



# The Effect of Quantitative Shariah-screening on Portfolio Performance in Malaysia

Nor Izzati Mohd Aziz<sup>a\*</sup>

<sup>a</sup>Faculty of Business Management and Professional Studies, Management and Science University (MSU) Shah Alam

\*Corresponding author: izzataufik0705@gmail.com

---

## Abstract

The Islamic capital market in Malaysia comprises a wide range of investment vehicles, including *Shariah*-compliant stocks, Islamic bonds (*Sukuk*), and *Shariah*-compliant mutual funds. Malaysia's government continues to support the development of the Islamic capital market through regulatory frameworks and incentives. This has fostered a positive environment for *Shariah*-compliant investing. The growing awareness of Islamic values has significantly driven the expansion of *shariah* compliance in Islamic finance into a new phase. A key component of *Shariah* compliance is the screening process. The introduction of *Shariah* screening criteria is to ensure that investments in the Islamic capital market align with Islamic principles. The aim of this study is to investigate the impact of *Shariah* screening on portfolio performance. Specifically, it will assess how the debt ratio and cash ratio of stocks influence their performance, given that *Shariah* screening restricts the debt and cash ratios to no more than 33%. This study adopts a qualitative approach, for a more robust understanding of the impact of *Shariah* screening on portfolio performance, particularly during market fluctuations and economic shocks. This research will add to the growing body of knowledge on *Shariah*-compliant investing and its impact on portfolio performance. It will provide evidence on the quantitative screening mechanisms (debt and liquidity screening) and their role in maximizing financial performance in the context of Islamic finance. The findings could help both individual and institutional investors in Malaysia make informed decisions when constructing *Shariah*-compliant investment portfolios.

*Keywords: Shariah screening, portfolio performance, Shariah shares, Shariah equity, Shariah investment management*

© IIUM Press

---

## 1. Introduction

The stock markets in the GCC region (Saudi Arabia, UAE, Qatar, Bahrain, Kuwait, and Oman) have seen consistent growth driven by higher oil prices and government-led diversification initiatives. Many of these markets are actively developing their Islamic capital markets and are introducing more *Shariah*-compliant options for investors. The Tadawul Stock Exchange in Saudi Arabia and Dubai Financial Market are key players in this space.

In countries with large Muslim populations, stock exchanges such as those in Saudi Arabia, Malaysia, Dubai, and Indonesia have introduced *Shariah*-compliant boards that list stocks meeting Islamic ethical guidelines. As these markets expand and attract more global investors, the performance of these stocks can see notable growth, especially when there is increasing investor interest in ethical investing.

Like conventional stock markets, the performance of stocks in the Islamic capital market is influenced by global economic factors such as interest rates, inflation, and geopolitical events. However, because Islamic investments are based on equity and profit-sharing principles, they may be more resilient during times of financial uncertainty. Additionally, Islamic finance tends to avoid the high leverage and risk-taking associated with interest-based debt, which can provide a level of stability in the performance of *Shariah*-compliant stocks. The long-term outlook for stock performance in Islamic capital markets remains positive, driven by the increasing adoption of ethical and sustainable investment principles. As more global investors seek *Shariah*-

© IIUM Press 

Article history

Received: 7 December 2024

Accepted: 20 March 2025

compliant assets for ethical and portfolio diversification reasons, demand for Islamic stocks is expected to grow. This demand, combined with the expansion of Islamic capital markets, should continue to fuel stock market development and provide opportunities for strong performance in the long run.

The Islamic capital market in Malaysia comprises a wide range of investment vehicles, including *Shariah*-compliant stocks, *Sukuk*, and *Shariah*-compliant mutual funds. The Malaysian Securities Commission (SC), together with the Bursa Malaysia, plays a key role in regulating and developing the ICM. Bursa Malaysia lists over 700 *Shariah*-compliant securities, which are included in the FTSE Bursa Malaysia *Shariah* Index.

As of November 2024, over 70% of the companies listed on Bursa Malaysia are *Shariah*-compliant, making Malaysia one of the leading hubs for Islamic finance and investments globally. Malaysia also has the largest *Sukuk* market, with approximately 60% of global *Sukuk* issuance taking place in the country, underscoring the importance of Islamic finance in the nation's financial landscape.

Malaysia's government continues to support the development of the Islamic capital market through regulatory frameworks and incentives. This has fostered a positive environment for *Shariah*-compliant investing. Investor Sentiment: A growing number of Malaysian investors prefer ethical investments that align with their religious and moral values. According to the Malaysian Islamic Investment Survey 2022, nearly 60% of Malaysian investors indicated a preference for *Shariah*-compliant investment options, contributing to an increasing demand for Islamic mutual funds, *Sukuk*, and *Shariah*-compliant stocks.

The FTSE Bursa Malaysia *Shariah* Index (FBM *Shariah* Index) and the FBM KLCI (the benchmark index of the Kuala Lumpur Stock Exchange) offer a good comparison. Data from 2023 shows that while the FBM KLCI generated a 3-year annualized return of 2.6%, the FBM *Shariah* Index outperformed with a 3-year annualized return of 3.2%. This suggests that, over the past few years, *Shariah*-compliant stocks have been able to deliver slightly better performance than their conventional counterparts, possibly due to the exclusion of highly volatile sectors such as banking and gambling.

The *Shariah* screening procedures implemented by different countries follow varying policies. Similarly, if the *Shariah* screening model differs, it suggests that the quality of *Shariah*-compliant stocks also varies, depending on the criteria and selection process used. The quality of Islamic stocks can be assessed by evaluating their performance, which is reflected in metrics such as returns, volatility, and resilience against economic shocks.

The introduction of *Shariah* screening criteria is to ensure that investments in the Islamic capital market align with Islamic principles. *Shariah* screening methodology was formulated by the *Shariah* Advisory Council (SAC) of Securities Commission (SC) of Malaysia to assist investors in identifying *Shariah*-compliant securities. This methodology has evolved significantly, particularly in Malaysia, where the Securities Commission (SC) has implemented a two-tier screening process to ensure that investments align with *Shariah* law.

