

# Comparison of the Optimal Portfolio Performance of Islamic Stock Issuers in Malaysia and Indonesia

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**Abstract:** Two countries have the best Islamic finance and the largest Islamic capital market, namely Malaysia and Indonesia, in the Southeast Asia region. Due to differences in each country in determining the criteria for Islamic stocks, the performance produced by the capital markets of the two countries is also different. The benchmark Islamic stock in Indonesia is the Jakarta Islamic Index, and the DSN-MUI carries out the screening process. Meanwhile, in Malaysia, it is called the FTSE Bursa Malaysia Hijrah Shariah Index, whose selection is determined by the Shariah Advisory Council (SAC) and Yassar Ltd. The purpose of this study to find out a better rate of return and risk between FTSE BM Hijrah Shariah Index and Jakarta Islamic Index by using the Single Index Model and comparing the optimal portfolio performance of the FTSE BM Hijrah Shariah Index and JII issuer's shares by using the Sharpe Index, Treynor Index, and Jensen's Alpha Index. All research results were calculated with formulas and the help of Microsoft Excel. The research object used is the issuer's Islamic stocks. It consistently includes in the FTSE BM Hijrah Shariah Index and the Jakarta Islamic Index in the period January 2013 to December 2017 which is 10 Islamic stocks issuer of FTSE BM Hijrah Shariah Index and 14 Islamic stocks issuer of Jakarta Islamic Index. The results of this study indicate that the optimal portfolio of return and risk of the FTSE BM Hijrah Shariah Index is smaller than the Jakarta Islamic Index. The optimal portfolio performance of the FTSE BM Hijrah Shariah Index from the calculation of the Sharpe index and the Treynor index is more excellent than JII but from the results of the Jensen's alpha index calculation is smaller than JII. It shows that Malaysia's optimal portfolio performance is better than Indonesia based on the calculation of two methods of three methods.

**Keywords:** Malaysia, Indonesia, Sharia, Optimal Portfolio, Single Index Model, Performance

## 1. Introduction

According to the Indonesia Capital Market Law No. 8 of 1995 the capital market is an activity related to Public Offerings and Securities Trading, public companies related to securities issued, as well as institutions and professions related to securities. Securities are securities in the form of stocks, bonds, and other evidence. Investing in the capital market is very risky because there is a trade-off between risk and return. The higher profit has the higher risk also. Of course, what investors want is to get a profit from the transactions. It is for these purposes that a method is needed which can be used to select a good stock portfolio. The increasing number of companies that become issuers in the capital market will lead to various stock combinations that investors can choose from a portfolio

In Southeast Asia, there are two countries with the largest Islamic finance industry, it is Indonesia and Malaysia. This is because the two countries have a majority Muslim population which of course requires an investment place that is by sharia. Islam does not allow its adherents to partner with companies engaged in non-halal sectors. This situation encourages the emergence of the Islamic capital market in Indonesia. Malaysia and Indonesia have differences in determining the criteria for Islamic stocks, so the performance produced by the capital market in the two countries is different. In Indonesia, there is a stock price index consisting of 30 Islamic shares of a company called the Jakarta Islamic Index. The National Sharia Council-Indonesian Ulama Council carries out the screening process.

Meanwhile, in Malaysia, the stock price index is called the FTSE Bursa Malaysia Hijrah Shariah Index, the selection is

determined by the Shariah Advisory Council (SAC). DSN-MUI and SAC and DSN-MUI apply specific criteria to the financial statements of companies that will include in the FTSE BM Hijrah Shariah Index and the Jakarta Islamic Index. For Malaysia, there are several specific criteria used by the Shari'ah Advisory Council under the supervision of the Malaysian Securities Commission (MSC). Meanwhile, the regulations on shares that include in the list of sharia securities or what is often called DES. It is regulated by the Financial Services Authority (OJK).

**Table 1:** Development of Total of Sharia Shares in Malaysia

Year	Total Sharia Shares in Malaysia
2013	653
2014	673
2015	667
2016	672
2017	686

Source: [www.sc.com.my/data-stitics/islamic-capital-market](http://www.sc.com.my/data-stitics/islamic-capital-market)

