ISLAMIC STOCKS INDEX PERFORMANCE: COMPARATIVE STUDIES BETWEEN INDONESIA AND MALAYSIA

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Abstract.
The aim of this research is to compare the Islamic stocks index performance between Malaysia and Indonesia using Sharpe method, Treynor method, and Jensen method. The result show that the Islamic stocks index performance in Indonesia—measured by Jakarta Islamic Index—is better than Malaysia if using Treynor and Jensen methods. Otherwise, using the Sharpe method show that Islamic stock index in Malaysia is better than Islamic stocks index in Indonesia. The implication from this result is the investor with enough funds recommended to invest in Indonesia, but the small investor can do the investment to Islamic stocks index in Malaysia.

Keywords: Islamic Stocks Index; Sharpe Method; Treynor Method; Jensen Method

Abstrak.

Kata Kunci: Indeks Saham Syariah; Metode Sharpe; Metode Treynor; Metode Jensen

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INTRODUCTION

Indonesia and Malaysia are two countries in the Southeast Asian region including in the top 10 countries with the highest Islamic Finance Country Index value in 2105. This showed that the development of Islamic finance industry in Indonesia and Malaysia is still in the top compared to other countries. It is known that the development of the Islamic finance industry in each country has a different character and pattern. Likewise, between Indonesia and Malaysia have different character and the pattern of development of the Islamic financial industry. For instance, in the case of developing sharia economy if in Indonesia patterned a bottom up while Malaysia patterned top to down. The spirit of Islamic economic development in Indonesia comes from undertow, but in Malaysia the government to provide a very large contribution. This possibility will lead any differences in the policy applied to the Islamic finance industry development.

One part of the Islamic finance industry is the Islamic capital market, which certainly cannot be separated from government policy as a regulator. The development and characters that exist in the Islamic capital market in Indonesia also have different possibilities to the one in Malaysia. In Indonesia, the shares belonging to the Indonesia Sharia Stock Index (ISSI), the filtering process carried out by the Islamic Nationalism Indonesia Ulama Council (DSN-MUI). In Malaysia, while the list of Sharia stocks incorporated in the FTSE Bursa Malaysia EMAS Sharia Index (FBMS), the selection determined by the Sharia Advisory Council (SAC). Both DSN-MUI and SAC impose certain criteria on the financial statements of companies which will enter the sharia index. Currently, there are international standards for Sharia stock screening process. Each sharia stock index using different standards based on the provisions of Sharia council. In Indonesia, the regulation of stocks included in the list of Sharia securities was regulated by the Financial Services Authority (FSA) with DSN-MUI fatwa consideration. In Malaysia, there are some specific criteria that are used by the Sharia Advisory Council (SAC) under the Malaysia Securities Commission (MSC) supervision.

In order to provide the variety of choices, a comparative study on the shares performance amongst different stock exchanges need to be developed. In that regard, in 2003, the Islamic Capital Market Task Force of the International Organization of Securities Commissions recorded Malaysia as one of the country that
has sharia stock capitalization higher than Indonesia. The report was then supported by the research team Indonesia Sharia Investment Study in 2004 that concluded the same thing. Another report that also supports the IOSCO is the information released from the second site stock exchanges of the country.

Research conducted by the Capital Market Supervisory Agency study (BAPEPAM) in 2004 regarding the study of Islamic Capital Market in Indonesia showed that the performance of Sharia stocks in Malaysia was better than the Sharia stocks performance in Indonesia. This study is also consistent with research that conducted by the Dewi and Ferdian in 2008. It showed that the performance of Sharia mutual fund in Malaysia was better than Sharia mutual fund performance in Indonesia (Dewi and Mardian, 2012).

Based on the above results, the performance of Sharia Malaysia stocks can be said to be better than the Sharia stock performance in Indonesia. However, in 2013, the development of Sharia stocks in Malaysia has declined, while in Indonesia has increased. The existence of Sharia capital market in Indonesia since 1997 with the Sharia Mutual Fund that issued by PT. Danareksa Investment Management has increased quite well by Sharia index i.e. Jakarta Islamic Index and Indonesia Sharia Stock Index. However, many studies show that the Indonesia Sharia stock performance turned out to be not better than Islamic stocks in other countries, especially Malaysia. It required a new regulation that supported the Sharia investment development in Indonesia capital market.