Investment instruments listed on the Main, ACE, and LEAP Markets of Bursa Malaysia Securities Berhad are reviewed by the *Shariah* Advisory Council of the Securities Commission Malaysia to assess their *Shariah*-compliant status. This study aims to contribute to the development of *Shariah*-compliant securities in Malaysia's capital market over time. As shown in Table 1, performance measurement analysis indicates that, as of 25 November 2011, there were 946 securities in total, with 839 being *Shariah*-compliant and 107 securities not being *Shariah*-compliant ([Securities Commission of Malaysia, 2024](#)).

Table 1: *Shariah*-compliant Securities Listed in Bursa Malaysia as at 25 November 2024

Main/ACE/Leap Market	Number of <i>Shariah</i> compliant Securities	Total securities	Percentage of <i>Shariah</i> -compliant securities (%)
Industrial products and services	254	301	84
Consumer products and services	163	216	75
Technology	93	121	77
Property	87	101	86
Construction	65	70	93
Plantation	35	45	78
Transportation and logistics	30	36	83
Energy	27	31	87

Healthcare	25	29	86
Telecommunications and media	22	30	73
Utilities	11	13	85
Financial services	5	38	13
TOTAL	817	1033	79

Source: Securities Commission Malaysia (2024)

*Shariah* screening was introduced in the Islamic capital market to identify and exclude stocks and securities containing elements prohibited under *Shariah* law. These stocks are removed from the list of *Shariah*-compliant investments available to Muslim investors. As business practices evolve and new developments emerge, it is essential to regularly reassess the compliance status of companies to ensure their activities remain aligned with *Shariah* principles. In this regard, the Securities Commission of Malaysia (SCM) publishes an updated list of *Shariah*-compliant stocks twice a year.

Screening can be defined as the process of examining or testing something to determine whether it meets specific standards or criteria. The *Shariah* screening methodology, as described by Ayedh et al. (2019), is a process designed to exclude companies with excessive conventional debt, interest-based investments, liquidity issues, or income derived from impermissible (impure) sources. *Shariah* screening significantly impacts investment decisions, particularly for Muslim investors, by ensuring that their investments comply with Islamic principles.

The *Shariah* screening process provides a structured methodology for identifying *Shariah*-compliant securities, thereby enhancing investor confidence in the Islamic capital market. By filtering out companies involved in non-compliant activities such as those dealing with *riba* (usury/interest), *maysir* (gambling), *gharar* (excessive uncertainties), *haram* (such as alcohol and pork related) products. *Shariah* screening helps investors avoid prohibited (*haram*) investments. This is vital for maintaining both ethical and religious standards in their portfolios.

By employing a structured two-tier methodology that combines qualitative and quantitative assessments, stakeholders can better navigate the complexities of *Shariah* compliance while promoting ethical investment practices.

Quantitative *Shariah* screening serves as a crucial tool for investors seeking to ensure their investments adhere to Islamic principles. The rationale behind the new financial ratios is to assess and measure elements related to *riba* and *riba*-based activities. On the downside, the updated screening method is more restrictive, which could lead to the exclusion of companies that were previously considered *Shariah*-compliant under the old criteria.

Table 2: Key Components of the Screening Methodology

<p>Qualitative Assessment:</p> <ul style="list-style-type: none"> <li>This initial stage involves evaluating business activities to identify any that are inherently non-compliant with <i>Shariah</i> principles, such as gambling, alcohol production, and conventional banking (image of the company)</li> <li>Other matters such as <i>Maslahah</i>, <i>ʿumum balwa</i>, <i>ʿuruf</i> and the rights of the non-Muslim community that are accepted by Islam.</li> </ul>	<p>1<sup>st</sup> tier: Business Activity Benchmarks</p> <ul style="list-style-type: none"> <li>A 5% threshold is set for certain prohibited activities (e.g., <i>riba</i>, gambling), meaning that no more than 5% of a company’s revenue can come from these sources.</li> <li>A 20% threshold applies to other activities deemed less critical but still non-compliant</li> </ul>
<p>Quantitative Assessment:</p> <p>The second tier focuses on financial ratios to further assess compliance. This includes specific benchmarks that companies must meet regarding their financial health and operations</p>	<p>2<sup>nd</sup> tier: Financial Ratio Benchmarks</p> <ul style="list-style-type: none"> <li>Compute the financial ratios: <ul style="list-style-type: none"> <li>i. Cash/ Total Assets</li> <li>ii. Debt/ Total Assets</li> </ul> </li> <li>Each ratio must be lower than 33%.</li> </ul>

Table 2 presents the qualitative and quantitative screening, whereby the thresholds are used to determine whether a company's activities and financial ratios comply with Islamic principles. These thresholds help investors decide which companies are permissible for investment. For the cash ratio, only cash held in conventional accounts and instruments is considered, while cash in Islamic accounts and instruments is excluded from the calculation. Similarly, for the debt ratio, only interest-bearing debts are included, while Islamic debt and *sukuk* are excluded. Both ratios are based on balance sheet items and are measured against a common benchmark of 33 percent. These ratios are clearly intended to assess the extent of non-compliance with Islamic principles in the company's non-Islamic financial transactions. The 33 percent benchmark likely derives from the well-known *Hadith* of the Prophet, which limits charitable donations to one-third of one's wealth.

This benchmark is also applied in the screening standards of developed markets such as the DJ, FTSE, S&P, and MSCI. However, the Securities Commission's definition of cash and total debt includes only the non-compliant components, making it more appropriate than other definitions that consider total cash and total debt regardless of whether they are Islamic or non-Islamic. To be certified as *Shariah*-compliant, all companies issuing securities must meet the requirements in both stages of the screening process.

Islamic finance is a financial system that operates in accordance with Islamic law. It encompasses three key components: Islamic capital markets, Islamic banking, and Islamic insurance (*takaful*). Each of these sectors shares the responsibility of ensuring that their products are *Shariah*-compliant. This study, however, will focus specifically on the *Shariah* screening process for stocks and securities. Furthermore, in Malaysia, literature on *Shariah* screening, is still limited. In specific, this study would like to investigate the quantitative assessment whereby the financial ratios are analyzed to measure elements like *riba* and ensure that non-compliant activities do not exceed specified thresholds (e.g., less than 5% or 20% of total revenue or profit).

