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The Impact of Macroeconomic Indicators on the Performance of Islamic Stocks: Evidence from KMI-30 Index

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	Abstract
<p>Afzaal Humayun Khan* PhD Scholar in Finance, Institute of Business Studies and Leadership, Abdul Wali Khan University Mardan, Pakistan. Corresponding Author Email: afzaal.hk@gmail.com</p> <p>Muhammad Yusuf Amin Institute of Business Studies and Leadership, Abdul Wali Khan University Mardan, Pakistan. Email: yusuf@awkum.edu.pk</p> <p>Saeed Akbar Institute of Business Studies and Leadership, Abdul Wali Khan University Mardan, Pakistan. Email: Saeed.akbar@awkum.edu.pk</p>	<p>The study examines the impact of three principal macroeconomic factors (GDP growth, interest rates, and inflation) on the performance of Shariah-compliant stocks in Pakistan. KMI-30 Index is used which monitors Islamic stocks, utilizing yearly data from 2010 to 2024. The study seeks to determine the impact of macroeconomic factors on Islamic stock performance in both the short and long term. Initially, we evaluated the stationarity of the data with the Augmented Dickey-Fuller (ADF) test. The initial data exhibited non-stationarity, but achieved stationarity at first difference. Subsequently, the study conducted the ARDL cointegration test, which indicated the presence of a long-term equilibrium association among the variables. This indicates that these variables exhibit correlated over time. Our long-run estimates showed that GDP growth has a positive and significant impact on Shariah stock returns. In other words, as the economy grows, Islamic stocks tend to do well. On the flip side, interest rates had a negative and significant effect. Even though Islamic finance doesn't deal directly with interest, higher rates still reduce investor desire for stocks overall. Inflation also has a negative impact but it is weakly significant. We employed an Error Correction Model (ECM) to analyze the adjustment of market self-correction following abrupt fluctuations. The findings indicated that around 65% of any short-term disturbance is rectified annually, signifying a rather rapid return to long-run equilibrium. This indicates a robust and adaptive market structure. The findings indicate that Shariah-compliant stocks are influenced by economic conditions; they prosper during robust economic development but face difficulties due to increasing interest rates and inflation. This study is beneficial for investors, analysts, and policymakers engaged in Islamic finance, since it provides insights into how macroeconomic indicators might inform wiser investment decisions. It is essential to comprehend the operation of these connections in order to effectively manage risks and optimize your investment returns, in an ethical, faith-based investment framework.</p>
<p>Keywords:</p>	<p>Shariah-compliant stocks, macroeconomic indicators, Stock return, KMI-30 index, GDP, Interest rates, Inflation, Autoregressive Distributed Lag (ARDL), Error correction term, Islamic finance.</p>



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Introduction

In recent years, an increasing number of investors are moving towards companies that adhere to Islamic standards, referred to as Shariah-compliant stocks. These selections are not just based on religious considerations; they have also demonstrated robust performance throughout several financial markets. The KMI-30 index in Pakistan monitors the leading Shariah-compliant enterprises, providing a definitive overview of the performance of Islamic investments (Rana et al, 2015). However, as to other stocks, their performance is affected by the underlying economy. Macroeconomic variables, such as economic growth (GDP), interest rates, and inflation, significantly influence market outcomes (Hania. H, 2020; Mohd & Siddiqui, 2020). Economic growth often results in increased corporate earnings, which enhances stock values (Naik & Padhi, 2014). However, when interest rates rise or inflation increases, it can diminish consumer purchasing power, elevate business expenses, and decrease corporate profits which can depress stock values (Habib & Islam, 2014; Saiti et al., 2016). Despite Islamic finance's prohibition of *riba* (interest), fluctuations in interest rates continue to influence investor choices, such as reallocating funds between stocks and fixed-income securities (Majid & Kassim, 2010). Shariah-compliant stocks exclude areas such as drugs, gambling, and interest-based banking, while they remain subject to the same economic risks and possibilities as other markets (Hamid et al, 2024). Interestingly, there is a lack of long-term studies examining the impact of these economic pressures on Shariah-compliant stocks in countries such as Pakistan. It is increasingly more crucial to comprehend how these macro trends affect the performance of ethical investments as concern in Islamic finance keeps growing (Ginting et al., 2022). In a world where both financially sound and faith-based judgments frequently coexist, this link aids investors, analysts, and politicians in making more informed decisions.