**Table 2:** Total and Capitalization of Sharia Shares in Indonesia

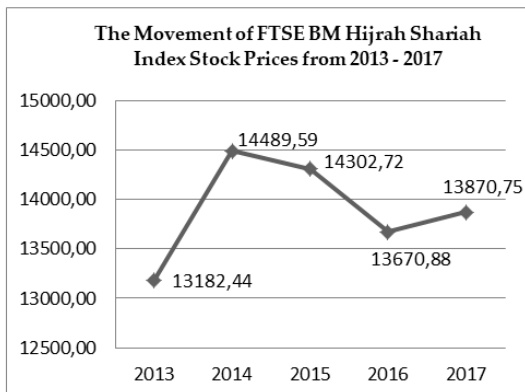
Year	Semester	Total Shares	Capitalization (Rp Million)
2013	1	653	1.672
	2		
2014	1	673	1.944
	2		
2015	1	667	1.732
	2		
2016	1	672	2.041
	2		
2017	1	686	2.288
	2		

Source: Directorate of Sharia Capital Market, Financial Services Authority

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**Image 1:** The Movement of FTSE BM Hijrah Shariah Index Stock Prices

Source: *investing.com*



**Image 2:** The Movement of Jakarta Islamic Index Stock Prices

Source: *investing.com*

Based on the data, despite the fluctuation of the FTSE BM Hijrah Shariah Index and Jakarta Islamic Index stock price movements and differences in the trend of the number of Islamic stocks in Indonesia and Malaysia. The two countries still have the best Islamic financial industry and capital market performance in Southeast Asia because the majority of the population of Malaysia and Indonesia is Muslim. With this phenomenon, it is necessary to develop a comparative study of stock performance between two different stock exchanges. Rafiq's research (2008) the performance of Islamic stocks in Malaysia is better than the performance of Islamic stocks in Indonesia. Miranti and Ilham (2012) Malaysia's capital market is superior to the Indonesian capital market. Liyanasari (2014) is a significant difference between the optimal portfolio performance of Indonesian Islamic stocks and Malaysian Islamic stocks. And the results of the performance of Indonesian Islamic stocks are lower than in Malaysia. This phenomenon is because the Islamic capital market in Malaysia is more established than the existing capital markets in Indonesia. Then, research by Maulana (2013), SBI has a significant negative effect on JII Islamic stock performance. SBI interest rates decreased throughout the period 2009 to the end of 2012, of course, had a positive impact on the Islamic stock industry. Akbar (2005), SBI did not have a significant effect on the performance of JII Islamic stocks. Other macro variables such as inflation because it becomes a pressure which is caused by interference from the pe side demand or offer. Then, research by Prihantini (2009), the inflation variable has a significant negative effect on stock returns. Akbar (2005) that inflation does not affect stock returns

because practitioners can still overcome the increase that occurs.

Investors consider two things to invest in a stock, namely, return and risk. So, it takes strategy and investment decisions to get optimal benefits. Investors tend to invest in several types of stocks, not just one stock. So it is necessary to form a portfolio because it discusses how to allocate investment to get high returns but small risks. Trillions of portfolios can be formed, but only one portfolio is best called: the optimal portfolio. The Single Index Model is a simplification model of the Markowitz model, which is very complex to form an optimal portfolio. Besides, the Single Index Model also considers aspects of the market and aspects of the uniqueness of the company. Therefore, the authors in this study use the Single Index Model to determine the optimal portfolio. In order to measure optimal portfolio performance, there are three methods used, namely, Sharpe Index, Treynor Index, Jensen's Alpha Index.

### Research Purposes

- 1) To find out a better rate of return and risk between FTSE BM Hijrah Shariah Index and Jakarta Islamic Index by using the Single Index Model.
- 2) To compare the optimal portfolio performance of the FTSE BM Hijrah Shariah Index and Jakarta Islamic Index issuer's shares by using the Sharpe Index, Treynor Index, and Jensen's Alpha Index.

## 2. Theoretical Review

### Investation

According to Downes and Goodman (2003) in Sinaga (2014), investment is a financial investment. It is an investor invests money in the form of a business within a specific time from everyone who wants to get a profit from the success of his work. The form of investment that investors are interested in is mostly in the form of stock investment through the stock exchange, preferring companies that go public. The increasing number of companies that become issuers in the capital market will lead to a combination of stocks that investors can choose to invest in the portfolio capital market. In general, investors do not invest all of their funds in one type of stock, but they diversify stocks which aim to reduce the risk borne due to the funds invested.

### Sharia Shares

Sharia shares are proof of ownership of an issuer that complies with sharia principles. Sharia principles for shares are "*musyarakah*" if shares are offered on a limited basis "*mudharabah*". If shares are offered on a limited basis, there should be no differences in the types of shares. It is because all parties must bear the risk, all profits will be shared, and if the loss occurs, the loss will be divided if the company is liquidated, investment in shares cannot be redeemed except after liquidation (Mannan, 2009). The basic principle of investing in sharia stocks is to avoid usury (written in Surah Al Baqarah verses 275-279, avoid "gharar", avoid "maysir" (written in the Al-Quran surah Al Maidah verses 90 - 91).