The remainder of this paper is organized as follows: Section 2 explains the research problem and objectives, Section 3 is the theoretical part, Section 4 is on the review of literature related to this study. Section 4 describes the methodology and data used in this paper. Section 5 summarizes the findings and concludes the paper. Finally, Section 6, provides a summary and the research findings.

## 2. Research Problem

The growing Muslim population in Malaysia, projected to rise significantly in the coming decades, has contributed to an increased demand for *Shariah*-compliant investments. As of 2020, Muslims made up 63.5% of Malaysia's population, and their growing interest in aligning their financial activities with religious principles has bolstered the development of a well-regulated Islamic capital market. This trend is not only prominent in Malaysia but also in Muslim-majority countries worldwide, influencing even non-Muslim investors to consider *Shariah*-compliant financial products (Pok, 2012). As the demand for such investments rises, the challenge of maintaining rigorous and effective *Shariah* screening processes becomes more challenging.

In a study where in today's globalized economy, it is increasingly difficult to find a joint-stock company whose activities are fully compliant with *Shariah* principles and rulings. One of the key challenges in ensuring *Shariah* compliance lies in the screening process itself. A recent qualitative study by Ashraf et al. (2017) delves into the complexities and technicalities involved in this screening process, highlighting the challenges faced by investors and regulatory bodies in maintaining strict adherence to *Shariah* guidelines.

Apart from that, certain studies suggest that the *Shariah* screening process does not fully align with Islamic values and fails to adequately consider societal welfare or openness. For instance, the S&P 500 *Shariah* Index methodology first screens industries and then analyzes financial ratios. As a result, a company can be *Shariah*-compliant one year and non-compliant the next. In such cases, management may be unaware of their compliance status due to the checklist-based nature of the screening process. Additionally, companies with high levels of *Shariah* compliance tend to have less favorable financial arrangements, such as lower leverage, cash reserves, and accounts receivable, leading to higher interest rates. This gives *Shariah*-compliant enterprises a financial disadvantage compared to non-compliant ones. For example, the lack of leverage in *Shariah*-compliant firms may limit management's ability to act in the best interests of shareholders, while the higher leverage of non-compliant firms can act as a monitoring mechanism, discouraging managers from engaging in unethical behavior.

*Shariah*-compliant investing inherently involves a more restrictive universe of eligible securities due to the ethical and legal constraints imposed by Islamic law. This limited investment universe can affect portfolio

diversification, leading to potential increases in idiosyncratic and concentration risk. While traditional investment strategies benefit from a broader range of stocks and bonds, *Shariah*-compliant portfolios must navigate these limitations, potentially sacrificing diversification for religious adherence.

Due to this limitation, the performance of *Shariah*-compliant investments relative to conventional portfolios remains a key area of debate. Some argue that the added costs and complexities of *Shariah* compliance may discourage investors, leading them to favor conventional investments despite the ethical appeal of *Shariah*-compliant options. Some studies argue that *Shariah*-compliant portfolios can achieve returns comparable to or even superior to conventional ones, especially when investments are chosen based on solid ethical principles and lower-risk companies (Sait, 2018). For example, research by Hassan et al. (2009) suggests that *Shariah*-compliant portfolios may outperform conventional ones in emerging markets, where ethical considerations are more influential.

As mentioned earlier, the quantitative *Shariah* screening measure financial ratios such as debt and cash ratio. With regards to this, *Shariah*-compliant portfolios also avoid companies with high leverage. This reduces their exposure to companies that might struggle in periods of rising interest rates or economic stress. However, it can also lead to underperformance in sectors that require significant debt financing, such as real estate and infrastructure. Other studies, such as Abdul Rahman (2011), highlight the potential underperformance of *Shariah*-compliant portfolios, particularly due to the restricted investment universe, which may exclude high-growth sectors like technology and finance. Similarly, Bashir et al. (2019) argue that these restrictions can lead to missed opportunities for higher returns, particularly in high-growth sectors.

There are mixed findings/results regarding the performance of *Shariah*-compliant portfolios. While some researchers have found that these portfolios can outperform conventional ones, others have not. This discrepancy highlights the need for further exploration, which this study aims to address, particularly when the *Shariah* screening criteria has been revised. Furthermore, the revised financial threshold limits *Shariah* companies' ability to raise interest-bearing debt as a source of financing raising a greater concern that the new threshold of financial ratio may affect the performance of *Shariah*-compliant firms.

### 3. Agency Theory

The relationship between *Shariah* screening and portfolio performance is deeply connected to agency theory, as the screening process helps align the interests of investors (principals) with fund managers (agents). By mitigating agency problems such as conflicts of interest, agency costs, and information asymmetry, *Shariah*-compliant screening mechanisms help ensure that fund managers act in the best interests of investors while adhering to ethical and religious principles. Past literature supports the use of agency theory to explain how *Shariah*-compliant investments can reduce agency costs, enhance transparency, and align incentives, ultimately influencing portfolio performance. The use of *Shariah* screening in investment portfolios helps align the interests of fund managers with those of investors, reducing the agency problem by establishing a clear set of guidelines and reducing the potential for unethical or non-compliant investments that could harm the fund's reputation or performance.

*Shariah*-compliant screening can also lower agency costs by creating an efficient governance structure (e.g., *Shariah* boards and compliance officers) that ensures adherence to ethical standards, which ultimately helps manage risk and enhances the long-term performance of the portfolio. In relation to this, how the compensation structures of Islamic financial institutions should align the goals of fund managers with the ethical preferences of investors, using agency theory as a framework to explain how *Shariah*-compliant funds mitigate the principal-agent problem through compensation linked to both financial returns and *Shariah*-compliance. This can be supported by how the governance structure of Islamic financial institutions (which often includes *Shariah* boards and compliance officers) is designed to align the interests of agents (fund managers) and principals (investors) to ensure adherence to *Shariah* principles while optimizing financial performance.