One of the most significant factors that can influence the performance of any company, including Shariah-compliant stocks, is the overall economic health of a country (Reddy, D. L, 2012). Macroeconomic concerns are crucial in this context. These are macroeconomic issues such as economic development, interest rates, and inflation that influence all businesses, regardless of whether they follow Islamic principles (Tejokusumo, 2023). These economic factors can have a substantial impact on investor reactions and corporate performance for companies included on Pakistan's KMI-30 index, which represents elite Shariah-compliant stocks (khan, 2022). Consider the GDP, for example. It provides a clear picture of the economy's performance. When GDP rises, it signals more consumer spending, higher company profitability, and overall economic growth. Under these conditions, businesses in essential sectors such as commerce, construction, and manufacturing—many of which are on the KMI-30 index—make a greater profit (Ritter, J. R, 2005). This boosts investor confidence, usually leading to an increase in stock prices. In essence, when the economy is strong, Islamic stocks tend to do better (Marashdeh et al, 2020). Research in emerging markets such as Pakistan supports this view, finding a strong link between GDP development and the performance of Islamic stocks.

However, GDP is not the sole macroeconomic variable that effect. Interest rates provide significant signals to the market (Semuel, H., & Nurina, S., 2014). Despite Islamic finance's prohibition of interest (or *riba*), fluctuations in interest rates significantly affect the broader economy, and this impact extends to Shariah-compliant stocks as well (Ayub, A., & Masih, M., 2013). For example, when interest rates increase, borrowing costs for enterprises rise (Alafif, H. A., 2023). This may impede investment, diminish earnings, and adversely affect stock prices (Bastida et al, 2014). It may also prompt investors to reallocate their funds from stocks to interest-bearing securities such as savings accounts or bonds, which appear "safer" in high-interest conditions (Lobo, B. J., 2000). This trend diminishes demand for shares, particularly those of Islamic firms, perhaps leading to a decline in the stock market (Nouman et al 2022). Conversely, when interest rates decline, borrowing costs decrease, company activity increases, and investors frequently return to the stock market in search of greater profits (Clarida, 2006). Despite the distinct operational frameworks of Islamic enterprises, they are influenced by interest rate policy and the broader financial landscape (Saiti et al., 2014).

Inflation is another key macroeconomic concern, defined as the pace at which the prices of ordinary goods and services rise (Jumayev, Z., 2024). Inflation affects all elements. When prices grow rapidly, people's purchasing power declines, and businesses face higher costs for commodities, labor, and logistics (Blanchard & Bernanke, 2024).). For enterprises on the KMI-30 index, this might lead to reduced profit margins and more uncertainty. Investors may lose confidence if the value of future earnings falls as expenses rise. This typically leads to decreased stock prices (Ullah, 2019). Some businesses may be able to pass these higher costs on to customers, but many can't, especially in markets where competition is high, which negatively impact their performance (Ali & Ibrahim, 2018). Inflation puts pressure on household budgets, potentially reducing consumer spending and company sales (Deaton, 2010). In Pakistan, where inflation is a constant issue, the impact on Islamic stock performance may be more severe (Naqvi et al., 2025). Such price increases limit company growth and may lead to increased market volatility (Hussain et al., 2020). As a result, inflation, like GDP and interest rates, has a major influence on Shariah-compliant stock performance (Saiti et al., 2014).

This study examines the influence of three macroeconomic factors—GDP, interest rates, and inflation—on the performance of Shariah-compliant stock in Pakistan during the previous 15 years, utilizing data from 2010 to 2024. Although several studies have examined these links in traditional stock markets, less research has concentrated on Islamic

financing inside emerging economies (Saiti et al., 2014; Abduh & Chowdhury, 2012). The KMI-30 index provides a distinctive perspective on the responses of Islamic enterprises to fluctuating economic situations (Rizvi et al., 2018). This study contributes to the discourse by examining the broader context—how extensive economic factors intersect with the ethical and interest-free domain of Islamic investing. It is particularly crucial at this time, since an increasing number of investors are gravitating towards responsible, faith-oriented investing alternatives (Hayat & Kraeusl, 2011). This research elucidates the connections between macroeconomic developments and Islamic stock performance, so assisting investors, analysts, and policymakers in making informed decisions. Comprehending these relationships is not only advantageous; it is essential in a world where Islamic finance increasingly influences the future of markets.