### FTSE Bursa Malaysia Hijrah Shariah Index

The essential Islamic investment products that meet the screening requirements of international Islamic investors is

a crucial stage. Securities that are included in the index are screened by the Malaysian Shariah Advisory Council (SAC) and the leading global Sharia consultant, Yasaar Ltd, with clear guidelines (FTSE, 2012). SAC criteria include, if investors are not involved in any financial service activities based on usury (interest), gambling, industry or sales of non-halal products, and become a broker or trade-in non-Islamic shares. YasaarLtd's screening criteria (Shofiyullah, 2014) are prohibited from conventional finance, alcohol, pork-related products, and non-halal food production, casinos, gambling, cinema, music, pornography, and hotels. An amount of debt is less than 33% of the total assets, as well as cash and items that have an interest of less than 33% of total assets, receivables and cash less than 50% of total assets, total interest and income from non-sharia activities, should not exceed 5 %.

### Jakarta Islamic Index

The index of 30 issuers that are included in the sharia criteria (List of Sharia Securities) is published by Bapepam-LK and includes large-cap stocks and high liquidity (Shofiyullah, 2014). Islamic investment criteria for DSN MUI:

- Gambling is prohibited
- Conventional/usury financial institutions are prohibited
- Illegal food and beverage business are prohibited
- Prohibited to do the business of goods/services which destroy morals and are harmful
- Obtain financing funds or sources of funds from debt not more than 30 percent of the capital ratio
- Interest earned by the company is not more than 15 %
- Total trade receivables or total receivables of not more than 50 %

Requirements for the issuer to enter the Jakarta Islamic Index stock component:

- The primary type of business that is not against the principles of sharia law and has been recorded for more than three months
- Has a maximum liability for assets of 90 per cent
- Sixty shares from the above list are based on the order of the largest market capitalization in the past year.
- Thirty shares in order based on the level of liquidity – the average trading value during the last year.

### Investment Decision Basis

#### Return

Return is one of the factors that motivates investors to interact and is also a reward for the courage of the investor in taking the risk of the investment they do (Tandelilin, 2001). There are two types of returns, namely:

- a) Return Realization / actual return / return that has occurred. Returns that have occurred are calculated using historical data. Realized return = Capital gain (loss) + Yield. Formula :

$$Ri = \frac{P_t - (P_{t-1})}{(P_{t-1})} + Dt$$

- b) Expected return: investors expect the return in the future on their investment. Mean Method. Formula :

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

### Risk

Ricky W. Griffin, et al. (2006) in Sinaga (2014) uncertainty about future events mentioned that "High risk brings about high return" which means a situation faced by a person or company where there is a possibility of harm. The higher value of deviation standard is the higher the risk. Standard deviation ( $\sigma$ ), variance ( $\sigma^2$ ). (Hartono, 2014)

$$\sigma^2 = \frac{\sum_{i=1}^n ((Ri - E(Ri))^2)}{n}$$

$$\sigma = \sqrt{\frac{\sum_{i=1}^n ((Ri - E(Ri))^2)}{n}}$$

### Single Index Model

The Markowitz method portfolio calculation is complicated because there are many variance and covariance (Mean-Variance Model), which is then developed under the name Index Model. Then the model, developed by William F. Sharpe, namely the Single Index Model (the return of each stock has a linear relationship to market returns) uses a simple number and type of input data to form a portfolio analysis and uses a simple and easy calculation procedure to form an optimal portfolio. Following are the stages of forming an optimal portfolio:

- Calculated excess return to Beta (ERBi) to rank a stock. The ranking based on the ERBi ratio is ordered from highest to lowest.
- Determine the *Cut-Off Rate* ( $C^*$ ) to separate the stocks that will enter and those that will exit the optimal portfolio. How to determine  $C^*$  is the highest  $C_i$  value of each of these shares.
- Determine the optimal portfolio optimal proportion
- Portfolio rate of return formula :  $E(R_p) = \alpha_p + \beta_p \cdot E(R_m)$
- Portfolio variance formula :  $\sigma_p^2 = \beta_p^2 \cdot \sigma_m^2 + \sum Wi^2 \sigma e_i^2$  if it is rooted, it will get the standard deviation of the portfolio as a result of optimal portfolio risk.

