The influence of dividend policy on sharia stock price volatility: A study on Indonesian stock exchange

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**ARTICLE INFO**

**Article history:**
Received 19 November 2020  
Received in rev. form 31 Nov. 2020  
Accepted 7 December 2020

**Keywords:**
Dividend per share, Dividend payout ratio, Earning volatility, Stock price volatility

**JEL Classification:**
M, M41

**ABSTRACT**

The main object of this research is to examine whether dividend policy in the form of dividend payout ratio and dividend yield influences the volatility of sharia stock price in the Indonesian Stock Exchange. This research uses the quantitative method by using the secondary data collected from the published Indonesian Stock Exchange. The sample in this research is 106 companies registered in the Indonesian Sharia Stock Index (ISSI) in 2016-2018. The dependent variable in this research is stock price volatility while the independent variables are dividend payout ratio, dividend yield, and data of earnings volatility, debt, size, and growth in assets. Multiplied regression analysis is used for correlation test and hypothesis test using the SPSS software program version 15.0. The result of the research shows a shred of evidence that dividend per share and dividend payout ratio have no influence on the stock price volatility. The result of research can help the investors to select the sharia shares, and for companies, this research is useful to determine the dividend policy.

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**Introduction**

Firm stock price reflects a company’s value. If the stock price increases, it may because the company performance is good, and on the contrary, if the stock price decreases, the company performance may be bad. In the Indonesian Stock Exchange (BEI), the information of stock price is reflected in the composite stock price index (IHSG) and the index with certain categories in capital market such as Jakarta Islamic Index (JII) and Indonesian Sharia Stock Index (ISSI). The stock price contained in ISSI is the reference for the investors to buy the sharia shares. The Index of ISSI is those determined by the Financial Service Authority (OJK) by determining some criteria as follows: (a) the company’s activities are contrary to sharia, and (b) they meet the certain financial ratio. For the investors, buying sharia shares means making investment without speculating and it is usually for the long-term investment. The return expected by the investors is to gain the profit from the stock selling and from the dividend received regularly. Due to the significance of dividend for the investors, they require the right information about the dividend policy in the form of dividend per share that will be received and the company profitability in dividend payout ratio.

For companies that pay the dividend regularly, dividend policy will influence their retain earnings and certainly this will make the stock price fluctuate up and down or make it volatile. Because it has influence on the stock price volatility, many companies did not pay the dividend regularly. From 399 populations of sharia shares taken by researcher as data, only 109 companies that regularly pay the dividend in the period of research (2016-2018). Contradiction between the investors’ interests and the company policy on dividend has been a concern of many researchers.

Researches on dividend policy with stock price volatility was conducted for the first time in America (Fama & French, 1988; Baskin (1989) and Ohlson (1995) and then were followed by many researches in developing countries (Zakaria et al, 2012); Nazir, Abdullah & Nawaz (2012); Islam et al, 2019; Nguyen et al, (2019). Following Baskin (1989), almost all researchers used dividend payout ratio and dividend yield as the independent variables and some control variables (earnings volatility, debt, size, and growth in assets) and stock price volatility as a dependent variable. Similar to the previous researches, the result of dividend research in various capital markets in developing countries showed the contradicting result in accordance with the character of each capital market. Nguyen, et
al, (2019) saw that dividend policy of a company gives negative influence on the stock price volatility, while Islam et al, (2019) showed the opposite result. Researches on dividend policy with stock price volatility have also been conducted in Indonesian capital market (Irton, 2013; Sutandijo, 2019) and they also showed the contradicting results.

The interest of the Indonesian people on sharia shares contained in the Indonesian Sharia Stock Index (ISSI) since the launching of sharia index (in 2012) has progressed significantly enough. At the end of 2019, sharia shares in ISSI increased 2.03% and even higher than the increase in the composite stock price index (IHSG) amounted 1.7%. According to the analyst in capital market, this increase is due to some factors those are the interests and the low debts and the company balance sheet.

