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# THE DISTINCTION BETWEEN SHARIA MARKET AND CONVENTIONAL MARKET: A STUDY ON INDONESIA STOCK EXCHANGE

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#### **Abstract**

The present study investigates the differences between Islamic Economic System and Conventional Economic System that supposedly lead to the differences between sharia market and conventional market. Through bivariate and multivariate analysis, regression, correlation, and determination tests were carried out to identify the effect of conventional market on sharia market. Analysis was done based on the data of Indonesia Stock Exchange from December 2006 to May 2017, The data consisted of Jakarta Stock Exchange (JSX) Composite Index (Indeks Harga Saham Gabungan, IHSG), Jakarta Stock Exchange Liquid Index (LQ45), Jakarta Islamic Index (JII), and Indonesia Sharia Stock Index (ISSI). The results show that IHSG and LQ45 have a significant positive correlation with JII or ISSI. While IHSG and LQ45 are classified as the elements of conventional market, JII and ISSI are the representation of Sharia market. It indicates that sharia market and conventional market are both present with the same character. In other words, sharia market is still influenced by banking interest rate and speculation. To confirm this finding, the list of issuers on IDX, LQ45, JII, and ISSI was examined and the specific sharia issuers were compared with nonsharia issuers, therefore the classification of IHSG and LQ45 as conventional market is corrected. Based on the results of the analysis of regression, correlation, determination, and investigation of the collected data, a model of sharia market stability is formulated.

**Keywords:** Bivariate Analysis, Multivariate Analysis, Stability Model, Sharia Market, Conventional Market.

#### Introduction

As the country with the largest Muslim population in the world, Indonesia is a prospective market for the development of Islamic financial industry. In fact, it has been initiated in Indonesia since 1992, with the establishment of the foremost sharia commercial bank, i.e., *Bank Muamalat Indonesia*. Subsequently, the Indonesian capital market has been enriched by Jakarta Islamic Index (JII) as the first Islamic stock index listed on the Indonesia Stock Exchange (IDX) which launched on 3 July 2000, and followed by the Indonesia Sharia Stock Index (ISSI) launched on 12 May 2011. In addition, Islamic or Sharia investment

in the capital market can also be invested in other Sharia securities, i.e., *sukuk* and Sharia mutual funds (Indonesia Stock Exchange/IDX, 2017).

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At the same time, the conventional stocks on the IDX can be considered non-compliant to Islamic laws, including those listed in Jakarta Stock Exchange (IHSG) and Jakarta Stock Exchange Liquid Index (LQ45). These conventional stocks or securities allow the practices of *usury* (referring to conventional bank interest rate fluctuations) as well as businesses that involve *gharar* (speculation), *maisir* (gambling) and non-sharia-compliant activities (e.g., conventional banking, liquor industry, and tobacco industry).

distinction between Sharia The and conventional stocks or securities will basically lead to the differences in the fluctuations of their values. In order to ascertain the difference, the bivariate and multivariate regression analysis using a quantitative approach and the correlation and determination analysis between Islamic stock and conventional stocks can be done. Furthermore, to confirm the equations and the results of quantitative analysis, it is necessary to qualitatively examine the investors' opinions and behavior in investing in Sharia or conventional stocks/ securities in the capital market. The measures to unveil the differences between Sharia markets (represented by stock transactions or Sharia securities) and conventional market (represented by stock transactions or conventional securities) is enclosed in a study directed at revealing Sharia market stability model.

Many studies have investigated the distinction between Sharia capital market and conventional capital market, the volatility of the Sharia capital market, and the link between the global Sharia capital markets. Such studies are the effort to reaffirm the consistency of Sharia market to exclude usury system (i.e., the fluctuations on interest rates in conventional banks), gharar (speculation), maisir (gambling), and other nonsharia-compliant activities. They include the studies carried out by Hakim, Rashidian, Hussein, Achsani, Effendi and Sclip. Some of the findings of those studies indicated the linkage between Sharia market and conventional market, yet some reported the opposite result.

