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Research Article

A Geographical Comparative Study On Conventional Versus Sharia Mutual Fund Performance

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Abstract

This research aims to determine geographical comparative study on conventional versus sharia mutual fund performance using the Sharpe, Treynor, and Jensen index measurements. The analytical method used is independent sample t-test. The population of this research is all conventional and sharia mutual funds that are active in the 2015-2019 period. The sampling method used purposive sampling method. The result showed that there was a significant difference between the performance of conventional equity mutual funds and the performance of Sharia mutual funds using three performance measurement method, there are Sharpe, Treynor, and Jensen.

Keywords

Conventional Mutual Funds, Sharia Mutual Funds, Performance.

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Introduction

The mutual fund industry in Indonesia is growing. The average performance of equity funds are selected in the Infovesta 90 Equity Fund Index provides a return of 4.48% on a monthly basis. This positive performance is in line with the performance of the Composite Stock Price Index (JCI) which throughout October 20210 rose 5.30% compared to the previous month. The number of mutual fund products issued in 2019 experienced the highest increase in the last three years. Based on data from the Indonesian Central Securities Depository (KSEI), as of December 27, 2019, there were 2,627 mutual fund products circulating in Indonesia. This number grew by 42.38 percent, or there was an increase of 782 products last year compared to the previous year. Mutual funds are one of the financial capital market instruments. The capital market is an important institution for the country, because that is the place for public to invest their funds into financial instruments (Dewi, 2020). Small investors, beginner, or risk averse investors can choose mutual funds for their alternative investment. This is related to the existence of investment law where when there is a high return it will be followed by a high risk. The consequences of this require us to manage and monitor our investments to avoid unwanted risks. Thus, investors from securities often diversify their investments by combining various securities (Utami, 2013). If we invest in mutual funds, it means we are entrusting money to parties who already understand how to manage it so that our money grows.

In Indonesia, mutual funds are divided into two, namely conventional and sharia mutual funds. Basically, the Sharia are the same as conventional, but Sharia have investment policies based on Islamic principles. Instruments that can be selected to be included in the investment portfolio must be in the halal category. It is said to be halal, if the party issuing the investment instrument does not conduct a business that is contrary to Islamic principles such as the example of the business activity above, it does not carry out usury or interest money, while in terms of regulations, treatment, and distribution of results, it is the same as conventional mutual funds (Qomariah et al., 2016). Sharia mutual fund products have experienced rapid growth when compared to conventional mutual funds over the last few years in Indonesia. Based on OJK data, from the end of September 2015 to the end of September 2020, the Islamic mutual fund industry in Indonesia experienced growth of more than 600 percent, far exceeding the growth of conventional mutual funds which grew by around 80 percent in the same period.

Based on the statistics of sharia mutual funds as of October 2020 on the OJK website, there are 284 sharia mutual fund products. This amount is equivalent to 12.84 percent of all current mutual funds. The net asset value (NAV) of sharia mutual funds from January to October 2020 grew 28.47 percent from Rp55.77 trillion to Rp71.65 trillion. In fact, the NAV of conventional mutual funds in the same period recorded a negative performance marked by a 4.84 percent correction from Rp481.51 trillion to Rp458.21 trillion. However, in terms of managed funds, the market share of sharia mutual funds was recorded at 13.62 percent in February 2021, an increase compared to 12.97 percent at the end of 2020. Sharia mutual fund managed funds in February 2021 were recorded at Rp. 77.85 trillion, of the total managed funds of the mutual fund industry. which amounted to Rp. 571.75 trillion. In fact, there are still many doubts from the layman that the returns received from Islamic mutual funds are not large or not as profitable as conventional mutual funds. The still small amount of managed funds for sharia compared to conventional funds is due to the low level of literacy and inclusion of capital market products, especially in the field of capital markets and Islamic finance, which are still relatively low. With such a small amount, is it possible to produce an optimal portfolio investment, because the public is generally risk averse towards new products whose performance results have not yet been seen.

To find out whether the investor's target is still being achieved, then the performance of the Portfolio needs to be calculated and measured periodically. Mutual fund performance is measured to see its progress, to help investors compare a mutual fund with other mutual funds that will be their investment goals. The method used to measure the performance of conventional and sharia mutual funds uses the composite (risk adjusted) measures of portfolio performance, which considers the return and risk aspects in the evaluation process. The method used is Jensen, Sharpe, and Treynor.

Previous research conducted by Ramdani (2020) showed that there was a significant difference between the conventional and sharia mutual funds using the three methods, namely Jensen, Sharpe, and Treynor. Agussalim et al. (2017) show a comparison of their performance, measured by the Jensen and Traynor indexes showing differences, while the Sharp index shows no differences. Dahlifah dan Teguh (2015) shows that Islamic stock mutual funds have better performance than conventional stock mutual funds. Zamzany et al. (2018) shows a comparison based on the Jensen

index, Islamic stock mutual funds are superior to conventional ones, based on the Sharp index and Treynor index showing that conventional stock mutual funds are superior.