### Optimal Portfolio Performance

There are three methods used to assess portfolio performance, namely: (Halim, 2005)

#### a) Sharpe Index

Based on the excess return on risk or what is known as the reward-to-volatility ratio. Excess return is obtained from the difference or difference between the average rate of return for the risk-free investment period. In Sharpe, portfolio investment is an investment in individual shares, and risk-free investment is assumed to be the average interest rate of Bank Indonesia Certificates (SBI) while the standard deviation of the portfolio used is the total risk value that combines the risk that can be diversified (unsystematic risk.) and risk that cannot be diversified (systematic risk)

$$Si = \frac{E(R_p) - R_f}{\sigma_p}$$

Information :

$Si$  : Sharpe Index

$E(R_p)$  : optimal portfolio expected return

$E(R_p) - R_f$  : optimal portfolio risk premium

$R_f$  : risk-free  
 $\sigma_p$  : optimal portfolio risk

The greater the ratio of the portfolio risk premium to the standard deviation, it can be said that the portfolio performance is getting better.

### b) Treynor Index

In this method, portfolio performance is measured by comparing the portfolio risk premium (i.e. the difference between the average rate of return of the portfolio and the average risk-free asset level) with the portfolio risk expressed in Beta (market risk or systematic risk). The use of Beta as a measure of portfolio risk implicitly reflects that the existing portfolio is well-diversified. The standard of measurement using the Treynor's measure is that the higher the Treynor Ratio, the better the portfolio performance. Mathematically the Treynor index is formulated:

$$T_i = \frac{E(R_p) - R_f}{\beta_p}$$

Information :

$T_i$ : Treynor Index

$E(R_p)$ : optimal portfolio expected return

$R_f$ : risk-free

$\beta_p$ : beta portfolio

$E(R_m)$ : market expected return.

### c) Jensen's Alpha Index

This method is based on the concept of the security market line (SML), which is a line that connects the market portfolio with risk-free investment opportunities.  $R_f$  expresses the slope of the SML. In equilibrium, all portfolios are expected to be in the SML. If there is a deviation, meaning that if with the same risk the rate of return of a portfolio is different from the rate of return on SML, then the difference is called the Jensen index; where the risk is stated in Beta (market risk or systematic risk). If the realized rate of return of a portfolio is greater than the rate of return by the SML equation, it means that the Jensen index will be positive.

Conversely, if the realized rate of return of a portfolio is lower than the rate of return by the SML equation, it means that the Jensen index will be negative. The standard measurement of Jensen's measure, namely the higher the Jensen's alpha, which is positive above 0, the better the performance. The formula is:

$$A_i = (E(R_p) - R_f) - \beta_p (E(R_m) - R_f)$$

Information :

$A_i$ : Jensen's Alpha Index

$E(R_p)$  : expected return portfolio

$R_f$ : risk-free

$\beta_p$ : beta portfolio

$E(R_m)$ : market expected return.

## 3. Research Methods

Determination of the optimal portfolio of Malaysian Islamic stocks and by applying the Single Index Model theory in the 2013-2017 period to compare the optimal portfolio

performance with the Sharpe Index, Treynor Index, and Jensen's Alpha Index. The population used is the closing price of the top 10 Islamic stocks of the FTSE BM Hijrah Shariah Index issuers and 14 Islamic stocks listed on the Jakarta Islamic Index. The sample selection method consists of three steps, first, determining the research period, then compiling a list of all 30 Islamic stocks of Jakarta Islamic Index issuers from January 2013 to December 2017 selected which consist of 14 listed Islamic stocks. In Malaysia, there are 10 Islamic stocks published on the FTSE website in the form of a factsheet. It is collecting and inputting data on closing prices of 14 Islamic shares of JII issuers and 10 Islamic stocks of FTSE BM Hijrah Shariah Index issuers for 60 months of observation period starting from January 2013 to December 2017. The following is a sample of listed Islamic stocks:

**Table 3:** Name of Sharia Shares of FTSE BM Hijrah Shariah Index Issuer

FTSE BM HIJRAH SHARIAH INDEX		
No.	Stock Code	Issuer Name
1	TENA	Tenaga Nasional Bhd.
2	PCGB	Petronas Chemicals Group Bhd.
3	AXIA	Axiata Group Bhd.
4	SIPL	Sime Darby Plantation Bhd.
5	DSOM	DiGi.Com Bhd.
6	DIAL	Dialog Group Bhd.
7	MXSC	Maxis Bhd.
8	IHHH	IHH Healthcare Bhd.
9	PGAS	Petronas Gas Bhd.
10	IOIB	IOI Corporation Bhd.