Hakim and Rashidian (2004) compared Sharia stocks on the Dow Jones Islamic Market Index - US (DJIMI) with conventional stocks on the Wilshire 5000 Index (W5000). It used cointegration analysis and multivariate autoregressive model as the method. The findings of this study revealed that the investors in DJIMI were relatively independent from the disruptions occurred in the capital market, there was no discernible correlation between the DJIMI and W5000, and they are independent from each other (Hakim & Rashidian, 2004).

The impact of the ethical screening on the performance of Financial Times and London Stock Exchange (FTSE) Global Islamic index and Dow Jones Islamic Market Index (DJIMI) was scrutinized by Hussein (2005). It examined examine whether returns gained by investors who

purchased shares in the FTSE Global Islamic and DJIMI indices were different from their indices counterparts, both in the short-run and long-run. The hypothesis assumed that ethical screening might lead to increased screening and monitoring costs, availability of a smaller investment universe, and restricted potential for diversification. In particular, ethical screening was inclined to eliminate large firms from the investment universe and as a result remaining firms tended to be smaller and had more volatile returns. In fact, the findings indicated that ethical screening does not have an adverse effect on the global Islamic Index performance. Generally, this study rejected the assumption that Islamic investment offered inferior investment performance compared to unscreened portfolios (Hussein, 2005).

Achsani, Effendi, and Abidin (2007) studied the Islamic stock markets of the USA, Canada, the UK, Japan, Asia Pacific, Indonesia and Malaysia. The correlation coefficient method, granger-causality test, and vector autoregressive were employed. While there are strong correlations between Islamic stock indices, the spatial relationship of Islamic markets also positively influences its degree of relationship; which is asymmetrical with each other.

Aziz and Kurniawan (2007) empirically tested the Kuala Lumpur Sharia Index (KLSI) and the Jakarta Islamic Index (JII). This study analyzed the indices of KLSI and JII that explain the descriptive statistics, tested the stochastic properties of the data series by using unit root, and performed GARCH test with the aim of assessing the volatility of the existing data. This study concludes that the index volatility depends on the market players. As long as the investors are still in large quantities yet the Islamic paradigm is absence, the Islamic index is merely an index that gives the investors either profits or losses.

Chapakia and Sanrego (2007) empirically examined the risks and benefits of the Islamic capital market by using several econometric techniques, i.e., unit root test, cointegration test, and vector error correction model (VECM). The study examined the dynamic and long-term relationships between the composite index (*Kuala Lumpur Stock Exchange Composite Index* - KLSE CI), sharia index (*KLSE Indeks Syariah*), and the 3-month Treasury bill rate. The findings of the study differ from the results of research conducted by Hakim and Rashidian (2004). Chapakia and

Sanrego found the high dynamic correlation between the Islamic index and the composite index. It opposed the findings reported by Hakim and Rashidian (2004) in which those indices are independent from each other, a sufficient condition for the lack of cointegration.

Saiti, Bacha, and Masih analyzed the daily returns of five sharia-compliant stock indices (i.e., FTSE Sharia China Index, FTSE Sharia India Index, FTSE Sharia USA Index, FTSE Malaysia EMAS Sharia Index, and Dow Jones Sharia Index) using the GARCH or combination of dynamic multivariate approach. The study estimated the dynamic conditional relationship between the investigated Sharia indices through a newly developed application, namely the dynamic multivariate GARCH model with the aim of assisting Islamic investors, both local and international, to diversify their portfolios by hedging to avoid unexpected risks. correlations between those five indices are not constant but dynamic and time varying. Therefore, investors must monitor the volatilities and regulate their investment portfolio (Saiti, Bacha, & Masih, 2013).

Research conducted by Reddy and Fu (2014) examined whether there were differences in performance between Islamic stocks and conventional stocks listed on the Australian Stock Exchange (ASX). The findings indicated that there was a statistically significant difference in the performance of Islamic stocks and conventional stocks listed on the ASX in terms of risk, otherwise the performance of Islamic stocks had a propensity to be similar to conventional stocks. Additionally, it found that there was a statistically significant relationship between the returns of Islamic stocks and conventional stocks.

