Stock performance based on sharia stock screening: Comparasion between syariah stock indices of Indonesia and Malaysia

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Abstract
This study aims to compare the performance of the Islamic stock index in Malaysia and Indonesia using the Sharpe, Treynor and Jensen methods. The findings in this study are the performance of Sharia JII and FBMS stocks in 2014-2019, it can be concluded that the overall Sharpe and Treynor method shows a negative performance value, which means that the performance is not good, whereas when measured using the Jensen Indonesia method it shows a positive performance value. Which means that the performance is good so that Indonesia has a better performance than Malaysia, measured by the Jensen method. Based on the results of different tests, it shows that there are differences in the performance of the two countries in 2014-2019 from each index (Sharpe, Treynor, and Jensen).

Introduction
Investments in stocks in the capital market must pay attention to the level of return and risk. However, in recent years, in Indonesia and in other countries there has been a trend of investing in stocks or securities that are in accordance with the teachings of the Islamic religion or are Sharia Compliant. This growth in Sharia-based finance is due to the increasing capital value of the Muslim population in the world and the increasing demand for Muslim investors to invest their funds in financial products that are not against Islam (Derigs and Marzban 2009). In general, there are two criteria that an issuer must meet in order to become a sharia company. These criteria are the criteria for business objects and quantitative criteria (accounting) (Baron & Holmstrom, 1980). The business object (issuer) is the core of the business that is carried out by each issuer and must be lawful according to Islamic teachings.

Halal and haram are basic criteria that must be met. The quantitative criteria consist of criteria on the aspects of capital, debt, and company income. Screening of company activities is a form of implementation of the principles of fiqh muamalat so that companies categorized as sharia can be accessed by Muslims. The selection process will provide comfort and confidence for Muslim investors and investors in general in investing (Hanafi, 2011) In the process of screening Islamic stocks, each country has different standards. Some countries have strict screening policies and other countries have loose screening policies. With these different standards, of course the screening mechanisms and procedures are also different. The DSN of each country refers to different opinions of classical scholars when making the criteria that will be applied to the index of each country. The difference in the use of criteria by scholars is also influenced by the objective conditions of each country relating to the number of companies, business objects, and financial characteristics. Countries that have many companies (listed on stock exchanges), tend to apply stricter sharia criteria and vice versa to countries that are still few. The criteria for business objects in countries with a lot of companies are relatively broader and more varied than countries with few companies. (Hanafi, 2011).

The difference in the standard model in screening Islamic stocks certainly raises several problems. The issue of sharia has come to the fore considering that this difference reflects the confusion in the Islamic financial system. Because, if the reference sources are the same, of course it would be better if the sharia standards are the same. In addition, different screening models also
indicate that the quality of a stock that is in accordance with sharia is also different, depending on how strict/good the criteria and selection are. This quality can be seen from the performance of these stocks as measured by the resulting returns, volatility, and resilience in the face of shocks in an economy. Third, in the context of the integration of the Islamic financial market, this difference creates confusion and confusion for the Muslim community. (M. Ardiansyah, Ibnu Qizam, and Abdul Qoyum, 2016).

Maharani (2017) argues that the screening criteria that have the most stringent policies are the screening criteria on the KLSESI index (Kuala Lumpur Stock Exchange Shariah Index) which is based on the Shariah Advisory Council of Malaysia (SAC) policy, where total debt divided by total assets does not exceed 33% (<33%) and total receivables divided by total assets does not exceed 33% (<33%). Then followed by the policy of screening criteria on the FTSE Global Islamic index with total debt divided by total assets not exceeding 33% (<33%) and total receivables divided by total assets not exceeding 50% (<50%). In the process of determining the screening, FTSE GIIS is under the auspices of a sharia consultant, namely Yaasar Limited as a guideline for the stock screening policy regulations (ftse-globalshariah.com).

Furthermore, the screening policy on the Jakarta Islamic Index (JI) with total debt divided by total assets does not exceed 45% (<45%) and total accounts receivable does not exceed 10% (<10%). This is in accordance with Bapepam-LK Regulation Number II.K.1 concerning Criteria and Issuance of Sharia Securities List, the most loose stock screening criteria policy, namely the DJIMI index with total debt divided by average market capitalization with a turnover (trailing) of 24 months. does not exceed 33% (<33%) and total receivables which are also divided by the average market capitalization (trailing 24-month) also do not exceed 33% (<33%). The screening is based on the criteria determined by the DJIMI Index Shariah Supervisory Board.