Source: [ftse.com/factsheet](http://ftse.com/factsheet)

**Table 4:** Name of Sharia Shares of Jakarta Islamic Index Issuers

FTSE BM HIJRAH SHARIAH INDEX		
No.	Stock Code	Issuer Name
1	ADRO	Adaro Energy Tbk.
2	AKRA	AKR Corporindo Tbk.
3	ASII	Astra International Tbk.
4	BSDE	Bumi Serpong Damai Tbk.
5	ICBP	Indofood CBP Sukses Makmur Tbk.
6	INDF	Indofood Sukses Makmur Tbk.
7	KLBF	Kalbe Farma Tbk.
8	LPKR	Lippo Karwaci Tbk.
9	LSIP	PP London Sumatera Plantaion Tbk.
10	PGAS	Perusahaan Gas Negara (Persero) Tbk.
11	SMGR	Semen Indonesia (Persero) Tbk.
12	TLKM	Telekomunikasi Indonesia Tbk.
13	UNTR	United Tractors Tbk.
14	UNVR	Unilever Indonesia Tbk.

Source: [www.idx.co.id](http://www.idx.co.id)

The method of data collection is carried out in two ways, namely: internet research and library research. It obtains secondary data such as listed Islamic shares of JII issuers from [idx.com](http://idx.com), listed top 10 Islamic stocks of Hijrah issuers from [ftse.com](http://ftse.com), the closing price of each of the two Islamic stocks index from [investing.com](http://investing.com), SBI from [www.bi.go.id](http://www.bi.go.id), OPR from [www.bnm.gov.my](http://www.bnm.gov.my). Then, library research through books, articles, journals, and theses. The method of data analysis uses the Single Index Model method for determining or forming optimal portfolio and performance measurement methods that refer to the Sharpe Index, Treynor Index, and Jensen's Alpha Index. Here are the steps:



**Table 5:** The First Step for individually/ each of the issuer's Sharia shares

No.	Individually / each of the issuer's sharia shares
1	Calculate realized return $R_i = \frac{P_t - (P_{t-1})}{(P_{t-1})}$
2	Calculate the expected return $E(R_i) = \frac{\sum_{i=1}^n R_i}{n}$
3	Calculate standard deviation and variance $\sigma_i = \sqrt{\frac{\sum_{i=1}^n ((R_i - E(R_i))^2)}{n}}$ $\sigma_i^2 = \frac{\sum_{i=1}^n ((R_i - E(R_i))^2)}{n}$
4	Calculate Market Realized Return (Rm) $R_m = \frac{P_t - (P_{t-1})}{(P_{t-1})}$
5	Calculate the market's expected return $E(R_m) = \frac{\sum_{i=1}^n R_m}{n}$
6	Calculate market standard deviation and variance $\sigma_m = \sqrt{\frac{\sum_{i=1}^n ((R_m - E(R_m))^2)}{n}}$ $\sigma_m^2 = \frac{\sum_{i=1}^n ((R_m - E(R_m))^2)}{n}$
7	Calculate the correlation of each Islamic stock using the CORREL function (return of realization of Islamic stocks, return of market realization)
8	Calculate the covariance of each Islamic stock $\sigma_{im} = \text{korelasi} \times \sigma_i \times \sigma_m$
9	Calculate the beta and alpha of each Islamic stock $\beta_i = \frac{\sigma_{im}}{\sigma_m^2}$ $\alpha_i = E(R_i) - (\beta_i \cdot E(R_m))$
10	Calculate the residual error variance $\sigma_{e_i}^2 = \sigma_i^2 - \beta_i^2 \cdot \sigma_m^2$
11	Calculate the risk return (RBR) or the same as the risk-free interest rate using the average SBI for the period January 2013 to December 2017

Source: Hartono, 2014

**Table 6:** Second step for SIM Optimal Portfolio Formation

No.	Single Index Model Optimal Portfolio Formation
1.	Calculate excess return to beta (ERBi) $ERBi = \frac{E(R_i) - RBR}{\beta_i}$
2.	Calculate Ai, Bi, Ci, and Cut-Off Point C*. The cut-off point ((the limiting point of a stock that can enter the optimal portfolio) is obtained from the highest Ci value $A_i = \frac{(E(R_i) - Rf) \beta_i}{\sigma_{e_i}^2}$ $B_i = \frac{\beta_i^2}{\sigma_{e_i}^2}$ $C_i = \frac{\sigma_m^2 \sum_j^t = 1. A_i}{1 + \sigma_m^2 \sum_j^t = 1. B_i}$
3.	Calculate Zi and Wi (proportion or weight) on each Islamic stock that has entered into the optimal portfolio $Z_i = \frac{\beta_i}{\sigma_{e_i}^2} (ERBi - C^*)$ $W_i = \frac{Z_i}{\sum_{j=1}^k Z_j}$