Besides, *Shariah*-compliant screening can act as a monitoring mechanism to reduce the agency problem by ensuring that the fund managers' investment decisions are aligned with the ethical preferences of the investors through the *Shariah* boards, that serve as a monitoring body that ensures transparency and reduces the information asymmetry between the agent and principal. The role of *Shariah* boards is also important in ensuring compliance with ethical and religious standards, which mitigates agency problems associated with information asymmetry and moral hazard in Islamic finance (Hassan et al., 2009).



#### 4. Literature Review

The performance of the Islamic capital market plays a crucial role in the broader economy. A well-functioning Islamic market can contribute significantly to economic growth by promoting efficient capital allocation and investments. One of the key factors influencing this performance is the methodology used to classify *Shariah*-compliant and non-compliant stocks. The way stocks are screened impacts not only trading volumes but also share prices, which in turn affects the overall performance of the market.

In Malaysia, the introduction of Islamic equity indices marked a milestone in the development of the *Shariah*-compliant investment space. The first such index, launched by RHB Unit Trust Management Bhd. in 1996, was followed by the creation of the Kuala Lumpur *Shariah* Index (KLSI) on April 17, 1999. The KLSI was developed to meet the growing demand from both local and international investors looking to invest in assets that adhere to Islamic principles. Initially, the index contained 279 companies, but by November 29, 2019, it had expanded to include 696 companies, making up 77% of the total listed companies on Bursa Malaysia (Securities Commission, 2019).

Different *Shariah* screening methods produce varying performance results, with quantitative ratios typically associated with lower performance (Saleh & Jurdi, 2021). The importance of country-specific screening standards is highlighted, as local market conditions play a crucial role in determining the effectiveness of *Shariah* compliance (Arifin & Qizam, 2021). *Shariah*-compliant portfolios are typically considered to have a lower risk-return tradeoff. While these portfolios might not always achieve the same high returns as conventional portfolios, they may offer better risk-adjusted returns. This is largely due to the rigorous screening process based on financial ratios, which helps ensure that the companies included in these portfolios are less likely to face financial distress. For example, *Shariah*-compliant companies tend to have lower debt levels, which reduces their exposure to bankruptcy risk. Additionally, these companies often have tangible assets that help them weather economic downturns better than their conventional counterparts.

By avoiding companies with excessive liquidity, such as those holding large cash reserves, *Shariah*-compliant portfolios encourage companies to reinvest their profits into growth opportunities, rather than hoarding capital. This may lead to more efficient use of resources and long-term growth for both the companies and the portfolios that invest in them.

Several studies have examined the performance of *Shariah*-compliant portfolios, particularly in comparison to conventional equity portfolios in Malaysia. According to Hassan et al. (2009), *Shariah*-compliant portfolios generally perform similarly to conventional portfolios during periods of economic growth. However, in times of economic decline or heightened market uncertainty, *Shariah*-compliant funds often outperform conventional ones. This is because *Shariah*-compliant portfolios tend to avoid speculative and highly leveraged stocks, focusing instead on stable, less risky assets.

One significant finding is that announcements regarding *Shariah* compliance can have a substantial effect on stock prices. When a company is recognized as *Shariah*-compliant, it often sees a boost in stock price due to increased interest from Muslim investors, who prioritize *Shariah* compliance in their investment decisions. Conversely, companies that are deemed non-compliant may experience a drop in stock prices as they become less attractive to these investors.

Research suggests that *Shariah*-compliant portfolios can deliver competitive returns, or even outperform conventional portfolios, over the long term. However, the performance of these portfolios heavily depends on the screening criteria used. For example, Raza (2021) found that portfolios built using market capitalization-based screening methods tend to perform better than those based on total asset-based screens. This highlights the importance of selection criteria in shaping the returns of *Shariah*-compliant investments.

The performance of *Shariah*-compliant portfolios also depends on the broader economic environment. During periods of economic instability or financial crises, companies that are involved in interest-based transactions or speculative activities may struggle, while those in ethical or real asset-backed sectors may perform better. As a result, *Shariah*-compliant portfolios can outperform during times of economic stress because they tend to focus on more stable, real economy-based assets. Izzeldin and Karbhari (2011) found that Islamic stocks often perform better during economic stress, as they are less exposed to interest rate fluctuations and speculative bubbles. In contrast, during periods of economic growth, when sectors like finance and technology are performing well, *Shariah*-compliant portfolios may underperform due to the exclusion of these sectors, which may offer higher returns in such periods.

One of the key arguments in favor of *Shariah*-compliant investing is its potential for better risk-adjusted returns. By avoiding companies with high debt or significant exposure to interest, *Shariah*-compliant portfolios may be more resilient in times of economic downturns. This focus on financial stability and ethical business practices may reduce overall risk exposure. Ashraf et al. (2017) investigated the impact of quantitative *Shariah* screening, including restrictions on financial leverage and a preference for real assets, on portfolio performance. They found that while these screening measures might limit potential returns, they also reduce risk exposure, offering a balanced tradeoff for investors.

Moreover, Raza (2021) found that *Shariah*-compliant portfolios often experience lower volatility due to their avoidance of speculative investments. This lower volatility can translate into better Sharpe ratios (a measure of risk-adjusted return), suggesting that *Shariah*-compliant investments may offer a more stable return profile, particularly in times of market turbulence. Similarly, Ariff and Farrukh (2011) argued that *Shariah*-compliant investments could outperform conventional investments in terms of risk-adjusted returns, particularly during periods of market volatility.

Despite the potential benefits, there are challenges associated with *Shariah*-compliant investing. For instance, some studies have indicated that *Shariah* screening, particularly through debt-ratio assessments, can negatively impact stock returns in certain markets, such as in Indonesia and Pakistan (Arifin & Qizam, 2021). Furthermore, Abdul-Rahman et al. (2010) observed that applying *Shariah* screening to local stocks can lead to a sharp reduction in the number of companies eligible for inclusion in the *Shariah*-compliant universe. While this might limit investment options in the short term, it is expected that companies will adjust their operations to meet *Shariah* requirements over time, thereby increasing the pool of eligible companies in the long run.

In conclusion, the performance of *Shariah*-compliant portfolios is influenced by a range of factors, including the underlying screening methodologies, the state of the economy, and market conditions. While *Shariah*-compliant portfolios might not always match the returns of conventional portfolios, they offer a more stable and lower-risk investment option, particularly during times of economic stress. With increasing investor demand for ethical and *Shariah*-compliant investments, the Islamic capital market is expected to continue growing and evolving, offering promising opportunities for both investors and the broader economy.