The number of Indonesia Sharia shares is still less compared to Malaysia, but when seen from the growth occurs the condition is reversed. The number of Sharia Share on Bursa Malaysia decreased in 2013 compared to 2012. Otherwise in Indonesia, it has increased the number of Sharia shares. Likewise, when it is seen from the capitalization of Indonesia market share, in 2013, the Sharia stocks market share on Bursa Malaysia declined compared to 2012 however it has increased in Indonesia.

From the above description, this study wanted to further probe about the comparative performance of the sharia stock portfolio between Indonesia and Malaysia. One method used to measure the performance of the stock portfolio using Sharpe, Treynor, and Jensen method. Thus, it can be seen that comparing the stock
performance of JII with FBMS stock based on the index so that investors in making investment decisions can use the information.

Research conducted by Rofiq (2008) resulted that the financial characteristics which measured from the current ratio (CR), Return on Equity (ROE), Debt to Equity Ratio (DER) and Price Earning Ratio (PER) of Sharia stocks in Indonesia and Malaysia are not significantly different, except in DER and PER. Market performance that was measured from Sharpe's index did not differ, while GARCH Sharia stocks in Indonesia was higher than in Malaysia.

Research conducted by Miranti and Ilham (2008) by comparing the Sharia mutual fund performance between Indonesia and Malaysia. The approach that was used to measure the Islamic mutual fund performance was Sharpe index, Treynor index, Jensen index, Snail Trail and Market Timing. The results showed that Malaysia Sharia mutual fund was superior to Islamic mutual funds in Indonesia. This phenomenon was due to the fact that the Islamic capital market in Malaysia, which more established compared to capital markets in Indonesia. Although Sharia market in Indonesia is still new, it does not mean that the Indonesia Sharia capital market cannot develop as the Sharia capital market in Malaysia.

Mustika (2012) conducted a study by comparing the Sharia stock performance based on Sharia stock screening prevailing in Indonesia, Malaysia and both combination. The results that are obtained Sharia share using Sharia stock screening has been able to generate the highest return compared to the use of Indonesia and Malaysia Sharia stock screening. From the three share groups, Malaysia Sharia stock screening is a group of stocks that generate the best level of M2.

Research that was conducted by Hermaniar (2013) found that the growth of GDP, inflation, interest rates, and exchange rates tested did not have a significant effect on the Sharia stock price volatility in Indonesia. However, Sharia share price volatility in Malaysia had a positive and significant influenced by interest rates and exchange rates. The difference is caused by each country dissimilar economic conditions, as well as the level of JII sharia stock price volatility tends to be low and stable while the level of FBMS sharia stock price volatility was very high.

Results of some studies that have been described above, all of which produce the same conclusion i.e. the Islamic stocks performance in Malaysia was better than
Indonesia Sharia stocks. However, the number of Sharia stocks on Bursa Malaysia declined in 2013 whereas the number of Sharia shares in Indonesia has steadily increased. The Sharia stock market on Bursa Malaysia has decreased compared to 2012 however in Indonesia, it has increased. In fact, the Sharia stock market capitalization in 2013, between Bursa Malaysia and Indonesia Stock Exchange was relatively the same.

**METHOD**

The data used in this study was obtained from Bloomberg database and Yahoo Finance. In this research, the type of data used in the form of secondary data i.e. Jakarta Islamic Index (JII) and Malaysia Sharia Stock Index (FBMS). The observation period was from January 2012 to December 2014. The data used in this study were:

a. JII and FBMS closing price;
b. IHSG and KLCI daily closing price; and
c. Equivalent Rate of Bank Indonesia Certificates Sharia (SBIS) Profit Sharing Rate and Bank Negara Malaysia Overnight Policy Rate, which is used as a risk free rate.

Reward to Variability (Sharpe Method)

The performance is calculated by dividing the excess return and portfolio variability return. Gauge portfolio performance is called the Sharpe Measure or also called by the name of reward to variability (RVAL) introduced by William F. Sharpe in 1996 as follows:

$$RVAR = \frac{TR_p - R_{BR}}{\sigma_p}$$

Notation:

- **RVAR**: Reward to variability or Sharpe measure
- **$TR_p$**: Average total return of portfolio in a certain period
- **$R_{BR}$**: Average return of risk-free assets in a certain period
- **$\sigma_p$**: Variability that is measured by the standard deviation of portfolio return with a certain period
- **$TR_p - R_{BR}$**: Excess return of portfolio
Sharpe method or RVAR actually measures the slope or angle of the portfolio that is drawn from the point of risk-free return. The best Portfolio is a portfolio that has the greatest angle.

