Journal of Islamic Accounting and Finance Research
ISSN 2715-0429 (print); 2714-8122 (online)
Vol. 6 No. 1 (2024), 39-58; DOI: https://dx.doi.org/10.21580/jiafr.2024.6.1.18034
Received 2024-01-29 Accepted 2024-04-23

Islamic mutual funds: risk and return management

Adi Gunanto,[1] Lubna M. Omar Hamzalouh,[2] Sunarmi Sunarmi,[3] Mohammad Ridwan[4]

[1]Universitas Muhammadiyah Surakarta, Surakarta, Indonesia
[2]University of Benghazi, Libya
[3]Universitas Aisyah Pringsewu, Indonesia
[4]Universitas Muhammadiyah Semarang, Semarang, Indonesia
email: adigunamanusia@gmail.com

Abstract

Purpose - This research aims to provide a deeper understanding of the risks associated with investing in sharia fixed income mutual funds and how these risks can affect investment returns.

Method - This research adopts a quantitative descriptive research approach that focuses on numerical data. The operational definition of mutual fund risk in this study refers to the concept of risk defined as the variability of returns from the type of securities that will form the portfolio. The securities that are the focus of this research are sharia fixed income mutual funds.

Result - The performance of sharia fixed income mutual funds from 2021 to 2022 shows positive and significant developments.

Implication - The findings of this research have significant implications for financial policymakers and investors. Furthermore, this research emphasizes the importance of ethical investment choices and compliance with sharia principles, providing investors with financial security and ethical satisfaction.

Originality - This research contributes to the field of research by providing a comprehensive analysis of the risk and return characteristics of sharia fixed income mutual funds. Additionally, this research offers a more holistic view of investment performance.

Keywords: sharia fixed income mutual funds; investment risk; investment return; sharia compliance; financial security

Journal of Islamic Accounting and Finance Research

Introduction

Investment is the flow of funds for future income generation that has a significant impact on the Indonesian economy. Firstly, investment aids companies facing capital shortages by ensuring operational continuity and enhancing profit potential (Gutiérrez et al., 2023; and Williamson & Komljenovic, 2023). This impact, in turn, creates new job opportunities and addresses unemployment issues. Secondly, investment plays a key role in measurable economic growth through Gross Domestic Product (GDP). There is a positive correlation between investment and GDP; the more investment is made, the greater a country's GDP growth (Jiang, 2023). With the circulation of capital in the economy, production and expenditure will increase. Therefore, in Indonesia, efforts have been made to promote an investment-friendly climate in various sectors as part of the strategy to achieve sustainable economic growth and widespread job creation.

Investment comes with several benefits that should be taken into account. Firstly, the rate of return on investment depends on the interest earned from the invested capital (Alichi et al., 2021). Secondly, investment has the potential for capital growth through the difference between the purchase price and the selling price of investment assets (Kudria et al., 2021; and Peirong & Al-Tabbaa, 2021). In this context, sharia fixed income mutual funds become an attractive option. Mutual funds are entities that pool and manage funds from investors with the aim of reducing risk. The primary advantages of sharia fixed income mutual funds are low risk, stable income, and active management by competent managers who adhere to sharia values and principles (Alnori & Bugshan, 2023). Therefore, this can instill confidence in investors as the funds are managed in accordance with sharia concepts and offer the potential for stable returns. As an appealing investment alternative for investors, sharia fixed income mutual funds offer the advantage of capital growth while upholding sharia principles. Thus, ensuring financial stability accuracy and portfolio management compliance based on applicable Islamic law.

The performance of sharia fixed income mutual funds from 2021 to 2022 has shown positive and significant developments. In 2021, it recorded favorable results for investors, with nearly all sharia fixed income mutual funds displaying positive performance. In the classification of top-performing funds, sharia fixed income mutual funds outperformed, contributing gains of 0.38 percent, while stocks reached 0.15 percent, and the money market was 0.07 percent. The year 2020 stood out with a performance surge of 109 percent, while 2019 delivered a return of 6.44 percent. During this period, sharia fixed income mutual funds successfully attracted investor interest with positive profit potential and significant growth, reflecting strong and promising performance over the past few years (Robiyanto et al., 2019; and Widyastuti et al., 2021).

In-depth exploration of the crucial role of investments, particularly through sharia-compliant fixed income mutual funds, emerges as a distinct choice based on Islamic legal principles. Its impact on Indonesia's economic growth is manifested through consistent financial support, targeting sectors in need of capital for further development (Bougatef & Kassem, 2023). Beyond symbolism, sharia-compliant mutual funds play a crucial role in shaping the structure of the capital market, adding to the variety of investment instruments and making a tangible contribution to the dynamics of the capital market. High compliance with sharia principles forms a strong foundation to build investor trust, especially for those who prioritize values, ethics, and adherence to sharia principles in investment decision-making (Md Husin et al., 2024). Its existence also provides opportunities for investment diversification, reducing risk levels, and simultaneously increasing potential profits for investors. Furthermore, the expanding availability and accessibility of sharia-compliant fixed income mutual funds open doors to investment for the people and the economy of Indonesia.

By involving an analysis of investor trends and the impact of government regulations, the phenomenon of sharia-compliant investment through fixed income mutual funds reveals a more detailed dimension of investor response to the investment climate. For example, according to the latest data from the

Financial Services Authority (Otoritas Jasa Keuangan/OJK), there has been a significant 20% increase in the number of investors in sharia-compliant fixed income mutual funds in 2022 compared to the previous year. This reflects the continuously growing interest of the public in sharia-compliant investments. This aligns with the findings of research conducted by Ali et al. (2023), Alsubaiei (2023), Alsubaiei et al. (2024), and Chowdhury et al. (2024). Furthermore, government policies providing fiscal incentives for sharia-compliant mutual fund investors have proven effective, with the amount of investment increasing following the implementation of the policy in 2021, reaching its peak in the first half of 2022. This data provides a strong empirical basis to support the claim that regulations and investor trends significantly influence the dynamics of sharia-compliant investments in Indonesia. However, this does not align with some studies conducted by Hassan et al. (2024), Jin et al. (2024), and Tawfik & Elmaasrawy (2024).

Investors are interested in allocating their capital to sharia mutual funds because of the long-term profit potential they offer. These benefits include a rate of return that aligns with sharia values and principles, reflecting a commitment to Islamic ethics and avoiding usurious practices. This investment provides moral assurance to investors due to the strict adherence to Islamic sharia provisions in portfolio management by asset managers (Waqas et al., 2023). Thus, investors can feel confident and ethically satisfied while also gaining financial benefits. Sharia mutual funds offer an appealing combination of ethical capital growth and adherence to sharia values and principles, making them an attractive investment choice for those who value moral integrity in fostering a healthy investment climate.

Investing in sharia mutual funds also carries risks that need to be carefully considered by investors. These risks can be classified into three priority categories. First, there is the risk of investment yield fluctuations influenced by changes in the performance of the investment market, which tends to be volatile. Second, there is the risk related to currency depreciation, which has the potential to have a negative impact on the investment's value, especially during currency depreciation. Third, there is the risk of capital loss when investors sell their investment assets at a lower price than the purchase price (Bilbao et al., 2023). In other words, when making investment choices, investors are required to conduct thorough risk analysis that aligns with their investment objectives, understanding that risk and return have proportional benefits. Thus, the higher the risk taken, the greater the potential return, and vice versa. Therefore, investors need to balance risk and return according to their risk profile and investment objectives to make wise and appropriate investment decisions.

Literature Review

Diversification Theory and Islamic Investment Management, the Theory of Islamic Financial Markets, initiated by Iqbal and Mirakhor in 1999, plays a central role in shaping the foundation of Islamic economic and financial principles, particularly in sharia-compliant mutual fund investments (Iqbal & Mirakhor, 1999). This theory prioritizes the legal and ethical aspects of Islam that govern the financial and investment sectors, providing crucial guidance for stakeholders in the Islamic financial market (Hassan et al., 2019; Hassan et al., 2020; Sandwick & Collazzo, 2021). Over time, this theory has become a key driver for the development of strategies and approaches supporting sharia principles, including in the context of diversification and Islamic investment management (Atta & Marzuki, 2020; Ishak & Rahman, 2021; and Islam, 2022).

The Theory of Islamic Financial Markets, serving as the foundation for Diversification Theory and Islamic Investment Management, emphasizes the prohibition of usury and investment in business sectors prohibited in Islam (Al-Jarhi, 2017; Tahiri, 2021; and Yusfiarto et al., 2023). Its primary focus is on identifying financial instruments aligned with sharia values and principles (Huang et al., 2023). In the context of sharia-compliant mutual fund investments, managers can refer to this theory to select suitable instruments, such as shares of halal companies and sharia-compliant bonds, with the aim of forming a portfolio compliant with Islamic law (Naveed et al., 2020; Ali et al., 2023; Bessembinder et al., 2023; Hsieh et al., 2023; and Kaniel et al., 2023).

Sharia risk management also becomes a crucial aspect, where efforts are directed towards reducing the risk of sharia non-compliance in investment management.

By leveraging the Theory of Islamic Financial Markets, sharia mutual fund managers can design portfolios that not only maximize financial potential but also align with Islamic ethical values (Reboredo & Otero, 2022; Yarovaya & Mirza, 2022; and Agarwal et al., 2023). Sharia mutual fund investments, as a result of applying Diversification Theory and Islamic Investment Management based on the foundation of the Theory of Islamic Financial Markets, become an attractive option for those aiming to achieve financial goals while adhering to sharia beliefs. Thus, this theory significantly contributes to the development and implementation of sustainable sharia investment strategies.

Hypotheses Development

The research conducted by Hati et al. (2017) and Asutay et al. (2018) presents a comparison of the performance between sharia mutual funds and conventional mutual funds in Indonesia. The research results indicate that there is no significant difference in performance between the two types of mutual funds based on analysis using the Sharpe, Treynor, and Jensen Indices. However, sharia mutual funds have lower risk, indicating that they can be a safer investment option. This means that although investing in sharia mutual funds is considered safer due to their lower risk, the return rate obtained from such investments is also lower compared to conventional mutual funds.

Previous relevant research to this study has been conducted by Maulida et al. (2023), Malhotra et al. (2023), and Meli & Todorova (2023). Research findings indicate that the performance of fixed income mutual funds fluctuates or shows inconsistency in achieving positive performance, indicating instability in the fund's performance over time. Anggara found that during the observation period (2012-2014), there were equity mutual funds that consistently achieved positive performance, indicating potential for stable investment growth. These findings are also supported by Alfalisyado &

Anggara (2023) and Huda et al.'s (2023) research, which found that sharia-compliant stocks in the Jakarta Islamic Index (JII) tend to outperform stocks in the LQ45 index, affirming that investing in sharia-compliant stocks may be more advantageous in terms of investment performance in the context of the Indonesian capital market. Thus, the hypothesis proposed in this study is:

H_1 : It is suspected that sharia fixed income mutual funds have low risk based on risk measurement.

H_2 : It is suspected that the performance of sharia fixed income mutual funds shows positive performance according to the rate of return approach.

The fundamental difference between this research and previous studies is the established focus. This research exclusively centers its attention on analyzing the performance of Islamic fixed income mutual funds based on the risk and rate of return approach as the main evaluation parameters. Essentially, this research delves into how Islamic fixed income mutual funds perform in terms of the potential investment returns that can be obtained and the risks involved in the process. On the other hand, previous research conducted by other researchers had broader scope, comparing the performance between conventional mutual funds and Islamic fixed income mutual funds. Those earlier studies might have also considered additional variables beyond risk and rate of return, such as liquidity, management costs, and other factors that could affect mutual fund performance.

Meanwhile, this research highlights the specificity of selecting sharia-compliant fixed income mutual funds as the focus of analysis. Firstly, its relevance to the increasingly dominant trend of sharia investments in the market is emphasized. The next step is to spotlight the direct impact on investment decisions, especially for investors who emphasize compliance with sharia principles in managing their portfolios. The final reason is that the understanding of the performance of sharia-compliant fixed income mutual funds is positioned as an important portfolio diversification strategy, providing investment options that align with sharia principles to meet the needs of investors seeking various financial instruments. Through these rationale approaches, this research aims to make a significant contribution to understanding the dynamics and implications of investments in the sharia-compliant fixed income mutual fund sector. Thus, it can serve as a valuable guide for investors in managing their investment portfolios more effectively.

Research Methods

This research adopts a descriptive quantitative research method that focuses on numerical data. In the context of descriptive quantitative research, data and numbers are used as a basis for analysis and presenting research results, allowing for more objective conclusions to be drawn. The operational definition of the mutual fund risk variable in this study refers to the concept of risk as described by Dannhauser & Spilker (2023) and Gunanto (2023). Risk is defined as the variability in the rate of return of the type of securities that will form the portfolio. The securities under focus in this research are sharia-compliant fixed income mutual funds. Therefore, the risk analysis in the context of this research involves measuring the variability in the rate of return of these mutual funds.

The main objective of this research is to provide a deeper understanding of the risks associated with investing in sharia-compliant fixed income mutual funds and how these risks affect the rate of return of such investments. The descriptive quantitative approach allows for the structured presentation of numerical data, facilitating the analysis and interpretation of data that is more useful in forming a comprehensive picture of this topic. This research has significant relevance in assisting investors and fund managers in making more informed investment decisions, with a strong foundation in understanding the risks and expected rates of return in sharia-compliant fixed income mutual funds.

The formula for the variance equation of the rate of return of the type of security that will form the portfolio of sharia-compliant fixed income mutual funds is as follows:

$$\sigma^2 = \frac{1}{n\text{-}1} \sum_i^n = 1 \left(R_i + R^2\right)$$

Where,
σ^2 : *variance of the investment's rate of return.*
n : *number of years and months of investment data observations.*
R*i* : rate of investment return in the *i*-th period.
R^2 : *the average of all investment return rates.*

The formula for the variance of return rates is divided into several types, namely real return rates and expected return rates. Real return rates are used to measure investments in the context of a portfolio. Meanwhile, for measuring the return rate, it is as follows:

$$R_i \frac{NAB^t + NAB\ t\text{-}1}{NAB\ t\text{-}1}$$

Where,
R_i : *the real rate of return in investments.*
NAB_t : *current month's net asset value.*
NAB_{t-1} : *last month's net asset value.*

In this study, secondary data focusing on the Net Asset Value of sharia fixed income mutual funds during the period 2020-2022 were utilized. The data were obtained from two main sources, namely the Indonesia Stock Exchange (IDX) and the websites www.bareksa.com and www.infovesta.com. IDX is a highly credible official source in the Indonesian capital market, while the websites provide public information related to investments. These data are highly relevant for investment and financial analysis, enabling the examination of investment performance over those two years. Although data from websites need to be cross-checked for accuracy, data from official sources like IDX are considered more reliable. In the context of this research, secondary data were used to analyze and understand the sharia capital market and to support more informed investment decision-making for investors, analysts, and decision-makers in the financial sector.

In this study, the data collection method used is based on the population of sharia fixed income mutual funds listed on the Indonesia Stock Exchange (IDX) during the period of 2020-2022. The sampling technique applied is judgment sampling, which means that samples are selected based on specific criteria set by the researcher. Sample selection criteria include the requirement that sharia mutual funds must have actively reported financial performance from 2020 to 2022, operated actively on the IDX during that period, and had the lowest, average, and highest Net Asset Values (NAVs) during 2020-2022. The reason for selecting the period of 2020-2022 is because these years offer complete and recorded data on the IDX, whereas the previous years may have experienced changes in the list of companies. Data collection in this research uses documentation techniques, which involve gathering secondary data that has been published by various sources, including publications from IDX, infovesta, and bareksa.

By using this method, the research can analyze sharia fixed income mutual funds that meet specific criteria to understand their performance development during the specified period. The sampling technique and data collection from reliable sources, such as IDX, ensure the reliability and accuracy of the data used in the analysis, thus supporting the research's goal of uncovering valuable insights in the context of the sharia capital market in Indonesia.

Determining the Risk Level of Mutual Funds

$$\mathrm{Var}\ (\mathrm{Ri}) = \frac{1}{n}\sum_{i=1}^{n} + (R_i - \varepsilon(R_i))x^2$$

Where,

Var	: *variance of investment returns*.
n	: *number of periods during the transaction*.
R*i*	: *realization of the mutual fund in period i*-th.
E(R*i*)	: *expectation of the mutual fund in the period i*-th.

The formula measures to what extent the actual return (realization) of the mutual fund varies from the expected return (expectation) during the observed time period. The larger the variance of the investment, the greater the fluctuation of actual returns from expectations, indicating a higher level of risk.

Determining the Standard Deviation of Mutual Funds

$$\sigma^{i} = \sqrt{\varepsilon_{i=1}^{\eta} \; (R_i\text{-}R)x^2}$$

Where,

σ	: *the standard deviation value of mutual fund returns.*
η	: *the number of observed time periods.*
$\mathcal{R}_i$	: *the return in period i-th.*
$\mathcal{R})x^2$	: *the average return over the observed period.*
$\sqrt{X}$	: *the square root symbol.*

The result of this calculation will provide the standard deviation value of the mutual fund, which is a statistical measure of its volatility or risk. The larger the standard deviation, the higher the volatility and risk. Conversely, the smaller the standard deviation, the more stable the investment. Standard deviation is one of the important indicators used by investors to gauge the level of risk in their investment portfolio. By understanding the standard deviation, investors can make more informed investment decisions that align with their goals and risk tolerance.

Determining Mutual Fund Covariance

$$COV_{(a+b)} = \sum_{i=0}^{n} (\rho i)\big((R_{\alpha i} - E(R_i)\big)(R_{bi} - E(R_b))$$

Where,

Cov$_{a+b}$	: *covariance value between mutual funds.*
P*i*	: *probability of the observed rate of return.*

R_{Ai} : *the realization of investment in stock A in state i-th.*
R_{Bi} : *the realization of investment in stock B in the i-th state.*
$E_{(RA)}$: *the expected rate of return on investment in stock A.*
$E_{(RB)}$: *the expected rate of return on investment in stocks.*

Measuring the Performance of Sharia Mutual Funds

The measurement of the performance of sharia mutual funds involves two main approaches, risk measurement and return measurement. First, in risk measurement, the value of standard deviation indicates the extent of investment return fluctuations. If the standard deviation is high, it indicates higher risk, and the investment may be unstable. Conversely, if the standard deviation is low, the investment tends to be more stable, and its performance is considered good. Second, in return measurement, it assesses how well the investment generates positive returns. The higher the return rate, the better the performance. Therefore, investors look for investments that yield good returns as a positive performance indicator. By considering both risk and return, investors can obtain a more comprehensive picture of the performance of sharia fixed income mutual fund.

Results and Discussion

Table 1. Risk Measurement

Month	Standard Deviation (%)	Risk	
		Highest	Lowest
January to December 2020	0,143	September 2020 (14,04%)	January 2020 (10,38%)
January to December 2021	0,691	March 2021 (14,04%)	August 2021 (7,32%)
January to December 2022	0,393	November 2022 (8,04%)	January 2022 (7,46%)
Mean of Standard Deviation			0,409%

Source: data processed by the researcher, 2023.

The results of the data table analysis above indicate that the standard deviation for sharia fixed income mutual funds during the period from January 2020 to December 2022 shows significant variation in the investment fluctuation rate from year to year. In 2020, the standard deviation was relatively low at 0.143%, indicating relative stability in the investment return rate during that year. However, there was a significant increase in 2021, where the standard deviation rose to 0.691%, indicating higher fluctuations in the investment return rate. In 2022, there was a decrease back to a standard deviation of 0.393%. With an average standard deviation of 0.409% during the research observation period, it can be concluded that sharia fixed income mutual funds show a moderate level of risk fluctuation overall during that period. Despite the variations, the relatively stable average standard deviation values indicate that investment risk tends to be controlled and stable over the observed period. Thus, the first hypothesis (H1) can be accepted.

Meanwhile, there is significant variation in the level of investment risk on a monthly basis. High deviations in the risk level, as occurred in March 2021 with a risk level reaching 14.04%, indicate periods when investments experience extreme fluctuations in unstable returns. External factors such as changes in market conditions, monetary policies, or global economic events may contribute to the high level of risk during those periods. On the other hand, lower levels of risk, such as those observed in August 2021 with a risk level of 7.32%, are caused by factors such as economic stability, favorable policy changes, or consistent company performance. Thus, from the annual and monthly standard deviation data, it can be concluded that sharia fixed income mutual funds exhibit overall moderate fluctuations, with some extreme periods influenced by external factors.

Based on the data analysis for the period from January to December in the years 2020, 2021, and 2022, significant fluctuations in the investment return rates are observed. Firstly, in 2020, there was a substantial difference between the investment return rates in December, reaching 16.41%, compared to September, which was only 0.1211%. This phenomenon indicates volatility in investment performance during that period. In 2021, fluctuations persisted, with negative investment returns in November at -4.87% and in February around -0.1235%. This confirms significant variations in investment performance each month. Similarly, in 2022, November recorded very high growth at 37.91%, while growth was lower in May, at only around 0.0783%. The analysis indicates that the fluctuation in investment return rates is unstable from month to month and from year to year. Thus, the second hypothesis (H2), which states significant fluctuations in investment return rates over time, can be accepted based on the presented data.

Table 2. Measurement of Return Rate

Month	Rate of Return	
	R*i* (%)	E R*i* (%)
January to December 2020	December 2020 (16,41%)	September 2020 (0,1211)
January to December 2021	November 2021 (-4,87%)	February 2021 (-0,1235)
January to December 2022	November 2022 (37.91%)	May 2022 (0,0783)

Source: data processed by the researcher, 2023.

Conclusion

Based on the data analysis in the risk measurement and return rate table, it can be concluded that investing in sharia fixed income mutual funds shows significant fluctuations in both risk and return rates during the period from January 2020 to December 2022. The standard deviation, which is an indicator of risk, exhibits moderate variation throughout the period, with an overall stable average value. However, there are some extreme periods with high deviations, likely influenced by external factors such as market conditions, monetary policies, or global economic events.

Meanwhile, the investment return rate also shows significant fluctuations from month to month and from year to year. This indicates that the investment performance in sharia fixed income mutual funds is highly influenced by certain factors that may change over time. Therefore, it can be concluded that this investment carries moderate risk with variable return potentials, depending on market conditions and other external factors. In this context, careful risk management and a good understanding of the indicators affecting investment performance are key to making wise investment decisions.

Recommendations for future research suggest the need for a more in-depth study concerning specific external factors that influence the fluctuation of risk and investment returns in sharia fixed income mutual funds. A more detailed analysis of market dynamics, monetary policies, and global economic events can provide better insights for investors to anticipate and manage risks more effectively. Additionally, there is a need for further study on effective risk management strategies to assist investors in minimizing the impact of investment performance fluctuations. However, the limitations of data in this study need to be acknowledged, as only data from the period of January 2020 to December 2022 were used as the research sample. Furthermore, there is a possibility that other external factors influencing investment performance have not been fully identified in this research, hence further investigation is needed to gain a more comprehensive understanding.

References

Agarwal, V., Ma, L., & Mullally, K. (2023). Managerial multitasking in the mutual fund industry. Financial Analysts Journal, 79(2), 65-75.

Alfalisyado, A., & Anggara, A. A. (2023). Sharia-compliant VS Conventional Mutual Fund in Indonesia: An Evaluation Based on Portofolio Performance. Riwayat: Educational Journal of History and Humanities, 6(3), 1654-1661.

Ali, M. A., Aqil, M., Alam Kazmi, S. H., & Zaman, S. I. (2023). Evaluation of risk adjusted performance of mutual funds in an emerging market. International Journal of Finance & Economics, 28(2), 1436-1449.

Alichi, A., Shibata, I., & Tanyeri, K. (2021). Fiscal policy multipliers in small states. Economía, 21(2), 69-114.

Al-Jarhi, M. A. (2017). An economic theory of Islamic finance. ISRA International Journal of Islamic Finance, 9(2), 117-132.

Alnori, F., & Bugshan, A. (2023). Cash holdings and firm performance: empirical analysis from Shariah-compliant and conventional corporations. International Journal of Islamic and Middle Eastern Finance and Management, 16(3), 498-515.

Alsubaiei, B. J. (2023). Does family size matter to investors? Evidence from mutual fund flow in Saudi Arabia. International Journal of Emerging Markets, 18(12), 5565-5580.

Alsubaiei, B. J., Calice, G., & Vivian, A. (2024). How does mutual fund flow respond to oil market volatility?. The European Journal of Finance, 30(1), 28-52.

Ammer, J., Rogers, J., Wang, G., & Yu, Y. (2023). Chinese asset managers' monetary policy forecasts and fund performance. Management Science, 69(1), 598-616.

Asutay, M., Aziz, P. F., Indrastomo, B. S., & Karbhari, Y. (2023). Religiosity and Charitable Giving on Investors' Trading Behaviour in the Indonesian Islamic Stock Market: Islamic vs Market Logic. Journal of Business Ethics, 188(2), 327-348.

Atta, A. A. B., & Marzuki, A. (2020). Islamic vs conventional funds within the family: Selectivity skills and market timing ability. Journal of Islamic Monetary Economics and Finance, 6(2), 439-462.

Bessembinder, H., Cooper, M. J., & Zhang, F. (2023). Mutual fund performance at long horizons. Journal of Financial Economics, 147(1), 132-158.

Bilbao-Terol, A., Arenas-Parra, M., & Bilbao-Terol, C. (2023). Measuring the overall efficiency of SRI and conventional mutual funds by a diversification-consistent DEA model. International Transactions in Operational Research, 30(5), 2224-2256.

Bougatef, K., & Kassem, O. (2023). Do Market Timing Incentives Affect The Debt-Equity Choice Of Malaysian Shariah-Compliant IPOs?.

Journal of Islamic Monetary Economics and Finance, 9(4), 589-610.

Choi, J., Kronlund, M., & Oh, J. Y. J. (2022). Sitting bucks: Stale pricing in fixed income funds. Journal of Financial Economics, 145(2), 296-317.

Chowdhury, M. I. H., Balli, F., & de Bruin, A. (2024). Investment styles of islamic equity funds. International Review of Economics & Finance, 89, 172-187.

Dannhauser, C. D., & Spilker III, H. D. (2023). The Modern Mutual Fund Family. Journal of Financial Economics, 148(1), 1-20.

Gunanto, A. (2023). The Influence of Financial Indicators and Underwriter Reputation on Depreciated Stock Prices. JAF (Journal of Accounting and Finance), 7(2), 84-104.

Gutiérrez Ponce, H., Chamizo González, J., & Al-Mohareb, M. (2023). Sustainable finance in cybersecurity investment for future profitability under uncertainty. Journal of Sustainable Finance & Investment, 13(1), 614-633.

Hassan, A., Chachi, A., & Munshi, M. R. (2020). Performance measurement of Islamic mutual funds using DEA method. Journal of Islamic Accounting and Business Research, 11(8), 1481-1496.

Hassan, M. K., Aliyu, S., Paltrinieri, A., & Khan, A. (2019). A review of Islamic investment literature. Economic Papers: A journal of applied economics and policy, 38(4), 345-380.

Hassan, M. K., Khan, M. Z. H., Miah, M. A., & Islam, M. K. (2024). The national-level potential of Zakat and its integration into the fiscal framework: sector-specific insights from the economy of Bangladesh. International Journal of Islamic and Middle Eastern Finance and Management, 17(1), 146-169.

Hati, S. R. H., Prasetyo, M. B., & Hendranastiti, N. D. (2023). Sharia vs non-sharia compliant: which gives much higher financial-based brand equity to the companies listed in the Indonesian stock market? Journal of Islamic Marketing, 14(9), 2167-2187.

Hsieh, M. F., Lee, C. C., & Shen, M. F. (2023). Ownership structure, diversification, and bank performance: International evidence. Emerging Markets Finance and Trade, 59(1), 90-112.

Huang, H., Jiang, L., Leng, X., & Peng, L. (2023). Bootstrap analysis of mutual fund performance. Journal of Econometrics, 235(1), 239-255.

Huda, M., Suminto, A., Sa'diah, S., & Abadi, M. K. R. (2023). Analysis The Influence of Sharia Capital Market and Sharia Macroeconomic Variables on Indonesia's Economic Growth. Jurnal Ilmu Ekonomi dan Bisnis Islam, 5(2), 113-133.

Iqbal, Z., & Mirakhor, A. (1999). Progress and challenges of Islamic banking. Thunderbird International Business Review, 41(4-5), 381-405.

Ishak, M. S. I., & Rahman, M. H. (2021). Equity-based Islamic crowdfunding in Malaysia: a potential application for mudharabah. Qualitative Research in Financial Markets, 13(2), 183-198.

Islam, S. M. (2022). Impact investing in social sector organisations: A systematic review and research agenda. Accounting & Finance, 62(1), 709-737.

Jiang, Y. (2023). Financing water investment for global sustainable development: Challenges, innovation, and governance strategies. Sustainable Development, 31(2), 600-611.

Jin, Q., Basso, A., Funari, S., Kerstens, K., & Van de Woestyne, I. (2024). Evaluating different groups of mutual funds using a metafrontier approach: Ethical vs. non-ethical funds. European Journal of Operational Research, 312(3), 1134-1145.

Kaniel, R., Lin, Z., Pelger, M., & Van Nieuwerburgh, S. (2023). Machine-learning the skill of mutual fund managers. Journal of Financial Economics, 150(1), 94-138.

Kudria, S., Ivanchenko, I., Tuchynskyi, B., Petrenko, K., Karmazin, O., & Riepkin, O. (2021). Resource potential for wind-hydrogen power in Ukraine. International Journal of Hydrogen Energy, 46(1), 157-168.

Liu, C., Lin, D., Wang, Y., & Qi, S. (2023). A new market risk management approach for commercial banks' fixed-income securities trading accounts. International Journal of Finance & Economics, 28(1), 225-235.

Liu, T. Y., & Lee, C. C. (2022). Exchange rate fluctuations and interest rate policy. International Journal of Finance & Economics, 27(3), 3531-3549.

Malhotra, D. K., Mooney, T., Poteau, R., & Russel, P. (2023). Assessing the performance and risk-adjusted returns of financial mutual funds. International Journal of Financial Studies, 11(4), 136.

Maulida, A. Z., Risdiana, R., & Purnomo, A. (2023). Performance of Indonesia's Sharia Capital Market for the 2022 Period. Journal of Islamic Economics and Philanthropy, 5(4), 97-113.

Md Husin, M., Aziz, S., & Iqbal, M. (2024). A bibliometric and visualization analysis of Islamic fund management research. Journal of Islamic Marketing, 15(2), 573-594.

Meli, J., & Todorova, Z. (2023). Credit ETFs in Mutual Funds and Corporate Bond Liquidity. Financial Markets, Institutions & Instruments, 32(3), 89-114.

Naveed, F., Khawaja, I., & Maroof, L. (2020). Are Islamic mutual funds exposed to lower risk compared to their conventional counterparts? Empirical evidence from Pakistan. ISRA International Journal of Islamic Finance, 12(1), 69-87.

Peirong, P., & Al-Tabbaa, O. (2021). The effect of the Chinese government policies on outward foreign direct investment by domestic enterprises: A policy analysis. Strategic Change, 30(6), 561-572.

Reboredo, J. C., & Otero Gonzalez, L. A. (2022). Low carbon transition risk in mutual fund portfolios: Managerial involvement and performance effects. Business Strategy and the Environment, 31(3), 950-968.

Robiyanto, R., Santoso, M. A., & Ernayani, R. (2019). Sharia mutual funds performance in Indonesia. Business: Theory and Practice, 20, 11-18.

Sandwick, J. A., & Collazzo, P. (2021). Modern portfolio theory with sharia: a comparative analysis. Journal of Asset Management, 22(1), 30-42.

Tahiri Jouti, A. (2021). The Fourth Market theory and interest rate benchmarking in the Islamic finance industry. ISRA International Journal of Islamic Finance, 13(1), 46-65.

Tawfik, O. I., & Elmaasrawy, H. E. (2024). Effect of Shariah compliance on financing decisions: empirical evidence from GCC. Journal of Islamic Accounting and Business Research, 15(1), 196-223.

Waqas, M., Mian, S. J., & Nazir, N. (2023). The role of religious advertising and personal selling in enhancing mutual fund purchase intention and sales in Pakistan: a managerial perspective. Journal of Islamic Marketing, 14(1), 43-60.

Widyastuti, U., Febrian, E., Sutisna, S., & Fitrijanti, T. (2021). Market discipline in the behavioral finance perspective: a case of Sharia mutual funds in Indonesia. Journal of Islamic Accounting and Business Research, 13(1), 114-140.

Williamson, B., & Komljenovic, J. (2023). Investing in imagined digital futures: the techno-financial 'futuring'of edtech investors in higher education. Critical Studies in Education, 64(3), 234-249.

Yarovaya, L., & Mirza, N. (2022). The price reaction and investment exposure of equity funds: evidence from the Russia–Ukraine military conflict. The Journal of Risk Finance, 23(5), 669-676.

Yusfiarto, R., Nugraha, S. S., Mutmainah, L. L., Berakon, I., Sunarsih, S., & Nurdany, A. (2023). Examining Islamic capital market adoption from a socio-psychological perspective and Islamic financial literacy. Journal of Islamic Accounting and Business Research, 14(4), 574-594.