2. Literature

2.1. Theoretical Background

Examining the basic economic theories makes it easier to understand how Shariah-compliant stock respond to economic fluctuations. These principles explain how certain economic variables, such as growth, inflation, or interest rate affects stock markets, particularly those governed by Islamic finance standards.

The Keynesian theory posits that economic growth leads to higher firm earnings, prompting investors to allocate funds into stock, hence enhancing overall stock performance (Chambers, 2015). Shariah-compliant stock, adhering to Islamic principles and functioning in tangible, productive industries such as manufacturing, healthcare, or energy, benefit from increased GDP, resulting in heightened business activity and enhanced profits potential (Kabir & Worthington, 2022). According to theory, there is often a positive correlation between GDP and the performance of Islamic stocks; when the economy strengthens, these companies normally perform better (Saiti, Bacha, & Masih, 2014).

The Loanable Funds Theory posits that rising interest rates increase borrowing costs, leading both firms and consumers to reduce expenditure and investment. This impedes economic activity, potentially diminishing corporate earnings and precipitating a decline in stock prices (Ackley, 1957)). The impact on Islamic stocks is indirect; a general economic slowdown resulting from elevated interest rates would also affect ethical or Shariah-compliant enterprises (Nouman, 2022). Investors may reallocate their funds into interest-bearing assets that provide more secure returns during periods of high rates, so exerting pressure on the stock market, especially Islamic stocks (Derigs & Marzban, 2008). According to theory, increased interest rates often adversely affect Islamic stock performance, regardless of whether such firms engage in earning or paying interest (Zulaikha et al, 2018).

The Fisher Effect Theory states that an increase in inflation results in a decrease in the value of money; for instance, an item that cost 100 rupees' yesterday may cost 110 now (Fisher, 1930). This implies that firms incur higher costs for materials, wages, and other expenditures, potentially restricting earnings (Ogbebor, 2021). Despite their commitment to ethical standards, Islamic enterprises encounter same cost constraints. If companies are unable to transfer those additional costs to customers, their earnings would decline, perhaps resulting in a decrease in stock prices (Saiti et al., 2014). From an investor's perspective, elevated inflation diminishes the actual worth of returns, rendering stocks less appealing (Mishkin & Kiley, 2025). Theoretically, rising inflation adversely affects Islamic stock performance, similar to its influence on conventional markets (Kismawadi, 2023).

These theories explain why Islamic stock frequently prosper during a strong economic growth, struggle when interest rates rise, and fall when inflation rises (Keynes, 1936; Fisher, 1930; Blanchard & Johnson, 2012). These concepts offer a unique viewpoint on how the economic landscape effects the profitability of Islamic investments, even when they are guided by faith-based principles (Derigs and Marzban, 2008).

2.2 GDP and Shariah-Compliant Stock Performance

GDP significantly influences the performance of Shariah-compliant stocks. An increase in GDP often indicates robust company performance, strong consumer demand, and heightened investment confidence. These characteristics foster an ideal environment for stock markets, encompassing Islamic stocks. Ashraf and Mohammad (2014) discovered that economic development exerted a positive influence on the performance of Shariah indices. During periods of sustained GDP development, investors are inclined to accept risks and allocate capital towards ethical and long-term investments such as Islamic stocks. Saiti et al. (2014) observed that increasing GDP levels resulted in favorable returns for Islamic shares in the Malaysian market. Raza et al. (2021) also observed positive effect, Shariah-compliant companies in developing countries benefited from enhanced GDP growth.

Nonetheless, growth in the economy might also have unintended consequences that weaken Islamic stocks. When economic growth accelerates excessively, central banks may increase interest rates to control inflation, thereby limiting stock market activity. Mohiuddin and Siddiqui (2023) highlight negative effect that during periods of increased GDP growth, inflation and restrictive monetary policy followed, diminishing investor interest in Shariah-compliant stocks. Mehmood et al. (2021) also discovered negative effect,

rapid GDP growth induced volatility in Islamic stock returns in Pakistan as a result of policy uncertainty. Moreover, Alsalloum (2023) observed that when economic development appeared unsustainable, investor confidence diminished, resulting in a decline in value for even ethical companies, such as those complying with Shariah principles. Briefly, Islamic stocks often gain from consistent GDP growth, but growth that is too rapid or inconsistent might pose hazards that harm their performance. Therefore, the subsequent research hypothesis was proposed by the study.

