Syariah and Conventional Stocks Performance of Public Companies Listed on Indonesia Stock Exchange

Chandra Setiawan* and Hesty Oktariza**

Shifting in the investment preferences from conventional to Syariah finance has been an emerging trend during the past two decades. However, there is a general pessimistic view that Syariah based investors are likely to earn returns below the market returns. This study aims to examine two issues. Firstly, whether there is a significant difference in risk and returns between Syariah stocks and conventional stocks of selected public companies listed on Indonesia Stock Exchange (IDX) during the period of 2009-2011; and secondly, whether there are significant relationships between stock returns and financial ratios of both selected Syariah and conventional stocks. Using independent samples Ttest and Mann Whitney U-test, the result shows no evidence of significant statistical differences in cumulative returns, standard deviation and beta between Syariah and conventional stocks. Moreover, this research employs risk-adjusted return measurement consisting of Sharpe ratio, Treynor ratio and Jensen's Alpha to assess the performance of Syariah and conventional stocks portfolios. The result indicates that risk-adjusted return of both stocks' portfolio is performed in a similar manner. Finally, using multiple regression analysis, the research finds that the financial ratios are simultaneously proven to have significant relationship with both of Syariah and conventional stocks returns.

1. Introduction

Islamic financial assets around the world hit USD 1.3 trillion in 2011, a 150% increase over five years as the industry expands into a new country beyond core markets in the Middle East and Malaysia (Davies; Reuters, 2012). El Qorchi (2005) as cited in Pok (2012) has summarized that this significant shift from conventional into Syariah financial system is generated by three main reasons. First, a strong demand for Syariah-compliant financial products from a large number of Muslim communities worldwide. Second, a strong demand from oil rich nations particularly the Middle East countries which prefer to invest in Syariah-compliant products. The last reason is the competitiveness and the ethical focus of the Syariah-compliant products not only attracting Muslim investors but also non-Muslim investors.

However, there is a pessimistic view in Islamic equity investment about the performance of Syariah-compliant stocks which have generally underperformed when compared to the performance of conventional stocks. This pessimistic view is based on the fact that Syariah-compliant stocks or companies experience limited economic activities for two reasons. First, Syariah restrictions limit a company's ability to use external sources of financing and this limit reduces the company's sustainable growth. Second, Syariah restrictions limit investment opportunities so the company's income is potentially reduced (McGowan & Junaina, 2010).

^{*} Dr. Drs. Chandra Setiawan, M.M., Ph.D, Department of Management Study Program, President University, Indonesia, Email: <u>chandra@president.ac.id</u>

^{**} Hesty Oktariza, B.Sc, Student in Management Study Program , President University, Indonesia, Email: <u>hestyoktariza@gmail.com</u>

The opinion that suggests conventional stocks and Syariah stocks have significant financial performance differences is still exemplary. The results from past studies on the performance gap between Syariah and conventional investments are mixed, with several of these studies reporting no statistically significant differences in their returns. Moreover, there is only a few existing empirical literature on the performance of Syariah stock market indices compared to conventional stock market indices using stocks data from Muslim majority countries, particularly Indonesia. About 86.1% of 230 million¹ of population are Muslim, which makes Indonesia the biggest Muslim majority country in the world. Therefore, Indonesia offers bright prospects for the development of Islamic financial industry. Based on the 2012 Indonesian Islamic Capital Report, the development of Syariah stocks on the Indonesian Syariah Securities List shows an increasing number from 173 in 2007 to 253 Syariah stocks in 2012. As March 2012, the percentage of Syariah stocks have exceeded the percentage of conventional stocks at 50.7%.

Hence, the objective of this research is to examine the financial performance of investment portfolio comprising of Syariah compliant stocks only, and compare its performance to the conventional stocks portfolio of public companies listed on Indonesia Stock Exchange. This research also aims to investigate the relationship between return and financial ratio of both Syariah and conventional stocks.

Based on these objectives, the following research questions are developed:

- (1) How is the performance of Syariah stocks compared to conventional stocks measured by risk and return?
- (2) How is the performance of Syariah stocks portfolio compared to conventional stocks portfolio measured by risk-adjusted return?
- (3) How is the relationship between stocks return and financial ratios (Debt to Equity Ratio, Earning per Share, Price Earning Ratio, Net Profit Margin, Return on Equity, and Price to Book Value) of Syariah and conventional stocks respectively?

To evaluate the performance of Syariah stocks portfolio and conventional stocks portfolio, this research uses Risk-Adjusted Return analysis. It assesses how the balance between high return and acceptable risk is achieved. It is measured by employing the Sharpe Ratio, Treynor Ratio, and Jensen's Alpha. The variables which are used in Risk-Adjusted Return analysis consist of return, standard deviation as the proxy of total risk and beta as proxy of systematic risk.