Sclip, Dreassi, Miani and Paltrinieri (2016) dissected the volatility and co-movements between sukuk and international stock indexes. Symmetric multivariate GARCH models with dynamic conditional correlations (DCC) were estimated under student-t distribution. The main hypothesis was sukuk as a hybrid bond, with similar characteristics between Islamic bonds and equity due to their specific financing framework. This study also illustrated the impact of the high correlation between sukuk and US and EU stock markets, without finding definitive knowledge about the quality behavior affecting Islamic bonds. Additionally, it revealed the higher volatility

between sukuk and regional market indexes during financial crisis (Sclip, Dreassi, Miani, & Paltrinieri, 2016).

Nurhayadi and Wijiharjono (2017) investigated the phenomenon in Indonesia Stock Exchange in which it explained that Jakarta Islamic Index (JII) has strong correlation with IHSG and LQ45. Likewise, Indonesia Sharia Stock Index (ISSI) also has strong correlation with both IHSG and LQ45. In this context, the findings reaffirmed IHSG and LQ45 as the representations of conventional markets.

Based on the literature review, the initial hypothesis of the present study is: the Islamic capital market has a very strong relationship with conventional capital markets. The data obtained from the activities of Indonesia Stock Exchange (IDX), which consist of JII and ISSI which represent Islamic capital market, and JSX Composite index and LQ45 which represent conventional capital market, are involved to test the hypothesis. The involved data is new relevant data (from 2006 to 2017) for maintaining the quality and the novelty of the research findings.

#### Theoretical Framework

Islamic or Sharia market is represented, among others, by the Sharia Capital Market. It is operated based on the *fatwa* issued by the National Sharia Council of the Indonesian Ulama Council (DSN-MUI). Despite *fatwa* is a non-binding legal opinion, the DSN-MUI *fatwa* becomes one of the references in the issue of Islamic capital market in Indonesia. Currently, there are 17 DSN-MUI fatwas related to this matter in which 3 (three) of them are referred as the basis for the development of Islamic capital market, namely:

- 1. Fatwa DSN-MUI No. 20/DSN-MUI/IV/2001 concerning Guidelines for Implementation of Investment for Islamic Mutual Funds.
- Fatwa DSN-MUI No. 40/DSN-MUI/X/2003 concerning Capital Market and General Guidelines of Islamic Principles Implementation in Capital Market Field.
- 3. Fatwa DSN-MUI No. 80/DSN-MUI/III/2011 concerning the Implementation of Islamic Principles in Equity Securities Trading Mechanism in Regular Market of Stock.

Regulations related to the Indonesian Islamic capital market are in the form of laws, and regulations issued by the Financial Services Authority (OJK). Specifically, the OJK has issued 10 regulations concerning the Islamic capital market, namely:

- POJK No. 15/POJK.04/2015, POJK on the Implementation of Sharia Principles in Capital Market.
- 2. POJK No. 16/POJK.04/2015, POJK on Sharia Capital Market Experts.
- POJK No. 17/POJK.04/2015, POJK on the Issuance of Sharia Securities Issuance and Requirements Shares by Sharia Issuers or Sharia Public Companies.
- 4. POJK No. 18/POJK.04/2015, POJK on the Issuance and Sukuk Requirements.
- 5. POJK No. 19/POJK.04/2015, POJK on the Issuance and Requirements of Syariah Mutual Funds.
- POJK No. 20/POJK.04/2015,POJK on the Issuance and Terms of Sharia Asset Backed Securities.
- 7. POJK No. 30/POJK.04/2016, POJK on Sharia Real Estate Investment Fund in the form of Collective Investment Contract.
- 8. POJK no. 53/POJK.04/2015, POJK on the contracts used in the issuance of Islamic Securities in the Capital Markets.
- POJK No. 61/POJK.04/2016, POJK on the Implementation of Sharia Principles in the Capital Market for Investment Manager.
- Criteria and the Issuance of Sharia Securities
   List, Rule Number II.K.1 concerning
   Criteria and the Issuance of Sharia Securities
   List.