H₁: GDP has a significant positive effect on the performance of Shariah-compliant stocks

2.3. Interest Rate and Shariah-Compliant Stock Performance

Interest rates effect the whole economy, and although Islamic finance prohibits interest (riba), fluctuations in interest rates nonetheless affect Shariah-compliant stocks. Abdul (2024) contend that in a robust, reforming market where interest rate increases coincided with improved growth and profitability, the rise in interest rates was positively correlated with greater Islamic stock returns in the short term. A further research demonstrates a strong long-term cointegration between the macroeconomic parameters, including interest rates. when central bank interest rate increases coincide with increased demand for the Islamic stocks (Vežzagić & Zarafat, 2013). Comprehensive Malaysian data on Islamic pricing indicates that interest rates significantly impact the Islamic price index. During periods when increases signify enhanced growth and bank profitability, the Islamic stock index has risen along with interest rates. (Rashid, Hassan, & Yein, 2014)

Conversely, as interest rates increase, a contrary pattern is frequently observed. Investors often allocate funds to more secure, fixed-income assets such as government bonds, which currently provide superior returns. This action diminishes the demand for stock markets, especially Islamic stocks. Hassan et al. (2021) discovered that increasing interest rates impacted Islamic stock performance in developing nations as a result of reduced investor confidence and stricter financing conditions. Fitriansyah & Darwanto (2022) observed that elevated interest rates hindered investment and impeded stock market activity, adversely impacting Islamic stock markets. Hussin et al. (2012) noted that Islamic stocks in Malaysia had negative pressure during periods of rising interest rates, particularly when economic development concurrently decelerated. Islamic stocks often exhibit superior performance in a low-interest-rate environment and have more difficulties as interest rates rise. consequently, the study offered the following research hypothesis.

H₂: Interest rates have a significant negative relationship with the performance of Shariah-compliant stocks.

2.4. Inflation Rate and Shariah-Compliant Stock Performance

Inflation, the increase in prices over time, influences consumer expenditure, corporate expenses, and overall investor conduct—rendering it a significant consideration for Shariah-compliant stocks as well.

Mustafa et al. (2017) elucidated that in Malaysia, instances of increasing inflation frequently corresponded with better stock performance, as corporations successfully transferred costs to consumers, hence maintaining profitability. Likewise, Nugroho et al. (2023) discovered that inflation exerted a favorable long-term influence on Islamic stocks, indicating that equities served as a safeguard against increasing prices. Kazak et al. (2025) noted that in Turkey, Islamic market returns had a positive correlation with inflation, particularly during periods of robust domestic demand that bolstered corporate profits. Research in Pakistan indicated similar results, noting that Islamic equities appreciated during inflationary periods due to the physical assets possessed by Shariah-compliant enterprises, such as real estate and commodities, which maintained or enhanced their worth (Khan, 2014).

However, high inflation typically generates complications. It diminishes customers' purchasing power and spikes corporate expenses, resulting in reduced earnings and diminished investor interest. Halim (2020) discovered that increasing inflation adversely affected Islamic stock performance in developing nations due to diminishing real returns and declining confidence among investors. Katmas & Indarningsih (2022) observed that during inflationary periods, the performance of Shariah-compliant shares declined due to heightened uncertainty and increased expenses. Mehmood et al. (2023) documented same results in Pakistan, indicating that inflation diminished the benefits of Islamic stock investments, particularly during times of economic distress.

In conclusion, Islamic stocks often do well in periods of low or steady inflation, but they struggle in periods of excessive inflation. Therefore, the study proposed the subsequent research hypothesis.

H₃: Inflation has a significant negative effect on the performance of Shariah-compliant stocks.

3. Data and Methodology

This study examines the impact of core macroeconomic indicators (GDP, interest rates, and inflation) on the performance of Shariah-compliant stocks in Pakistan. The quantitative time-series- econometric approach is used to examine the long-run and short-run relationships between annual stock returns and macroeconomic variables. The section address data selection, variable definition, model development, and estimation techniques below.

3.1 Sample and data selection

The study uses yearly data from 2010 to 2024, which gives 15-year view assess both short-term and long-term trends. The KMI-30 index, which shows the best Shariah-compliant equities trading on the Pakistan Stock Exchange (PSX), was the main focus of the study. The World Bank and Central Bank statistics reports provided the data.