The aim of this research is to examine the influence of dividend policy on stock price volatility in sharia shares contained in ISSI at the Indonesian Stock Exchange (BEI). Four variables those are earnings volatility, debt, firm size, and growth in assets influencing the dividend policy are added as the control variables. The significance of this research is to fill the research gap in which there are no researches on dividend yet in Indonesia that use the sharia shares contained in ISSI as the samples. Suwannahrunulkul and Masih (2018) stated that researches on dividend policy with volatility of sharia stock price are still very rarely conducted, and learning dividend policy will influence the stability of sharia shares and certainly will be able to determine the investors’ classical economy.

**Literature Review**

**Influence of Dividend Policy on Stock Price**

In theory, dividend policy can be calculated in two ways (1) dividend yield, which is the number of annual stock dividend of a company stated in percentage from the last market price of the company shares, and (2) dividend payout ratio that is a ratio indicating the percentage of each profit received that is distributed to the shareholders in cash money. Dividend is the company profits distributed to the shareholders that can be in the form of cash dividend or stock dividend. The question is whether each company always pays dividend? And does the dividend policy influence the stock price? Some researches of dividend policy have successfully proved that if the company reduces or does not pay the dividend, it is a bad signal for the company and it may cause the decrease of stock price (Lintner, 1956). Even Gordon (1963) proved that the investors are more interested in the dividend paid by the companies than the capital gain. The result of Lintner and Gordon’s research was famous as Bird-in-hand theory. This theory is greatly supported by the next dividend researchers such as Brickley (1983) and Zainudin et al. (2018). Brickley stated that dividend always provides information when it is regularly or routinely paid. On the other side, some scholar saw that there is no correlation between dividend and stock price (Miller and Modigliani, 1961; Black and Scholes, 1974; Adefila, et al., 2004). The controversy of this result has opened a discourse for the other researchers in deeply studying and further developing about how big the influence of dividend policy on stock price in various world capital market is.

**Influence of Dividend Policy and Some Control Variables on Stock Price Volatility**

Stock price is different from stock price volatility. Baskin (1989) was the first researcher who examined the correlation of policy with stock price volatility by adding some control variables (earnings volatility, firm size, debt, and growth in assets). According to Baskin, these four variables have information and it is related to the stock price volatility and even to the dividend per share. Volatility is a standard of deviation of stock price change in a period of time, while earnings volatility is the up and down of the company profits. Stock price volatility has influence on earnings volatility because it will influence the dividend distribution in the future. The firm size may influence the big or small of the dividend paid to the investors and the bigger the size of company is, the more stable the company has to pay the dividend. Debt is the long term debt of a company divided by the total of asset, the more the debt ratio will influence the stock price volatility. The growth in assets divides the average of the asset growth with the total of assets in certain period. Baskin (1989) conducted a research on 2344 companies registered in New York Stock Exchange in 1967-1986, with the stock price volatility as the dependent variable and dividend per share, dividend payout ratio, earnings volatility, size, debt, and growth as the independent variables; he shows an evidence that there is a negative correlation between dividend per sheet of stock and stock price volatility. Baskin’s research was then followed by many researchers in the capital market of developing countries.

Ilaboya and Aggreh (2013) used random effects regression to examine 26 selected companies in the period of 2004-2011 registered in Nigeria Securities Exchange (NSE), and they found an evidence that dividend per share has positive correlation while dividend payout has negative correlation with stock price volatility. Araoye, et al (2019) were in the same research as Ilaboya and Angreh in NSE capital market with the period of 2005-2014. The result of research using the equation of random effects regression indicated that only dividend per share that can influence the stock price volatility in NSE.

Al-Shawawreh (2014) examined the correlation between dividend per share and dividend payout ratio with the stock price volatility in Amman Stock Exchange, Jordania. He used the multiple regression equation with 13 years period of research in 2001-2013, and he showed that dividend per share has very weak positive correlation with stock price volatility while dividend payout ratio has weak negative correlation. Almanasere (2019) conducted research on 20 insurance companies in the 2008-2017 period of data registered in Amman Stock Exchange. Using the multiple regression equation, he showed that both independent variables (dividend yield and dividend payout) have negative correlation with stock price volatility.