There are several factors that can be used to predict the stock return of a company. One of these parameters is financial ratio which represents the fundamental factors of a company. Therefore, a financial ratio analysis, also known as fundamental analysis is required to find out whether the financial information given in the company's financial report accurately reflects the real value of the company's stock so that it is useful to predict the stock price and return (Anisa, 2011). This study assesses the relationship between stock return and financial ratios represented by Debt to Equity Ratio, Earning per Share, Price Earnings Ratio, Net Profit Margin, Return on Equity, and Price to Book Value of both Syariah and Conventional Stocks.

To the best of our knowledge, this is the first empirical study in Indonesia that compares Syariah stocks and its counterpart by examining relationship between stock returns and firm financial ratios. The findings of this study will bring some implications

for investors who are willing to take additional risks with the advantage of extra returns. In addition, the findings will indicate what factors each investor should consider when selecting firms to invest in. More importantly, this study will show whether the screening criteria that differentiate Syariah from conventional stocks in Indonesia have any effect on the significance of the stock performance.

The next part of this paper presents the past literature on the financial performance comparison of Syariah and conventional stocks. Section three presents the sample of study, methodology, model and hypotheses of this research. Section four presents results of the study. The final section summarizes the results.

2. Literature Review

Despite its increasing popularity, published empirical literature on the performance of Islamic versus conventional investment in Muslim majority countries is minimum, especially in Indonesia. Among these countries which have had head starts on documenting research on Islamic investment are Malaysia and India by using data from both developed and developing countries.

Ahmad and Ibrahim (2002) investigated the risk and return performance comparison of Kuala Lumpur Shariah Index (KLSI) with Kuala Lumpur Composite index (KLCI) from 1999 to 2002 in Malaysia. The sample period of the study is divided into growing period, decline period and overall period. Relative return technique, standard deviation, and risk adjusted return are used to measure the performance of both indices. The study finds that KLSI underperformed during overall period and the decline period but it over-performed in the growing period. Lastly, their study finds no significant difference in the performance of both indices during the three sample period.

Hussein and Omran (2005) studied the performance of the Islamic index in Dow Jones against the Dow Jones World Index from 1995 to 2003 based on monthly data. The sample period is divided into three sub-periods which are the entire period, the bull period and the bear period. By applying CAPM, Sharpe ratio, and Treynor ratio, the study finds that Islamic indexes provided positive abnormal returns over the entire period and the bull market period, but they underperformed their index counterparts over the bear market period.

Rahmayanti (2003) empirically examined the performance of Syariah stocks portfolio in Jakarta Stock Exchange within period of 2001 to 2002. The study analyzes the return, risk, risk adjusted return, Sharpe index, Jansen index, and Treynor index of Syariah stocks portfolio and compares it to Jakarta Composite Index (JCI), LQ45 Index, Jakarta Islamic Index (JII) based on the single and multiple benchmark approach. The study finds that in 2001, the portfolio of Syariah stocks not only outperformed the performance of conventional stocks, but also JII as its benchmark. However, in 2002, the opposite condition was applied in which the Syariah stocks portfolio under-performed the conventional stocks market index in several criteria on both single and multiple benchmark approaches.

Albaity and Ahmad (2008) examined the performance and relationship of the Kuala Lumpur Shariah Index (KLSI) against the Kuala Lumpur Composite index (KLCI) from the period of 1999 to 2005 in Malaysia. The study employs risk adjusted performance

measurement, causality and Johansen co-integration test. The statistical results on their risk and returns, measured by the mean and standard deviation, suggest that KLSI has lower risk exposure than KLCI although it also has a lower return. However, their study finds that there was no significant return difference and long run bidirectional relationship between both indices.

Albaity and Ahmad (2011) investigated the return difference between Syariah compliant and non-Syariah compliant firms listed on the Malaysian Stock Exchange using panel data of 300 firms from the period of 2000 to 2006. The determinants of stock returns used are market capitalization, Market to Book ratio, Price Earnings ratio, market risk and total debt. The study finds that there was no significant difference between Syariah compliant firms and their counterparts. For Syariah compliant firms, it was found that the size and market-to-book ratios were the most significant variables explaining returns. However, for non-Syariah compliant firms, market to book ratio and market risk were the most significant variables that influenced return.