3.2. Variables list.

Table 1 Variables list, Measurement and sources.

Variable	Measurement	Source
Dependent		
Annual Stock Returns	Percentage return on KMI-30 index	Pakistan Stock Exchange (PSX)
Independent		
Economic growth	GDP (Constant 2015 US\$)	World Bank, Central Bank Statistics
Interest Rate	Annual interest rate (in %)	Central Bank Statistics
Inflation Rate	Annual inflation rate (in %)	World Bank, Central Bank Statistics

3.3 Empirical Models

The study examines the impact of three principal macroeconomic indicators (GDP, interest rates, and inflation) on the performance of Shariah-compliant stocks in Pakistan. The study employed time series data and adhered to a systematic methodology to examine the interrelationships of these variables in both the short term and the long term. The foundational model of study is as follows.

$$ASR_t = \alpha_0 + \beta_1 GDP_t + \beta_2 IR_t + \beta_3 IN_t + \varepsilon_t$$

Derived from the model, ASR represents annual stock returns, GDP represents economic growth, IR represents interest rate, IN represents inflation rate, ε represents error term, t for time, α is the intercept term and β is the coefficient of the variable.

We initiated the process by conducting the Augmented Dickey-Fuller (ADF) test to verify the stationarity of each variable. Then, the study estimated both long-run coefficients and short-run dynamics using the ARDL model after confirming the long-term relationship. The study also incorporated an Error Correction Term (ECT) to assess the speed at which the stock market returns to equilibrium following a brief disturbance.

3.3.1. Stationarity Test

Prior to doing any empirical study, it is necessary to assess the order of integration of the variables. ADF unit root tests are employed in our analysis to ascertain the stationarity of the series. The null hypothesis of the ADF test posits that the series possesses a unit root. The initial differences of the series must be selected to render the series stationary if it is non-stationary at the level. Stationary series at the level are denoted by $I(0)$, whereas the unit root is denoted by $I(1)$. The model can be articulated as follows:

$$\Delta Y_t = \alpha + \beta t + \gamma Y_{\{t-1\}} + \sum_{t-i} \delta_i \Delta Y_{t-i} + \varepsilon_t$$

In this equation, y represents the dependent variable, t denotes the trend, a represents the intercept, and ε_t indicates white noise error term.

3.3.2. Co-Integration Test

The bounds co-integration test is employed to test the existence of a long term relationship amid the variables when it comes to the ARDL model.

$$\Delta Y_t = \alpha_0 + \sum_{i=1}^p a_i \Delta Y_{t-i} + \sum_{k=1}^n \sum_{j=0}^{qk} b_{kj} \Delta X_{k,t-j} + \lambda_0 Y_{t-1} + \sum_{k=1}^n \lambda_k X_{k,t-1} + u_t$$

Where, Y_t represents dependent variable, $X_{k,t}$ is independent variable, p q_k indicates optimal lag lengths and u_t is error term.

3.3.3. ARDL Test

The ARDL test is effective in determining the present and future relations between variables, or in other term, it is applicable when the variables are usually integrated of order one (I (1)) or not integrated at the same order.

The ARDL model can be expressed in the following general form:

$$Y_t = \alpha + \sum_{i=1}^p \beta_i Y_{t-i} + \sum_{j=0}^q \gamma_j X_{t-j} + \epsilon_t$$

Where:

- Y_t : The dependent variable at time t (Annual stock returns in this case).
- α : The constant term or intercept.
- Y_{t-i} : The lagged values of the dependent variable (Annual stock returns) to account for past influences on the current value.
- β_i : The coefficients for the lagged dependent variable.
- X_{t-j} : The independent variables at time t (GDP, interest rates, inflation).
- γ_j : The coefficients for the independent variables.
- ϵ_t : The error term, capturing all unobserved factors affecting the dependent variable

4. Results and discussion

4.1.1. Unit Root Tests

Table I: ADF Test Results at Level

Variable	ADF Statistic	p-value	Stationary?
Annual stock returns	-2.334	0.161	Non-Stationary
GDP (constant 2015 US\$)	-1.771	0.395	Non-Stationary
Interest rate	-2.472	0.122	Non-Stationary
Inflation rate	-1.576	0.496	Non-Stationary

Table above shows results of the Augmented DickeyFuller (ADF) unit root tests of all variables analyzed in the level form, in terms of ADF statistic, the associated p value, and the stationarity status. All variables have p-values > 0.05 , indicating that they are non-stationary at their levels. This suggests that a direct regression in levels could produce spurious results.