Currently, there is no international sharia standard for screening syari'ah stocks. In various countries the criteria for sharia are different from other countries depending on the issues developed by the community and observers of the role of the company. Due to differences in each country in determining the criteria for Islamic stocks, the performance produced by the capital market is different (Mirfahi, 2013). To find out the position of this research, it is necessary to look at existing research related to the research plan. Research on the performance of stock portfolios that has existed so far still compares the performance of Islamic stock portfolios and conventional stocks or compares the performance of Indonesian and Malaysian Sharia stocks. It is very rare to compare the performance of Islamic stocks in various countries A qualitative research was conducted by the Shari'ah Investment Study Team of the Capital Market Supervisory Agency (BAPEPAM) in 2004. This research is entitled The Study of Sharia Investment in the Indonesian Capital Market. Although this research is not aimed specifically at comparing the performance of Islamic stocks in Indonesia and Malaysia, the information presented in it is sufficient to provide an overview of Islamic stocks in Indonesia and Malaysia at a macro level.

This study provides information that in 2003, in terms of both total emissions and market capitalization, Islamic stocks in Indonesia were still far behind compared to Malaysia. In Indonesia, Islamic stock issuance reaches 333 shares of the total issuance and the capitalization is around 42% of the total capitalization on the Indonesia Stock Exchange (IDX). Meanwhile in Malaysia, in the same year, the issuance of Islamic stocks reached 684 shares with a capitalization of 60% of the total capitalization. The results of this study are also consistent with research conducted by Miranti Kartika Dewi and Ilham Reza Ferdian in 2008 which examined the performance of syari'ah stocks in Indonesia and Malaysia.

Research conducted by Rofiq (2008) tested the performance of Islamic stocks in Indonesia and Malaysia. The analysis found that the financial characteristics as measured by the current ratio (CR), Return on Equity (ROE), Debt to Equity Ratio (DER) and Price Earning Ratio (PER) of Islamic stocks in Indonesia and Malaysia were not significantly different, except for DER and PER. Market performance as measured by Sharpe's index is not different, while GARCH (1,1) of Islamic stocks in Indonesia is higher than in Malaysia.

Dewi and Ferdian (2012) evaluate the performance of sharia mutual funds in Indonesia and Malaysia. This study measures the performance of Islamic mutual funds in Indonesia and Malaysia,
two countries that have grown Islamic capital markets. Using 5 measuring instruments, namely the Sharpe, Treynor and Jensen Index, as well as the Snail Trail Methodology and Timing Market, this study finds that Malaysian Islamic stocks appear to outperform Indonesian Islamic mutual funds, even in times of global economic crisis. This study also found that the risk-return relationship of Islamic mutual funds is relatively stable compared to the allocation of assets and equity of Islamic mutual funds. Finally, this study found that the market timing ability of Islamic mutual fund investment managers in both countries cannot increase the overall return on funds (Halim, 2005).

Aryanto (2013) examines the comparison of stock portfolios with a single index model between the JII and FTSE Bursa Malaysia EMAS Shariah index in Malaysia for the period 2010-2012. The method used is quantitative. It can be concluded that there are differences between beta 15 candidate stocks in JII and beta 16 candidate portfolio stocks in FBMS. The average beta of candidate stocks is higher than the average shares of non-candidates. So the optimal portfolio is formed by stocks that have the highest return at the same level of risk.

Mirfahi (2013) examines the comparison of the performance of Islamic stocks based on the applicable stock screening in Indonesia, Malaysia and a combination of both. This study aims to obtain a group of Islamic stocks that are in accordance with sharia principles and have good performance. Differences in the screening process for each country have an impact on financial performance for each category of Islamic stocks. The statistical test results show that there is no difference in market performance between DES Indonesia DES filtered with syari'ah Malaysia stock screening. The M2 value of syari'ah stocks that use Malaysia's syari'ah stock screening, is higher when compared to DES Indonesia. Descriptively, there is an increase in return of 5.7% and market performance of 36.27%. Although not significant.

Liyanasari (2014) examines the comparison of optimal portfolio performance on Islamic stocks in Indonesia and Malaysia for the 2009-2012 period. The method used in this research is the Sharpe Index Model, Treynor Index and Jensen Index. It can be concluded that the alternative hypothesis is accepted, which means that there is a significant difference between the performance of the Indonesian Islamic stock portfolio and Malaysian Islamic stocks measured by the Sharpe Index Model, Treynor Index and Jensen Index. From the results of statistical tests, it is found that the performance of Indonesian Sayriah stocks is lower than the performance of Malaysian Islamic stocks.

Rahmasuciana (2016) examined the impact of screening on the price and volume of Islamic stock trading in Indonesia. The purpose of this study is to identify whether there is an impact of stock screening on stock prices and share trading volume as reflected in price fluctuations and volume of Islamic stock trading at the announcement of the screening. Tulasmi (2016) examined the comparison of the performance of Islamic stocks in Malaysia and in Indonesia using the Sharpe, Treynor and Jensen methods. The results of tests conducted using the Sharpe index show that JII shares are negative while FBMS shares are positive, so that FBMS has a better performance than JII's stock portfolio performance. Tests conducted using the Treynor index show that JII stock performance is negative and FBMS shares are also negative. However, the value of FBMS is higher than JII, so that FBMS has a better performance than JII's stock portfolio. Tests conducted using the Jensen index show that JII shares are positive while FBMS shares are also positive, but the results of testing the value of FBMS shares are higher than JII shares, so FBMS shares have a better performance than JII stock portfolio performance.

