

## **Analysis of Performance Between Islamic and Conventional Stock Portfolios in Malaysia**

**Musthofa Ahmad Maryani<sup>1</sup>, Isaudin Ismail<sup>1\*</sup>**

<sup>1</sup>Department of Mathematics and Statistics, Faculty of Applied Sciences and Technology,  
Universiti Tun Hussein Onn Malaysia, 84600 Pagoh, Johor, MALAYSIA

\*Corresponding Author Designation

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**Abstract:** There are differences in performance between the Islamic and conventional stock markets. Islamic market often gives lower return but lower volatility while the conventional market is often more risk and debt oriented but carry a higher return. In this research, 10 portfolios have been evaluated, later divided into Islamic and conventional portfolios, which in turn divided into five sectors: consumer, industrial, property, energy, and transportation and logistics. To measure performance, Jensen's alpha, Sharpe ratio and Treynor ratio are used. Beta is also used to measure volatility against Kuala Lumpur Composite Index (FBMKLCI). Linear Regression Model is used to forecast the trend of the portfolio. The analysis found that among the stocks and their market sector has no difference of volatility in most of the stocks, and the return of the conventional portfolio is higher than its Islamic counterparts. The average Beta value is quite similar between the two main portfolios, albeit in different sectors. The forecast analysis shows that the number of Islamic portfolios that have a more positive trend is higher than the conventional ones. Investors are recommended to invest to Islamic stock portfolio as for safety in uncertainties of time.

**Keywords:** Islamic Stock Market, Conventional Stock Market, Portfolio, Performance, Volatility, Forecast.

### **1. Introduction**

Stock is an essential part of our common life whether we realize it or not. It is known when one decides to invest by sharing a portion of his or her wealth to gain a profit. Furthermore, it is also known as equity, a security that represents a certain company and has proportionate ownership in the issuing corporation (Investopedia, 2021). Although many types of stocks ever existed, they are generally divided into two main types: common and preferred. Common stock usually represents ownership in a corporation that yields higher rates in long-term return. Meanwhile, preferred stock represents a certain degree of ownership in a corporation but doesn't come with the same voting rights, and usually guaranteed a dividend that is fixed forever. (Desjardins Online Brokerage, 2021).

While the conventional stock has always been the traditional form of stock as we know it today the most of the time, Islamic stock exists for those who want to verify their investments adheres to the Sharia law. The difference between Islamic stocks and conventional stocks portfolio is that Islamic stocks utilize the Islamic method of investment rather than the standard conventional stocks. Under Islamic finance and banking, financial action that involves interest, gambling and uncertain trading is prohibited. This is one of the objectives in Islamic banks in order to attain the highest profits (Al-Sharif, 2018). Since its growth from the 1970s, the global Islamic financial assets and assets under management have accumulated about USD2.88 trillion as of December 2019 with an annual growth of 14%. (Bank Negara Malaysia, 2021).

After the global financial crisis that plagues the Malaysian financial market, the Islamic financial market has seen exponential growth, indicating that Islamic finance based investment is getting more popular within Muslim communities in Malaysia (Rakhi, Hoque and Hassan, 2018). It was said that the Islamic finance system is more asset based and asset driven in which marks the outcome or gain is confirmed, which follows the Sharia law, while the conventional is more interest-based and debt-driven in which the outcome is unpredictable and highly prone to risk (Rakhi, Hoque and Hassan, 2018). However, utilizing Islamic financing in investment doesn't mean that they are not volatile to outside factors that influences the flow of market stocks. Covid-19 pandemic that occurred recently has proven that Islamic equity markets from various regions around the world have shown a downward trend at the point of first quarter in 2020 amid lockdown restrictions (Islamic Development Bank, 2020). Upon nationwide imposed full lockdown implemented in March 2020, Malaysia also affected by this phenomena, inducing panic to the public and the stock markets (Saw *et al.*, 2021).

The objective of this research is to analyze the performance between Islamic and conventional stock portfolios using Treynor Ratio, Sharpe Ratio, and Jensen Alpha, to assess the volatility of Islamic and conventional stock portfolios against FBM KLCI using Beta, and to investigate the forecast trend between Islamic and conventional stock portfolios using Linear Regression Model. As for the scope, this research will use data from Bursa Malaysia stock portfolio and FBMKLCI data, retrieved from Yahoo Finance, Market Watch and Investing.com. The data ranges from 1 October 2018 until 30 September 2021 on weekdays except public holidays, for an accumulated data of three years. The data was selected from the top five most active companies on the date of retrieval as referred to in Bursa Malaysia, corresponding to the portfolio market sector conducted in this research. The stock data for each portfolio is accumulated, weighted and calculated into average.

The significance of this research is that it could serve as the output and guidance for investors and risk managers to strategize their investment in order to maximize return while at the same time minimizing risk as much as possible. Furthermore, this research contributes to the study of stock performance during pandemic Covid-19 by analyzing more recent stock data in the period as mentioned before, lessening the gap of lack of recent research during this critical period. More or less, this research also helps to come up with some suggestions in decision making to invest at this specific of time.

## **2. Methodology**

### **2.1 Research Flow Chart**

The following figure shows the process of obtaining information and data based on the title.

**Figure 1: Research study flow chart**

## 2.2 Mathematical Modelling

In order to understand the concept of this research, the first important thing is to define what the perspective of performances that are measured is. For this research, five different methods are used to satisfy the objectives that were mentioned: Jensen's Alpha, Sharpe Ratio, Treynor Ratio, Beta coefficient, and Linear Regression Model. The definition for each formula is described in their respective sections.

### 2.2.1 Jensen's Alpha, Sharpe Ratio, and Treynor Ratio

Jensen's Alpha is the measurement of the performance of a stock market in terms of returns and is used in this research. The measurement of the volatility of a portfolio uses Sharpe Ratio and Treynor Ratio which is the ratio of excess return to standard deviation of return and beta respectively. The formulas are described in order as follows:

$$\alpha_p = (R_p - R_f) - \beta_p(R_m - R_f) \quad Eq. 1$$

$$S_p = \frac{R_p - R_f}{\sigma_p} \quad Eq. 2$$

$$T_p = \frac{(R_p - R_f)}{\beta_p} \quad Eq. 3$$

in which,

- $\alpha_p$  is the Jensen's alpha for portfolio
- $\beta_p$  is the Beta for portfolio
- $R_p$  is the portfolio return
- $R_m$  is the market return
- $R_f$  is the risk-free return
- $S_p$  is the Sharpe Ratio
- $T_p$  is the Treynor ratio
- $\sigma_p$  is the standard deviation of portfolio

### 2.2.2 Beta coefficient

Beta is also used to measure the volatility of a stock market against the index, specifically FBMKLCI as the benchmark. Beta helps investors to decide their decision based on how much risk of a stock market will be taken to a diversified portfolio. The formula is described as:

$$\beta_p = \frac{cov(R_p, R_i)}{\sigma^2(R_i)} \quad Eq. 4$$