In the present study, the dynamics of the Islamic market are examined by observing the fluctuations of Islamic stocks in the Jakarta Islamic Index (JII) and Indonesia Sharia Stock Index (ISSI). The JII consists of 30 Islamic stocks listed on the Indonesia Stock Exchange (IDX), while the ISSI consists of all Islamic stocks listed on the IDX. JII, ISSI, and other Sharia securities are listed as stocks or securities traded on the IDX, which have passed a periodic screening process to meet certain Sharia requirements. The screening includes the certainty that sharia stocks and securities are not related to usury (referring to conventional bank interest rate fluctuations), gharar (speculation), maisir (gambling) and nonsharia-compliant activities (e.g., conventional banking, liquor industry, tobacco industry, etc.) (DSN-MUI, 2013-2017).

The criteria between JII and ISSI are different. *First*, JII is selected from all stocks that have complied with Sharia requirements based on the Criteria and Issuance of Sharia Securities List incorporated in the ISSI. *Second*, of the selected stocks, as many as 60 stocks which have the largest capitalization in the past year, are selected. *Third*, of the selected 60 stocks, as many as 30 stocks are selected based on the highest liquidity level as indicated by the value of transactions in the regular market over the past year (Indonesia Stock Exchange (IDX), 2017).

## **Research Method**

The present study is a quantitative research using linear regression method. Data were examined using bivariate and multivariate analysis. The analysis was based on the equations developed by Walpole, Myers, Myers, and Ye (2013). In the bivariate analysis, the estimated linear regression is generated by the equation as follows:

$$\hat{y} = b_0 + b_1 x \tag{1}$$

The data of x and  $\hat{y}$  are displayed in a scatter plot diagram. The pattern of points on the scatter diagram forms a straight line, which indicates the linear relationship between the two variables. Given the paired  $\{(x_i, y_i); i = 1, 2, ..., n\}$  sample data, the least squares method estimates  $b_0$  and  $b_1$  from equation (1) in the formula as follows:

$$b_{1} = \frac{n \sum_{i=1}^{n} x_{i} y_{i} - \left(\sum_{i=1}^{n} x_{i}\right) \left(\sum_{i=1}^{n} y_{i}\right)}{n \sum_{i=1}^{n} x_{i}^{2} - \left(\sum_{i=1}^{n} x_{i}\right)^{2}}$$

$$b_{0} = \overline{y} - b_{1} \overline{x}$$
(2)

By identifying  $b_0$  and  $b_1$  hence equation (1) is formulated. The correlation between x and y is calculated using the Pearson product-moment correlation coefficient, r.

$$r = \frac{S_{xy}}{\sqrt{S_{xx}S_{yy}}}$$

where,

$$S_{xx} = \sum_{i=1}^{n} x_{i}^{2} - \frac{\left(\sum_{i=1}^{n} x_{i}\right)^{2}}{n}, S_{yy} = \sum_{i=1}^{n} y_{i}^{2} - \frac{\left(\sum_{i=1}^{n} y_{i}\right)^{2}}{n}$$

$$r^{2} = \frac{\left[b_{0}\sum_{i=1}^{n} y_{i} + b_{1}\sum_{i=1}^{n} x_{1i}y_{i} + b_{2}\sum_{i=1}^{n} x_{2i}y_{i} - \left(\sum_{i=1}^{n} y_{i}\right)^{2} / n\right]}{\sum_{i=1}^{n} y_{i}^{2} - \frac{\left(\sum_{i=1}^{n} y_{i}\right)^{2}}{n}}$$

$$S_{xy} = \sum_{i=1}^{n} x_{i}y_{i} - \frac{\left(\sum_{i=1}^{n} y_{i}\right)\left(\sum_{i=1}^{n} y_{i}\right)}{n}$$

$$S_{xy} = \sum_{i=1}^{n}$$

The range of values of r is from -1 to +1 or  $-1 \le r \le +1$ . A value of -1 or close to -1 indicates a significant negative correlation between variable X and variable Y. Conversely, a value of 1 or close to 1 indicates a positive correlation between variable X and variable Y. Meanwhile, a value of 0 or close to 0 indicates no linear correlation or a weak linear correlation between variables X and Y. The coefficient of determination, which states a large percentage of the effect of variable x to y is expressed by R2. The coefficient of determination states the percentage variation in variable y explained by x variables. It is denoted by  $r^2$ .