Theoretical Background

Mutual Fund

Referring to the Capital Market Law No. 8 of 1995, defines that Mutual Fund is a forum where the funds are collected from investor, are managed by investment managers into portfolios.

Conventional Mutual Funds

Mutual funds that can invest in all types of financial securities such as stocks, bonds, and deposits; with investment limits as determined by the Financial Services Authority (OJK). Conventional mutual funds can be bought or resold by investors at any time depending on the investment objectives, time period and risk profile of investors. In the conventional capital market, investors can buy or sell stocks directly using the services of a broker or broker.

Sharia Mutual Funds

Mutual funds that can only invest in financial securities that comply with Islamic rules and principles, and of course are still bound by the investment limits set by the OJK. That are a forum for public to invest with reference to Islamic law, apart from that, there is a distinctive feature of sharia mutual fund products, namely the existence of a cleansing process or cleaning of income obtained by paying zakat, not an instrument that generates usury.

Sharia and Conventional Mutual Funds

The operational mechanism of conventional and sharia mutual funds is different. Mechanism between investors and investment sharia managers is by wakalah, where the party is given power by another party who provides the funds. Meanwhile, between investment users and manager wuth the Mudharabah system, namely an agreement where the party providing the funds promises to the manager to surrender their capital and the manager promises to manage the capital. Process of cleansing, screening, and portfolio management are also different. Meanwhile, conventional mutual funds do not pay attention to the things that are of concern to Islamic mutual fund market players (Lestari, 2016). In Islam, borrowing and lending money on interest (riba) is forbidden. Debt level maximum is 1/3 of firms capita that can be hold by IMF (Hayat et al., 2011).
Hypothesis: There are differences in the performance of conventional mutual funds and sharia mutual funds using Sharpe, Treynor, and Jensen Index.

Research Methods

Research Design

This research was conducted using a descriptive method with a comparative study. The description described in this study is everything related to conventional and sharia equity mutual funds during the 2015-2019 period, as well as comparing their performance using the Jensen Index, Sharpe Index, Treynor Index measurements.

Population and Research Sample

The population in this research were all conventional and Sharia mutual funds that were active in the 2015-2019 period. There were some of the companies who did not published their data on secondary sources. Therefore, the sampling technique was carried out by purposive sampling method to increase the study response rate, namely the determination of the sample based on certain considerations or criteria in accordance with the research objectives. The sample studied must be in accordance with the criteria set by the researcher, namely conventional and sharia

equity mutual funds registered with the OJK and traded in mutual funds for the 2014-2019 period, conventional and sharia equity mutual funds that publish Net Asset Value (NAV) in general per year from 2015-2019, and Conventional and Islamic equity mutual funds that publish Net Asset Value (NAV) in Rupiah. From the sampling criteria, the sample obtained 30 for conventional and 10 for sharia. There were some of the traded companies who did not published online website data. For this purpose, the researcher collected by visiting that company which was geographical convenience near to his like Bandung in Indonesia.

Sources and Data Collection Techniques

This research's source is secondary data, derived from data published in statistics or other journals and available information from various published sources. Data were obtained from the IDX, OJK, the capital market website, the website for mutual funds, the BAPEPAM-LK website, the Bank Indonesia website, bareksa.com, OJK Mutual funds.

Technical Data Analysis

D Data analysis was performed using calculations performed with the help of the Excel program, then performance measurements were performed using the Sharpe, Treynor, and Jensen Index measurements. The analytical method used to the research hypothesis is parametric t statistic, namely independent sample t-test. The steps to be taken are as follows:

Sharia and Conventional Mutual Fund Returns
a. Determining the realized return of mutual funds

$$\boldsymbol{Ri = \frac{NABt - NABt - 1}{NABt - 1}}$$

Where:
Ri = Actual return from mutual funds i dana
NABt = Net Asset Value at time t
NABt-1 = Net Asset Value at the previous time

b. Determining the expected return of mutual funds

$$\boldsymbol{E(Ri) = \frac{\sum_{t=1}^{n} (Ri)}{n-1}}$$

Where:
E(Ri) = Expected Return of i mutual fund
Ri = Actual Return from i mutual funds
n = Number of periods during the transaction

c. Determining the variance of mutual funds

$$\boldsymbol{Var(Ri) = \frac{\sum_{t=1}^{n} [Ri - E(Ri)]^2}{n - 1}}$$

Where:
Var (Ri) = Variance of return on investment
E(Ri) = I mutual fund expected return
Ri = Actual Return from mutual funds
n = Number of periods during the transaction

