoring their long-term positive contribution to economic growth. Notably, this study finds that Islamic stock indices offer superior predictive accuracy regarding future economic performance, which can be attributed to Sharia-compliant governance mechanisms that enhance transparency and information efficiency in economic forecasting.

Additionally, the results reveal that Islamic stock indices exhibit a faster correction of economic imbalances, with a shorter adjustment period compared to conventional stock indices. This reinforces their role in promoting financial stability and sustainable economic development. Consequently, Islamic finance emerges as a viable alternative for enhancing financial market efficiency and mitigating the adverse effects of financial crises, making it a relevant policy consideration for fostering a more stable financial system.

However, as this study is based on the Malaysian stock market, its findings are particularly relevant for policymakers and researchers examining this financial system. While these insights are significant, their applicability to other markets should be approached with caution, given variations in economic structures and regulatory environments. Moreover, the study focuses exclusively on stocks, without considering other financial instruments, which limits the extent to which these findings can be extrapolated to broader investment frameworks.

Furthermore, this study assesses the stock-growth relationship at the macroeconomic level, and its conclusions may not necessarily hold for individual sectors or firms.

Specifically, the observed correlation between Islamic stock indices and GDP does not imply that all Sharia-compliant companies or industries maintain the same degree of economic integration. As such, further research is needed to explore the implications of Islamic finance across different financial instruments and sub-sectors within financial markets.

7. References

- Abduh, M., & Sukmana, R. (2013). The role of stock markets in promoting economic growth in Malaysia: Islamic vis-vis conventional. *Global Review of Islamic Economics and Business*, 1(1), 001-010. <http://dx.doi.org/10.14421/grieb.2013.011-01>
- Acha, I. A., & Akpan, S. O. (2019). Capital market performance and economic growth in Nigeria. *Noble International journal of economics and financial research*, 4(2), 10-18.
- Adamopoulos, A. (2010). Stock market and economic growth: An empirical analysis for Germany. *Business and Economics Journal*, 1(1), 1-12.
- Adewiyah, R., & Bawono, A. (2023). The Effect of Islamic Capital Market Instruments on Indonesia's Economic Growth is Moderated by The Money Supply. *ISLAMICONOMIC: Jurnal Ekonomi Islam*, 14(1).
- Alfaro, L., Chanda, A., Kalemli-Ozcan, S., & Sayek, S. (2004). FDI and economic growth: the role of local financial markets. *Journal of international economics*, 64(1), 89-112. [http://dx.doi.org/10.1016/S0022-1996\(03\)00081-3](http://dx.doi.org/10.1016/S0022-1996(03)00081-3)
- Ali, S., Shahzad, S. J. H., Raza, N., & Al-Yahyaee, K. H. (2018). Stock market efficiency: A comparative analysis of Islamic and conventional stock markets. *Physica A: Statistical Mechanics and Its Applications*, 503, 139-153. <http://dx.doi.org/10.1016/j.physa.2018.02.169>
- Altarturi, B. H. M., & Abduh, M. (2016). Stock markets and economic growth: a comparative analysis between Islamic and conventional markets in Malaysia. *Middle East Journal of Management*, 3(1), 34-48.
- Anugerah, P. K., Kirom, N., & Rosyidah, N. (2023, August). Does Islamic Finance Boost Economic Growth? Emperical Evidence From Indonesia. In *PROCEEDING ICONIEB: International Conference of Islamic Economics and Business* (Vol. 2, No. 1).
- Asutay, M., Wang, Y., & Avdukic, A. (2022). Examining the performance of Islamic and conventional stock indices: a comparative analysis. *Asia-Pacific Financial Markets*, 29(2), 327-355.
- Ayaz, M., Shah, H. S., Hussain, T., & Iqbal, M. (2019). Islamic Capital Markets and Economic Growth. *Islamic Banking and Finance Review*, 6, 39-58.
- Bailey, R. E. (2005). *The economics of financial markets*. Cambridge University Press.
- Balassa, B. (1978). Exports and economic growth: further evidence. *Journal of development Economics*, 5(2), 181-189. [http://dx.doi.org/10.1016/0304-3878\(78\)90006-8](http://dx.doi.org/10.1016/0304-3878(78)90006-8)
- Bencivenga, V. R., & Smith, B. D. (1991). Financial intermediation and endogenous growth. *The review of economic studies*, 58(2), 195-209. <http://dx.doi.org/10.2307/2297964>
- Boubakari, A., & Jin, D. (2010). The role of stock market development in economic growth: Evidence from some Euronext countries. *International Journal of Financial Research*, pp. 14-25. <http://dx.doi.org/10.5430/ijfr.v1n1p14>
- Choong, C. K., Baharumshah, A. Z., Yusop, Z., & Habibullah, M. S. (2010). Private capital flows, stock market and economic growth in developed and developing countries: A comparative analysis. *Japan and the World Economy*, 22(2), 107-117. <http://dx.doi.org/10.1016/j.japwor.2009.07.001>
- Claessens, M. S., & Kose, M. A. (2013). Financial crises explanations, types, and implications, CAMA Working Paper 06/2013, The Australian National University. <http://dx.doi.org/10.2139/ssrn.2295201>
- Diamond, D. W. (1984). Financial intermediation and delegated monitoring. *The review of economic studies*, 51(3), 393-414. <http://dx.doi.org/10.2307/2297430>
- Erbaş, S. N., & Mirakhor, A. (2013). The Foundational Market Principles of Islam, Knightian Uncertainty, and Economic Justice. *Economic development and Islamic finance*, 93.
- Farid, S., Mohsan, T., & Jan, M. W. (2022). Do Islamic Stocks reinforce Real