In Pakistan, dividend policy study has been conducted by some researchers (Abrar-ul-haq et al, 2015; Shah, Noreen & Umara, 2018; Ul-haq et al, 2015) who examined the influence of dividend policy on stock price volatility using stratified sampling and time series
data in 2001-2014 to all companies registered in Karachi Stock Exchange (KSE) Pakistan, and it showed an evidence that dividend policy has no influence on stock price volatility. Ullah et al (2015), with the sample of textile company in Pakistan Stock Exchange, proved that only dividend payout ratio that has significant correlation with stock price volatility. Shah and Noreen (2018) examined the correlation of dividend policy using 50 samples of non-financial sector company in 205-2012 period of research in Karachi Stock Exchange (KSE). They used dividend payout and dividend yield as the independent variables, asset growth (AG), earnings volatility (EV), earnings per share (EPS) as the control variables, and stock price volatility as the dependent variables. The result of regression equation showed an evidence that there is a negative correlation between SPV and DP with DY, and a positive correlation between AG, EV and EPS with SPV in KSE.

In Malaysia the dividend policy research with various sample model has been conducted by some researchers. Zainudin et al (2018) with samples of 166 industries in Malaysian Stock Exchange in 2003-2012 period of research examined the correlation of stock price volatility with dividend payout and dividend per share with some variables those are earnings, firm size, debt, and asset growth as variable control during the critical period, and they found an evidence that dividend policy is the best predictor of the stock price volatility. Neelanjana et al. (2019) used samples of 35 companies of food, beverage, chemical, home product and consumer product in Malaysian Stock Exchange in 2008-2017, and they proved that dividend payout has significant negative influence on stock price while dividend per share does not.

In Indian capital market, Singh et al. (2019) examined the influence of dividend policy on stock price volatility. They took samples of 50 companies registered in National Stock Exchange, India in 2008-2017. Using multiple regression with fixed and random model, they successfully proved that dividend policy has influence on stock price.

Nguyen et al. (2019) used 141 non-financial companies in Ho Chi Minh Stock Exchange, Vietnam in 2011-2016 period of research. Using fixed model, they found that dividend payout ratio and dividend yield have negative influence on stock price volatility.

Islam, et al (2019) examined dividend policy with stock price volatility in Dhaka Stock Exchange (DSE), Bangladesh, with 15 companies randomly taken from 290 companies in five years in 2012-2017 period of research. Using the multiple regression equation, they successfully proved that there is a positive correlation of dividend yield and stock price volatility, and a negative correlation of dividend payout and stock price volatility.

In sharia capital market, Suwanhirunkul and Masih (2018) examined the correlation of dividend policy with sharia stock price registered in Dow Jones Islamic US Index in 2005-2017. Using the regression quantile equation and GMM approach, they proved that both dividend per share and dividend payout have no influence on sharia stock price volatility.

The result of literature study of research of dividend policy on stock price volatility in the capital markets in Asia, Africa, and Indonesia is presented in Table 1:

<table>
<thead>
<tr>
<th>No</th>
<th>Researcher</th>
<th>Country</th>
<th>Period of Research</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Araoye et al. (2019)</td>
<td>Nigeria</td>
<td>2008-2017</td>
<td>Positive correlation of DPR with SPV and negative correlation of DPS with SPV</td>
</tr>
<tr>
<td>2</td>
<td>Al-Shawawreh, Fawas Khalid (2014)</td>
<td>Jordania</td>
<td>2008-2017</td>
<td>Negative correlation of SPV with DPS and positive correlation of DPR with SPV</td>
</tr>
<tr>
<td>4</td>
<td>Ul-haq, Abrar et al. (2015)</td>
<td>Pakistan</td>
<td>2001-2014</td>
<td>DPR and DPS have no influence on SPV</td>
</tr>
<tr>
<td>5</td>
<td>Ullah et al. (2015)</td>
<td>Pakistan</td>
<td>2003-2008</td>
<td>DPR has influence on SPV</td>
</tr>
<tr>
<td>7</td>
<td>Zainudin et al. (2018)</td>
<td>Malaysia</td>
<td>2003-2012</td>
<td>DPS and DPR have influence on SPV</td>
</tr>
<tr>
<td>8</td>
<td>Neelanjana and Hasan (2019)</td>
<td>Malaysia</td>
<td>2008-2017</td>
<td>DPS has negative influence on SPV and DPR and has no influence on SPV</td>
</tr>
<tr>
<td>9</td>
<td>Suwanhirunkul and Masih (2018)</td>
<td>Malaysia</td>
<td>2005-2017</td>
<td>DPS and DP have no influence on SPV</td>
</tr>
<tr>
<td>10</td>
<td>Nguyen et al. (2019)</td>
<td>Vietnam</td>
<td>2011-2016</td>
<td>DPS and DPR have negative influence on SPV</td>
</tr>
<tr>
<td>11</td>
<td>Islam et al. (2019)</td>
<td>Bangladesh</td>
<td>2012-2017</td>
<td>Positive correlation of DPS with SPV and negative correlation of DP with SPV</td>
</tr>
<tr>
<td>12</td>
<td>Sutandijo (2019)</td>
<td>Indonesia</td>
<td>2012-2018</td>
<td>DPS and DP have no influence on SPV</td>
</tr>
<tr>
<td>13</td>
<td>Singh and Tandon (2019)</td>
<td>India</td>
<td>2008-2017</td>
<td>DPS and DP have influence on SPV</td>
</tr>
</tbody>
</table>

Source: Author

Annotation:

Stock Price Volatility (SPV); Dividend per Share (DPS); Dividend Payout (DP)

In Indonesia, researches on dividend policy have been conducted by some researchers. For example, Sutandijo (2019) examined the correlation of dividend policy with all shares registered in Indonesian Stock Exchange (ISX), and the observation in 2012-2018 did not see that dividend payout and dividend yield have influence on stock price volatility.
The result of research on dividend policy with stock price volatility previously in various capital markets in Asia, Africa and also in Indonesia showed a contradicting result. Moreover, there is only one research in sharia capital market that examined dividend policy with stock price volatility in companies registered in Dow Jones Islamic US Index, and the result showed that both dividend per share and dividend payout have no influence on stock price. Filling the research gap, especially researches on sharia stock market, researchers are interested in analyzing the correlation of dividend yield and dividend payout ratio on sharia stock price volatility contained in ISSI, in the Indonesian Stock Exchange (BEI). Four variables related to dividend (size, earnings volatility, debt, and growth) are used as the control variables.

Based on the study result of the above literature, the writer is developing the hypothesis in the following form.

H0: 1 Dividend per share, dividend payout ratio have influence on sharia stock price volatility.

H0: 2 Dividend per share, dividend payout ratio, asset growth, earnings volatility, firm size, and debt to asset ratio have no influence on sharia stock price volatility.

There is a reason why the independent variable has influence on the dependent. When conducting an investment, the rational investors usually have a concern on the company’s fundamental factors such as dividend, asset growth, firm size, and debt before making a decision.

Research and Methodology

Data

The samples in this research are taken from the stock population contained in the Indonesian Sharia Stock Index (ISSI) registered in the Indonesian Stock Exchange (BEI) in 2016-2018. The samples are taken using non-probability sampling technique with purposive sampling, determining the samples with certain consideration as follows: 1) companies included in ISSI for three years, 2015-2018) companies that always pay dividend in the period of research. Stock price volatility is found and calculated from the stock price report of the companies registered in ISSI published by the Indonesian Stock Exchange. While dividend payout ratio, dividend yield, earnings volatility, size, growth, and debt are found and calculated from the annual financial report of the companies.

Model

Variables of Research

Dependent variable in this research is stock price volatility, while independent variables are dividend yield and dividend payout ratio with four control variables those are earnings volatility, size, debt, and growth, similar to what has been used in the previous researches conducted by Gordon (1959), Baskin (1989); Nishat (1992); Allen and Rachim (1996); and Islam, et al (2019).

Stock Price Volatility (SPV)

\[
SPV = \sqrt{\frac{\sum_{i=1}^{3} ((H_i - L_i)/(H_i + L_i)^2)^2}{3}}
\]

Where;

Hi: Highest share price in year I; Li: Lowest share price in year i

Dividend Payout Ratio (DPR)

Ratio of the total of dividend is divided by the total of profit.

\[
DPR = \frac{\sum_{i=1}^{3} D_i/E_i}{3}
\]

Where;

Di: Dividend paid in year I; Ei: Profit after tax

Dividend per Share (DPS)

Ratio of the cash of dividend to the common share and the total value of share at the beginning of the year.

\[
DPS = \frac{\sum_{i=1}^{3} D_i}{MVi/3}
\]

Where;

DPS: Dividend per share; Di: Dividend paid in year I; MVi: Total value of assets in year i,
Earnings Volatility (EV)
Standard of deviation of the ratio of operating profit (EBIT) to the total of assets.

\[ EV = \sqrt{\frac{\sum_{i=1}^{3}(R_i - \bar{R})^2}{3}} \]

Where;
Ri: Ratio of operating profit to the total of asset in year i.

\[ \bar{R} = \frac{\sum_{i=2016}^{2018} R_i}{3} \]

Debt to Total Asset (Debt)
Ratio of long-term debt divided by the total of assets.

\[ \text{Debt} = \frac{\sum_{i=1}^{3} \frac{\text{LTD}_i}{\text{TA}_i}}{3} \]

Where;
LTD: Long term debt at the end of the year i; TAi: Total of assets at the end of the year i.

Firm Size (Size)
Firm size is natural log of the total of assets at the end of the year.

\[ \text{Size} = \ln\left(\frac{\sum_{i=1}^{3} \text{TA}_i}{3}\right) \]

Growth
Change in assets from the beginning to the end of the year.

\[ \text{Growth} = \frac{\sum_{i=1}^{3} \left(\frac{\Delta \text{Asset}_i}{\text{Asset}_i}\right)}{3} \]

Where;
Growth = Average of asset growth; \( \Delta \text{Asset}_i \) = Change in the total of assets in year i; Asset = Total of assets at the beginning of year i.

Regression Equation
To know how big the influence of independent variables is (DPS and DPR) on dependent variable (SPV), two regression are formulated:

\[ \text{SPV} = a + b_1 \cdot \text{DPS} + b_2 \cdot \text{DPR} + e \]

\[ \text{SPV} = a + b_1 \cdot \text{DPS} + b_2 \cdot \text{DPR} + b_3 \cdot \text{EVol} + b_4 \cdot \text{Debt} + b_5 \cdot \text{Size} + b_6 \cdot \text{Growth} + e \]

Where
\( SPV \) = Stock Price Volatility
\( a \) = Constant
\( \text{DPR} \) = Dividend payout ratio
\( \text{DPS} \) = Dividend per share
\( \text{EVol} \) = Earning volatility
\( \text{Debt} \) = Debt
\( \text{Size} \) = Size
\( \text{Growth} \) = Growth in asset
\( b(1,2,3) \) = Regression coefficient value
\( e \) = Error estimation

Variables of EVol, Debt, Size, and Growth are the control variables. The statistic software of SPSS 15 is used to calculate t descriptive statistics, correlation, and regression equation.
Result and Discussion

This research uses secondary data collected from the shares contained in the Indonesian Sharia Stock Index (ISSI) in the Indonesian Stock Exchange. The population of this research is 399 sharia companies entering ISSI in 2017-2018. The samples processed are 109 companies. Table 1 shows the result of sample taking.

Table 2: Sample

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>All companies registered in Indonesian Sharia Stock Index (ISSI)</td>
<td>399</td>
</tr>
<tr>
<td>Companies not regularly paying dividend</td>
<td>185</td>
</tr>
<tr>
<td>Companies with incomplete data</td>
<td>15</td>
</tr>
<tr>
<td>Total samples processed</td>
<td>109</td>
</tr>
</tbody>
</table>

Descriptive Statistics

Descriptive statistics used in this research is mean, maximum, minimum, and standard deviation.

Table 3: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Max</th>
<th>Min</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPV</td>
<td>0.5921</td>
<td>-0.98</td>
<td>1.87</td>
<td>0.34630</td>
<td>326</td>
</tr>
<tr>
<td>DPS</td>
<td>0.0330</td>
<td>0.0000</td>
<td>0.3089</td>
<td>0.03563</td>
<td>326</td>
</tr>
<tr>
<td>DPR</td>
<td>0.4183</td>
<td>-0.0482</td>
<td>3.5211</td>
<td>0.35581</td>
<td>326</td>
</tr>
<tr>
<td>EV</td>
<td>0.1175</td>
<td>-0.33</td>
<td>3.21</td>
<td>0.20393</td>
<td>326</td>
</tr>
<tr>
<td>DEBT</td>
<td>0.1299</td>
<td>0.00</td>
<td>2.76</td>
<td>0.17568</td>
<td>326</td>
</tr>
<tr>
<td>SIZE</td>
<td>15.2049</td>
<td>11.62</td>
<td>19.32</td>
<td>1.63221</td>
<td>326</td>
</tr>
<tr>
<td>GROWTH</td>
<td>-0.3952</td>
<td>-20.18</td>
<td>0.78</td>
<td>2.41623</td>
<td>326</td>
</tr>
</tbody>
</table>

Table 3 shows that deviation standard, maximum, and minimum of SPV are 0.34630, -0.98, 1.87, while mean is 0.5921 or 59%. Mean of DPS is 0.0330 (3.3%), while deviation standard, maximum, and minimum are 0.03563, 0.0000, and 0.3089. Mean of DPR is 0.4183 (42%), while deviation standard, maximum, and minimum are 0.35581, -0.482, and 3.521. Mean of earnings volatility (EV) is 0.1175 (12%), while deviation standard, maximum, and minimum are 0.20393, -0.33, and 3.21. Mean of DEBT is 0.1299 (13%), while deviation standard, maximum are 0.17568, 0.0000 and 2.76. Mean of SIZE is 15.2049, while deviation standard, maximum, minimum are 1.63221, 11.62, and 19.32. The last, mean of GROWTH is -0.3952 (-40%), while deviation standard, maximum, and minimum are 2.41623, -20.18, and 0.78.

Multicollinearity

Table 4: Correlation among Variables

<table>
<thead>
<tr>
<th></th>
<th>SPV</th>
<th>DPS</th>
<th>DPR</th>
<th>EVOL</th>
<th>DEBT</th>
<th>SIZE</th>
<th>GROWTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPV</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPS</td>
<td>0.021</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPR</td>
<td>-0.088</td>
<td>0.514</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EVOL</td>
<td>-0.050</td>
<td>0.144</td>
<td>0.182</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEBT</td>
<td>-0.024</td>
<td>-0.133</td>
<td>-0.042</td>
<td>0.625</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.070</td>
<td>0.076</td>
<td>0.080</td>
<td>0.044</td>
<td>0.070</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>GROWTH</td>
<td>-0.031</td>
<td>-0.269</td>
<td>-0.187</td>
<td>-0.347</td>
<td>-0.290</td>
<td>0.247</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Table 4 shows that the stock price volatility (SPV) has positive correlation with the dividend per share (DPS) with 0.021 value at 1% significance level. The result of correlation between SPV and DPS is in accordance with the finding of Allen and Rachim (1996), and contradicts Baskin (1989), Hashemijoo, et al. (2012), Islam et al (2019). Table 4 also shows a negative correlation between SPV and DPR with -0.088 value at 1% significance level. This result is in accordance with the finding of Baskin (1989), Allen and Rachim (1996), Hashemijoo, et al (2012), Islam, et al (2019).

The correlation between SPV and EVOL also shows a negative result with -0.050 value at 1 significance level. This negative result is not in accordance with the expectation that the company’s earnings volatility has positive influence on the stock price volatility.
Table 4 also shows the correlation between SPV and DEBT with negative result with -0.024 value. This result shows that companies with big debt value will pay dividend with small amount.

The correlation between SPV and SIZE shows a negative result with -0.70 value at 1% significance level. The correlation between SPV and SIZE shows that the bigger a company is, the smaller the stock price volatility will be, and on the other hand, the smaller a company is, the bigger the stock price volatility will be. The correlation between SPV and Growth also produces negative number, which means that the company’s growth has no correlation with the stock price volatility, between SPV and EVOL with -0.050 value, between SPV and DEBT with -0.024, and between SPV and SIZE with -0.70 value.

Table 4 shows a positive result of the correlation between DPS and DPR with 0.514 value at 1% significance level and 0.514 value that possibly will make a multicollinearity between DPS and DPR. The variable is called free from multicollinearity if the tolerant value > 0.01 and VIF value < 10. To overcome the problem of multicollinearity, each independent variable is examined separately. Table 5 shows that variables DPS and DPR are 0.618 > 0.01 and VIF value amounted 1.617 < 10, which means that both variables are free from multicollinearity.

**Regression Result**

*Regression Test 1 (LN\(SPV= \alpha + \beta LN\text{DPS} + \beta LN\text{DPR}\))*

Regression 1, test the hypothesis that dividend per share (DPS) and dividend payout ratio (DPR) have influence on sharia stock price volatility.

**Table 5: Regression Result Test 1**

<table>
<thead>
<tr>
<th>Dependent Variable: Log Natural (LN) Stock Price Volatility (SPV)</th>
<th>Model</th>
<th>Coefficients</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Sig</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.618</td>
<td>0.129</td>
<td>-4.806</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LN DPS</td>
<td>0.041</td>
<td>0.039</td>
<td>1.035</td>
<td>0.301</td>
<td>0.618</td>
<td>1.617</td>
<td></td>
</tr>
<tr>
<td>LN DPR</td>
<td>-0.077</td>
<td>0.048</td>
<td>-1.626</td>
<td>0.105</td>
<td>0.618</td>
<td>1.617</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** SPSS Output

**Dividend per share (DPS)**

Table 5 is a regression equation SPV= \(\alpha + \beta LN\text{DPS} + \beta LN\text{DPR}\) to see how big the influence of dividend per share (LN\text{DPS}) and dividend payout ratio (LN\text{DPR}) are on the stock price volatility (LN\text{SPV}). The regression result with t test shows the DPS significant value amounted 0.301 > 0.05, which means that DPS variable has no significant variable on SPV. This direct test shows a result that the investors are not so interested in dividend per share when selecting the sharia shares. The result of research is in accordance with the result of research (Ul-haq et al, 2015; Suwanhirunkul and Masih, 2018; Neelanjana et al, 2019; and Sutandijo, 2019).

**Dividend payout ratio (DPR)**

The result of direct regression test between DPR and SPV finds 1.105 value and bigger than the significant value 0.05. Because the significant value is bigger than 0.05 value, DPR has no influence on the stock price volatility. The previous scholar (Ul-haq et al, 2015; Suwanhirunkul and Masih, 2018; Neelanjana et al, 2019; and Sutandijo, 2019) also show that DPR has no influence on the stock price volatility and tends to be similar to DPS that DPR does not become the investors’ attention.

*Regression Test 2 (Y= \(\alpha + \beta LN\text{DPS} + \beta LN\text{DPR} + \beta LN\text{Evol} + \beta LN\text{DEBT} + \beta LS\text{IZE} + \beta LG\text{ROWTH} + e\)).*

Regression 2, test the Hypothesis that dividend per share (DPS), dividend payout ratio (DPR), asset growth (GROWTH), earnings volatility (EVOL), firm size (SIZE), and debt to asset ratio (DEBT) have no influence on sharia stock price volatility (SPV). The aim of regression is to see whether inserting the control variables will make the independent variable give influence on the dependent variable.