Maharani (2017) investigates the screening mechanism for Islamic stocks in several countries that affect index and stock performance. Some countries have strict screening policies and other countries have loose screening policies. This study examines 4 Islamic indexes DJIMI, FTSE G1IS, KLSESI, and JII from October 2012 to September 2014. This research shows that the performance of the Sharia stock index is not affected by how strict the filtering process of the index is. Although the KLSESI index has a strict stock screening policy, its performance is not different from Sharia stocks which have a loose stock screening policy, namely the DJMI index. When we compare the returns of each index, the performance of the 4 indices shows insignificant differences as well. The performance of JII shares which have a loose stock screening policy is no different from the performance of KLSESI's shares which has a strict stock screening policy.
The results of the different studies above and the lack of research on the comparison of the performance of Islamic stocks in various countries, this study tries to investigate the effect of screening criteria on the performance of Islamic stocks in Indonesia and Malaysia. Comparing the performance of Islamic stocks in the two countries is interesting to study because Indonesia and Malaysia are developing countries which are predominantly Muslim. In addition, Indonesia and Malaysia are geographically close countries, but the screening techniques used by these two countries are different. Based on the explanation as to the background of the problem above, the formulation of the problem can be taken as follows: Is the performance of Indonesian Islamic stocks (JII) better than Malaysia (FBMS).

Literature Review and Hypotheses Development

Sharia Shares From a sharia perspective, the capital market is part of muamalah activities. Transactions in the capital market are allowed as long as there are no transactions that are contrary to the provisions outlined by sharia. The existence of a capital market that is in accordance with sharia and can optimally play a role in economic growth and expansion. The analysis uses an approach of applying sharia principles in transaction activities in the capital market with a goal-oriented application of sharia principles itself (Jobson & Korkie, 1981). According to him, the objectives of sharia in economic life, such as the realization of the distribution of income and wealth, the creation of justice and a new economic balance will be realized by the application of sharia principles in various Islamic economic and financial activities, particularly the capital market as a financial institution (financial institute). Among these principles are the prohibition of interest as stipulated in Q.S. al-Baqarah/2: 275-276 and verses 278-290. (Syed Othman Alhabshi, 2016).

Sharia Screening Criteria

In general, there are two criteria that an issuer must meet in order to become a sharia company. These criteria are; criteria for business objects and quantitative criteria (accounting). The business object of the issuer (company) is the core of the business that is carried out by each issuer and must be halal according to Islamic teachings (Hassan, et al., 2005). These criteria are absolute and the most basic for an issuer to be classified into Islamic shares (Abdullah, et al., 2007; Allen & Faulhauber, 1989). Halal and haram are basic criteria that must be met by issuers. These criteria are absolute decisions set by the sharia board of each country. The criterion of halal-haram has expanded its meaning and includes everything that is considered dangerous (madarat) and in the public interest (maslahah). In countries that already have a variety of issuers’ businesses, the prohibition of business objects is wider than countries that do not have a relatively diverse range of listed companies (Hanafi, 2011).

Quantitative criteria (accounting) are criteria intended for the financial aspects of the company which consist of aspects of capital, debt and company income. The criteria used by each country are different from other countries by looking at the condition of the issuer and the decision of the sharia board (Rahman, et al., 2010; Sartono, et al., 1998). These differences have a basis for the opinions of various classical fiqh scholars on these issues. The ratio of the amount of debt in a business to your own capital varies. Likewise, the amount of non-halal income that cannot be avoided in today's business world experiences different limitations on criteria. Some indexes use a debt to equity ratio of 45:55, while other indices use a 33% limit as the maximum debt limit for companies. The non-halal income allowed for Islamic issuers is a maximum of 10% of all revenue and other indexes apply a maximum value of 5% of total revenue. These criteria are based on different sources of law and the opinions of classical scholars (Hanafi, 2011).

Indonesia, all Islamic stocks are included in the Indonesia Shariah Stock Index (ISSI), and the screening process is carried out by the Financial Services Authority (OJK). Meanwhile in Malaysia, the list of Islamic stocks is included in the FTSE Bursa Malaysia EMAS Syariah Index (FBMS), and the selection is determined by the Shariah Advisory Council (SAC). Both DSN-MUI and SAC both impose certain criteria on the financial statements of companies that will be included in the sharia index (Mirfahi, 2013).
Islamic Index in Indonesia

In Indonesia, the first Islamic index was launched on June 3, 2000, known as the Jakarta Islamic index (JII). Syariah's shares are a set of shares that have been selected by the Jakarta Stock Exchange (JSE) in collaboration with PT. Danareksa Investama Management. Shares that are members of JII are leading, active stocks with the highest market capitalization (30 shares). The JII share collection is evaluated every six months based on the financial statements and core business of the issuer (core business).