Determine the risk level
a. Determining the standard of deviation

$$\boldsymbol{\sigma i = \sqrt{Var(Ri)}}$$

Where:
σi = Investment standard deviation
Vari (Ri) = Variants of Return on Investment

b. Determining Mutual Fund Covariance

$$COV(Ri, Rm) = \frac{\sum_{i=1}^{n} \sum_{i=1}^{n} [Ri - E(Ri)] - [Rm - E(Rm)]}{n-1}$$

Where:
COV(Ri,Rm) = Market covariance with mutual fund investments
Ri = Mutual Fund Investment Return
Rm = Market Return
E(Ri) = Expected Return on Mutual Fund Investment
E(Rm) = Market Expected Return
n = Number of Analysis Periods

c. Determining the level of risk of fluctuations in the mutual fund portfolio relative to Market Risk (Beta), which is Systematic risk / Market risk, there are:

$$Qi = \frac{COV(Ri - Rm)}{\sigma m^2}$$

Where:
βi = Mutual fund investment beta
COV(Ri,Rm) = Market Covariance with Mutual fund investments
σm^2 = Market variance

Determining the Performance
a. Sharpe Index Method

$$Si = \frac{[E(Ri) - Rf]}{\sigma i}$$

Where:
Si = *Sharpe index value*
E(Ri) = Expected Return on mutual fund investment
Rf = Risk free rate
σi = Mutual Fund Investment Standard Deviation

b. Treynor Index Method

$$Ti = \frac{[E(Ri) - Rf]}{Qi}$$

Where:
Ti = Treynor Index Value
E(Ri) = Expected Return on Mutual Fund Investment
Rf = Risk free rate Tingkat
βi = Beta Mutual Fund Investment

c. Index Jensen method

$$\alpha i = [E(Ri) - Rf] - Qi[E(Rm) - Rf]$$

Atau

$$E(Ri) - Rf = \alpha i + Qi[E(Rm - Rf]$$
$$\alpha i = Ri - E(Ri)$$

Where:
E(Ri) = Expected Return on Mutual Fund Investment Portfolio
E(Rm) = Market Expected Return
Rf = Risk free rate Tingkat
Ri = Expected Return on Mutual Fund investment
βi = Beta Mutual Fund Investment
αi = Jensen index value /alpha (Differential return)

Market Return Formula for conventional mutual funds

$$\boldsymbol{Rm = \frac{IHSGt - IHSGt - 1}{IHSGt - 1}}$$

Where:
Rm = Tingkat pengembalian pasar
IHSGt = Index harga saham gabungan bulan sekarang
IHSGt-1 = Index harga saham gabungan bulan lalu

Market Return Formula for Sharia Mutual Funds

$$\boldsymbol{Rm = \frac{ISSIt - ISSIt - 1}{ISSIt - 1}}$$

Where:
Rm = Market rate of return
ISSIt = Indonesia Sharia Stock Index for the current month
ISSIt-1 = Indonesia Sharia Stock Index last month

Market Expected Return Formula:

$$\boldsymbol{E(Rm) = \frac{\sum_{i=1}^{n} (Rm)}{n}}$$

Where:
E(Rm) = Average expected market return
Ri = Market rate of return
n = Number of periods during the transaction

Market variance:

$$\boldsymbol{Var(Rm) = \frac{\sum_{i=1}^{n} [Rm - E(Rm)]^2}{n}}$$

Where:
Var (Rm) = Variance of the market
E(Rm) = Average market return
Rm = Market rate of return
N = Number of Periods during the transaction

Market Standard Deviation:

$$\boldsymbol{\sigma m = \sqrt{Var(Rm)}}$$

Where:
σm = Market standard deviation
Var(Rm) = Market variance

Results and Discussion

The Differences Between Conventional and Sharia Performance

Table 1.
Mutual Fund Performance Differences

Performance	t	sig	Conclusion
Sharpe	5,027	0,00	H1 Accepted
Treynor	16,908	0,00	H2 Accepted
Jensen	16,447	0,00	H3 Accepted

Based on table 1, the results of the t test obtained the value of Sig. of the Sharpe Method, Treynor Method, and Jensen Method each of 0.000. Sig values. it is below = 0.05, this means that H_0 is rejected, it means that there is a significant difference between conventional and sharia performance using three methods, there are Sharpe, Treynor, and Jensen. The result are in line with research from Ramdani (2020); Ratnawati et al. (2012) which show that there is a significant difference between their performance using three methods, namely Jensen, Sharpe, and Treynor. This means that investing in conventional mutual funds has a different level of profit and risk from investing in Islamic mutual funds, assuming other variables are constant. The result contradict with Putra and Fauzie (2014) where using the Sharpe and Treynor measurement, it is concluded that there is no significant difference between the two mutual fund groups. Meanwhile, the Jensen Ratio concluded that there was a significant difference between them.

Conclusions

The conclusion in this research is based on data analysis and discussion of testing, such as there is a significant difference between conventional and sharia mutual funds, measured by Sharpe, Treynor, and Jensen Index.

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