Economic Activity? Evidence from an Emerging Islamic Capital Market. *Iranian Economic Review*, 26(2), 421-433.

- Filer, R. K., Hanousek, J., & Campos, N. F. (2000). Do stock markets promote economic growth? SSRN Electronic Journal. <http://dx.doi.org/10.2139/ssrn.1535900>

- Firdaus, F., Ilham, M., Asiam, S., Nurbaiti, N., & Nasution, Y. S. J. (2024). Comparative Analysis of Economic Growth in Countries Implementing Conventional Versus Islamic Financial Systems. *Talaa: Journal of Islamic Finance*, 4(1), 11-27.

- Fulghieri, P., & Rovelli, R. (1998). Capital markets, financial intermediaries, and liquidity supply. *Journal of Banking & Finance*, 22(9), 1157-1180.

- Gebhard, K., Jürgen, W., & Uwe, H. (2013). introduction to modern time series analysis second edition. Springer. <http://dx.doi.org/10.1007/978-3-642-33436-8>

- Grassa, R., & Gazdar, K. (2014). Financial development and economic growth in GCC countries: A comparative study between Islamic and conventional finance. *International Journal of Social Economics*, 41(6), 493-514. <http://dx.doi.org/10.1108/IJSE-12-2012-0232>

- Hanif, M., & Bhatti, A. A. (2018). Causality among stock market and macroeconomic factors: A comparison of conventional and Islamic stocks. *Journal of Islamic Business and Management*, 8(2). <http://dx.doi.org/10.26501/jibm/2018.0802-001>

- Hasan, Z. (2015). Risk-sharing versus risk-transfer in Islamic finance: An evaluation. MPRA Paper No. 65368

- Hossain, M. K., Hossain, A., & Sadi, R. (2013). An examination of the relationship between stock market and economic growth: A study in Malaysia. *Journal of Transformative Entrepreneurship*, 1(2), 124-133.

- Hossain, M. S., Uddin, M. H., & Kabir, S. H. (2021). Sukuk and bond puzzle: an analysis with characteristics matched portfolios. *Emerging Markets Finance and Trade*, 57(13), 3792-3817.

- Islamic Financial Market Committee. (2023). The Malaysian Islamic Financial Market Report. Issued on April 13, 2023.

- Kamarudin, A. A., Duasa, J., Kassim, S., & Imon, R. A. (2023). ISLAMIC CAPITAL MARKET-GROWTH NEXUS PRE AND POST IFSA 2013: EMPIRICAL EVIDENCE FROM MALAYSIA. *IJIBFR*, 11, 20-34.

- Khataybeh, M., & Omet, G. (2021). ECONOMIC GROWTH, INFLATION, AND CAPITAL MARKET PERFORMANCE: IS THERE A LINK IN JORDAN?. *Journal of Economics Finance and Accounting*, 8(1), 1-7.

- Khavarinezhad, S., Biancone, P. P., & Jafari-Sadeghi, V. (2021). Financing in the Islamic System and Sustainable Economic Development of Selected Islamic Countries. *European Journal of Islamic Finance*, 19(2021), 18-23.

- Krugman, P. R., & Obstfeld, M. (2003). *International Economics: Theory and Policy* (6th ed.). Addison Wesley.

- Ledhem, M. A., & Mekidiche, M. (2022). Islamic securities (ṣukūk) and economic growth: New empirical investigation from Southeast Asia using non-parametric analysis of MCMC panel quantile regression. *Islamic Economic Studies*, 29(2), 119-138.

- Levine, R. (1991). Stock markets, growth, and tax policy. *The journal of Finance*, 46(4), 1445-1465. <http://dx.doi.org/10.1111/j.1540-6261.1991.tb04625.x>

- Levine, R., & Zervos, S. (1998). Stock markets, banks, and economic growth. *American economic review*, 537-558.