In general, investment in the capital market in Indonesia refers to the DSN-MUI decision which is followed up by the decision of the head of Bapepam-LK, Fatwa of the National Syari'ah Council of the Indonesean Ulama Council no: 40/DSN-MUI/X/2003, concerning the Capital Market and General Guidelines for the Application of Sharia Principles in the Capital Market Sector. DSN-MUI Decree No. 40/DSN-MUI/X/2003 Article 3 is in the attachment. In the event that an Issuer or Public Company that issues Sharia Securities at any time does not meet the requirements mentioned above, then the Securities issued by itself are no longer a Sharia Securities. Business activities that are contrary to Sharia principles include:

1. gambling and games that are classified as banned gambling or trading;
2. providing financial services that apply the concept of ribawi, buying and selling risks that contain gharar and/or maysir;
3. produce, distribute, trade and or provide: a) goods and or services that are haram because of their substance (haram li-dzathii); b) goods and or services that are haram not because of their substance (haram li-ghairihi) determined by the DSN-MUI; and or c) goods and or services which destroy morals and are harmful in nature; and or
4. Investing in companies which at the time of the transaction the level (nisbah) of the company's debt to the Ribawi financial institution is more dominant than its capital, unless the investment is declared kesyariahan by DSN-MUI. Bapepam-LK Regulation Number: KEP-130/BL/2006 followed up by Regulation Number: KEP-314/BL/2007 Concerning Criteria and Issuance of List of Sharia Securities contained in Regulation II.K.1, which does not exceed financial ratios as follows:
   a. total debt based on interest compared to total equity is not more than 82% (debt based on interest compared to total equity is not more than 45%; 55%); and
   b. total interest income and other non-halal income compared to total revenue (revenue) is not more than 10%; Shares that are included in the Sharia Securities List are shares that have passed through the business object criteria and predetermined ratios. Assessment of these criteria is carried out twice a year, namely based on reports every six months and periodic year-end reports (Hanafi, 2011)

Islamic Index in Malaysia

The Islamic stock index in Malaysia consists of two, the Kuala Lumpur Syariah Indek (KLSI) and the Rashid Husein Berhad Islamic Market Indek (RHBIMI). KLSI was founded by the government while RHBIMI was founded by the private sector (Rashid Hussain Berhad). The emergence of these two indices shows the great interest of Malaysian and other foreign investors towards Islamic investment in Malaysia. This development can be seen from the increasing number of issuers and currently Islamic stocks have controlled 88% of all shares listed on the KLSE in 2010 (www.sc.com).

These shares have undergone screening according to the provisions stipulated by the Sharia Advisory Council (SAC) of the Malaysian Securities Commission (SC) (Mifrahi, 2013). The launch is based on requests from local and foreign investors who want to invest in shares based on sharia, where the company's activities must not contain the following elements:

a. In the form of financial services based on usury (interest)
b. Gambling
c. The manufacture or sale of non-halal products
d. Conventional insurance
e. Entertainment activities that are not allowed under sharia
f. Manufacture or sale of tobacco-based products or the like
g. Stock brokerage or stock exchange in non-sharia securities and other activities deemed non-halal according to sharia.

Meanwhile, for companies that implement these two elements (halal and haram), 2 more conditions will be added, namely:

a. The general perception or image of the company must be good
b. The company’s core activities are important and are considered maslahah (containing public interest) for Muslims and the state, besides that the element of illegality must be very small and constitute ‘general balwa (general condition and difficult to avoid), ‘uruf (custom) and rights.
   - Rights of the non-Muslim community accepted by Islam.

To determine the tolerance for mixing between allowed and not allowed shares of the income and profit before tax of a company. The SAC establishes several comparisons based on ijtihad. If the income from a business that is not allowed by sharia exceeds the limit, then the shares of the company are not categorized as sharia shares (Statman & Meir, 1987). These limits are:

a. The 5% limit, this limit is used from various business activities that are expressly prohibited by sharia such as interest (usury, from conventional financial institutions such as banks, gambling and liquor and pork activities)
b. The 10% limit, this limit is used for various business activities that are prohibited but very difficult to avoid, such as interest on deposits on conventional banking deposits and cigarette products.
c. The limit of 20%, this limit is used for leasing from business activities that are not permitted by sharia, such as receipts from gambling, liquor and others.
d. The 25% limit, this limit is used for business activities that are allowed by sharia and have benefits, but there are still elements that can affect the activities of these activities. These activities include hotels, stock trading, stock brokers and business activities that are contrary to sharia.
e. This index already presents a strong platform for growth in the share and management of Islamic funds and the stock brokerage industry in Malaysia. The KLSE Syariah Index has performed well in 2001 with a gain of 2.3 percent.