**Reward to Volatility (Treynor Method)**

Dividing excess return and volatility of the portfolio does portfolio performance that is calculated by this measure. Measurement of portfolio performance is called the Treynor method or also called by the name of reward to volatility (RVOL) that was introduced by Jack L. Treynor in 1966.

\[
RVOL = \frac{\overline{TR_p} - \overline{R_{BR}}}{\beta_p}
\]

- **RVOL**: Reward to volatility or Treynor method
- **\(\overline{TR_p}\)**: Average total return of portfolio in a certain period
- **\(\overline{R_{BR}}\)**: Average return of risk-free assets in a certain period.
- **\(\beta_p\)**: Volatility that is measured by beta portfolio certain period
- **\(\overline{TR_p} - \overline{R_{BR}}\)**: Excess return) portfolio

RVOL value indicates the performance of the portfolio. The larger of RVOL value, the better its portfolio. Treynor split over the portfolio return (reward) with portfolio beta. Treynor argued that a portfolio that is formed should be the optimal portfolio, then the unique risks (unsystematic risk) can be omitted and the systematic risk still remains that is measured by beta. Value of \(\beta_p\) for each mutual fund returns are calculated by regressing \((\overline{TR_p})\) as a dependent variable with the market return \((\overline{R_m})\) as an independent variable. Value of \(\beta_p\) can be also calculated as the average weight securities value of \(\beta\) that make up the portfolio.

**Jensen's Alpha**

If considered, Sharpe method (RVAL) and Treynor method (RVOL) actually measure the angle of portfolio. The greater portfolio slope or angles the better portfolio performance. Michael C. Jensen knows intercept measurement in 1968. This measurement is called by the name of Jensen's alpha developed from the CAPM. CAPM equation for the portfolio was as follows:
\[ E(R_p) = R_{BR} + \beta_p (E(R_m) - R_{BR}) \]

While it is used for measuring the historical performance of a portfolio, then the expected value in CAPM equation and the value of \( R_{BR} \) is replaced by the value of the historical average as follows:

\[ TR_p = \overline{R_{BR}} + \beta_p (\overline{R_M} - \overline{R_{BR}}) \]

Jensen estimator (Jensen’s alpha) or also called by the name of measuring return differential by Jensen (Jensen’s differential return measurement) is the difference between the average return portfolio with a value according to the CAPM as follows:

\[ \alpha_p = \overline{TR_p} - [\overline{R_{BR}} + \beta_p (\overline{R_M} - \overline{R_{BR}})] \]

Or can also be written as follows:

\[ \alpha_p = \overline{TR_p} - \overline{R_{BR}} - \beta_p (\overline{R_M} - \overline{R_{BR}}) \]

And then be written:

\[ \alpha_p = \overline{TR_p} - \overline{R_{BR}} - \beta_p (\overline{R_M} - \overline{R_{BR}}) \]

Notation:

- \( \alpha_p \) : Jensen’s alpha
- \( \overline{TR_p} \) : Average portfolio return certain period
- \( \overline{R_{BR}} \) : Average risk-free asset return certain period
- \( \overline{R_M} \) : Average return certain period
- \( \overline{TR_p} - \overline{R_{BR}} \) : Average premium portfolio risk
- \( \overline{R_M} - \overline{R_{BR}} \) : Average premium market risk (market risk premium) Jensen’s alpha for the three portfolios

From the regression intercept results (alpha); it can be used as a basis for measuring the superiority or inferiority of portfolio. If the alpha (\( \alpha_p \)) is positive, then the portfolio performance is superior to the market. If the alpha (\( \alpha_p \)) is negative, then
the portfolio performance is inferior to the market. If the alpha ($\alpha_p$) is zero, then the portfolio performance is equal to the market performance.

Analysis of stock performance using the method of Sharpe, Treynor, and Jensen is necessary to study due to the portfolio management of both individual investors and investment manager will perform several stages. The final stage is very important that an evaluation of the portfolio performance that had been developed previously.

Sharpe, Treynor and Jensen method can be used in the investments selection by looking at the ongoing market conditions. All three models base on its analysis on the return of the past to predict risk and return in the future. Sharpe insists on a total risk (standard deviation), Treynor regards to market fluctuations that play an important role in influencing the return (beta), while Jensen's own emphasis on alpha. So, three of these methods have its own characteristics.

