ANALYSIS OF FACTORS AFFECTING THE VOLATILITY OF STOCK PRICE IN INDONESIA STOCK EXCHANGE: THE ROLE OF DIVIDEND POLICY MEDIATION
(Case Study On Companies Listed on BEI Year 2013-2015)

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ABSTRAK

Penelitian ini bertujuan untuk menganalisis faktor-faktor apa saja yang mempengaruhi volatilitas harga saham pada perusahaan manufaktur yang terdaftar di BEI pada periode tahun 2013-2015. Populasi pada penelitian ini adalah semua saham yang terdaftar di Bursa Efek Indonesia (BEI). Teknik pengambilan sampelnya menggunakan teknik *purposive sampling.* Metode pengumpulan data dalam penelitian ini adalah metode dokumentasi.

Berdasarkan dari hasil pembahasan pada bagian sebelumnya, maka dapat ditarik kesimpulan sebagai berikut : (1) *Size* berpengaruh positif terhadap dividen. *(2) Leverage* berpengaruh negatif terhadap dividen, (3) *Earnings growth* berpengaruh positif terhadap dividen (4) *Asset growth* berpengaruh positif terhadap dividen (5) Dividen berpengaruh positif terhadap volatilitas harga saham (6) *Size* berpengaruh positif terhadap volatilitas harga saham (7) *Leverage* berpengaruh negatif terhadap volatilitas harga saham (8) *Earnings growth* berpengaruh positif terhadap volatilitas harga saham (9) *Asset growth* berpengaruh positif terhadap volatilitas harga saham (10) Dividen mampu memediasi pengaruh positif *size* terhadap volatilitas harga saham (11) Dividen mampu memediasi pengaruh negatif *leverage* terhadap volatilitas harga saham (12) Dividen mampu memediasi pengaruh positif *earnings growth* terhadap volatilitas harga saham (13) Dividen mampu memediasi pengaruh positif *asset growth* terhadap volatilitas harga saham.

Kata Kunci: Volatilitas harga saham, *size, leverage, dividen, earning growth, asset growth.*

ABSTRACT

*This study aims to analyze what factors affect the volatility of stock prices at manufacturing companies listed on the Stock Exchange in the period 2011-2015. The population in this study are all shares listed on the Indonesia Stock Exchange (BEI). Sampling technique using purposive sampling technique. Data collection method in this research is documentation method. Based on the results of the discussion in the previous section, it can be deduced as follows: (1) Size has a positive effect on dividend. (2) The positive effect on stock price volatility. (*3) *Earnings growth has a positive effect on dividend* (4) *Asset growth has a positive effect on dividend* (5) *Dividen has a positive effect on stock price volatility. (6) Size has a positive effect on the stock price volatility (7) The positive effect on stock price volatility (8) Earnings growth has a positive effect on stock price volatility (9) Asset growth has positive effect on stock price volatility (10) Dividend can mediate the relationship between size on stock price volatility (11) Dividend can mediate the relationship between leverage to stock price volatility (12) Dividend can mediate the relationship between earnings growth on stock price volatility (13) Dividend can mediate the relationship between asset growth on stock price volatility.*

Keywords: *Stock price volatility, size, leverage, dividend, earnings growth, asset growth.*

INTRODUCTION

The capital market is a meeting of supply and demand for long-term funds that are transferable. Therefore, the success of capital market formation is influenced by the success of capital market such as securities and securities supply, political and economic conditions, legal and regulatory issues, role of market support institutions (Husnan and Pudjiastuti, 2002).

Stock is a sign of participation or ownership of a person or entity within a limited company or company. The form of shares in the form of a piece of paper that explains who the owner. However, nowadays a scripless system has been conducted on the Indonesia Stock Exchange where the ownership form is no longer a stock sheet that is given the name of the owner but is in the form of an account on behalf of the scripless owner or share. So the settlement of the transaction will be faster and easier because it is not through letters, forms, and procedures are convoluted. Kinyua (2013) states the effect of Earnings growth on dividends. Masum (2012) concludes that dividends have a positive effect on stock prices. This is in accordance with the agency cost and hypothesis of dividend signaling theory. Ebrahimi (2011) states that there is an influence between dividends and stock prices on companies in the US. Khan (2008) states that dividends do not affect stock prices. Abdullah (2013) concludes that there is a significant negative influence between dividends and stock price volality. Nishat and Irfan (2001) stated that both dividend and dividend yield dividends policy has no effect on stock price volatility.

In addition to the differences in the results of the research gap, this is also supported by the gap phenomenon which states that the fluctuation of various data below is about the development of growth data of corporate assets in the Stock Exchange, stock prices, DER, ROA (profit) and dividends paid in 2013 -2015. Based on the research gap and phenomenon of the gap, this research will analyze about the factors that influence the volatility of stock price in Indonesia Stock Exchange with the mediation variable that is dividend policy of the company.

Research purposes

1. To analyze the effect of size on dividends.
2. To analyze the effect of leverage on dividends.
3. To analyze the effect of earning growth on dividends.
4. To analyze the effect of asset growth on dividends.
5. To analyze the effect of dividends on stock price volatility.
6. To analyze the effect of size on stock price volatility.
7. To analyze the effect of leverage on stock price volatility.
8. To analyze the effect of earning growth on stock price volatility.
9. To analyze the effect of asset growth on stock price volatility.
10. To analyze the role of dividend mediation between the effect of size on stock price volatility.
11. To analyze the role of dividend mediation between the effect of leverage on stock price volatility.
12. To analyze the role of dividend mediation between the influence of earnings growth on stock price volatility.

13. To analyze the role of dividend mediation between the influence of asset growth on stock price volatility.

LITERATURE REVIEW

Signaling Theory

Signalling theory emphasizes the importance of information released by firms on investment decisions outside parties. Information is an important element for investors and business people because information essentially presents information, notes or images for both the past, present and future circumstances for the survival of a company and how its market effects. Complete, relevant, accurate and timely information is needed by investors in the capital market as an analytical tool to make investment decisions.

Effect Size on Dividend

A company that has a larger total asset represents a size of a company or a large size so that it has stronger assets to be used in its daily operations and to improve its profit and performance. So the company will have the ability to pay a larger dividend to its shareholders, thus it can be said that there is a positive effect size on dividends.

Research conducted Wirjolukito (2013) states that the scale of the company will affect the dividend policy. This is because the larger the scale of the company will increase the dividend policy given to the company's shareholders. Winatha (2010) also states that the variable size, growth of sale and corporate tax that directly affect the dividend payout ratio. Based on the description, the hypothesis is:

H1: Size has a positive effect on dividends.

Effect Leverage on Dividends

Debt to equity ratio is the ratio used to measure the level of leverage (debt use) to total shareholders' equity owned by the company (Ang, 2010). This factor reflects the ability of the company to fulfill all its obligations indicated by several parts of its own capital used to pay the debt. The greater this ratio indicates the greater the liability and the lower the ratio will show the higher the company's ability to fulfill its obligations. Research conducted by Dhatt (2000) in five industrial sectors namely water transport, chemicals, drugs, paper and forest products, and the semiconductor industry to the relationship between dividend payout ratio with debt equity ratio obtained result that there is relationship between Debt Equity Ratio with dividend Payout ratio. The relationship can be positive or negative depending on the type of company. Hairani (2001) states that the dividend payout ratio is only influenced by DER, the higher the DER value indicates that the company's debt is higher and this will lower the dividends paid to shareholders. