

AN EMPIRICAL ANALYSIS OF FACTORS INFLUENCING PERFORMANCE OF SHARIAH MUTUAL FUNDS IN INDONESIA

JAM
20, 4

Received, June '21
Revised, June '21
March '22
September '22
Accepted, September '22

A. Dewantoro Marsono
Perbanas Institute, Indonesia

Ubud Salim
Kusuma Ratnawati
Siti Aisjah

Fakultas Ekonomi dan Bisnis, Universitas Brawijaya, Indonesia

Abstract: This paper aims to identify the factors that affect the performance of shariah mutual funds. This study uses SEM to test the factors that hypothetically influence mutual fund performance, namely mutual fund manager skills, characteristics, and analyst coverage. This study uses a sample of 45 mutual funds registered with the OJK [financial services authority] for at least three years: equity funds, fixed-income funds, and mixed funds. The results indicate that fund manager skills negatively influence mutual fund performance but not significantly. In addition, the characteristics positively affect the mutual fund performance but are insignificant. Last, analyst coverage is positively influencing the mutual fund performance significantly. The results provide information that would benefit the investors in predicting the performance of shariah mutual funds and the fund managers to improve the performance of their managed funds. Further research will ascertain the inability of market-timing skills and asset allocation strategies to improve mutual fund performance.



Journal of Applied
Management (JAM)
Volume 20 Number 4,
December 2022
Indexed in DOAJ -
Directory of Open Access
Journals, ACI - ASEAN
Citation Index, SINTA -
Science and Technology
Index, and Google
Scholar.

Keywords: Shariah Mutual Fund, Performance, Fund Manager Skill, Characteristic, Analyst Coverage

Cite this article as: Marsono, A.D., Salim, U., Ratnawati, K., and Aisjah, S. 2022. An Empirical Analysis Of Factors Influencing Performance Of Shariah Mutual Funds In Indonesia. *Jurnal Aplikasi Manajemen*, Volume 20, Number 4, Pages 889–901. Malang: Universitas Brawijaya. DOI: <http://dx.doi.org/10.21776/ub.jam.2022.020.04.11>.

A mutual fund is an investment opportunity in the capital market with expert acumen. This scheme provides well-diversified risk investment and optimal returns with minimum asset allocation of funds. The selection of mutual funds has become tedious since the growth in the

number offered by fund companies. The fund companies publicize the performance of their mutual funds and a disclaimer that the past year's performance may not guarantee future performance. The advertisements do not give valuable information for investors to maximize their returns. Investors consistently search for any information (publicly available) about various effective parameters of mutual funds. They may wish to know whether information can generate any gains for them.

Corresponding Author:
A. Dewantoro Marsono, Perbanas Institute, Indonesia, Indonesia, DOI: <http://dx.doi.org/10.21776/ub.jam.2022.020.04.11>

The study aims to identify whether shariah mutual funds' performance is related to fund manager skills, fund characteristics, and analyst coverage. We observe this for Indonesia shariah mutual funds as the industry increases rapidly. The total number of Indonesian open-ended mutual funds was 1,777 in 2017 (OJK – Financial Services Authority – Shariah Mutual Fund Statistic-January 2018). The number of shariah mutual funds is 181, and conven-

tional mutual funds are 1596 [as seen in Figure 1]. The AUM [Asset Under Management] of sharia mutual funds grew nearly five times more in the same period than conventional mutual funds. However, the market share of shariah mutual funds was still less than 10% in 2017. That shows that the support of the Indonesian government regarding the shariah capital market boosts the growth of shariah mutual funds, with hesitant investors.

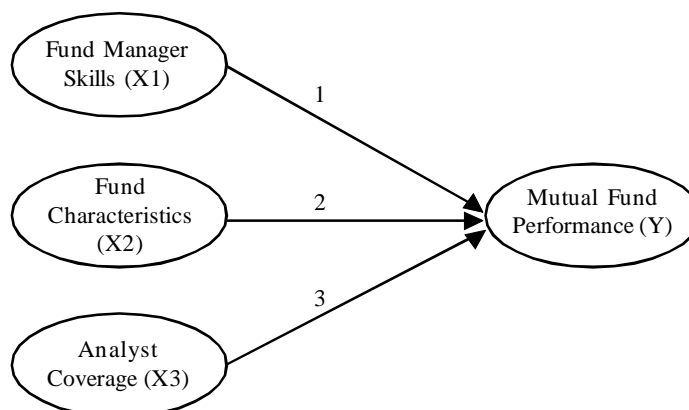


Source: Processed Data [OJK] (2017)

Figure 1. AUM Growth and Market Share

Mutual fund performance is crucial for investors. The measurement of its performance allows investors to control the success of their investment programs. Busse (2001) and Del Guercio and Tkac (2002) found evidence that mutual fund performance affects buying and selling activities of mutual fund units. Rao et al. (2016) and Sirri and Tufano (1998) found evidence that investors buy more when the mutual fund performance improves but sell less when the fund performance is poor. The issue is

whether the investor can generate profitable returns through such information. Concerning that issue, the study aims to analyze the influence of fund manager skills, fund characteristics, and analyst studies on the performance of shariah mutual funds (Figure 2.). The research questions are: (1) Do fund manager skills influence mutual funds' performance? (2) Does fund characteristics influence mutual fund performance? (3) Does analyst coverage influence mutual performance?



Source: various papers

Figure 2. Conceptual Framework

The contribution to knowledge is the improvement or revision that we make to the prediction model for the performance of shariah mutual funds. Analyst coverage is a non-observable factor that needs to take into consideration. Another contribution concerns various measurements of mutual fund performance: raw returns and the Sharpe Index. Investors usually consider simple returns but adjusting the risk undertaken to realize targeting returns is necessary.

LITERATURE REVIEW

In this segment, we discuss literature related to mutual fund performance determinants to develop the hypotheses of this study.

Fund Manager Skills and Performance

The portfolio performance is affected by the fund manager’s skills. At least, there are two abilities that fund managers must have that is the ability to choose assets and the ability to take the transaction times (Bodie et al., 2014). Chang and Lewellen (1984) examined the skill of fund managers to manage mutual funds in the United States, while Panjaitan (2012) and Denis et al. (2004) examined those skills in Indonesia to prove that those skills do not affect mutual fund performance. Bollen and Busse (2001) found that the market-timing ability of fund managers in the United States influences mutual fund per-

formance. Bello and Janjigian (1997) found evidence that there is a positive and significant correlation between market-timing ability and mutual fund performance; and a negative correlation between market timing and stock selection. In Indonesia (Prasetyo et al., 2017) and India (Bollen, 2007), they found evidence that the skills of fund managers influence mutual fund performance. The study considers market-timing ability and stock selection ability as proxies. Fund managers with these skills will provide returns better than market returns and improve mutual fund performance. This result is in line with research conducted by Sharpe (1992), Saez and Izquierdo (2000), Panjaitan (2012), and Gunawan (2010), who found that fund management skills have a positive effect on mutual fund performance. Based on the discussion, the study proposes to test a hypothesis.

H1: The higher the skills, the better the sharia mutual fund performance.

Fund Characteristics and Performance

That has been an argument about whether fund characteristics are signs of persistence in performance. The study considers fund size, cost ratio, fund age, and asset allocation strategy as the fund characteristics’ proxies. Carhart (1997) found evidence that mutual fund characteristics influence its performance. Kour (2018) examined mutual funds

in India and found that fund size negatively impacts performance, and the turnover ratio positively impacts performance. Lobao and Gomes (2015), Chen et al. (2004), Otten and Bams (2001), and Dwiprakasa and Dharmastuti (2016) found evidence that fund size influences mutual fund performance. The bigger the size of the mutual fund, the better the fund's performance. Indro et al. (1999) stated that mutual fund performance would be good if it could maintain its size to a certain degree. If the size limit is not met, it will harm performance. See and Jusoh (2012) found evidence that fund size and turnover ratio do not influence fund performance.

Dahlquist et al. (2000) concluded that there is no relation between the high-cost ratio and the high performance of the mutual fund. See and Jusoh (2012) found that cost ratio and fund age significantly affect mutual fund performance in Malaysia. Sirri and Tufano (1998) found that the cost ratio affected mutual fund performance.

Adkisson and Fraser (2003) found that young mutual funds are more attractive to individual or family investors. Otten and Bams (2001) found that newly traded mutual funds performed better than mutual funds that have been in the market for a long time. Gregory et al. (1997) found that young mutual funds performed worse than old mutual funds. Peterson et al. (2001) concluded that there is no relation between age and the mutual fund's performance.

Drobtetz and Kohler (2002) and Perold and Sharpe (1995) found evidence that asset allocation strategy affects mutual fund performance. The study proposes to test a hypothesis:

H2: The improvement in the mutual fund characteristics will improve the performance of shariah mutual funds.

Analyst Coverage and Performance

Spence (1974) and Stiglitz (2002) stated that information asymmetry occurs because different people know different things. Such an information asymmetry related to investment assets frequently creates bubble expectations from investors. Dissemination of objective information from analysts will boost investors to become more rational with

their investments. Fortin and Roth (2007) suggested that analysts are encouraged to offer coverage for firms expected to produce more brokerage income or investment bank fees.

Franck and Kerl (2013) find that European mutual funds significantly increase (decrease) holding in stock subsequent to the analysts' forecast measures increases (decreases) within the quarter before the observation period. Fang et al. (2011) found that fund managers tend to buy more assets reviewed by independent analysts to improve mutual fund performance. Andrade et al. (2013) stated that analyst coverage is ineffective in avoiding a 'bubble' if the contents of the coverage contradict one another. Abdesaken (2015) found evidence that fund managers use analyst forecasts to adjust their portfolio holdings to experience lower abnormal returns. He also found that uninformed investors were more sensitive to changes in the precision of public information than informed investors. Andrade et al. (2013) found that stocks with more analyst coverage show low turnover, and the reduction effect of analyst coverage on turnover is weaker when there is more disagreement among analysts. Franck and Kerl (2013) find evidence that professional fund managers in Europe use analyst forecasts to improve performance. Frey and Herbst (2014) find evidence that analyst coverage influences a fund's performance. The study's purposes for testing a hypothesis:

H3: The improvement in the quality of analyst coverage will improve the performance of shariah mutual funds.

METHOD

The end-of-month data from JII (Jakarta Islamic Index) and SBIS (Certificate of Bank Indonesia Syariah) use to determine the market returns and the returns risk-free, respectively. The data of JII collect from BEI (Indonesia Stock Exchange), and the data of SBIS collect from Bank Indonesia. The data of the shariah mutual fund collect from the mutual fund issuers and www.bareksa.com. The data for this study ranges from December 2014 - December 2017. The study uses three-year data since we assume that investors (who are risk-

averse) will only buy mutual funds that prove profitable. Moreover, based on the OJK (Financial Services Authority) report indicates that various shariah mutual funds have been traded since 2014. We build our sample of active sharia mutual funds using the OJK database. We use any mutual fund that OJK

identifies as equity mutual funds, fixed income mutual funds, mixed mutual funds, at least three years of trading, and Rupiah denomination. Based on those criteria, we get 45 sharia mutual funds consisting of 17 mixed mutual funds, seven fixed-income mutual funds, and 21 equity mutual funds.

Table 1. Description of Variable

Variable	Indicator
Mutual Fund Performance	<ul style="list-style-type: none"> • Raw return [RRD] • Sharpe Index [SI] • Treynor Index [TI]
Fund Manager Skills	<ul style="list-style-type: none"> • Stock selectio ability [PA] • Market timing ability [PW]
Fund Characteristics	<ul style="list-style-type: none"> • Fund size [Size] • Fud Cost [Cost] • Fund Age [Age] • Asset allocation style [A Alloctn]
Analyst Coverage	<ul style="list-style-type: none"> • Fund rating [Rat] • Market-risk-based return [ERmr] • Total-risk-based return [ERtr]

Source: previous research articles

This study uses SEM to analyze the influence of exogenous variables – fund manager skills, fund characteristics, and analyst coverage on an endogenous variable – mutual fund performance. The reflective indicators are used to describe the latent variables. Table 1 illustrates the operationalization of indicators.

Performance measures

The study considers raw return, Sharpe index, and Treynor index as proxies for performance measures. The raw return is measured as a holding period return based on monthly data for each year:

$$gr_t^i = \sqrt[n]{(1 + r_1^i * (1 + r_2^i) * * (1 + r_n^i))} - 1$$

Where ar_t^i = geometric mean return for fund ‘i’ for year ‘t’ with ‘n’ number of months,

$$r_n^i = \frac{NAV_n^i - NAV_{n-1}^i}{NAV_{n-1}^i}$$

Where r_n^i = monthly return for fund ‘i’ and NAV is Net Asset Value of fund ‘i’.

The risk-adjusted performance is measured with Sharpe Index and Treynor index for the year ‘t’ for each mutual fund has been calculated as,

$$SI = \frac{\hat{r}_p - \hat{r}_f}{\sigma_p}$$

Where SI is Sharpe Index, r_p is the average return of mutual fund for period ‘t’; r_f is the average return of risk-free, and σ_p is the standard deviation of mutual fund return (Bodie et al., 2011).

$$TI = \frac{\hat{r}_p - \hat{r}_f}{\beta_p}$$

Where TI is Treynor Index, r_p is the average return of mutual fund for period 't'; r_f is the average return of risk-free, and β_p is the beta of mutual fund return (Bodie et al., 2013).

Fund Manager Skills Measures

The study considers stock selection and market timing ability as proxies for fund manager skills. The skills are measured using the model of Treynor and Mazuy (1996):

$$R_p - R_f = \alpha + \beta_1 (R_m - R_f) + \beta_2 (R_m - R_f)^2 + \varepsilon_p$$

Where R_p is mutual fund return, R_f is risk-free return, α is stock selection ability, β_1 is coefficient of excess market returns, R_m is market returns, β_2 is market timing ability, ε_p is random error. The fund manager has stock selection ability if the value of α is positive, and the fund manager has market timing ability if the value of β_2 is positive.

Fund Characteristics Measures

The study considers fund size, age, cost, and asset allocation as proxies for fund characteristics. Fund size is measured using the natural logarithm of AUM (Asset Under Management), fund age is measured using years of trade of the mutual funds, the cost is measured using the natural logarithm of total cost charged by the fund company, and asset allocation is measured using the model of Sharpe (1992)

$$R_{it} = [b_{i1}F_{1t} + b_{i2}F_{2t} + b_{i3}F_{3t}] + \varepsilon_{it}$$

Where R_{it} returns asset 'i' on period 't'; b_{i1} , b_{i2} , and b_{i3} are the portion of fund allocation on assets 1, 2, 3; F_{1t} , F_{2t} , F_{3t} are return assets.

Analyst Coverage Measures

The study considers fund rating, market-risk-based return, and total-risk-based return as proxies for analyst coverage. Fund rating is measured using the number of Barometer Bareksa stars. The

best performance got five stars, and the worst got one. Market-risk-based return (ERmr) is measured using the CAPM model

$$E(p) = r_f + \beta_p [E(r_m) - r_f]$$

Where $E(R_p)$ is the expected returns of the mutual fund, β_p is the beta of mutual funds, $E(R_m)$ is expected market returns, and r_f is risk-free assets. Total-risk-based return (ERtr) is measured using the CAPM model

$$E(p) = r_f + [E(r_m) - r_f] \times (\sigma_p / \sigma_m)$$

Where $E(r_p)$ is the expected return of the mutual fund for period 't'; r_f is the average return of risk-free, σ_p is the standard deviation of the mutual fund, σ_m is the standard deviation of the market, $E(r_m)$ is expected market return,

RESULTS

Characteristic of Variables

This study uses four latent variables: mutual fund performance, fund manager skills, fund characteristics, and analyst coverage. We use mean, median, minimum, maximum, and standard deviation to present an overview of the reflective indicator of variables, as shown in Table 2.

Measurement Model Evaluation

Each indicator tests its reliability and validity. Valid indicators can explain or reveal something they measure. The validity test carries out after all predicted-indicator pass the outer-loading test. An outer-loading test ensures that the indicators can explain the variables. In this study, the outer-loading test carries out twice. The second outer-loading test indicates that the Asset Allocation strategy is the only relevant indicator of Fund Characteristics. The outer-loading value of Fund Age is slightly larger than the minimum limit of 0.4, and P-value is more than 10%, so it is irrelevant and not valid as an indicator of mutual fund characteristics. Those data can be seen in Table 3 and Table 4, respectively.

Table 2. Indicators – an Overview

Variable	Indicator	Mean	Median	Min	Max	Std.Dev.
Mutual Fund Performance	RRD	0.000	0.000	-0.010	0.008	0.004
	SI	-0.075	-0.067	-0.289	0.051	0.078
	TI	-0.509	-0.038	-15.860	0.215	2.351
Fund Manager Skills	PA	0.000	-0.004	-0.163	0.342	0.057
	PW	0.199	0.333	-10.746	6.811	2.772
Fund Characteristics	Size	24.811	24.623	22.527	27.249	1.095
	Cost	21.249	21.101	19.219	24.207	1.144
	Age	8.335	8.000	3.750	17.667	4.478
	A Alloctn	0.630	0.663	0.124	0.948	0.261
Analyst Coverage	Rat	2.533	2.500	1.667	4.167	0.593
	ERmr	0.060	0.059	0.057	0.063	0.002
	ERtr	0.078	0.062	0.043	0.614	0.083

Source: Processed data (2020)

Table 3. Outer Loading – Iteration 1

Variable	Indicator	Outer Load	Std.Dev.	P-value
Mutual Fund Performance	RRD	0.911	0.027	0.000
	SI	0.839	0.051	0.000
Fund Manager Skills	PW	1	0.000	0.000
Fund Characteristics	Age	0.483	0.435	0.166
	A Alloctn	0.731	0.372	0.017
Analyst Coverage	ERmr	0.803	0.091	0.000
	Rating	0.851	0.065	0.000

Source: Processed data (2020)

Table 4. Validity Evaluation

Variable	Indicator	Weight	Std. Dev.	P-value	Description
Mutual Fund Performance	RRD	0.658	0.054	0.000	Valid
	SI	0.474	0.047	0.000	Valid
Fund Manager Skills	PW	1	0.000	0.000	Valid
Fund Characteristics	Age	0.462	0.458	0.313	Not Valid
	A Alloctn	0.81	0.462	0.080	Valid*
Analyst Coverage	ERmr	0.552	0.079	0.000	Valid
	Rating	0.642	0.088	0.000	Valid

*sig < 10%

The strength of the causal relationship between variables in this research model is tested by the magnitude of R squared. The following criteria are to measure the strength or weakness of the causal relationship between variables. R2 value > 0.67 indicates a strong relationship; R2 value > 0.33 indicates a moderate relationship; R2 value < 0.19 indicates a weak relationship (Hair et al., 2019; Ghozali and Latan, 2015).

The test showed that the R2 of the research model is 0.514. This result indicates that the exogenous variables consisting of fund manager skills, fund characteristics, and analyst coverage can explain the dynamics of mutual fund performance (endogenous variable) by 51.4%. The strength of this influence is moderate to high because around 48.6%

of mutual fund performance can be explained by other variables not discussed in this study. The model is confirmed fit or has a fit if empirical data support it.

Hypothesis Testing

The analysis of the effect of fund manager skills on the performance of the shariah mutual fund pointed out a path coefficient of -0.044 with a p-value of 0.783. Based on the results of hypothesis testing, a probability of 78.3% is obtained, which is greater than the 5% significant level. The first hypothesis is rejected, which means that the increased skills of fund managers cannot improve the performance of the shariah mutual fund. Look at Table 5.

Table 5. Path Coefficient Analysis

Exogenous Variable	Endogenous Variable	Path Coefficient	P-value	Description
Fund Manager Skill	Mutual Fund Performance	-0.044	0.783	Not Significant
Fund Characteristics	Mutual Fund Performance	0.064	0.592	Not Significant
Analyst Coverage	Mutual Fund Performance	0.735	0.000	Significant

Source: Processed data (2020)

The analysis of the effect of fund characteristics on the performance of the shariah mutual fund points out a path coefficient of 0.064 with a p-value of 0.592. Based on the results of hypothesis testing, a probability of 59.2% obtain is greater than the 5% significant level. The second hypothesis is rejected, which means that the improvement in asset allocation strategy does not improve the performance of the shariah mutual fund.

The analysis of the effect of analyst coverage on the performance of the shariah mutual fund points out a path coefficient of 0.735 with a p-value of 0.000. Based on the results of hypothesis testing, a probability of 0.00% obtained is less than the 5% significant level. The third hypothesis is accepted, which means that the better quality of analyst coverage does improve the performance of the shariah mutual fund.

DISCUSSION

The Influence of Fund Manager Skills on Mutual Fund Performance

Fund manager skills are measured using the stock-selection ability and the market-timing ability. The stock-selection ability is the ability of the fund manager to predict the value of an asset selected to form a mutual fund. Fund managers only choose assets that potentially increase mutual fund returns above the market or other benchmarks in the future. In addition, the market-timing ability is choosing the right time to sell or buy. When is the best for fund managers to replace high-risk assets with lower-risk or risk-free assets. (Bodie et al., 2013; Sharpe, 1992).

The study finds that around 56% of sharia mutual funds are under fund managers equipped with

market-timing capabilities. 24% of mutual funds are under fund managers equipped with stock-selection ability. The rest of the mutual funds are under unskilled fund managers. In addition, during the research period, the market has an upward or bullish tendency, and fund managers should be able to improve the performance of the mutual funds they manage. However, the hypothesis test result shows that the increased skills of fund managers do not improve mutual fund performance. This result is consistent with Trisnopati and Titik (2015), Kurniawan et al. (2016), Unal and Tan (2015), and Anita (2015). Though these results are not in line with the research results of Putri and Haryanto (2014), Cuthbertson and Nitzsche (2013), and Sari and Purwanto (2013), they found that the ability of market-timing has a positive and significant influence on mutual fund performance.

Fund managers do not have sufficient capacity to improve the performance of shariah mutual funds. So that every time the fund manager attempts to adjust the risk, the mutual fund performance will decrease. The reason is that the majority (84%) of shariah mutual funds have a greater risk than market risk. Comparing the NAV (Net Asset Value) at the beginning and the end of the study period showed that around 56% of shariah mutual funds experienced a decrease in NAV. The distribution of mutual fund-required returns forms a decreasing SML (Security Market Line), indicating that sharia mutual funds are not well-diversified. This evidence is similar to the findings of Jensen (1968) that mutual fund returns are scattered randomly and concludes that fund managers do not have the relevant private information.

A negative path coefficient value means that the fund manager's efforts to time the market contribute to the return reduction is not following the theory. In managing sharia mutual funds, fund managers have to maximize profits while maintaining the conformity of transactions with sharia principles. This condition makes it hard to apply market-timing theory to sharia mutual funds. However, this limitation should drive fund managers to improve their skills, especially stock-selection ability, following the data indicating that most shariah mutual funds are not well-diversified portfolios.

The Influence of Fund Characteristics on Mutual Fund Performance

The study investigated the effect of fund characteristics on shariah mutual fund performance. The test results on characteristic indicators show that only asset allocation strategies are relevant to explaining shariah mutual funds' characteristics. Although, the hypothesis testing finds that the effect of mutual fund characteristics on mutual fund performance is positive but not significant. This result is in line with Saez and Izquierdo (2000), who found no difference in the performance of most of Spain's mutual funds, whether passively or actively managed. However, the result is not in line with Istavirti et al. (2008), Soekarno and Damayanti (2012), and Mangiring and Husodo (2014), who found that asset allocation strategy influences mutual funds performance.

Asset allocation decision refers to allocating assets to broad asset markets (Jones, 2010). It also specifies how fund managers manage assets actively or passively. Fund managers who apply a passive strategy will form mutual funds with a composition like the market or other benchmarks. Fund managers will only adjust the configuration of their mutual fund assets periodically or in case of extraordinary market volatility. Fund managers apply active strategies to increase the expected returns or achieve the promised return on mutual funds.

Empirical data shows that 67% of shariah mutual funds apply a passive rather than an active strategy to manage the assets. Adopting a passive strategy type in managing assets reflects the fund manager's efforts to comply with Islamic finance principles. Indeed, 53% of passively managed mutual funds showed good performance, and the funds' return was greater than zero. The average value of asset allocation is 0.63 (Table 2), which means that the fund manager has attempted to rebalance the asset allocation to maintain returns. However, in a market with limited asset alternatives, rebalancing efforts resulted in increased costs so that only 36% of shariah mutual funds performed well. The evidence gives possible explanations why such an asset allocation strategy does not influence sharia mutual fund performance.

The Influence of Analyst Coverage on Mutual Fund Performance

Harrison and Kreps (1978) stated that investors are willing to buy more expensive assets if they believe they can quickly resell them in the future. It is an asymmetry information phenomenon. Information about investment assets often creates a bubble of expectations for investors, which in turn will destabilize the market. Therefore, disseminating information related to a fair valuation of assets can reduce the excessive optimism of investors. Analyst coverage is an effort to disseminate information about investment assets by an independent analyst. The more analyst coverage available and accessible, the more quality information flows into the capital market.

The study examines the influence of analyst coverage on shariah mutual fund performance. The indicators of analyst coverage are the market-risk-based returns (ER_{mr}) and the Barometer rating published by Bareksa.com. Empirical data shows that 82% of shariah mutual funds received more than two to five stars. Indeed, about 41% of the more than two stars mutual funds showed good performance, and the funds returned greater than zero. The average value of the rating is 2.53 (Table 2), which means that analysts consider that the performance of shariah mutual funds is good because they can balance risk and return. Another indicator, market-risk-based returns, shows that all sharia mutual funds can provide a required return of more than 5.5%. However, only 51% of shariah mutual funds have good performance.