## 5. Methodology

The study explores the relationship between quantitative screening factors and financial performance metrics, such as Return on Assets (ROA) and Return on Equity (ROE). Employing a qualitative approach, the research conducts a research analysis of *Shariah*-compliant portfolios to evaluate the impact of key screening factor, specifically debt and liquidity, on portfolio performance. The findings are also to contribute to the understanding of a topic by proposing new theory/framework suggesting new directions for research.

At the literature review stage, the researcher formulated the following research questions to guide the study:

1. How does financial ratio screening imposed by *Shariah* compliance impact portfolio return, and how do the returns of *Shariah*-compliant securities compare to conventional securities?
2. Does the limitation on leverage and liquidity (cash and cash equivalents) hinder or enhance financial performance?

This conceptual paper also provides insights into the financial implications of adhering to *Shariah* investment principles.

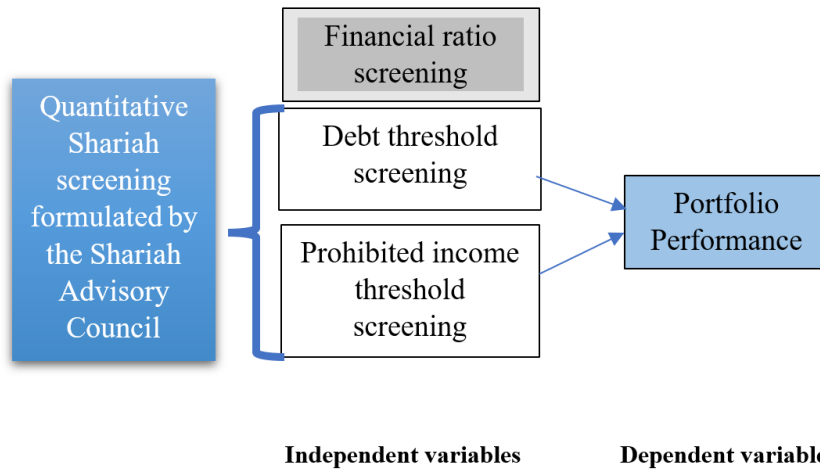
## 6. Research Findings and Discussion

### 6.1 Proposed Research Concept Based on the Framework Established by the Securities Commission Malaysia

This section aims to explain the findings and discussion of this study by addressing the specific objectives mentioned above in 2.0. This research aims to qualitatively assess the impact of *Shariah* screening on portfolio returns, comparing *Shariah*-compliant securities with conventional ones to evaluate whether the financial ratio screening imposed by *Shariah*-compliance hinder or enhance financial performance. Previous research has not yet fully explained the issues underlying the screening components of the framework imposed by the Securities Commission.

Figure 1 below shows the proposed framework constructed from the information of *shariah* screening criteria approved by Securities Commission Malaysia. The dimensions under financial ratio screening are adopted from the quantitative approach, thus being an independent variable to measure how this threshold will affect the performance of portfolio.

Figure 1: Conceptual Framework



As shown in Table 3, financial ratios screening looks at the relative size of the company’s interest income and return from interest-based assets. If a large percentage of its income comes from interest, a company may be excluded even if its core business is permissible. The level of liquid assets, which may include cash and cash equivalents, short term investments and account receivables, should be kept to a minimum in Islamic finance.

Table 3: Variables and measurements

Variables	Measurement	Justification
Portfolio return/performance	Return on Asset (ROA), Return on Equity (ROE)	To measure company/firm performance in relation to their asset or equity
Debt threshold	The Debt ratio – Debt/Total Asset	Debt to be included in the calculation includes interest-bearing debt only. If the company used Islamic financing such as sukuk, it should be excluded from the calculation
Prohibited income threshold	Percentage of revenue from non-permissible activities –  Cash and cash equivalent /Total Asset	Cash-to-Total Assets ratio helps assess whether a company holds excessive cash reserves. Companies with a cash-to-asset ratio exceeding 50% may be excluded from Shariah-compliant portfolios, as holding such a high proportion of cash could be considered inconsistent with the ethical principles of Islamic finance.

6.2 How does financial ratio screening imposed by Shariah compliance impact portfolio return, and how do the returns of Shariah-compliant securities compare to conventional securities?

Since 1998, the official list of *Shariah*-compliant securities in Malaysia has been announced twice a year. Initially, these announcements were made in April and October, beginning in 2000. However, starting in 2007, the announcement schedule was revised to May and November, where it remains to this day.

The revised methodology in 2013 aims to align the standards with global expectation by introducing a two-tier quantitative framework. Previous study by [Zainudin and Sulaiman \(2019\)](#) has recommended to investigate on how does the revised methodology affect the *Shariah*-compliant status of public companies listed on Bursa Malaysia. The methodology used to assess *Shariah* compliance significantly influences the status of public companies listed on Bursa Malaysia. In their previous study, the introduction of a revised two-tier quantitative approach which includes both business activity benchmarks and newly introduced financial ratio



benchmarks, alongside the existing qualitative assessment has a direct impact on the *Shariah*-compliant status of listed companies. This change means that companies with mixed activities, which were previously evaluated using 10% or 25% thresholds, will now be assessed based on more stringent 5% or 20% benchmarks. Additionally, companies with high levels of conventional debt will be affected, as the new methodology introduces screening based on the total conventional debt of the company, a factor that was not considered under the previous approach.

The new revised framework stated that companies with a debt-to-equity ratio above 33% are generally excluded from *Shariah*-compliant portfolios due to Islamic principles that prohibit excessive reliance on interest-bearing debt. High levels of debt are seen as incompatible with the ethical standards of *Shariah* law, which forbids *riba*. A lower debt ratio is preferred, as it indicates reduced exposure to interest and enhances financial stability. From a portfolio management standpoint, excluding highly leveraged companies can mitigate financial risk, particularly during economic downturns when such companies are more vulnerable to solvency challenges.