Natarajan and Dharani (2012) empirically examined the risk and return of the selected Syariah-compliant stocks and benchmark indices during period of 2007 to 2011 in India. They tried to compare Nifty Shariah index to Nifty index during the period of 2007 to 2010. The research employs risk-adjusted measurements such as Sharpe Index, Treynor Index and Jensen's alpha. The t-test is used to test the mean returns difference between both indices. The result suggests that Nifty Shariah and Nifty indices performed similarly.

Chiadmi and Ghaiti (2012) compared the stock market volatility of Standard & Poor Sharia to Standard & Poor 500 during 2006 to 2011 period by using the ARCH and GARCH model. The results show that volatility persistence of both indices was very significant and the S&P Syariah Index was less volatile than the conventional index in the long run and it did present less risk at crisis periods.

Manao and Deswin (2001) analyzed the relationship between financial ratio and stock returns during economic crisis in Indonesia by adding firm size as a variable. Using 120 manufacturing companies listed on IDX as samples, this study uses eight financial ratios (QR, TATO, CLTA, LDTA, GPM, ROE, PBV and EPS). The sample companies were divided into three size categories (small, medium and big) based on total assets. The result indicates that only PBV and EPS that had significant influence on all models.

Martani *et al.* (2009) investigated the effect of financial ratios, firm size and cash flow from operating activities to the stock return using samples of manufacturing companies listed on Indonesia Stock Exchange during the period of 2003-2006. The study finds that NPM, ROE, TATO and PBV had consistently significant effect on stocks adjusted return and abnormal return.

In conclusion, there is no clear evidence that Syariah stocks perform below the conventional stocks. The chance for Syariah investors to gain maximum possible return while at the same time being socially and ethically concerned about their investment is still possible yet debatable. However, there is a lack of published prior studies regarding the relationship between returns and financial ratio on Syariah stocks against conventional stocks. Most of existing studies only focus on the performance of Syariah investment portfolio and their counterparts, and examine the

relationship between returns and financial ratios without classifying the companies based on Syariah compliant criteria.

3. Data and Methodology

This research is exclusively based on secondary panel data consisting of the weekly stock prices and financial ratios of public companies listed on Indonesia Stock (IDX), which collected from IDX official Exchange were website and Yahoofinance.com. The samples in this research were taken from the population of stock prices and financial ratios of 440 public companies listed on IDX. The data used is weekly and annual data during three years of research period (2009 – 2011). This research uses stratified sampling method in choosing samples. In order to construct a diversified portfolio, sample stocks were chosen from industrial sectors with low correlation of returns. Therefore, a correlation analysis was conducted to find the degree of strength and direction between the sectors.

Based on the correlation analysis result, three sectors were selected as sample sectors as they indicated a highly negative correlation toward each other. The three sectors are Mining, Trade and Services, and Consumer Goods. From the mining sectors, there were a total of 32 companies which consists of 26 Syariah compliant companies and six conventional companies. From Consumer Goods sectors, there were 39 companies in total which consist of 25 Syariah compliant companies and 14 conventional companies. As for Trade and Services sectors, there are 99 companies which consists of 67 Syariah compliant companies and 32 conventional companies. However, companies' stocks which fulfilled the sampling criteria from total of the three sectors only consist of 30 conventional stocks and 117 Syariah stocks. Therefore, 30 Syariah stocks.

In this research, weekly return, with adjustment for dividends and stock splits, has been computed using this formula:

$$Rt = \ln\left(\frac{P_t}{P_{t-1}}\right)$$

Where R_t is the weekly return on the stocks, P_t is the weekly adjusted price over t period, and P_{t-1} is the weekly adjusted price in one period before t

To measure the variability of the investment return, standard deviation is used as the proxy of total risk and beta coefficient is used to measure the systematic risk or volatility of the investment. Beta coefficient of the stock or portfolio in this research is estimated using regression analysis on historical stock prices data. Mann Whitney U-test and Independent Samples T-test are used to find the significant difference between the mean return, standard deviation and beta of Syariah stocks and conventional stocks. The null hypotheses to be tested are:

- H₀₁: There is no significant difference of returns between Syariah and Conventional Stocks
- H₀₂: There is no significant difference of standard deviation between Syariah and Conventional Stocks

H₀₃: There is no significant difference of beta between Syariah and Conventional Stocks

3.1 Risk-Adjusted Return Measurement

Assuming that return and risk have a positive correlation, the performance of an investment portfolio cannot only be assessed based on its return alone. The risk factor is supposed to be put into account. Along with the development of Capital Market Theory, several measurements for portfolio performance have included risk factors on its calculation of return. Therefore, risk-adjusted return measurement is used in this research to provide a relatively simple measure of risk-adjusted return. It is assumed that investors choose to hold the optimally diversified portfolio that includes all risky investments. Three of the best-known measures that include adjustment for risk are Sharpe ratio, Treynor ratio and Jensen's ratio, which are employed in this research.