Research Methods
Types of research This type of research is a comparative descriptive study that aims to explain something by describing and comparing the performance of the JII and FBMS indexes, 2014-2019. Population and Sample The population is all research objects, while the sample is part of the number and characteristics of the population. The sampling technique in this study used saturated sampling, namely the sampling technique when all members of the population were used as samples (Sugiyono, 2016). The population in this study are all companies that are members of the JII which have been listed on the Indonesia Stock Exchange (IDX), all Islamic stocks listed in the FBMS on the KLSE Kuala Lumpur Stock Exchange 2014-2019.

As for the sample of this study are all Islamic stocks that are members of the JII on the Indonesia Stock Exchange (BEI), amounting to 30 companies and FBM Emas Shariah Index totaling 696 companies.

The data in this study is secondary data obtained from various sources such as journal articles, books, and websites. This study uses time series data in the form of daily and sustainability reports published by the company from 2014 to 2019. The data is then analyzed descriptively to determine the results of comparisons between Indonesia, Malaysia, Europe and America. The data sources in this study were obtained by the authors from daily closing price data taken from www.yahoo-finance.com and www.investing.com.
The data collection technique used in this research is documentation, namely data collection techniques by retrieving data through existing documents. In this case the researcher uses monthly/daily historical price data from the four countries.

This research will describe the performance of Islamic stocks in several stock markets. Performance is measured by price movements in the Indonesia, Malaysia stock index for the 2014-2019 period. The author measures stock performance using three methods, namely Sharpe, Treynor, and Jensen.

This research data analysis method consists of three parts, namely descriptive analysis, analysis of stock performance. Each analysis method is described in the following description:

### Descriptive Analysis

Descriptive analysis in this study seeks to present data in the form of mean, standard deviation, minimum value and maximum value with the help of Eviews 10 software.

### Stock Performance Analysis

#### Sharpe performance measure

One of the methods used to compare portfolio performance is using the concept of the Capital Market Line (CML) or better known as the Reward to Variability Ratio (RVAR). Where Sharpe stated that the portfolio performance series is calculated as the net result of the portfolio with a risk-free interest rate per unit risk, given the symbol $S_p$. The Sharpe performance index is calculated by the following formula:

$$
\hat{S}_p = \frac{\bar{R}_p - \bar{RF}}{\sigma_{TR}}
$$

Where:

- $\hat{S}_p$ = Sharpe performance index.
- $\bar{R}_p$ = Average portfolio returns.
- $\bar{RF}$ = Average risk free return
- $\sigma_{TR}$ = total risk which is the sum result of systematic risk and unsystematic risk.

If the portfolio is highly diversified, the total risk is almost the same as the systematic risk because unsystematic risk is close to zero. This can also be called if the portfolio is the same as the market portfolio, the total risk is the same as the systematic risk or market risk or it can be called beta (Manurung, 2000).

#### Treynor performance measures

Treynor as one of the indices used to measure portfolio performance, Treynor assumes that a highly diversified portfolio is known as the Reward to Variability Ratio (RVOR). Therefore the Treynor index states that the portfolio performance series is calculated as the net result of the portfolio with a risk-free interest rate per unit of market risk for the portfolio with the symbol $T_p$ (Tandelilin, 2001). The Treynor performance index is calculated by the following formula:

$$
\hat{T}_p = \frac{\bar{R}_p - \bar{RF}}{\hat{\beta}_p}
$$

Where:

- $\hat{T}_p$ = Treynor performance index.
- $\bar{R}_p$ = Average portfolio return.
- $\bar{RF}$ = Average risk free return
- $\hat{\beta}_p$ = Market risk of the portfolio or portfolio systematic risk.
In calculating the Treynor index, the assumption that must be considered is that the results provide an evaluation in one period, because the return on the portfolio and risk requires a long period. If the period used is short enough, the risk calculated by beta gives an unreasonable or unrepresentative result. Besides that, the assumption of normality of the rate of return also needs to be considered (Manurung, 2000).

**Jensen's performance measure**

As a measure of portfolio performance, Jensen pays close attention to CAPM in measuring portfolio performance which is often referred to as the Jensen ALPHA (differential return measure). Jensen ALPHA is an absolute measure that estimates a constant rate of return over the investment period where Jesen ALPHA gets a return above (below) from the buy-hold strategy with the same systematic risk. The Jensen ALPHA formula is as follows:

\[ J_p = \bar{R}_p - \left[ \bar{R}F + (R_M - \bar{R}F)\beta_p \right] \]

where:
- \( J_p \) = portfolio Jensen index
- \( \bar{R}_p \) = average portfolio return.
- \( \bar{R}F \) = risk free rate return.
- \( \beta_p \) = portfolio market return or portfolio systematic risk

The higher the positive \( AP \), the better the portfolio performance. Jensen ALPHA can be calculated in another way, namely by simplifying the above equation into the equation below:

\[ R_p - R_f = a + b (R_m - R_f) \]

The equation above shows that portfolio premium risk is influenced by market premium risk. The values \( a \) and \( b \) in the above equation are estimated according to a model known as regression. Therefore original time series data from portfolios, market rates of return and risk free interest rates should be available. The highest and significant a value is the best portfolio of existing portfolios.

Analysis of stock performance using the Sharpe, Treynor, and Jensen methods needs to be studied because in good portfolio management both investment managers and individual investors will carry out several stages. The last, very important stage, is to evaluate the performance of the previously prepared portfolio (Ho, 2015).

The Sharpe, Treynor and Jensen method can be used in investment selection by looking at ongoing market conditions. The three models base their analysis on past returns to predict future returns and risks. The Sharpe method emphasizes total risk (standard deviation), Treynor considers market fluctuations to play a major role in influencing returns (beta), while Jensen himself emphasizes alpha. So these three methods have their own characteristics. (Manurung, 2000).

**Multiple Comparison Test**

Test to analyze variants by taking the same measurement several times on each subject or within-subject variables. If the p-value <0.05 indicates a difference in the results tested. The F-statistic formula of the Repeat Measure ANOVA is formulated as follows:

\[ F(df_{time}, df_{error}) = F - value, \ p = p - value \]

**Results and Discussion**

Comparison of the Performance of Sharia Shares in Indonesia (JII) and Malaysia (FBMS) with the Sharpe, Treynor, Jensen Method.
Daily Return and Average Return of Each Country

Calculation of daily return and average return of Islamic stocks in Indonesia (JII) and Malaysia (FBMS) is presented in the table below:

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>JII</td>
<td>0.0005</td>
<td>-0.0004</td>
<td>0.0006</td>
<td>0.0004</td>
<td>-0.0003</td>
<td>0.0001</td>
</tr>
<tr>
<td>FBMS</td>
<td>-0.00005</td>
<td>0.0001</td>
<td>-0.0002</td>
<td>0.000</td>
<td>-0.0006</td>
<td>0.0002</td>
</tr>
</tbody>
</table>

Source: www.investing.com, data processed by the author (2020)

Table 1 above shows that in 2014, 2016, 2017 and 2019 the JII index had positive returns, while the FBMS index had positive returns in 2015, 2017 and 2019.

Standard deviation

Standard deviation calculation to determine how far each observed value is from the mean which is within the average standard deviation. Standard deviation aims to determine the risk of each country’s stock. The data from the calculation of the standard deviation of the Indonesian and Malaysian Islamic stock markets are shown in the following table:

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>JII</td>
<td>0.0104</td>
<td>0.0142</td>
<td>0.0119</td>
<td>0.0072</td>
<td>0.0131</td>
<td>0.0100</td>
</tr>
<tr>
<td>FBMS</td>
<td>0.0058</td>
<td>0.0067</td>
<td>0.0048</td>
<td>0.0035</td>
<td>0.0078</td>
<td>0.0056</td>
</tr>
</tbody>
</table>


Table 2 above shows that overall in 2014-2019 the JII index had a higher standard deviation than FBMS, meaning that JII had a higher risk than FBMS.

Market Return Calculation

The daily market returns for the JCI and KLCI are shown in the table below:

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</tr>
</thead>
<tbody>
<tr>
<td>Rm</td>
<td>IHSG</td>
<td>0.0008</td>
<td>-0.00045</td>
<td>0.0006</td>
<td>0.0008</td>
<td>-0.0005</td>
<td>0.000009</td>
</tr>
<tr>
<td>Stadev</td>
<td>IHSG</td>
<td>0.0093</td>
<td>0.0109</td>
<td>0.0088</td>
<td>0.0053</td>
<td>0.0102</td>
<td>0.0071</td>
</tr>
<tr>
<td>Rm</td>
<td>KLCI</td>
<td>0.0002</td>
<td>-0.0001</td>
<td>-0.0001</td>
<td>0.0004</td>
<td>-0.0002</td>
<td>-0.0002</td>
</tr>
<tr>
<td>Stadev</td>
<td>KLCI</td>
<td>0.0079</td>
<td>0.0070</td>
<td>0.0053</td>
<td>0.0036</td>
<td>0.0069</td>
<td>0.0049</td>
</tr>
</tbody>
</table>

Source: www.investing.com data processed by the author, (2020)

Based on the calculation results in table 3, the JCI return for Indonesian Islamic stocks is higher than the average KLCI return on Malaysian Islamic stocks, this indicates that the Indonesian market return is better than the average Malaysian market return. However, seen from the standard deviation value, the return of Indonesian Islamic stocks is higher than that of Malaysia's stock, which means that the risk of deviation in the return value of Indonesian Islamic stocks is higher than Malaysia's. The high risk-free assets in Indonesian Islamic stocks compared to Malaysian Islamic stocks can be concluded that the influence of the stock market in Indonesia is smaller than the stock market in Malaysia.

Stock beta

The calculation of Beta shares of the Islamic stock market in Indonesia and Malaysia is shown in the table below:
Table 4. Stock Beta Calculation Results

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Indonesia</td>
<td>1.1963</td>
<td>1.2451</td>
<td>1.2737</td>
<td>1.2009</td>
<td>1.2084</td>
<td>1.2805</td>
</tr>
<tr>
<td>2</td>
<td>Malaysia</td>
<td>0.0693</td>
<td>0.9012</td>
<td>0.6979</td>
<td>0.7756</td>
<td>1.0280</td>
<td>1.0341</td>
</tr>
</tbody>
</table>

Based on the results of calculations in Table 4, the amount of beta obtained from the calculation that the Indonesian Islamic stock index (JII) is higher than the Malaysian Islamic stock index (FBMS), which means that the Indonesian stock index has a greater stock price sensitivity than the Malaysian stock index.

Normality test

Table 5. The Kolmogorov-Smirnov One-Sample Normality Test

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>6</td>
</tr>
<tr>
<td>Normal Parameters(^a)</td>
<td>Mean: 0.0000000</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation: 0.0000000</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute: 0.172</td>
</tr>
<tr>
<td></td>
<td>Positive: 0.172</td>
</tr>
<tr>
<td></td>
<td>Negative: -0.114</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>0.421</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.994</td>
</tr>
</tbody>
</table>

\(^a\) Test distribution is Normal.

Source: data processed by the author, (2020)

Based on these results, it can be concluded that the residuals of the JII and FBMS stock performance regression equations have a normal distribution. This is shown in the Asymp value. Sig (2 – tailed) 0.994 is greater than alpha 5% in each country for 2014-2019.

Difference Test

Table 6. Comparison Results of Each Performance with the Sharpe, Treynor and Jensen Methods in 2014-2019

<table>
<thead>
<tr>
<th></th>
<th>JII</th>
<th>FBMS</th>
<th></th>
<th>JII</th>
<th>FBMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Sharpe</td>
<td>-7.16819</td>
<td>-5.20665</td>
<td>Sharpe</td>
<td>-6.2761</td>
</tr>
<tr>
<td></td>
<td>Treynor</td>
<td>-0.06236</td>
<td>-0.43340</td>
<td>Treynor</td>
<td>-0.03763</td>
</tr>
<tr>
<td></td>
<td>Jensen</td>
<td>0.01436</td>
<td>-0.0279</td>
<td>Jensen</td>
<td>0.008626</td>
</tr>
<tr>
<td>Average</td>
<td>-2.4053</td>
<td>-1.8893</td>
<td>Average</td>
<td>-2.10170133</td>
<td>-2.87572</td>
</tr>
<tr>
<td>2015</td>
<td>JII</td>
<td>FBMS</td>
<td>2018</td>
<td>JII</td>
<td>FBMS</td>
</tr>
<tr>
<td>Sharpe</td>
<td>-5.3285</td>
<td>-0.47531</td>
<td>Sharpe</td>
<td>-3.9318</td>
<td>-4.24902</td>
</tr>
<tr>
<td>Treynor</td>
<td>-0.0607</td>
<td>-0.00356</td>
<td>Treynor</td>
<td>-0.04248</td>
<td>-0.03216</td>
</tr>
<tr>
<td>Jensen</td>
<td>0.018574</td>
<td>-9.0471E-05</td>
<td>Jensen</td>
<td>0.01035</td>
<td>0.000581</td>
</tr>
<tr>
<td>Average</td>
<td>-1.7902</td>
<td>-0.1596</td>
<td>Average</td>
<td>-1.32131</td>
<td>-1.42687</td>
</tr>
<tr>
<td>2016</td>
<td>JII</td>
<td>FBMS</td>
<td>2019</td>
<td>JII</td>
<td>FBMS</td>
</tr>
<tr>
<td>Sharpe</td>
<td>-4.9700</td>
<td>-6.31767</td>
<td>Sharpe</td>
<td>-5.5833</td>
<td>-5.43686</td>
</tr>
<tr>
<td>Treynor</td>
<td>-0.0466</td>
<td>-0.04881</td>
<td>Treynor</td>
<td>-0.0437</td>
<td>-0.0295</td>
</tr>
<tr>
<td>Jensen</td>
<td>0.015638</td>
<td>-0.00899</td>
<td>Jensen</td>
<td>0.01577</td>
<td>0.00147</td>
</tr>
<tr>
<td>Average</td>
<td>-1.66698733</td>
<td>-2.12516</td>
<td>Average</td>
<td>-1.87041</td>
<td>-1.82163</td>
</tr>
</tbody>
</table>

Source: Secondary data processed by researchers, 2020.