Source: Hartono, 2014

**Table 7:** Expected return and risk optimal portfolio

No	Expected return and risk optimal portfolio
1	Calculate the Alpha for the optimal portfolio $\alpha_p = \sum W_i \cdot \alpha_i$
2	Calculate the optimal portfolio Beta $\beta_p = \sum W_i \cdot \beta_i$
3	Calculate the expected optimal portfolio return $E(R_p) = \alpha_p + \beta_p \cdot E(R_m)$
4	Calculate portfolio variance $\sigma_p^2 = \beta_p^2 \cdot \sigma_m^2 + \sum W_i^2 \sigma_{e_i}^2$
5	Optimal portfolio risk $\sigma_p = \sqrt{\sigma_p^2}$

Source: Hartono, 2014

**Table 8:** Optimal Portfolio Performance

No	Optimal Portfolio Performance
1	Sharpe Index $S_i = \frac{E(R_p) - R_f}{\sigma_p}$
2	Treynor Index $T_i = \frac{E(R_p) - R_f}{\beta_p}$
3	Jensen's Alpha Index $A_i = (E(R_p) - R_f) - \beta_p(E(R_m) - R_f)$

Source: Hartono, 2014

#### 4. Results and Findings

Stocks that are candidates for optimal portfolios are listed sharia stocks that have an excess return to a beta value greater than or equal to the cut-off point value. Issuer stock code that enters the optimal portfolio must have an ERBi (excess return to Beta) higher than or equal to the C\* (cut-off point).

**Table 9:** Optimal Portfolio FTSE BM Hijrah Sharia Index

FTSE BM Hijrah Shariah Index				
No.	Stock Code	ERBi	>	C*
1	TENA	0.033645	>	0.00875
2	IHHH	0.032925	>	0.00875
3	DIAL	0.027751	>	0.00875
4	PCGB	0.023078	>	0.00875

Source: Proceed data, Microsoft Excel

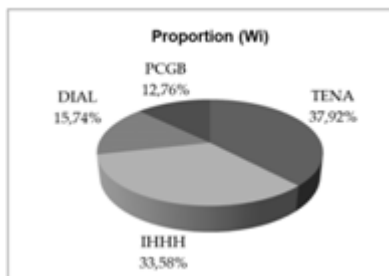
Based on the results of the calculation of Table 9 four stock codes were selected. It is included in the optimal portfolio based on the single index model among the stock names, namely the Islamic stocks of Tenaga Nasional Bhd, IHH Healthcare Bhd., Dialog Group Bhd., And Petronas Chemical Bhd. These stocks entered because their ERBi value greater than 0.00875, namely 0.033645, 0.032925, 0.027751, and 0.023078, respectively.

**Table 10:** Optimal Portfolio Jakarta Islamic Index

Jakarta Islamic Index				
No.	Stock Code	ERBi	>	C*
1	UNTR	0.038006	>	0.010841
2	UNVR	0.025927	>	0.010841
3	TLKM	0.019954	>	0.010841
4	AKRA	0.015332	>	0.010841
5	ICBP	0.014404	>	0.010841
6	ADRO	0.011534	>	0.010841

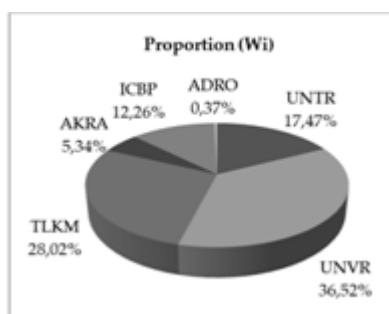
Source: Proceed data, Microsoft Excel

Based on the results of the calculation of Table 10, six stock codes were selected and included in the optimal portfolio based on the single-index model. Among the stock, names are the Islamic shares of the issuer United Tractors Tbk., the issuer Unilever Indonesia Tbk., the issuer Telekomunikasi Indonesia Tbk., the issuer AKR CorporindoTbk. , the issuer Indofood CBP SuksesMakmurTbk., and the issuer Adaro Energy Tbk. These stocks were included because they had an ERBi value greater than 0.010841, namely 0.038006, 0.025927, 0.019954, 0.015332, 0.014404, 0.011534 respectively.



**Image 3:** The proportion of funds each stock which included in the optimal portfolio of Jakarta Islamic Index

Based on Image 3, the highest proportion of FTSE BM HijrahShariah index funds is owned by the TENA issuer stock code. It is from the issuer TenagaNasional Bhd. is 0.379220 or 37.92%, IHHH stock code, from the issuer IHH Healthcare Bhd. is 0.335759 or 33.58%, the stock code DIAL with the proportion of funds is 0.157425 or 15.74%, the lowest proportion is 0,127596 or 12.76% of the issuers of Petronas Chemical Bhd.