In general, higher Sharpe ratio means higher performance, and vice versa. Sharpe ratio, which is also known as reward-to-variability ratio can be simply defined as:

$$Sp = \frac{Ri - Rf}{\sigma p}$$

Where Sp is Sharpe ratio, Ri is the portfolio return over t period, Rf is Bank Indonesia Rate over t period (the risk-free rate in this study), and σp is portfolio standard deviation.

Treynor ratio is almost similar with Sharpe ratio, except that the risk is measured by beta which represents the systematic risk instead of total risk. The higher the Treynor ratio, the better is the portfolio. It is also known as reward-to-volatility ratio and formulated as:

$$Tp = \frac{Ri - Rf}{\beta p}$$

Where Tp is Treynor ratio of portfolio, Ri is the average portfolio returns over t period, Rf is Bank Indonesia Rate over t period (the risk-free rate in this study), and βp is portfolio beta.

The Jensen ratio calculates the excess return that a portfolio generates over its expected return. This measure is also known as Alpha. The higher the ratio, the better the risk-adjusted returns. A portfolio with a consistently positive excess return will have a positive alpha, and vice versa (Pareto, 2008). Jensen's ratio is based on the Capital Asset Pricing Model (CAPM), given the portfolio beta and the average market return. The formula of Jensen's alpha can be defined as follows:

$$\alpha j = (Rj - Rf) - \beta (Rm - Rf)$$

Where α is Jensen's alpha, Rj is the average portfolio returns over *t* period, Rm is the average market return (IHSG return) over *t* period, Rf is Bank Indonesia Rate over *t* period (the risk-free rate in this study).

3.2 Multiple Regression Analysis

The multiple regression analysis aims to investigate how Syariah and conventional companies react to the same selected variables by testing and examining the relationship between stock return and selected financial ratios as defined in the equation below:

Rt = β_0 + $\beta_1 X_1$ + $\beta_2 X_2$ + $\beta_3 X_3$ + $\beta_4 X_4$ + $\beta_5 X_5$ + $\beta_6 X_6$ + ϵ

Where:

Rt	: Weekly Return of Stock
X ₁	Debt to Equity Ratio (DER) = $\frac{Total Debt}{Total Equity}$
X ₂	Earnings per Share Ratio (EPS) = $\frac{Earnings available for common stockholders}{Number of shares of common stock outstanding}$
X ₃	Price Earnings Ratio (P/E Ratio) = $\frac{Market price per share of common stock}{Earning per Share}$
X ₄	: Net Profit Margin (NPM) = $\frac{Earnings available for common stockholders}{Sales}$
X ₅	: Return on Equity (<i>ROE</i>) = $\frac{Earnings available for common stockholders}{Common stock equity}$
X ₆	: Price to Book Value (<i>PBV</i>) = $\frac{Market price per share of common stocks}{Book value per share of common stocks}$
3	: Random Error

For this model, the following null hypothesis is tested using linear regression least squares method at 10% significance level:

H₀₄ : There is no significant relationship between stocks return and Debt to Equity Ratio (DER), Earning per Share (EPS), Price Earnings Ratio (PER), Net Profit Margin (NPM), Return on Equity (ROE), and Price to Book Value (PBV).

4. Results and Discussion

This research aims to examine the financial performance of investment portfolio comprised of only Syariah compliant stocks, and compare its performance to that of conventional stocks portfolio at public companies listed on Indonesia Stock Exchange measured by return, risk, and risk-adjusted return as proxies. This research also aims to investigate the relationship between return and financial ratio of both Syariah and conventional stocks. Using stratified sampling method and correlation analysis, 30 Syariah compliant companies and 30 conventional companies were selected from 440 listed companies in Indonesia Stock Exchange.

4.1 Difference in Mean Result

This research uses the non parametric Mann Whitney U-test for data that cannot follow the normal distribution assumption and the Independent Sample t-test for data that fulfills normal distribution assumption.

The description in Table 1 hints at dissimilarity between Syariah and conventional stocks. For example, maximum and minimum value of the Cumulative Return of Syariah stocks is higher than those of conventional stocks. However, the mean value of Cumulative Return of Syariah stocks is less than those of conventional stocks (1.75523 < 1.84857). Standard deviation measures the securities stability over a period of time. The result indicate that of conventional stocks is less than the stability of Syariah stocks, as it is shown by its value of Standard Deviation which is higher than Syariah stocks. This result is possibly because conventional stocks are traded more frequently than the Syariah stocks. Moreover, as Beta represents the securities sensitivity to the market, the variation in Beta value also indicates that the Syariah stocks are less sensitive to the market than conventional stocks (0.603946 < 0.764747).