**DISCUSSION**

Measurement using the Sharpe method is also referred as Reward to Variability Ratio (RVAR) that emphasizes the total risk or standard deviation. Standard deviation indicates that the size of the change a return share on average stocks concerned. To predict the future performance, it used past data. Return on average in the past was considered as a prediction of future returns and standard deviation of past returns is considered to be predictive of future risk. Treynor method or commonly referred as Reward to Volatility Ratio (RVOR) uses the return on the past average as the expected return and beta as a measure of risk. Beta indicates the size of the change return a stock portfolio to changes in market returns. As a measure of investment risk is generally used beta for stock price fluctuations influenced by market fluctuations.

Jensen method measures based on CAPM, where the SML line wills that was established connect to portfolio return market ($R_m$) with a risk-free investment opportunity ($R_f$). Here, the slope of the SML expressed as $\{E(R_m)-R_f\} / \beta_p$ and the intercept is $R_f$ whilst the market beta ($\beta_p$) is one, in a state of equilibrium, all portfolios are expected to be in SML line. If there is a deviation (at the same level of risk) of a portfolio return will be different than the return on the SML. This difference is called the differential return obtained from abnormal return its value, which is the difference between the actual return that is greater than the
expected return of his. Differential return is said to be positive if the actual return is greater than the expected return of a portfolio. Conversely, said to be negative when the actual return value is smaller than of his expected return. In the mutual fund portfolio performance measurement, portfolio differential positive returns and the largest of the differential return of portfolio else will have better performance.

**Table 1. Indonesia Sharia Stock Performance Measurement Result**

<table>
<thead>
<tr>
<th>Sharia Stock</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>JII average return</td>
<td>0.000425</td>
</tr>
<tr>
<td>IHSG average return</td>
<td>0.000486</td>
</tr>
<tr>
<td>SBIS average return</td>
<td>0.000117</td>
</tr>
<tr>
<td>JII beta</td>
<td>0.214324</td>
</tr>
<tr>
<td>Deviation Standard</td>
<td>0.010488</td>
</tr>
</tbody>
</table>

Table 1 shows the period between January 2012 and December 2014 that obtained an average return of Indonesia Sharia portfolio stock amounted to 0.000425, while the average return of the market amounted to 0.000486 and the average return of assets free of risk amounted to 0.000117 with a beta of 0.214324 and a deviation standard of 0.010488.

**Table 2. Malaysia Sharia Stock Performance Measurement Result**

<table>
<thead>
<tr>
<th>Sharia Stock</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBMS average return</td>
<td>0.000290</td>
</tr>
<tr>
<td>KLCI average return</td>
<td>0.000238</td>
</tr>
<tr>
<td>OPR average return</td>
<td>0.001009</td>
</tr>
<tr>
<td>FBMS beta</td>
<td>1.014715</td>
</tr>
<tr>
<td>Deviation Standard</td>
<td>0.005584</td>
</tr>
</tbody>
</table>

Table 2 shows in the same period that Malaysia share have an average return of 0.000290, while the average return of the market amounted to 0.000238 and the average return of assets free of risk amounted to 0.001009 with a beta of 1.014715 and a deviation standard of 0.005584.
Table 3. The Comparison between Indonesia and Malaysia Sharia Stock

<table>
<thead>
<tr>
<th></th>
<th>Indonesia</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>JII average return</td>
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<td>Deviation Standard</td>
<td>0.010488</td>
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</tr>
</tbody>
</table>

Based on the results in Table 3, JII average return, IHGS average return, SBIS average return, beta and deviation standard showed that the comparison as follows i.e. the JII return is higher than the FBMS average. This indicates that the return of investment of Indonesia Sharia stock is better than Malaysia Sharia stock. The average return for Indonesia Sharia IHSG stock is higher than the average return on Malaysia Sharia KLCI stock. This shows that the average market return in Indonesia is better than the average return in Malaysia market. However, from the deviation standard value, Indonesia Sharia stock return is higher than Malaysia stock returns. This means that the risk of deviation value of Indonesia Sharia stock returns Indonesia is higher than Malaysia.

The average return of risk-free asset in Malaysia is higher than Indonesia, and the amount of beta obtained from the calculation on the Malaysia Sharia stocks compared to Indonesia Sharia stock can be concluded that the influence of the stock market in Indonesia is less than the stock market in Malaysia.