**Image 4:** The proportion of funds each stock which included in the optimal portfolio of Jakarta Islamic Index  
Source: Proceed data, Microsoft Excel

Based on Image 4, the highest proportion of Jakarta Islamic Index funds belongs to the UNVR stock code is 0.365293 or 36.52% from the issuer Unilever Indonesia Tbk., The proportion of funds of the TLKM stock code from the issuer Telekomunikasi Indonesia Tbk. is 0.280220 or 28.02%. The proportion of funds of the UNTR stock code is 0.174717 or

17.47% from the issuer United Tractors Tbk. The lowest proportion is 0.003702 or 0.37% of the issuer PT. Adaro Energy Tbk.

**Table 11:** Optimal Portfolio Performance FTSE BM HijrahShariah Index and Jakarta Islamic Index

Optimal portfolio performance of	FTSE BM HijrahShariah Index	Jakarta Islamic Index
$\sigma_p$	0.010543	0.012426
$\beta_p$	0.368967	0.675324
$E(R_m)$	0.003623	0.004655
$E(R_p)$	0.011880	0.015570
$R_f$	0.000310	0.000641
$S_i$	0.465704	0.389220
$T_i$	0.031358	0.022106
$A_i$	0.010348	0.012218

Source: Proceed data, Microsoft Excel

Based on the results of the calculation of Table 11, the optimal portfolio risk for Islamic stocks of the FTSE BM HijrahShariah Index issuer is 0.010543 smaller than the optimal portfolio risk of the Jakarta Islamic Index of 0.012426. It is because the beta results and optimal market risk for the Jakarta Islamic Index are greater than the optimal Beta for the FTSE BM HijrahShariah Index.

The optimal portfolio beta of the FTSE BM HijrahShariah Index is 0.368967, which is smaller than the optimal portfolio beta of the Jakarta Islamic Index of 0.675324. It is because the total of listed sharia shares that are included in the Jakarta Islamic Index is more, namely six Islamic stocks issuers compared to the FTSE BM HijrahShariah Index, which is four Islamic stocks issuers. It is because the beta value of each issuer's sharia stock included in the optimal portfolio of the Jakarta Islamic Index. It is greater than the beta value of each issuer's Islamic stock that is included in the optimal portfolio of the FTSE BM HijrahShariah Index.

The Jakarta Islamic Index's expected return market is 0.004655 higher than the FTSE BM HijrahShariah Index of 0.003623. The value of the market rate of return is one of the elements that affect the results of the optimal portfolio expected return (optimal portfolio return).

The optimal portfolio expected return of FTSE BM HijrahShariah is 0.011880, which is smaller than the optimal portfolio expected return of the Jakarta Islamic Index of 0.015570. It is because of the optimal portfolio of beta value and the expected return market (market return) of the FTSE BM HijrahShariah Index. It is smaller than the optimal beta value of the portfolio and the expected market return (market rate of return) of the Jakarta Islamic Index.

The FTSE BM HijrahShariah Index's risk-free rate is 0.000310 smaller than the Jakarta Islamic Index's risk-free interest rate of 0.000641. It is because the SBI interest rate is higher than in OPR Malaysia. The value of the risk-free interest rate is one of the elements that affect the results of the Sharpe index, Treynor index, and Jensen's Alpha Index.

The Sharpe Index of FTSE BM HijrahShariah Index is 0.465704 greater than the Sharpe Index of the Jakarta Islamic Index is 0.389220. It shows that the optimal

portfolio performance of the FTSE BM HijrahShariah Index is better than the optimal portfolio performance of the Jakarta Islamic Index. It happens because the portfolio risk and expected rate of return of the FTSE BM HijrahShariah Index, as well as the Malaysian risk interest rate, are smaller than the optimal portfolio of the Jakarta Islamic Index. However, the return on returns is smaller; it can result in a better optimal portfolio performance of Islamic stocks.

The Treynor Index of FTSE BM HijrahShariah Index is 0.031358 greater than the Jakarta Islamic Index Treynor index value 0.022106. It shows that the optimal portfolio performance of the FTSE BM HijrahShariah Index is better than the optimal portfolio performance of the Jakarta Islamic Index. It happens because the Beta of the portfolio and the expected rate of return of the FTSE BM HijrahShariah Index, as well as the Malaysian risk interest rate, are smaller than the optimal portfolio of the Jakarta Islamic Index. Beta implicitly reflects that this optimal portfolio is well-diversified.