Table 1Cumulative Return, Standard Deviation, and Beta Comparison of Syariah and
Conventional Stocks

	Ν	Minimum	Maximum	Mean	Std. Deviation	Sig.	
Acc Return of Syariah Stocks	30	.005	7.517	1.75523	1.361091	0 600	
Acc Return of Convent. Stocks	30	130	5.473	1.84857	1.483089	0.090	
Std Deviation of Syariah Stocks	30	.029	.320	.09160	.053276	0 101	
Std Deviation of Convent. Stocks	30	.015	.276	.10787	.061733	3	
Beta of Syariah Stocks	30	749	1.465	.54240	.603946	0 105	
Beta of Convent. Stocks	30	-2.301	1.640	.30903	.764747	0.195	

However, the Mann Whitney U-test and Independent Samples T-test result as shown in column Sig. in Table 1 indicates that the differences between Syariah and conventional stocks are not statistically significant. Cumulative return is used as a proxy for measuring investment return and the result indicates that the screening criteria applied to Syariah compliant stocks do not affect the performance of the stocks compared to the conventional stocks. Moreover, the research also compares the level of risk between Syariah and conventional stocks using standard deviation as the proxy. Like the return, the result indicates no significant risk differences between both stocks. Specifically, the systematic risk between Syariah and conventional stocks is also compared using beta. Beta is used as the proxy for volatility of the stock returns toward changes in the market. The independent samples t-test result suggests that there is no statistically significant difference of Beta means between Syariah and conventional stocks.

This result contradicts a previous research by Albaity and Ahmad (2008) which finds that Syariah stocks index marginally underperforms the conventional index. In addition to that, the result also differs from Ahmad and Ibrahim (2002) which finds that Syariah

index underperforms its counterparts during overall period and decline period but it exceeds the conventional index during growing period. However, the result is not totally different from previous researches by Albaity and Ahmad (2008) and Ahmad and Ibrahim (2002) since returns of both Syariah and conventional stocks are not significantly different during the overall period of the study.

4.2 Risk Adjusted Return Performance Result

This research also employs risk-adjusted return to show a more comprehensive analysis regarding the risk and return of the Syariah and conventional stocks portfolio.

Table 2 below summarizes the comparison of risk-adjusted return between Syariah and conventional stocks portfolio measured by Sharpe Ratio, Treynor ratio and Jensen's Alpha. From the result, the risk-adjusted return measured by Sharpe Ratio and Jensen's Alpha of both Syariah and conventional stocks are performing in a similar manner.

Voor	Sharpe Ratio		Trey	nor Ratio	Jensen's Alpha	
real	Syariah	Conventional	Syariah	Conventional	Syariah	Conventional
2009	0.449	0.448	0,625	0,637	0.424	0.545
2010	0.442	0.591	1,428	2,249	0.280	0.395
2011	0.335	0.309	0,525	0,736	0.308	0.193
Average	0.409	0.449	0,859	1,208	0.338	0.347

Table 2Risk Adjusted Return Performance of Syariah and Conventional Stocks

These results support those found by Natarajan and Dharani (2012) who conducted a similar research in India. In contrast, this result differs from the result by Rahmayanti (2003) and Hussein and Omran (2005) which find that the Syariah portfolio performs in a diverging manner to its counterparts during certain periods.

Nevertheless, a significant difference is shown by the Treynor Ratio measure in which the conventional stocks portfolio presents higher risk-adjusted return against its Syariah counterpart. The value of Treynor Ratio for Syariah stocks is 0.859, lower than the value of conventional stocks at 1.208. High Treynor Ratio means a high excess return. On the other hand, the Treynor Ratio has an inverse relationship with the systematic risk or beta. High Treynor Ratio means low beta and vice versa. Based on data acquired in 2010, the result suggests that conventional stocks portfolio has a significant lower systematic risk than Syariah stocks portfolio which has resulted in higher Treynor Ratio in average.

4.3 Multiple Regression Analysis Result

The research employs Ordinary Least Square method in conducting regression analysis to examine the relationship between stock returns as dependent variable and financial ratios (DER, EPS, PER, NPM, ROE, and PBV) as independent variables.

The result in Table 3 reveals differences in the factors influencing returns between Syariah and conventional stocks. From six financial ratios, for Syariah Stocks all variables except NPM have a significant relationship with stock returns while for conventional stocks, all variables except NPM and PBV have a significant relationship with the stock returns.