- Lucas Jr, R. E. (1988). On the mechanics of economic development. *Journal of monetary economics*, 22(1), 3-42. [http://dx.doi.org/10.1016/0304-3932\(88\)90168-7](http://dx.doi.org/10.1016/0304-3932(88)90168-7)

- Marsi, G. G., & Wardani, D. T. K. (2020). The influence of sharia capital market, sharia bonds (Sukuk), and BI rate on gross domestic products (GDP) in Indonesia. *Journal of Economics Research and Social Sciences*, 4(2), 149-162.

- Masoud, N. M. (2013). The impact of stock market performance upon economic growth. *International Journal of Economics and Financial Issues*, 3(4), 788-798.

- Mirakhor, A., & Krichene, N. (2009). The recent crisis: lessons for Islamic finance, Munich Personal RePEc Archive.

- Muharam, H., Anwar, R. J., & Robiyanto, R. (2019). Islamic stock market and sukuk

market development, economic growth, and trade openness (the case of Indonesia and Malaysia). *Business: Theory and Practice*, 20, 196-207.

• Musa, G. I., Bahari, Z., & Aziz, A. H. A. (2020). The impact of islamic capital market on malaysian real economy. *Jurnal Ekonomi Malaysia*, 54(2), 91-103. <http://dx.doi.org/10.17576/JEM-2020-5402-08>

• Narayan, P. (2004). Reformulating critical values for the bounds F-statistics approach to cointegration: an application to the tourism demand model for Fiji (Vol. 2, No. 04). Australia: Monash University.

• Njemcevic, F. (2016, October). Capital market and economic growth in transition countries: Evidence from South East Europe. In 8th International Conference of the School of Economics and Business (Vol. 48, p. 146). University of Sarajevo, School of Economics and Business Trg oslobođenja–Alija Izetbegovic 1, Sarajevo, Bosnia and Herzegovina.

• 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), 33.

• Nordin, S., & Nordin, N. (2016). The impact of capital market on economic growth: a Malaysian outlook. *International Journal of Economics and Financial Issues*, 6(7), 259-265.

• Pan, L., & Mishra, V. (2017). Stock market development and economic growth: Empirical evidence from China. *Economic Modelling*, 68, 661-673. <http://dx.doi.org/10.1016/j.econmod.2017.07.005>

• Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of applied econometrics*, 16(3), 289-326. <http://dx.doi.org/10.1002/jae.616>

• Pradhan, R. P. (2018). Development of stock market and economic growth: The G-20 evidence. *Eurasian Economic Review*, 8(2), 161-181.

• Prebisch, R. (1950). The economic development of Latin America and its principal problems, United Nations.

• Mustafa, S. A., Ramlee, R., & Kassim, S. (2017). Economic forces and Islamic stock market: Empirical evidence from Malaysia. *Asian Journal of Business and Accounting*, 10(1), 45-85.

• FTSE Russell. (2024). FTSE Bursa Malaysia Index Series Ground Rules, v6.0.

• Saleem, A., Setiawan, B., Bárczi, J., & Sági, J. (2021). Achieving sustainable economic growth: analysis of Islamic debt and the Islamic equity market. *Sustainability*, 13(15), 8319. <http://dx.doi.org/10.3390/su13158319>

• Sari, N., Syamsurijal, A. K., & Widiyanti, M. (2018). The impact of Islamic capital market development on economic growth: The case of Indonesia. *Journal of Smart Economic Growth*, 3(2), 21-30.

• Sulaiman, L. A., Adejayan, A. O., & Ilori, O. O. (2023). Capital market development and economic growth of West African countries. *Nigerian Journal of Banking and Financial Issues*, 9(1), pp. 115-125.

• Tan, Y. L., & Mohamad Shafi, R. (2021). Capital market and economic growth in Malaysia: the role of *ṣukūk* and other sub-components. *ISRA International Journal of Islamic Finance*, 13(1), 102-117.

• Tükenmez, N. M., Şaka, H., & KIZGIN, M. (2019). Conventional and Islamic Indices: A Comparison on Performance. *Journal of Accounting & Finance/Muhasebe ve Finansman Dergisi*.

• Wanaset, A. (2018). The relationship between capital market and economic growth in Thailand. *Journal of Applied Economics and Management Strategy*, 5(1), 25-38.

• Yusof, R. M., & Shabri Abd. Majid, M. (2008). Towards an Islamic international financial hub: the role of Islamic capital market in Malaysia. *International Journal of Islamic and Middle Eastern Finance and Management*, 1(4), 313-329.

• Zalgiryte, L., Guzavicius, A., & Tamulis, V. (2014). Stock market and economic growth in the US & France: Evidence from stock market sector indices. *Inžinerinė ekonomika*, 25(1), 47-53.