Table 4. Indonesia Sharia Stock Performance

<table>
<thead>
<tr>
<th></th>
<th>Sharpe</th>
<th>Treynor</th>
<th>Jensen</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.025308</td>
<td>0.001239</td>
<td>0.000195</td>
</tr>
</tbody>
</table>

Based on Table 4, it can be explained that on Indonesia Sharia stock portfolio performance measurement in three ways i.e. Sharpe, Treynor, and Jensen. Sharpe measurement the performance of Indonesia Islamic stock portfolio values obtained 0.025308, while Indonesia Sharia portfolio stock performance Treynor measurement gained 0.001239 and for Jensen measurement, Indonesia Sharia stock portfolio stock performance Islamic stocks gained 0.000195.
Based on Table 5, the measurement of Malaysia Sharia stock portfolio performance is done through three methods. These are the same as in the measurement of the Indonesia Sharia stock portfolio performance, a score that is on the Sharpe measurement method obtained 0.037139, on the Treynor measurement method obtained 0.0002043, and Jensen method resulted 0.0002096.

Table 6 shows that from January 2012 to December 2014, the Sharpe index value of Indonesia Islamic stock (JII) was 0.025308 while the Sharpe index value of Malaysia Sharia Islamic stock (FBMS) amounted to 0.037139. In other words, the Sharpe index value of Malaysia Sharia stock (FBMS) is greater than the Sharpe index value of Indonesia Sharia stock. In general, the greater the value of the Sharpe index performance / RVAR, the better portfolio performance of the stock.

<table>
<thead>
<tr>
<th>Method</th>
<th>Indonesia (JII)</th>
<th>Malaysia (FBMS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharpe</td>
<td>0.025308</td>
<td>0.037139</td>
</tr>
<tr>
<td>Treynor</td>
<td>0.001239</td>
<td>0.000204</td>
</tr>
<tr>
<td>Jensen</td>
<td>0.000195</td>
<td>0.000049</td>
</tr>
</tbody>
</table>

Treynor index of Indonesia sharia stock (JII) amounted to 0.001239, while the Malaysia Sharia stock (FBMS) resulted 0.000204. In other words, Indonesia sharia stock (JII) is greater than Malaysia sharia stock (FBMS). If the value RVOL / Treynor is positive and bigger, the performance of the stock portfolio is better.

The Jensen index on Indonesia Sharia stock (JII) resulted 0.0000195, while the Malaysia Islamic stock (FBMS) amounted 0.000049. Thus, we can conclude that Indonesia sharia stock index (JII) is greater than the Malaysia sharia stock (FBMS). On the other hand, stocks that have the highest Jensen’s alpha and significant are the stock with the best portfolio. Alpha is positive, it is said that the financial managers produce better performance than the SML line, while a negative value indicated that alpha's financial managers have a poor performance or lower than the SML.
Based on the results of Indonesia sharia stock (JII) and Malaysia Sharia stocks (FBMS) performance measurement from January 2012 to December 2014, it is seen from Treynor and Jensen index, Indonesia sharia stock performance is better than the Malaysia sharia stock. However, if it is seen from the Sharpe index, Malaysia sharia stock performance is better than Indonesia sharia stock performance.

The result on this study indicates that the market risk, Indonesia sharia stock (JII) performance is better than the Malaysia Sharia stocks (FBMS) performance. However, based on calculations which did not take into consideration of market risk, the Malaysia Sharia stocks (FBMS) performance is better than the Indonesia sharia stock (JII) performance.

This result differs from previous research that was conducted by Rofq, Miranti and Ilham, also Mustika and Hermaniar. The difference can occur because the sharia capital market conditions during the observation period dissimilar to the previous studies. Sharia number of shares on Bursa Malaysia declined in 2013, and in contrary to in Indonesia steadily increased the number of sharia shares. The sharia stock market on Bursa Malaysia decreased compared to 2012, but in Indonesia it increased. In fact, the sharia stock market capitalization in 2013 between Bursa Malaysia and Indonesia Stock Exchange was relatively the same.

CONCLUSION

The test that was conducted using Sharpe Index shows that sharia stock FBMS performance has higher value than JII stock. It can be concluded that FBMS stock portfolio has more performance than JII portfolio performance. The test was carried out using Treynor Index indicates that JII shares has a higher value than FBMS, so it can be concluded that the portfolio of JII has more performance than FBMS portfolio performance. Jensen Index indicates that the JII stocks have a higher value than FBMS stocks, so it can be concluded that the JII shares have a better performance than the performance of FBMS stock portfolios. Taking into account the market risk, Indonesia sharia stock (JII) performance shows better performance than Malaysia sharia stock. However, without considering market risk, Malaysia sharia stock performance is better than Indonesia sharia stock performance.
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