Test for Price to Book Value (PBV) shows different results between Syariah and conventional stocks. For Syariah stocks, PBV has a significant relationship with the stock returns. The coefficient of correlation indicates a negative correlation between PBV and Syariah stock returns. In contrast, PBV does not have any significant relationship with the conventional stock returns. The result which states PBV has a negative and significant relationship with stock returns is disagrees with previous studies by Martani et al. (2009) which proves that PBV has positive correlation with stock returns.

Syariah Variable	Coefficient	Std. error	t-Statistic	Prob.			
С	0,198	0,118	1,684	0,096			
DER	0,208	0,112	1,862	0,066			
EPS	0,005	0,001	3,113	0,003			
NPM	-0,103	0,695	-0,148	0,883			
PBV	-0,010	0,006	-1,715	0,090			
ROE	0,856	0,459	1,866	0,066			
R-squared : 0,161 Adjusted R-squared : 0,109							
Conventional Variable	Coefficient	Std. error	t-Statistic	Prob.			
С	0,246	0,141	1,741	0,088			
DER	0,076	0,007	10,229	0,000			
EPS	-0,026	0,009	-3,053	0,004			
NPM	0,015	0,064	0,233	0,817			
PBV	0,002	0,002	1,343	0,185			
PER	0,006	0,002	3,207	0,002			
ROE	0,192	0,062	3,080	0,003			
Deguarad	0 516						

Table 3Regression Model Result

R-squared : 0,516

Adjusted R-squared : 0,197

The explanation for the dissimilarity of the results is possibly caused by the differences on the behavior between the Syariah and conventional system itself. Syariah finance breaks the law of market mechanism practiced in conventional finance in which the system is left to operate on its own without outside interferences and securities are exchanged with an open and understood system of value and time trade-off to produce the best distribution of profit. Within Syariah system, the profit sharing depends on discretion of the management. In other words, the management has more freedom to interfere with the system in profit distribution. For this reason, the prudent valuation of Syariah stocks will surely affect its return. However, the negative correlation of PBV and the stock returns might be related to supply and demand mechanism. Price has a positive correlation with PBV, assuming ceteris paribus, the higher stock prices means higher PBV. In a market condition where trading volume is moved up, the increasing stock price will trigger an increasing level of return. Nevertheless, the opposite condition happens on the market condition where the rise of stock price will lead to the declining trading transaction volume and level of return (Mar'atun, 2007).

Earning per Share (EPS) has a significant relationship with stocks returns for both Syariah and conventional stocks. However, the coefficient of correlation between Syariah and conventional shows a different direction; Syariah stocks and EPS signal a positive correlation while conventional stocks and EPS indicate the opposite correlation. As explained before, the profit sharing in Syariah stocks depends on projects; earnings will be distributed to shareholders only if a project successfully generates profit. Therefore, for Syariah stocks, the increasing of profit and stock returns is indicated by the growth of EPS and vice versa. For conventional stocks, profit earned might be allocated to retained earnings so it decreases the number of earnings available to common shareholders. Thus, conventional stocks investors might expect low EPS to result in higher returns in the future.

Debt to Equity Ratio (DER) has a significant relationship with stock returns for both Syariah and conventional stocks In addition, the coefficient of correlation at 0.280 for Syariah stocks and 0.076 for conventional stocks value also signals a positive correlation between DER and stock return for both Syariah and conventional stocks. DER represents a firm financial structure. A high DER indicates that the company uses debt financing assertively. The fund can be used to support long term growth for the firm so it can earn more profit (Martani, Mulyono, & Khairurizka, 2009). Thus, high DER correlates with the increase of stock returns and vice versa.

Return on Equity (ROE) has a significant relationship with stocks returns of both Syariah and conventional stocks. The same result is similar to Martani et al. (2009) which suggests that ROE has a significant relationship with stock returns. The coefficient of correlation of Syariah stock returns indicate a strong positive correlation with its ROE at the value of 0.856 while the coefficient of correlation between conventional stocks returns and its ROE also signals a positive correlation at 0.192. A higher ROE shows that the company can earn higher returns on shareholder's equity. A higher ROE also indicates higher efficiency in spending money invested by shareholder to earn profit growth. The profit growth then reflects the increase of stock returns.

Net Profit Margin (NPM) does not have a significant relationship with stock returns of both Syariah and conventional stocks. It contradicts the result of previous research by Martani et al. (2009). NPM measures the comparison between earnings available to common shareholders from sales. However, the result indicates that NPM cannot be used as a predictor of stock returns by both of Syariah and conventional investors.

In addition, the value of Adjusted R^2 of the regression model for Syariah stocks is 0.109 or 10.9% and 0.197 or 19.7% for conventional stocks during the period of 2009 to 2011. It indicates that, respectively, 10.9% and 19.7% of the variation in the dependent variable can be explained by the variability in the independent variables. The remaining 89.1% and 81.3% are explained by other variables from outside this regression model.