The results show that analyst coverage has a positive and significant effect on the performance of sharia mutual funds. These results indicate that the better the quality of analyst coverage, the higher the performance of shariah mutual funds. These results are in line with the research results of Abdesaken (2015), Lee and So (2017), Fortin and Roth (2007), and Sirri and Tufano (1998).

The study indicates that analyst coverage strongly correlates with mutual fund performance. That positive effect happens since mutual fund managers respond immediately to each publication of analyst results on the mutual funds they manage.

Referring to Fang et al. (2011) find that many fund managers use analyst coverage to sustain the performance of mutual funds. The adjustments made by fund managers will, at last, improve mutual fund performance.

CONCLUSIONS

The fund manager's skills are not a factor that affects the performance of shariah mutual funds. The ability of fund managers in market timing cannot improve the performance of shariah mutual funds. In the emerging capital market, where the available alternative investment assets are still limited, market-timing ability is more appropriate than stock-selection ability.

The characteristics of mutual funds are not a factor that affects the performance of shariah mutual funds. Asset management style is a long-term strategy, but in a dynamic market, fund managers make adjustments frequently. However, the limited alternative of shariah assets in the capital market causes the cost of adjusting the asset allocation to be greater than the returns obtained.

Analyst coverage is a factor that affects the performance of shariah mutual funds. The higher the quality of analyst coverage, the better the mutual fund performance. Quality analyst coverage is an objective analysis of the potential strengths or weaknesses of the mutual fund. Fund managers use the objectives information as a cross-reference to adjust the composition of the assets they manage so that the mutual fund's performance gets better in the future.

IMPLICATIONS

Even though it has been more than two decades, the Islamic capital market seems like a new market because of the limited alternative investment assets. According to empirical evidence in this study and market conditions, fund managers should improve their macro analysis skills. Adequate macro analysis skills will increase market-timing ability and be able to form well-diversified sharia mutual funds. In addition, fund managers with macro analysis skills will not depend on analyst coverage and will avoid herding behavior in managing their assets.

LIMITATIONS

This study aims to identify the factors that affect the performance of shariah mutual funds. The key concept used in this study is the modern portfolio theory initiated by Markowitz (1952) and the asymmetry information concept initiated by Stiglitz (2002). Therefore, this study cannot explain in more detail the findings that lead to behavioral finance concepts such as herding behavior.

RECOMMENDATIONS

Like most investors, shariah mutual fund investors also demand returns as expected. For this reason, it is necessary to investigate further whether fund managers should increase their knowledge of macro and microeconomics as a basis for developing market-timing ability. The improvement of this ability, hopefully, can cut the costs borne by investors. What is interesting to study further is whether different market conditions require specific information. Two types of information cause information asymmetry: information about quality and information about intentions. The availability of information that fits the needs of investors will suppress information asymmetry and eliminate opportunities for excessive demand or supply (bubble).

REFERENCES

- Abdesaken, G. 2015. *On the Precision of Public Information and Mutual Fund Performance*. Journal of Asse Management 16, pp. 85-100.
- Adkisson, J. A. and Fraser, D. R. 2003. *Reading the Stars: Age Biases in Morningstar Ratings*. Financial Analyst Journal, Vol 59, pp. 24-28.
- Andrade, S. C., Bian, J., and Burch, T. 2013. *Analyst Coverage, Information, and Bubbles*. Journal of Financial and Quantitative Analysis, Vol. 48, No. 5, pp. 1573-1605.
- Anita. 2015. *Pengukuran Pemilihan Saham dan Penetapan Waktu Menggunakan Model Treynor-Mazuy pada Reksadana Syariah di Indonesia*. Jurnal Etikonomi Vol. 12, No. 1.
- Bank Indonesia. 2008. *Peraturan Bank Indonesia No. 10/11/PBI/2008 Tentang Sertifikat Bank Indonesia Syariah*.
- Bello, Z. Y. and Janjigian, V. 1997. *A Reexamination of the Market-Timing and Security-Selection Performance of Mutual Funds*. Financial Analysts Journal, 53(5), pp. 24-30.
- Bodie, Z., Kane, A., and Marcus, A. J. 2013. *Essentials of Investments* (9th ed.). New York: McGraw-Hill Education.
- Bodie, Z., Kane, A., and Marcus, A. J. 2014. *Investments* (10th ed.). New York: McGraw-Hill Education.
- Bollen, N. P. B. 2007. *Mutual Fund Attributes and Investor Behavior*. Journal of Financial and Quantitative Analysis. September 2007.
- Bollen, N. P. B. and Busse, J. A. 2001. *On the Timing Ability of Mutual Fund Managers*. The Journal of Finance. Vol. LVI, No. 3, June 2001.
- Busse, J. A. 2001. *Another Look at Mutual Fund Tournaments*. Journal of Financial and Quantitative Analysis, 36 (2001), pp. 53-73.
- Carhart, M. M. 1997. *On Persistence in Mutual Fund Performance*. The Journal of Finance. Vol. LII, No. 1 pp. 57, March 1997.
- Chang, E. C. and Lewellen, W. G. 1984. *Market Timing and Mutual Fund Investment Performance*. The Journal of Business, Vol. 57, No. 1, Part 1 (Jan. 1984), pp. 57-72.
- Chen, J., Hong, H., Huang, M., and Kubik, J. D. 2004. *Does Fund Size Erode Mutual Fund Performance? The Role of Liquidity and Organization*. American Economic Review, Vol 94, 5, pp. 1276-1302.
- Cuthbertson, K. and Nitzsche, D. 2013. *Performance, Stock Selection, and Market Timing of the German Equity Mutual Fund Industry*. Journal of Empirical Finance, Elsevier, vol. 21(C), pp. 86-101.
- Dahlquist, M., Engström, S., and Söderlind, P. 2000. *Performance and Characteristics of Swedish Mutual Fund*. The Journal of Financial and Quantitative Analysis, Vol 35, pp. 409-423.
- Del Guercio, D. and Tkac, P. A. 2002. *The Determinants of the Flow of Funds of Managed Portfolios: Mutual Funds vs. Pension Funds*. Journal of Financial and Quantitative Analysis. Vol. 37, No. 4, pp. 532, September 2002.
- Denis P. J., Manurung, A. H., and Nachrowi, D. 2004. *Analisis Determinasi Kinerja Reksa Dana Pendapatan Tetap di Indonesia Periode 1999-2003. Penggunaan Model Jensen dan Model Gudikunst*. Jurnal Riset Akuntansi Indonesia, Vol. 7, No. 2.
- Drobetz, W. and Kohler, F. 2002. *The Contribution of Asset Allocation Policy To Portfolio Performance*. Financial Market Research, Vol. 16, No. 2, pp. 219-233.
- Dwiprakasa, B. and Dharmastuti, C. F. 2016. *Karakteristik Reksa Dana dan Kinerja Reksa Dana Saham di*

- Indonesia. *Jurnal Manajemen*. Vol. 13, No. 1, pp. 94-116, Mei 2016.
- Fang, L. H., Peress, J., and Zheng, L. 2011. *Does Media Coverage of Stocks Affect Mutual Funds' Trading and Performance?*. The Review of Financial Studies, Vol. 27, Issue 12, pp. 3441-3466.
- Fortin, R. and Roth, G. 2007. *Analyst Coverage of Small Cap Firms In A Period of Brokerage Firm Retrenchment*. Journal of Business & Economics Research, Vol. 5, No.12, pp. 61-68.
- Franck, A. and Kerl, A. 2013. *Analyst Forecasts and European Mutual Fund Trading*. Journal of Banking and Finance 37(80), pp. 2677-2692.
- Frey, S. and Herbst, P. 2014. *The influence of Buy-side Analysts on Mutual Fund Trading*. Journal of Banking & Finance 49, pp. 442-458.
- Ghozali, I. and Latan, H. 2015. *Konsep, Teknik, Aplikasi Menggunakan Smart PLS 3.0 Untuk Penelitian Empiris*. BP Undip. Semarang.
- Gregory, A., Matatko, J., and Luther, R. 1997. *Ethical Unit Trust Financial Performance: Small Company Effects and Fund Size Effects*. Journal of Business Finance & Accounting, Vol 24, pp. 705-725.
- Gunawan, R. A. 2010. *Pemanfaatan Metode Value Investing Benjamin Graham untuk Meraih Capital Gain di Bursa Efek Indonesia*. Jurnal Ekonomi dan Bisnis. Vol.1, pp. 49 – 62.
- Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E. 2019. *Multivariate Data Analysis. 8th Edition*. Cengage Learning EMEA.
- Harrison, J. M. and Kreps, D. M. 1978. *Speculative Investor Behavior in a Stock Market with Heterogeneous Expectations*. Quarterly Journal of Economics, 92, pp. 323-336. DOI: <https://doi.org/10.2307/1884166>.
- Indro, D., Jiang, C., Hu, M., and Lee, W. 1999. *Mutual Fund Performance. Does Fund Size Matter?*. Financial Analyst Journal, Vol 55, pp. 74-87.
- Istavirti, Yuyun. 2008. *Pengaruh Strategi Asset Allocation, Security Selection dan Market Timing terhadap Kinerja Reksa Dana Saham di Indonesia*. Tesis. Program Pascasarjana Ilmu Manajemen Universitas Indonesia.
- Jensen, M. C. 1968. *The Performance of Mutual Funds in the Period 1945-1964*. Journal of Finance, 23 (1968), pp. 389-416.
- Jones, C. P. 2010. *Investments Principles and Concepts*, 11th edition. John Wiley and Sons (Asia).
- Kour, I. 2018. *Effect of Mutual Funds Characteristics on Their Performance and Trading Strategy: A Dynamic Panel Approach*. Cogent Economics and Finance (2018) 6: 1493019.
- Kurniawan, B., Siregar, H., and Andati, T. 2016. *Market Timing, Selektivitas Saham serta Kinerja dari Produk Reksa Dana Saham di Indonesia*. Jurnal Aplikasi Bisnis dan Manajemen, Vol. 2, No. 1, pp. 43-52.
- Lee, C. M. C. and So, E. C. 2017. *Uncovering Expected Returns: Information in Analyst Coverage Proxies*. Journal of Financial Economics 124, pp. 331-348.
- Lobao, J. and Gomes, S. C. 2015. *Performance and Characteristics of Mutual Funds: Evidence from the Portuguese Market*. Revista de Gestão, Finanças e Contabilidade. Vol. 5, No. 4, pp. 125-148.
- Mangiring, B. and Husodo, Z. A. 2014. *Style Analysis: Asset Allocation and Performance Evaluation of Indonesian Equity Funds, April 2004 – March 2009*. Indonesian Capital Market Review, 2(2), pp. 133-152.
- Markowitz, H. M. 1952. *Portfolio Selection*. Journal of Finance, 7, pp. 77-91.
- Otoritas Jasa Keuangan. 2015. *Peraturan Otoritas Jasa Keuangan Nomor 19/POJK.04/2015 Tentang Penerbitan Dan Persyaratan Reksa Dana Syariah*.
- Otten, R. and Bams, D. 2001. *European Mutual Fund Performance*. European Financial Management, Vol 8, pp. 75-101.
- Panjaitan, M. V. 2012. *Analisis Kemampuan Stock Selection dan Market Timing Manajer Investasi pada Reksadana Saham di Indonesia*. Jurnal Ilmiah Mahasiswa Manajemen. Vol. 1, No. 2.
- Perold, A. F. and Sharpe, W. F. 1995. *Dynamic Strategies for Asset Allocation*. Financial Analysts Journal, January-February 1995, pp. 149-160.
- Peterson, J. D., Pietranico, P. A., Riepe, M. W., and Xu, F. 2001. *Explaining the Performance of Domestic Equity Mutual Funds*. Journal of Investing, Vol 10, pp. 81-92.
- Prasetyo, A., Khairunnisa, and Mahardika, D. P. K. 2017. *Analisis Stock Selection Ability dan Market Timing Ability pada Kinerja Reksa Dana Syariah. Studi Kasus pada Reksa Dana Syariah yang Terdaftar di OJK Periode Januari - Desember 2016*. e-Proceeding of Management: Vol: 4, No. 3.
- Putri, C. H. M. and Haryanto, A. M. 2014. *Analisis Pengaruh Market Timing Ability, Stock Selection, Expense Ratio dan Tingkat Risiko terhadap Kinerja Reksa Dana Saham*. Diponegoro Journal of Management, pp. 1-10.

- Rao, Z. R., Tauni, M. Z., and Rehman, A. 2016. *Asymmetric Flow-performance Relationship: Case of Chinese Equity Funds*. International Journal of Economics and Financial Issues 6(2), pp. 492-496.
- Republik Indonesia. 1995. *Undang-Undang Republik Indonesia Nomor 8 Tahun 1995 Tentang Pasar Modal*.
- Republik Indonesia. 2008. *Undang-Undang Republik Indonesia Nomor 36 Tahun 2008 Tentang Pajak Penghasilan*.
- Saez, J. C. M. and Izquierdo, A. F. 2000. *Style Analysis and Performance Evaluation of Spanish Mutual Funds*. Journal of Asset Management, 1(2), pp. 151-171.
- Sari, A. P. N. and Purwanto, A. 2013. *Analisis Kebijakan Alokasi Aset, Kinerja Manajer Investasi dan Tingkat Risiko terhadap Kinerja Reksadana Saham di Indonesia*. Diponegoro Journal of Accounting, Vol. 1, No. 1, pp. 1-14.
- See, Y. P. and Jusoh, R. 2012. *Fund Characteristics and Fund Performance: Evidence of Malaysian Mutual Funds*. International Journal of Economics and Management Sciences, Vol. 1, No. 9, pp. 31-43.
- Sharpe, W. F. 1992. *Asset Allocation: Management Style and Performance Measurement*. The Journal of Portfolio Management, 18(2), pp. 7-19.
- Sirri, E. R. and Tufano, P. 1998. *Costly Search and Mutual Fund Flows*. The Journal of Finance, Vol. LIII, No. 5, pp. 1589, Oktober 1998.
- Soekarno, S. and Damayanti, S. M. 2012. *Asset Allocation Based Investment Strategy to Improve Profitability and Sustainability of the SMEs*. Procedia Economics and Finance 4 (2012), pp. 177 – 192.
- Spence, M. 1974. *Market Signaling: Information Transfer in Hiring and Related Screening Processes*. Cambridge MA. Harvard University Press.
- Stiglitz, J. E. 2002. *Information and the Change in the Paradigm in Economics*. American Economic Review, 92 (3), pp. 460-501.
- Treynor, J. and Mazuy, K. 1966. *Can Mutual Funds Out-guess the Market?*. Harvard Business Review, 44, pp. 131-136.
- Trisnopati and Titik, F. 2015. *Pengaruh Stock Selection, Market Timing, dan Ukuran Reksa Dana terhadap Kinerja Reksa Dana Saham*. e-Proceeding of Management, Vol.2, No. 3, pp. 3491, Desember 2015.
- Unal, G. and Tan, O. F. 2015. *Selectivity and Market Timing Ability of Polish Fund Managers Analysis of Selected Equity Funds*. Procedia - Social and Behavioral Sciences, Vol. 213, pp. 411-416.