Furthermore, in the multivariate analysis, the IHSG and LQ45 values are expressed as two independent variables of  $x_1$  and  $x_2$ , respectively. Meanwhile, the Islamic market index (JII or ISSI) is the dependent variable, y. The multiple linear regression equation is as follows:

$$\hat{y} = b_0 + b_1 x_1 + b_2 x_2 \tag{4}$$

Given the data  $\{(x_1, x_2, y); i = 1, 2,..., n\}$ , hence to calculate  $b_0$ ,  $b_1$ ,  $b_2$ , the least squares method is used to developed the following estimated regression equations.

$$nb_{0} + b_{1} \sum_{i=1}^{n} x_{1i} + b_{2} \sum_{i=1}^{n} x_{2i} = \sum_{i=1}^{n} y_{i},$$

$$b_{0} \sum_{i=1}^{n} x_{1i} + b_{1} \sum_{i=1}^{n} x_{1i}^{2} + b_{2} \sum_{i=1}^{n} x_{1i} x_{2i} = \sum_{i=1}^{n} x_{1i} y_{i},$$

$$b_{0} \sum_{i=1}^{n} x_{2i} + b_{1} \sum_{i=1}^{n} x_{1i} x_{2i} + b_{2} \sum_{i=1}^{n} x_{2i}^{2} = \sum_{i=1}^{n} x_{2i} y_{i}$$
(5)

The coefficient of determination  $(r^2)$  is given by:

$$r^{2} = \frac{\left[b_{0}\sum_{i=1}^{n} y_{i} + b_{1}\sum_{i=1}^{n} x_{1i}y_{i} + b_{2}\sum_{i=1}^{n} x_{2i}y_{i} - \left(\sum_{i=1}^{n} y_{i}\right)^{2} / n\right]}{\sum_{i=1}^{n} y_{i}^{2} - \frac{\left(\sum_{i=1}^{n} y_{i}\right)^{2}}{n}}$$
(6)

while the correlation coefficient is given by:

$$r = \sqrt{r^2} \tag{7}$$

The examined data were obtained from the data of JSX Composite Index (IHSG), LQ45, and JII from December 2006-May 2017 (10 years 6 months), and the data of ISSI from January 2011-May 2017 (6 years 5 months). The value of the stocks was recorded regularly at the close on the last day of the month. By assuming that JSX Composite Index (IHSG) and LQ45 are the conventional markets while JII and ISSI are the Islamic markets, as many as six scenarios were devised as follows:

- x = JSX Composite, y = JII, bivariate analysis.
- 2. x = LQ45, y = JII, bivariate analysis.
- $x_1 = JSX$  Composite,  $x_2 = LQ45$ , y = JII, multivariate analysis.
- x = JSX Composite, y = ISSI, bivariate analysis.
- x = LQ45, y = ISSI, bivariate analysis.
- $x_1 = \text{JSX } Composite, x_2 = \text{LQ45}, y = \text{ISSI},$ multivariate analysis.

These six scenarios were re-examined by observing the overall list of issuers from IHSG, LQ45, JII, and ISSI. Subsequently, the 7th scenario was devised by sorting the data of stock index from January 2011 to June 2017) with the pure non-sharia issuers as x and the pure sharia issuers as y, and bivariate analysis was performed.