4.1.2 Stationarity at First Difference

Table II: ADF Test Results at First Difference

Variable (Δ)	Stationary?
Δ Annual stock returns	Stationary
Δ GDP	Stationary
Δ Interest rate	Stationary
Δ Inflation rate	Stationary

The table below gives the results of the Augmented DickeyFuller (ADF) test on the first-differenced series of the variables.

All variables become stationary after the first differencing, implying that they are integrated of order one, I (1). The presence of the I (1) series allows the application of the ARDL bounds testing approach to investigate long-run relationships.

4.2. Bounds Cointegration Test

Table III: Bounds Cointegration Test

Test Statistic	Value	5% Critical Value I (0)	5% Critical Value I (1)	Decision
F- statistic	5.84	3.23	4.35	Cointegration exists

The table shows ARDL Bounds cointegration test.

The F-statistic (5.84) computed exceeds the critical value I (1) at 5 percent (4.35), we reject null hypothesis of no cointegration and hence conclude that there is cointegration. This shows a long run balance between the macroeconomic variables and stock returns which are Shariah-compliant.

4.4. ARDL Long-Run Model

Table IV: ARDL Long-Run Estimates

Variable	Coefficient	Significance
Constant	0.47	—
GDP	0.32	Positive, significant
Interest rate	-0.18	Negative, significant
Inflation	-0.09	Negative, weakly significant

This table presents the long-run ARDL estimates.

The findings indicate that GDP exerts a distinct and favorable influence on stock market performance. In essence, as a country's economy expands, its stock market often performs more favorably. A robust economy enhances corporate profitability, elevates investor confidence, and stimulates more trading activity in the stock market, all of which contribute to ascending stock values. This conclusion aligns with prior studies by Raza et al (2021) and Saiti et al. (2014), which also indicated that economic expansion results in improved stock market performance. Consequently, we affirm our initial hypothesis (H1) that GDP positively influences stock performance.

The interest rate exerts a negative and considerable influence. This indicates that an increase in interest rates renders borrowing more costly for both enterprises and individuals. Consequently, corporations may diminish investments, and individuals would curtail expenditures, potentially resulting in decreased corporate profits and falling stock prices. Our findings align with the research conducted by Hassan et al (2021) and Fitriansyah & Darwanto (2022), which indicated that elevated interest rates adversely affect stock market returns. Consequently, we affirm our second hypothesis (H2) that interest rates adversely impact stock performance.

The impact of inflation is adverse, but only marginally significant. This indicates that inflation adversely impacts stock market performance; yet, the effect is neither robust nor constant over the long term. Inflation may diminish customers' purchasing power and elevate business expenses; but, in our situation, the effect is quite little. The findings align with Mehmood et al. (2023), who also observed that inflation may adversely affect stock returns, but the intensity of this association may fluctuate based on the economic circumstances. Consequently, we reject our third hypothesis (H3) asserting that inflation significantly adversely affects stock performance.

4.5. Short-Run Dynamics and Error Correction

The short-run model was obtained from the error correction- representation of the ARDL model. The error correction term (ECM) is **ECM (-1) = -0.65 (p < 0.01)**

Based on the findings. The short-term adjustment is also significant. Approximately 65% of any short-term shocks between these variables self-corrects within a year. This adjustment is more rapid than earlier studies; for instance, Rana (2021) documented a correction speed of 47.6% in Nepal. This expedited response may indicate a more efficient and liquid stock market in which investors promptly react to economic fluctuations.

5. Conclusion

This study examined the impact of GDP, interest rates, and inflation on the performance of Shariah-compliant stocks in Pakistan, utilizing the KMI-30 index from 2010 to 2024. The study used an econometric approach that started with checking the stationarity of the data, moving on to cointegration tests, and then using the ARDL model to figure out the short- and long-term effects. At first, the ADF test showed that all of the variables were not stationary at their level, but they became stationary at the first difference, hence

confirming their applicability in ARDL models. The Bounds cointegration test indicated that these factors have a long-term effect on Shariah stocks returns. The results are in line with what Raza et al (2021) and Saiti et al. (2014) found: that macroeconomic indicators and Islamic stock indices have a long-term relationship in emerging economies.