Companies that are *Shariah*-compliant and those with non *Shariah*-compliant securities are involved in distinct business and investment activities, which means their associated risks and returns are likely to differ. The screening criteria can influence the financial performance of portfolios, as companies with high debt levels may be excluded from Islamic portfolios, potentially limiting diversification or growth in certain sectors. However, avoiding high-debt companies may also reduce the risk of financial instability, contributing to more stable long-term returns. During economic downturns, leverage can be detrimental due to higher fixed costs (interest), potentially leading to increased financial distress (Walkshäusl, 2015).

Numerous studies have explored the impact of debt screening on key financial indicators such as Return on Assets (ROA) and Return on Equity (ROE). One of the primary principles of Islamic finance is the prohibition of *riba*, which leads to the exclusion of companies heavily reliant on interest-bearing debt from *Shariah*-compliant portfolios.

The debt screening process ensures that only companies with a sustainable, interest-free capital structure are eligible for inclusion, aligning with the ethical principles of Islamic finance.

The performance of *Shariah*-compliant portfolios can vary significantly based on market conditions. In bull markets, *Shariah*-compliant funds may underperform conventional funds due to their exclusion of high-growth sectors such as finance, energy, and technology. For instance, Malaysia's stock market has seen technology sector growth in recent years, particularly in 2020 and 2021, where tech stocks posted strong returns. *Shariah*-compliant portfolios, however, may have missed out on these opportunities due to their exclusion of non *Shariah*-compliant tech companies. In contrast, during downturns or periods of market stress, *Shariah*-compliant portfolios typically outperform. For example, during the COVID-19 pandemic (2020-2021), *Shariah*-compliant portfolios demonstrated resilience, as the companies they included were often less exposed to speculative debt and leveraged positions.

*Shariah*-compliant portfolios typically demonstrate lower volatility than their conventional counterparts, indicating a more risk-averse investment approach (Arifin & Qizam, 2021). Debt screening, particularly through debt-to-equity and interest-bearing debt ratios, has been shown to have significant implications for portfolio performance. Several studies have investigated how debt screening affects the financial metrics like ROA and ROE.

A company with lower debt may not leverage financial borrowing to boost its ROE in the short term. However, the long-term stability and financial health afforded by lower leverage often result in higher ROE over time, as the company generates consistent profits without relying on debt-based funding.

### 6.3 Does the limitation on leverage and liquidity (cash and cash equivalents) hinder or enhance financial performance?

A key feature of *Shariah*-compliant investments is the avoidance of excessive debt and *riba*. The quantitative screening process typically uses ratios like the debt-to-equity ratio and cash-to-assets ratio to ensure that companies in the portfolio adhere to Islamic principles by minimizing exposure to debt and interest-based activities. Specifically, Islamic equity screening standards prohibit investments in companies with high financial leverage and a low proportion of investment in real assets.

*Shariah*-compliant portfolios tend to be less volatile because they avoid investing in companies with high leverage and interest-bearing debt, which makes them more resilient in times of economic uncertainty. Abdul

Rahman (2011) found that *Shariah*-compliant portfolios in Malaysia exhibit lower volatility compared to conventional portfolios, primarily because they avoid high-debt companies and industries susceptible to speculative bubbles. In terms of standard deviation, a measure of risk, *Shariah*-compliant equity funds in Malaysia have shown lower values than their conventional counterparts, particularly during times of market stress.

A study by (Arifin & Qizam, 2021) found the debt ratio (DER) has a significantly positive effect on the *Shariah* portfolio returns, but not on the conventional portfolio returns. The presence of *Shariah* screening adds an additional "virtue" to capital markets. Even though leverage is subject to *Shariah* screening, portfolio performance remains positive, which in turn helps reduce risk. As a result, investors and managers need not be concerned about the impact of *Shariah* screening. This evidence helps explain why many firms in Indonesia maintain high debt profiles and why the DSN-MUI and OJK have set relatively loose thresholds 82% for the debt-to-equity ratio (DER) and 45% for the debt-to-asset ratio (DAR). This result aligns with Durand's (1952) traditional theory of capital structure, which suggests that, to some extent, leverage can enhance a firm's value.

Hassan et al. (2009) examined the impact of *Shariah* compliance on financial performance and found that companies with lower debt levels demonstrated better ROA and ROE compared to their highly leveraged counterparts. They argued that by avoiding excessive debt, *Shariah*-compliant companies tend to have more stable earnings and higher profitability, as their lower financial risk enhances their overall performance. Hoepner et al., (2011); and Hayat & Kraeuss (2011) in their studies on the *Shariah* stocks and mutual funds proof that the *Shariah* investment products offer higher stock returns due to restricted leverage and credit sales.

Companies with lower leverage often achieve higher ROA because they are less encumbered by debt-related expenses (such as interest payments), leaving more capital available for productive investments. Without the heavy burden of debt servicing, these companies can allocate more resources toward enhancing operational efficiency, resulting in higher asset returns.

Although a company with lower debt may not use financial leverage to boost its ROE in the short term, the long-term stability and financial health associated with lower leverage often led to higher ROE over time. By consistently generating profits without relying on debt-based funding, such companies can achieve sustained profitability and superior returns for shareholders.

Ariff and Farrukh (2011) found that *Shariah*-compliant stocks, which typically have lower debt ratios, demonstrate better operational efficiency and profitability, leading to higher Return on Assets (ROA). Their study indicated that companies with lower debt levels are better positioned to reinvest profits into productive operations rather than servicing high-interest debt, resulting in improved ROA. Similarly, other study examined *Shariah*-compliant portfolios in Malaysia and found that firms with lower debt levels tend to achieve higher Return on Equity (ROE), as their equity capital is utilized more efficiently for growth and value creation. By avoiding excessive debt, these firms can focus on long-term operational performance and capital efficiency, ultimately delivering better returns for shareholders.

In contrast, Ashraf et al. (2017) and El-Alaoui et al. (2018) found that leverage tends to negatively impact portfolio performance. However, their findings were based on the financial crisis period (2007-2008), and under normal market conditions, they observed no significant difference in performance.

The incorporation of stochastic purification variables in portfolio models can help mitigate compliance risks, though it may also lead to a reduction in overall returns (Puspita et al., 2023). While this adjustment improves adherence to *Shariah* principles, it introduces a trade-off, as the need for stricter compliance may limit investment opportunities and affect the portfolio's potential for higher yields.