# RESULTS AND DISCUSSION

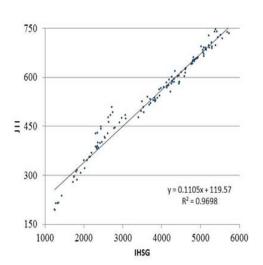
The regressions, coefficients of determination, and correlation coefficients of the six scenarios have generated several points that are elaborated below.

1. 1st scenario: x = JSX Composite, y = JII, bivariate analysis.

The data processing of JSX Composite Index or IHSG (x) and JII (y) with bivariate analysis method generated a basic linear regression equation as follows:

$$\hat{y} = 119.57 + 0.1105x$$

with correlation coefficient (r) = 0.9848 and coefficient of determination  $(r^2) = 0.9698$  (Fig. 1). The results indicate that IHSG and JII are directly proportional, implying the increase in the IHSG means the increase in JII, and vice versa. The IHSG and JII also have a strong positive correlation in which 96.98% of the IHSG affecting the JII.



Graph 1. IHSG vs. JII 750 600 = 450 300 y = 0.7583x + 27.86 $R^2 = 0.9911$ 150 200 300 400 500 600 700 800 900 1000 LQ45

Graph 2. LQ45 vs. JII

2. 2nd scenario: x = LQ45, y = JII, bivariate analysis.

The results of data processing of LQ45 (x) and JII (y) with bivariate analysis method generated a simple linear regression equation as follows:

$$\hat{y} = 27.860 + 0.758x$$

Correlation coefficient (r) = 0.996 and coefficient of determination  $(r^2) = 0.9911$  (Fig. 2). The results show that LQ45 and JII are directly proportional. The increase in LQ45 index means the increase in JII index and vice versa. LQ45 and JII have a strong positive correlation in which 99.11% of the LQ45 index affecting the JII index.

3. 3rd scenario:  $x_1 = JSX$  Composite Index,  $x_2 = LQ45$ , y = JII, multivariate analysis. The results of data processing of IHSG (JSX Composite Index as  $x_{1), LQ45}$  ( $x_{2), and JII}$  (y) with multivariate analysis method generated multiple linear regression equation as follows:

$$\hat{y} = 20.953 - 0.0094x_1 + 0.8212x_2$$

with correlation coefficient (r) = 0.9956 and coefficient of determination  $(r^2) = 0.9913$ . The results indicate that the IHSG and LQ45 are directly proportional to the JII, meaning the increase in the IHSG and LQ45 is also accompanied by the increase in the JII, and vice versa. Those indices also have a strong positive correlation, in which 99.13% of the IHSG and LQ45 affecting the JII.

4. 4th scenario: x = JSX Composite Index, y = ISSI, bivariate analysis.

The results of data processing of IHSG (x) and ISSI (y) with bivariate analysis method generated a basic linear regression equation as follows:

$$\hat{y} = 5.383 + 0.0316x$$

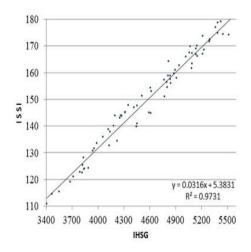
with correlation coefficient (r) = 0.9865 and coefficient of determination  $(r^2) = 0.9731$  (Figure 3). The results show that IHSG and ISSI are directly proportional, the increase in the IHSG means the increase in the ISSI and vice versa. Moreover, the IHSG and the ISSI also have a strong positive correlation in which 97.31% of the IHSG affecting the ISSI.

5. 5th scenario: x = LQ45, y = ISSI, bivariate analysis.

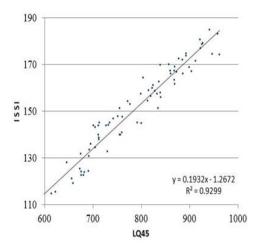
The results of processing the LQ45 index (x) and ISSI index (y) data with bivariate analysis method generated a simple linear regression equation as follows:

$$\hat{y} = -1.267 + 0.193x$$

with correlation coefficient (r) = 0.964 and coefficient of determination  $(r^2) = 0.9299$  (Figure 4). The results show that LQ45 and ISSI are directly proportional, meaning the increase in the LQ45 index also means the increase in the ISSI index and vice versa. The LQ45 and ISSI index have a strong positive correlation in which 92.99% of the LQ45 index affecting the ISSI index.