5. Conclusion

This paper empirically examines the performance of Syariah stocks compared to conventional stocks listed on Indonesia Stock Exchange using Risk-Adjusted Return measurements. The statistical result using Mann Whitney U-test and Independent Samples T-test indicates no significant difference on risk and returns, measured by weekly return, standard deviation and beta, between both Syariah and conventional stocks. Furthermore, this research also evaluated the performance of both Syariah and conventional stocks portfolio by employing Risk-Adjusted Return measurement, consisting of Sharpe ratio, Treynor ratio and Jensen's Alpha. Measurement using Sharpe ratio and Jensen's Alpha shows that both stock portfolios perform in a similar manner. Despite that result, the measurement using Treynor ratio indicates that Syariah stocks portfolio had lower risk-adjusted return than conventional stocks portfolio.

In addition, this paper investigates the relationship between stock returns and fundamental factors of the company, which are financial ratios represented by Debt to Equity Ratio, Earning Per Share, Price Earning Ratio, Net Profit Margin, Return on Equity and Price to Book Value of both Syariah and conventional stocks. Based on the regression result, it can be concluded that DER, EPS, NPM, ROE and PBV simultaneously have significant relationship with returns of both Syariah and conventional stocks. From the t-test result, the variables which have a significant relationship on Svariah stock returns are DER, EPS, PBV and ROE (variable PER is excluded from the regression model due to a multicollinearity problem). For conventional stocks, the variables which have a significant relationship with the stocks returns are DER, EPS, PER and ROE. This result implies that Syariah-compliant companies are similar to conventional companies since most of the variables have significant relationship with the stock returns, except PBV. The highest coefficient of correlation in this research regression model is shown by variable ROE for both Syariah and conventional stocks, which means that ROE is the most influential variable among all variables in this research.

Moreover, the explanatory power of regression model in this research is limited due to the relatively small number of Adjusted R². Purnomo (1998) in Martani *et al.* (2009) mention that macroeconomic condition, political situation, government industrial policy and technical aspects within firms are factors other than financial performance that can affect changes in stock price. Thus, those variables are suggested to be expanded in the next research.

Endnotes

1. Central Intelligence Agency, "The World Factbook 2011", <u>https://www.cia.gov/library/publications/the-</u>world-factbook/geos/id.html (accessed November 2012)

References

- Abubakar, A & Rizal, SN 2007, *Development of Indonesia's Islamic Capital Market*, Islamic Finance News Guide 2007, Indonesia.
- Ahmad, Z & Ibrahim, H 2002, 'A study of the performance of the KLSE Syari'ah index', *Malaysian Management Journal,* vol. 6, no. 1, pp. 25-34.