The Jensen's Alpha Index of FTSE BM HijrahShariah Index is 0.010348 smaller than the value of Jensen's Alpha Index of Jakarta Islamic Index is 0.012218. It shows that the optimal portfolio performance of the Jakarta Islamic Index is better than the optimal portfolio performance of the FTSE BM HijrahShariah Index. It shows that investment managers in Indonesia can provide good performance, namely their performance value is an above-market performance by the risk they have and with a higher risk-free rate than Malaysia. Overall, Malaysia's optimal portfolio performance is better than Indonesia based on the calculation of two methods of three methods.

According to Thandelilin (2001) which states that to see optimal portfolio performance, we can not only look at the level of return generated by the portfolio but also must pay attention to other factors such as the level of optimal portfolio risk. Moreover, according to Hartono (2010), a high return is not necessarily a good investment. Low returns can also be a good investment return if low returns are caused by low risk as well. The optimal portfolio that has a higher return does not necessarily have better performance. There are times when a portfolio with a lower return can have a better performance than a portfolio with a higher return.

Therefore, investors need to measure optimal portfolio performance because a higher return does not guarantee a better performance portfolio. The results of this study show that the performance of Islamic stocks of the FTSE BM HijrahShariah Index issuers is better than the performance of Islamic stocks of the Jakarta Islamic Index. The Sharpe index, Treynor index measure it, and Jensen index even though the optimal portfolio return rate of FTSE BM HijrahShariah Index is 0.011880 smaller than the optimal portfolio return rate of the Jakarta Islamic Index of 0.015570.

Based on the previous research conducted by Liyanasari (2014), the results of the Sharpe Index, Treynor Index, and Jensen's Alpha Index showed that the performance of Islamic shares of Malaysian issuers is better than Indonesia

issuer. Even though Liyanasari took samples of listed Islamic stocks from the FTSE BM EMAS Shariah Index and the results of the calculation of Jensen's Alpha Index is more significant for Malaysia. With the Sharpe Index value of the FTSE BM EMAS Shariah Index of 0.7015, it is greater than the Sharpe Index value of the Jakarta Islamic Index of 0.3044. The Treynor Index value of the FTSE BM EMAS Shariah Index is 0.0571. It is greater than the value of the Jakarta Islamic Index Treynor Index of 0.0261, and the value of the Jensen's Alpha Index, the FTSE BM EMAS Shariah Index, is 0.0139, more significant than the value of Jensen's Alpha Index Jakarta Islamic. Index of 0.0103.

The results are also by the research conducted by Rinda (2015) shows that the performance of Islamic shares of Malaysian issuers is better than Indonesia. However, Rinda also took a sample of listed Islamic stocks from the FTSE BM EMAS Shariah Index. Rinda's research results using the Sharpe index, showing that the performance of the FTSE BM EMAS Shariah Index stock portfolio is better than the JII stock portfolio. However, the results of the calculation of the Treynor index show that the performance of the JII stock portfolio is better than the performance of the FTSE BM EMAS Shariah Index stock portfolio. Then, the results of the Jensen index calculation show that the performance of the FTSE BM EMAS Shariah Index stock portfolio is better than the JII stock portfolio. So that overall, the performance of the Malaysian stock portfolio is better than the performance of the Indonesian stock portfolio.

## 5. Conclusion

The return and risk of the optimal portfolio for Islamic stocks the issuers of FTSE BM HijrahShariah Index is smaller than the issuer Jakarta Islamic Index. The return of the optimal portfolio for FTSE BM HijrahShariah Index is 0.011880 smaller than the return of the Jakarta Islamic Index is 0.015570. Also, the risk of optimal portfolio FTSE BM HijrahShariah Index is 0.010543 smaller than the risk for the Jakarta Islamic Index is 0.012426.

The optimal portfolio performance of Malaysia with the FTSE BM HijrahShariah Index is better than Indonesia with the Jakarta Islamic Index based on the calculation of two methods of three methods. The Sharpe Index of optimal portfolio performance for Islamic stock the issuers of the FTSE BM HijrahShariah Index is 0.465704 better than the optimal portfolio performance for Islamic stock the issuers Jakarta Islamic Index is 0.389220. The Treynor Index of optimal portfolio performance for Islamic stock the issuers of the FTSE BM HijrahShariah Index is 0.031358 better than the optimal portfolio performance for Islamic stock the issuers Jakarta Islamic Index is 0.022106. The Jensen's Alpha Index of optimal portfolio performance for Islamic stock the issuers of the FTSE BM HijrahShariah Index is not better than 0.010348 than the optimal portfolio performance for Islamic stock the issuers Jakarta Islamic Index is 0.012218.



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