Graph 3. IHSG vs. ISSI



Graph 4. LQ45 vs. ISSI

6. 6th scenario:  $x_1 = JSX$  Composite Index,  $x_2 = LQ45$ , y = ISSI, multivariate analysis. The results of processing the data of IHSG  $(x_{1), LQ45}(x_{2), and ISSI}(y)$  with multivariate analysis method generated a multiple linear regression equation as follows:

$$\hat{y} = 11.747 + 0.0485x_1 - 0.1072x_2$$

with correlation coefficient (r) = 0.9896 and coefficient of determination (r<sup>2</sup>) = 0.9793. The results show that the IHSG and LQ45 are inversely proportional with the ISSI index. The increase in the IHSG and LQ45 index is simultaneously accompanied by the decrease in the ISSI index. Nevertheless, the IHSG and LQ45 index still have a strong positive correlation with the ISSI index in which 97.93% of the IHSG and LQ45 index affecting the ISSI index.

All scenarios indicate that the independent variables have a strong positive correlation with the dependent variable. The independent variables explained 90% of the variation in the dependent variable. Assumed the IHSG and LQ45 are conventional markets while the JII and ISSI are Islamic markets, the situation implies the high correlation between conventional markets and Islamic markets. It opposes the ideal condition, in which Islamic markets should not have an association with interest rates, *gharar* (speculation), *maisir* (gambling), and non-sharia-compliant businesses.

Subsequently, the data of issuers in all indices were examined thoroughly to investigate the possible reasons for the high correlation coefficient and coefficient of determination yielded in the first six scenarios. The results are:

- 1. Of the 572 issuers listed on the IHSG, there are 30 JII issuers on it. As JII is a part of the IHSG hence the fluctuations in the IHSG greatly affect the fluctuations in the JII.
- 2. As many as 28 issuers are among the 45 issuers listed on LQ45 as well as 30 issuers listed on the JII. Most JII issuers (93.33%) are also listed on LQ45 hence the fluctuations in the LQ45 significantly affect the fluctuations in the JII.
- 3. Based on the facts above, the IHSG and LQ45 are simultaneously having a strong effect on

the fluctuations of JII.

- 4. Of the 572 issuers listed on the IHSG, 326 of them are also listed on the ISSI (totally, there are 331 issuers in ISSI). Thus, most of the issuers of ISSI are also part of the IHSG. It shows the fluctuations in the IHSG greatly affect the fluctuations in the ISSI.
- 5. Of the 45 issuers listed on LQ45, 33 issuers are also listed on the ISSI. Thus, most of the issuers of LQ45 (73.33%) are also listed on the ISSI hence the fluctuations in the LQ45 also affect the fluctuations in the ISSI.
- Based on the facts, the fluctuations in the IHSG and LQ45 will affect the fluctuations in the ISSI.

To ensure the actual correlation between the Islamic markets and the conventional markets, the 7th scenario that covered regression test, correlation test, and determination between the pure Islamic issuers (PT Telekomunikasi Indonesia

(*Persero*)) and the pure conventional issuers (PT Gudang Garam Tbk), was carried out. It has been identified that PT Telekomunikasi Indonesia (Persero) is listed on JII and ISSI. Meanwhile, PT Gudang Garam Tbk (non-sharia) is not listed on either JII or ISSI.

Regression test, correlation test, and determination of: x = the stock value of PT Gudang Garam, y = the stock value of PT Telekomunikasi Indonesia, using bivariate analysis method. The simple linear regression equation generated from the data and method is  $\hat{y} = 6835.52 - 0.0282x$ ; with a correlation coefficient, r = -0.0923 and the coefficient of determination,  $r^2 = 0.00853$  (Figure 5). The results indicate that the absence of correlation between the stock value of PT Gudang Garam and that of PT Telekomunikasi Indonesia. It also confirms that the volatility of Islamic market differs from and does not correlate with the fluctuation of conventional (non-sharia) markets.