For example, an apparel company that invests surplus cash seasonally in interest-bearing money market instruments, such as Treasury bills and low-risk commercial papers, may face eligibility issues for Islamic investors if interest income represents a significant portion of its total earnings. Similarly, a company with excessive debt financing may be excluded from investment, even if it operates in a *Shariah*-permissible business. For instance, real estate developers relying heavily on debt financing are screened out, despite real estate development itself being *Shariah*-compliant. However, if a company's debt is structured in a *Shariah*-compliant manner (i.e., not interest-based), the debt ratio screening does not apply. This is because the primary purpose of the screening is to exclude companies that derive substantial benefits from interest-based financing. As such, investing in leveraged Islamic banks or *Shariah*-compliant real estate companies is permissible, irrespective of their debt ratios (Rehman, 2010).

Islamic guidelines restrict the proportion of revenue derived from interest-bearing activities (*riba*), and

typically, companies with interest income exceeding 5% of their total earnings are excluded from *Shariah*-compliant portfolios. By avoiding companies with significant interest income, investors can ensure their portfolios remain ethically aligned and less vulnerable to the volatility and risks associated with interest rate fluctuations. Companies with minimal interest exposure are often viewed as more stable, as they are less reliant on external financial factors and more focused on their core business operations.

*Shariah*-compliant stocks reduce risk by limiting debt capital, credit sales, interest income, and adhering to other ethical investment principles. Additionally, their risk remains low, even during global crises, due to these *Shariah* investment guidelines. *Shariah* stocks as one of the most effective alternatives for minimizing risk in investment portfolios. The unique characteristics of *Shariah*-based investments make them a preferred choice for global investors. Ashraf et al. (2022) analyze the impact of Covid-19 on global *Shariah* indices and find that these indices generated excess returns during that period. In this context, Salisu and Shaik (2022) suggest that Islamic stocks can serve as a hedge during pandemics.

## 7. Conclusion and Recommendation

*Shariah* screening not only guides Muslim investors in making compliant investment choices but also shapes market dynamics by influencing stock valuations and creating a more structured investment environment. As an increasing number of investors in Malaysia look for ethical, *Shariah*-compliant investment options, it is crucial to understand the effect of these quantitative screenings on enhancing portfolio performance, particularly regarding risk-adjusted returns and long-term profitability. Research consistently shows that *Shariah*-compliant screening improves financial stability, with lower debt levels and effective cash management contributing to higher ROA and ROE compared to conventional portfolios.

Further research is needed to better understand the long-term impact of *Shariah*-compliant investing on portfolio performance, particularly in emerging markets where *Shariah*-compliant investments have the potential to outperform due to different economic dynamics. Overall, quantitative *Shariah*-screening serves both as a constraint and a value proposition, depending on the investor's objectives and the market context.

Based on the findings, future researcher is suggested to focus on other areas for further investigation, such as exploring other financial ratios (beside ratios that only compulsory for screening) or deeper dives into sector-specific *Shariah*-compliant screening. There have been several debates about the factors that contribute to the portfolio performance that serve as a useful measure of its return performance.

Islamic finance plays a pivotal role in promoting sustainable development by aligning financial activities with ethical, social, and environmental goals. It is rooted in the principles of *Shariah* law, which emphasize justice, equity, and the well-being of society. Since now the current trend is on Environmental, Social, and Governance (ESG) financing and investment, it is best to also highlight how the growing trend of ethical investing, including Socially Responsible Investing (SRI), aligns with *Shariah*-compliant investing. Researcher is encouraging to have further integration on quantitative methods, relations to an ethical investment strategy.

## 8. Practical Implications

This study has significant implications for financial institutions and fund managers, particularly in shaping their capital leverage decisions. It highlights the need to carefully consider the choice between debt and equity when determining the optimal capital structure to fund a company's operations. Considering this, financial institutions and asset managers can develop or refine *Shariah*-compliant financial products, such as ETFs, mutual funds, and index funds. With the application of debt and cash ratio filters, the performance and compliance of these products can be improved. Asset manager is responsible for managing risk, thus the quantitative screening methods, like debt-to-equity ratios, can also provide a more structured risk management framework for managing *Shariah*-compliant portfolios. By ensuring that the portfolio's assets are in line with these criteria, financial institutions can reduce exposure to non-compliant and risky assets.

Companies that offer *Shariah*-compliant investments could use this finding to assess how their debt and cash management practices affect their attractiveness to *Shariah*-compliant investors. This could be as a guideline for them to improvise and make changes to a corporate policy regarding financial leverage, debt issuance, and cash reserves. Moreover, this research could also be beneficial for corporate governance aspect, by encouraging companies to adopt financial practices that align with *Shariah*-compliant criteria, potentially increasing their investor base within the Islamic finance community.

Whereas on the investors' side, this study would contribute to the best decision-making practices. This

research can guide investors who wish to adhere to *Shariah* principles. For example, the quantitative screening tools, like debt and cash ratios, can be used to help identify compliant stocks, bonds, and other assets for *Shariah*-compliant portfolios through the ratio measurement. It also can be guidance for investors when it comes to portfolio construction. They can adjust their portfolios by using these ratios to create a balanced, yet *Shariah*-compliant portfolio still optimizes financial returns. Investors who want to align their financial strategies with ethical or religious guidelines may benefit from this study. Furthermore, this research could show if these screening enhance or reduce portfolio returns compared to non-screened portfolios. International investors seek to diversify their portfolios by investing across various asset classes. In this context, *Shariah*-compliant stocks offer a valuable alternative for global investors looking to rebalance their portfolios.

Islamic finance is increasingly recognized for its alignment with the Sustainable Development Goals (SDGs), due to its focus on ethical investing, social justice, and the avoidance of exploitative financial practices. Screening based on debt and cash ratios can support the SDGs by promoting financial stability and ethical business conduct, which resonates with several goals, notably Goal 8 (Decent Work and Economic Growth), Goal 9 (Industry, Innovation, and Infrastructure), and Goal 16 (Peace, Justice, and Strong Institutions).