Findings shows that GDP has a positive effect on stock returns in long term. This means that as the economy grows, investors feel more confident, which raises stock prices. This result supports earlier studies by, which found that Islamic stock markets improved when GDP grows. The interest rate has a significant and negative effect, showing that higher interest rates make Shariah-compliant equities less appealing, maybe because people are moving toward safer or interest-bearing investments. The result is in line with the results of Hassan et al (2021) and Fitriansyah & Darwanto (2022), who also found that Islamic stocks do worse when interest rates go up. Inflation also has a negative but statistically insignificant effect, which means that rising prices lower the actual profits on Islamic stock to some extent. Mehmood et al. (2023) found: inflation is a risk for investors in Islamic stocks, but not consistently significant.

The Error Correction Model (ECM) finally proved that about 65% of any systemic imbalance is fixed within the previous year. This means that the model is stable and changes quickly. The research on Islamic financing in emerging economies, Zahid et al. (2021) and Majid and Kassim (2010) found similar adjustment timeframes.

This analysis shows how important macroeconomic factors are to the performance of Shariah-compliant equities in Pakistan, especially GDP and interest rates. Investors must monitor changes in the economy. It advises policymakers that stable and developing economies are necessary for the growth of Islamic stock markets.

5.1. Recommendations

This research paper identifies a number of practical suggestions to policymakers to improve performance of Shariah-compliant stocks. Discussing the promotion of long-term growth in GDP, firstly, it is necessary to invest in infrastructure and innovation. Business activity and performance of stock markets will upturn because of mammoth projects in infrastructure, including in the field of transportation and digital. There is also a need to reward innovation with tax allowances and joint partnership between the private and government effort as a means of inviting investment and economic development.

In terms of monetary policy, interest rates ought to be acceded keenly. In very high rates they might discourage borrowing and investment, whereas moderate rates will enhance growth. The policymakers ought to update the rates regularly in order to provide sustainable growth of the economy without suppressing investments in the market.

Though the inflation was not significantly different in this experiment it is important that pricing stability has to be maintained so that the investor confidence is not lost. Policymakers must concentrate on regulating the inflation by putting fiscal and monetary policies in place with the aim of stabilizing the prices and curbing uncertainty in the market.

It is also imperative to reinforce investor education. Investors have to be guided with a better financial literacy, including macroeconomic indicators and their impacts on the stock market to make sounder and more rational choices that will minimize volatility in the market.

Lastly, it is necessary to make financial markets more resilient. The financial institutions are supposed to install strong systems of risk management and stronger data and corporate disclosure transparency. Promoting write off diversification in investments will be useful in stabilizing the market, and the risk of being shocked by the systemic consequence will also be minimized.

Introducing such strategies, policymakers will be able to generate a more stable and growth-g geared market, which will help investors and the whole economy as well.

5.2. Limitations and Suggestions

Although the study is useful, there are some critical shortcomings which must be overcome in the future research. To begin with, the research has linearity and symmetry assumptions on the relationships among macroeconomic variables and the performance of the stock market. Nonetheless, recent literature has indicated that the effect of macroeconomic factors on stock returns could be asymmetric, or nonlinear (Alabdulwahab, 2025). To represent this, non linear models can be considered when there are complex relationships between predictor variables and the dependent variable, and such models include nonlinear ARDL or NSB ARDL models.

Second, the analysis employs annual data that is typically helpful in a long-term view, but it is possible that it might ignore severe volatility and occasional impacts of given events. Frequently updated data like monthly or quarterly could be useful to capture the nature of the influence of the macro-economic shocks on the market on the short run. This is a possible area of future research since it might be possible to use data that is collected more frequently in order to deal with this weakness and to avoid missing more immediate reactions on the market.

Third, the study centres only on three macroeconomic indicators, namely GDP, interest rates and inflation. Although these factors are a requirement, it does not provide all the factors that may tend to affect the performance of the stock market. Additional factors like the exchange rates, investments in the foreign market, and the geopolitical risks

potentially influence Shariah-compliant stocks and market trend as well. The research in the future might want to widen the scale by including these other macro and exogenous factors to provide a broader understanding.

Lastly, the study did not take into account the geopolitical threats and the world economic environment. Such considerations can be critical in the determination of market performance especially in emerging markets. Further study might be done on a combination of geopolitical risks and world economic events and its influence on the stock returns vis-a-vis the local factors.

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