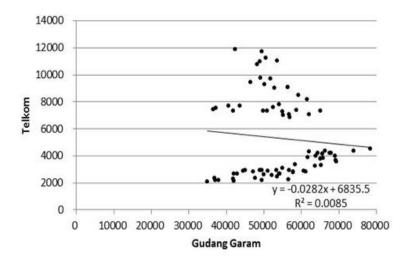


Figure 5. Gudang Garam vs. Telkom

Based on the findings of this study, the stability model of Islamic market can be explained as follows:

- 1. In Islamic markets, the types of business, products, services, agreement and management system (as represented by the issuers or public companies that issue Sharia Securities) must not oppose the Sharia principles. The process of screening is carried out on JII and ISSI.
- 2. In Islamic markets, the implementation of transactions must be carried out according
- to the prudence concept and the consistency for not involving and/or allowing any speculation and manipulation activities, i.e., *dharar*, *gharar*, *usury*, *maisir*, *risywah*, bad deeds and injustice. Briefly, secondary markets designed based on pure speculation is prohibited.
- 3. In calculating the stock exchange composite index, the list of the sharia issuers or sharia public companies should not be merged with the list of non-sharia issuers or non-sharia public companies.

4. If the points of the Islamic market stability model produced in this study are implemented with consistency and discipline, it is estimated that the pure Islamic market will be relatively stable, distinctive, and not correlated to the pure non-sharia markets.

### Conclusion

- 1. The fluctuations in IHSG and LQ45 are highly correlated to and determined by the fluctuations in JII and ISSI. Nevertheless, IHSG and LQ45 are actually ineligible for being considered as the manifestation of nonsharia or conventional markets since most of the issuers listed on JII and ISSI are also listed on the IHSG and LQ45. The finding of this study rejects the initial hypothesis that the Islamic capital markets have a very strong relationship with the conventional capital markets.
- 2. After comparing the stock value of the sharia issuers with the stock value of non-sharia issuers, the finding of this study affirms that the Islamic markets are not correlated to the conventional markets. Therefore, the initial hypothesis that the Islamic capital markets have a very strong relationship with the conventional capital markets, is rejected.
- 3. The findings of this study indicate that the coefficient of determination between Islamic markets and conventional markets is very low. It reveals that conventional markets have no effect on the Islamic market, and vice versa
- 4. After examining the fluctuations in the value of sharia issuers compared to that of non-sharia issuers, it can be stated that they are not correlated. The investors of Islamic markets are consistent in making investment hence the fluctuations in Islamic markets are

- distinctive and also not correlated with the conventional markets.
- The model of Islamic market stability devised in this study is clarified as follows: *First*, the type of business, products, services, agreements and management systems (as represented by sharia issuers or sharia public companies that issue sharia securities) in the Islamic markets must not conflict with the sharia principles. To ensure this requirement, a screening is carried out on JII and ISSI. Second, the implementation of transactions in the Islamic markets must be carried out based on the prudence concept and the consistency for not involving and/or allowing any speculation and manipulation activities, including dharar, gharar, usury, maisir, risywah, bad deeds and injustice. The secondary markets that entail pure speculation are prohibited. Third,calculating the stock exchange composite index, the list of the sharia issuers or sharia public companies should not be merged with the list of non-sharia issuers or non-sharia public companies.
- 6. To reinforce the evidence that the fluctuations in Islamic markets are distinctive from the fluctuations in conventional markets and that the stability of the Islamic market is not disrupted by the fluctuations in conventional markets, it is necessary to conduct further comparison on the data of the fluctuations in conventional markets and Islamic markets.
- 7. In comparing the fluctuations in the aggregate Islamic market index and conventional market index, the list of issuers should be specific. It means that the list of sharia issuers is only filled by the pure sharia companies while the list of conventional issuers is only filled by pure non-sharia companies.

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