Based on the comparison of the performance of Sharia JII and FBMS stocks in 2014-2019, it can be concluded that the overall Sharpe and Treynor method shows a negative performance value, which means that the performance is not good, whereas if measured using the Jensen Indonesia
method shows a positive performance value means that the performance is good so that Indonesia has a better performance than Malaysia measured by the Jensen method. The results of the performance difference test for 2014-2019 are shown in Table 7.

**Table 7. Different Test Repeat Measure**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Pillai's Trace</th>
<th>Wilks' Lambda</th>
<th>Hotelling's Trace</th>
<th>Roy's Largest Root</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>.890</td>
<td>.110</td>
<td>8.111</td>
<td>8.111</td>
</tr>
<tr>
<td>F</td>
<td>40.553*</td>
<td>40.553*</td>
<td>2.000</td>
<td>2.000</td>
</tr>
<tr>
<td>Hypothesis df</td>
<td>2.000</td>
<td>2.000</td>
<td>2.000</td>
<td>2.000</td>
</tr>
<tr>
<td>Error df</td>
<td>10.000</td>
<td>10.000</td>
<td>10.000</td>
<td>10.000</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: Secondary data processed by researchers, 2020.

Based on the repeat measure difference test, it is known that for performance, the P-value is (0.000) < 0.05, then, there are differences in the performance of the two countries in 2014-2019 from each index (Sharpe, Treynor, and Jensen). The difference also shows a significant value because of the Hotellings' Trace Value (8.111) > Pillai's Trace (0.890).

**Table 8. Tests of Within-Subjects Contrasts**

<table>
<thead>
<tr>
<th>Source</th>
<th>KINERJA</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINERJA</td>
<td>Linear</td>
<td>168.175</td>
<td>1</td>
<td>168.175</td>
<td>87.108</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Quadratic</td>
<td>52.731</td>
<td>1</td>
<td>52.731</td>
<td>83.268</td>
<td>.000</td>
</tr>
<tr>
<td>Error(KINERJA)</td>
<td>Linear</td>
<td>21.237</td>
<td>11</td>
<td>1.931</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quadratic</td>
<td>6.966</td>
<td>11</td>
<td>.633</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Secondary data processed by researchers, 2020.

Based on the table, it is known that P-value (0.000) < 0.05, which indicates that there are differences in the performance of JII and FBMS shares during the study period. This means that in the Repeated Measure Test Anova sig < 0.05 then H0 is rejected and Ha is accepted, in other words there is a difference in the average stock performance of each country.

**Table 9. Multiple Comparisons**

<table>
<thead>
<tr>
<th>Tukey HSD</th>
<th>(I)</th>
<th>(J)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>JII</td>
<td>1</td>
<td>2</td>
<td>-5.4940*</td>
<td>.3697</td>
<td>.000</td>
<td>-6.5337</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>3</td>
<td>-5.5568*</td>
<td>.3697</td>
<td>.000</td>
<td>-6.5172</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>5.4940*</td>
<td>.3697</td>
<td>.000</td>
<td>4.5337</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1</td>
<td>-0.0627</td>
<td>.3697</td>
<td>.984</td>
<td>-1.0231</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>-0.0627</td>
<td>.3697</td>
<td>.984</td>
<td>-0.8975</td>
</tr>
<tr>
<td>FBMS</td>
<td>1</td>
<td>2</td>
<td>-4.9349*</td>
<td>.8907</td>
<td>.000</td>
<td>-7.2486</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>3</td>
<td>-5.0316</td>
<td>.8907</td>
<td>.000</td>
<td>-7.3453</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>4.9349</td>
<td>.8907</td>
<td>.000</td>
<td>2.2612</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1</td>
<td>-0.9673</td>
<td>.8907</td>
<td>.994</td>
<td>-2.4104</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2</td>
<td>5.0316</td>
<td>.8907</td>
<td>.000</td>
<td>2.7179</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.

Based on table 9, it can be concluded that the P-value of Indonesia (JII) and Malaysia (FBMS) is the same, which has a sig value of 0.00 < 0.05, then the stock performance has insignificant differences.
Implication and Conclusion

After analyzing the results of the research described in the previous chapter, the following conclusions can be drawn: (1) The performance of Islamic shares of JII and FBMS in 2014-2019 can be concluded as a whole for the Sharpe and Treynor method shows a negative performance value, which means the performance is not good, whereas if measured using the Jensen method, Indonesia shows a positive performance value, which means that the performance is good so that Indonesia has a better performance than Malaysia measured by the Jensen method, (2) Based on the results of different tests, there are differences in the performance of the two countries in 2014-2019 from each index (Sharpe, Treynor, and Jensen).

The policy implications that can be taken from the results show that the performance of JII shares is better than FBMS shares. Differences in the screening process for each country have an impact on financial performance for each category of Islamic stocks. The sharia criteria for the quantitative screening (selection) process for Islamic stocks in Malaysia are looser than the screening (selection) for Islamic stocks in Indonesia. And the share of sharia in Malaysia is more than the share of sharia in Indonesia.

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