- Albaity, M & Ahmad, R 2011, 'A Comparative Analysis of the Firm Specific Determinants of Syariah Compliant Versus on-Syariah Compliant Firms in Bursa Malaysia', *Asian Journal of Business and Accounting*, vol. 4, no. 1, pp. 59-84.
- Albaity, M & Ahmad, R 2008, 'Performance of Syariah and Composite Indices: Evidence from Bursa Malaysia', *Asian Academy of Management Journals of Accounting and Finance,* vol. 4, no. 1, pp. 23–43.
- Atmaja, LS 2011, *Who Wants to be a Smiling Investor,* Kepustakaan Populer Gramedia, Jakarta.
- Bhatt, V & Sultan, J 2010, 'Leverage Risk, Financial Crisis, and Stock Returns: A Comparison among Islamic, Conventional, and Socially Responsible Stocks', paper presented to the 8th International Conference on Islamic Economics and Finance, Center for Islamic Economics and Finance, Qatar Faculty of Islamic Studies, Qatar.
- Chiadmi, MS & Ghaiti, F 2012, 'Modeling Volatility Stock Market using the ARCH and GARCH Models: Comparative Study between an Islamic and a Conventional Index (SP Sharia VS SP 500)', *International Research Journal of Finance and Economics ISSN 1450-2887 Issue 91*.
- Davies, A 2012, *Global Islamic finance assets hit* \$1.3 *trillion*, Reuters, viewed December 2012, ">http://www.reuters.com/article/2012/03/29/islamic-finance-growth-idUSL6E8ET3KE20120329>.
- El Qorchi, M 2005, 'Islamic finance gears up', *Finance & Development, Vol. 42, No. 4,* pp. 46-49 as cited in Pok, W. C., 2012, 'Analysis of Syariah Quantitative Screening Norms among Malaysia Syariah-compliant Stocks', *Investment Management and Financial Innovations,* vol. 9, no. 2, pp. 69-80.
- Hakim, S & Rashidian, M 2004, 'Risk & Return of Islamic Stock Market Indexes', paper presented at the International Seminar of Non-Bank Financial Institution, Malaysia.
- Hickman, KA, Teets, R & Kohls, JJ 1999, 'Social investing and modern portfolio theory', *American Business Review*, vol. 17, no. 3, pp. 72–78.
- Husein, K & Omran, M 2005, 'Ethical investment revisited: Evidence from Dow Jones Islamic Indexes', *Journal of Investing*, vol. 14, no. 3, pp. 105-124.
- The Mili Gazette 2005, *Investing in stock market: the Shariah way*, viewed October 2012, http://www.milligazette.com/Archives/2005/01-15July05-Print-Edition/011507200530b.htm>.
- Khan, ZA 2010, *Islamic Stock Market and Shariah*, viewed October 2012, < http://ziaahmedkhan.hubpages.com/hub/Islamic-Finance-Market>.
- Lesourd, V 2007, *Performance Measurement of Traditional Investment Literature Survey,* viewed November 2012, ">http://www.investopedia.com/articles/08/performance-measure.asp#axzz2FYYt2CMu>.
- Manao, H & Deswin, N 2001, 'Asosiasi Rasio Keuangan dengan Return Saham: Pertimbangan Ukuran Perusahaan serta Pengaruh Krisis Ekonomi di Indonesia', Simposium Nasional Akuntansi UI, Jakarta.
- Mar'atun, S 2007, 'Pengukuran Return dan Risiko Portofolio Saham Syariah from Berbagai Kriteria Pemilihan Saham di Jakarta Islamic Index', Jakarta.
- Martani, D, Mulyono & Khairurizka, R 2009, 'The effect of financial ratios, firm size, and cash flow from operating activities in the interim report to the stock return', *Chinese Business Review, ISSN 1537-1506,* pp. 44-55.
- McGowan, C & Junaina, M 2010, 'The Theoretical Impact Of The Listing of Syariah-Approved Stocks on Stock Price and Trading Volume', *International Business & Economics Research Journal – March 2010* vol. 9, no. 3, pp. 11-19.

- Natarajan, P & Dharani, M 2012, 'Shariah Compliant Stocks in India a Viable and Ethical Investment Vehicle', *Arabian Journal of Business and Management Review*, vol. 1, no.6, pp. 50-62.
- Pareto, C 2008, *Measure Your Portfolio's Performance,* viewed November 2012, <Investopedia: http://www.investopedia.com/articles/08/performancemeasure.asp#axzz2FYYt2CMu>.
- Pitluck, A 2008, Moral Behavior in Stock Markets: Islamic Finance and Socially Responsible Investment, viewed October 2012, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1156346>.
- Pok, WC 2012, 'Analysis of Syariah Quantitative Screening Norms among Malaysia Syariah-compliant Stocks', *Investment Management and Financial Innovations*, vol. 9, no. 2, pp. 69-80.
- Purnomo, Y 1998, 'Keterkaitan Kinerja Keuangan dengan Harga Saham', Usahawan, 27 (12) as cited in Martani, D, Mulyono, & Khairurizka, R 2009, 'The effect of financial ratios, firm size, and cash flow from operating activities in the interim report to the stock return', *Chinese Business Review*, ISSN 1537-1506, pp. 44-55
- Putri, AA 2012, 'Analisis Pengaruh ROA, NPM, DER, EPS, dan PBV terhadap Return Saham', Bachelor thesis, Universitas Diponegoro, Indonesia.
- Rahmayanti, TF 2003, 'Analisis Kinerja Portfolio Saham Syariah di Bursa Efek Indonesia Tahun 2001-2002', PhD thesis, Universitas Indonesia, Jakarta.
- Romli, N, Mohammad, AA & Yusof, MF 2012, 'Volatility analysis of FTSE Bursa Malaysia: Study of the problems of the Islamic stock market speculation from period 2007 to 2010', *African Journal of Business Management*, vol.6, no. 29, pp. 8490-8495.
- Sadeghi, M 2008, 'Financial Performance of Shariah-Compliant Investment: Evidence from Malaysian Stock Market', *International Research Journal of Finance and Economics*, ISSN 1450-2887, issue 20, pp. 15-26.
- Wilson, R 1997, Islamic Finance and Ethical Investment. *International Journals of Social Economics*, vol. 24, no. 11, pp. 1325-1342.
- Wulandari, EE 2012, *Indonesia Islamic Capital Market Report*, Islamic Finance News Forum – Indonesia.