**Dividend per share (DPS)**

Table 6 is a regression equation SPV= \(\alpha + \beta LN\text{DPS} + \beta LN\text{DPR} + \beta LN\text{Evol} + \beta LN\text{DEBT} + \beta LS\text{IZE} + \beta LG\text{ROWTH} + e\). With addition (EVOL, DEBT, SIZE and GROWTH) as control variable, to regression model, DPS, DPR, and SIZE is negatively related to SPV while EVOL, DEBT, and GROWTH are positive. The regression results show that the DPS coefficient is negative -11.200 with a significance of 0.563. The hypothesis is rejected because the DPS value of 0.563 is greater than 0.05.

**Dividend Payout Ratio (DPR)**

The regression results show that the DPR coefficient is negative -0.091 with a significance of 0.947. The hypothesis is accepted because the DPS value of 0.947 is greater than 0.05.
Earning Volatility, Debt, Size and Growth

Evolution coefficient is positive 0.807 with a significance of 0.151. But no significance with stock price volatility 0.151 > 0.05. In Table 6, DEBT coefficient is positive 0.605 with significance 0.231 and Growth coefficient is positive 0.643 with significance 0.184. SIZE coefficient is negative -0.054 with significance 0.066.

This direct test shows a result that the investors are not so interested in dividend per share (DPS) and dividend payout ratio (DPR) when selecting the sharia shares.

Table 6: Regression Result Test 2

<table>
<thead>
<tr>
<th>Dependent Variable: LN SPV</th>
<th>Coefficients</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(constant)</td>
<td>1.181</td>
<td>0.416</td>
<td>2.838</td>
<td>0.005</td>
</tr>
<tr>
<td>DPS</td>
<td>-11.200</td>
<td>19.318</td>
<td>-0.580</td>
<td>0.563</td>
</tr>
<tr>
<td>DPR</td>
<td>-0.091</td>
<td>1.364</td>
<td>-0.067</td>
<td>0.947</td>
</tr>
<tr>
<td>EVOL</td>
<td>0.807</td>
<td>0.561</td>
<td>1.440</td>
<td>0.151</td>
</tr>
<tr>
<td>DEBT</td>
<td>0.605</td>
<td>0.504</td>
<td>1.202</td>
<td>0.231</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.054</td>
<td>0.029</td>
<td>-1.847</td>
<td>0.066</td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.643</td>
<td>0.482</td>
<td>1.334</td>
<td>0.184</td>
</tr>
</tbody>
</table>

Conclusions

The aim of this research is to find out whether the dividend policy in the form of dividend per share and dividend payout ratio influence the sharia stock price volatility at the Indonesian Stock Exchange. Earnings volatility, debt, size, and growth are added into the model as the control variables. Data of research is taken from the stock price data and the company financial report registered in the Indonesian Sharia Stock Index (ISSI) in 2016-2018. The two models of regression are measured and improved. First, dividend per share and dividend payout ratio are regressed with stock price volatility. Second, earnings volatility, debt, size, and growth are added as the control variables to the independent variables. The result of research shows that dividend per share and dividend payout have no influence on the stock price volatility. This result is in accordance with the research, Suwanhirunkul and Masih (2018), and Ul-haq, et al. (2015) and contradicting with the results of Baskin (1989), Hashemijoo, et al (2012), and Islam, et al (2019).

This research is empirically contributed to four things. First, the research contributes to the academic world to add the literature of accountancy research, especially the research on dividend. Second, information of the research result is useful for the investors as a reference in selecting the shares that has beneficial potential in the form of dividend. Third, for companies listing in the capital market, this research is useful in determining the direction of dividend policy in the future. Fourth, specifically, this research adds references of sharia capital market literature in Indonesia. Seen from the point of view of moslem investors, the research of result shows that dividend policy has not been preference for them in investing in the sharia shares contained in the Indonesian Sharia Stock Index.

Theoretically this research can answer the aim of research that dividend policy has no influence on the sharia stock price volatility. This research also answers a research gap in which there are different results of research on dividend policy between sharia and nosharia shares. In sharia shares the researchers consistently support the result of research of Suwanhirunkul and Masih (2018).

For the next researches, the scholars suggest three things. First, some companies with negative earnings are showed in the sample. Second, the cash dividend used in the sample should have significant value. Third, time series data is extended to be five years.

References


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