By prioritizing companies with low debt and minimal interest exposure, investors are more likely to steer clear of industries that rely on unsustainable financial practices, thus fostering investment in sectors that positively impact on the economy and society, such as renewable energy, education, and healthcare.

A potential challenge, however, lies in the risk of portfolio underperformance for those strictly adhering to debt and cash ratio constraints. Excluding high-growth companies with significant debt or cash holdings could result in missed market opportunities. Nevertheless, such strict adherence also presents an opportunity to develop innovative financial products and strategies that balance *Shariah* compliance with strong financial performance. Moreover, these portfolios can attract impact investors who prioritize sustainable and ethical investments.

## References

- Abdul-Rahman, A., Yahya, M.A. & Mohd-Nasir, M.H. (2010). Islamic Norms for Stock Screening: A Comparison Between The Kuala Lumpur Stock Exchange Islamic Index and the Dow Jones Islamic Market Index. *International Journal of Islamic and Middle Eastern Finance and Management*, 3(3), 228-240.
- Abdul Rahman, A. (2011). The Impact of *Shariah* Screening on Stock Market Performance. *International Review of Economics and Finance*.
- Ariff, M. & Farrukh, M. (2011). *Shariah*-Compliant Investments and Risk-Adjusted Performance. *Global Finance Journal*.
- Arifin, M. A., & Qizam, Q. (2021). Country-Specific Screening Standards in *Shariah*-Compliant Investments: A Global Perspective. *International Journal of Islamic Finance*.
- Ashraf, D., Felixson, K., Khawaja, M., & Hussain, S. M. (2017). Do Constraints on Financial and Operating Leverage Affect the Performance of Islamic Equity Portfolios? *Pacific-Basin Finance Journal*, 42(4), 171–182
- Ashraf, D., Rizwan, M. S., & Ahmad, G. (2022). Islamic Equity Investments and the COVID-19 Pandemic. *Pacific-Basin Finance Journal*, 73, 101765.
- Ayedh, A. M. A., Shaharuddin, A., & Kamaruddin, M. I. H. (2019). *Shariah* Screening Methodology: Does It ‘Really’ *Shariah* Compliance? *IQTISHADIA*, 12(2), 144-172.
- Bashir, M., Ahmad, R., & Hassan, A. (2019). *Shariah*-Compliant Portfolio Management and Performance: A Review. *Journal of Islamic Economics*, 11(2)
- Durand, D. (1952). Cost Of Debt and Equity Funds for Business: Trends and Problems of Measurement. In Universities-National Bureau Committee for Economic Research (Ed.), *Conference on research in business finance* (pp. 215–262). National Bureau of Economic Research. Retrieved from <http://www.nber.org/chapters/c4790.pdf>
- El-Alaoui, A. O., Bacha, O. I., Masih, M., & Asutay, M. (2018). Does Low Leverage Minimise the Impact of Financial Shocks? New Optimisation Strategies Using Islamic Stock Screening for European Portfolios. *Journal of International Financial Markets, Institutions and Money*, 57(11), 160–184

- Hassan, M. K., Girard, E., & Hoepner, A. G. F. (2009). Shariah-Compliant Investments: A Performance Comparison with Conventional Equities. *Financial Review*, 44(3), 443–468. Retrieved from <https://doi.org/10.1111/j.1540-6288.2009.00227.x>
- Hayat, R., & Kraeuss, J. (2011). Shariah-Compliant Mutual Funds and Stock Returns: Evidence from the Islamic Finance Market. *Journal of Islamic Finance*, 6(2), 145-162. Retrieved from <https://doi.org/10.2139/ssrn.1890982>
- Hoepner, A. G. F., Rammal, H. G., & Rezec, M. (2011). Islamic Mutual Funds: Performance and Investment Characteristics. *The European Journal of Finance*, 17(4), 313-335. Retrieved from <https://doi.org/10.1080/1351847X.2011.587390>
- Izzeldin, M., & Karbhari, Y. (2011). Islamic Stock Markets and Economic Cycles. *Journal of Banking & Finance*.
- Puspita, D., Kolkiewicz, A., & Tan, K. S. (2023). Markowitz-Based Shariah-Compliant Portfolio Model with Stochastic Purification and Probabilistic Compliance Screening Constraints. *Journal of Islamic Accounting and Business Research*, 14(8), 1300–1323. Retrieved from <https://doi.org/10.1108/JIABR-08-2021-0230>
- Pok, W. C. (2012). Analysis of Syariah Quantitative Screening Norms Among Malaysia Syariah-Compliant Stocks. *Investment Management and Financial Innovations*, 9(2), 69–80.
- Raza, S. (2021). Risk-Adjusted Returns of Shariah-Compliant Portfolios: Evidence from Pakistan. *Asian Economic Policy Review*.
- Rehman, A. (2010). *Gulf Capital and Islamic Finance*. New York, McGraw-Hill.
- Sait, S. (2018). Performance of Shariah-Compliant Funds: A Global Perspective. *International Journal of Finance & Economics*.
- Saleh, M., & Jurdi, R. (2021). The Impact of Shariah Screening Methods on Investment Performance: Evidence from Emerging Markets. *Journal of Islamic Finance and Economics*.
- Salisu, A. A., & Shaik, M. (2022). Islamic Stock Indices and COVID-19 Pandemic. *International Review of Economics & Finance*, 80, 282-293.
- Securities Commission. (2019). *KLSI Development and Expansion: Meeting the Demand for Shariah-Compliant Investments*. Securities Commission Malaysia.
- Securities Commission Malaysia. (2024) *List of Shariah-compliant securities by the Shariah Advisory Council of the Securities Commission Malaysia*. Retrieved from <https://www.sc.com.my/api/documentms/download.ashx?id=1920c06f-61e5-46d7-8016-28a918acd4c8>
- Walkshäusl, C. (2015). Equity Financing Activities and European Value-Growth Returns. *Journal of Banking & Finance*, 57, 27–40.
- Zainudin, N., & Sulaiman, M. (2019). *Investigating The Impact of The Revised Shariah-Compliant Methodology on Public Companies Listed on Bursa Malaysia*. *Journal of Islamic Finance*.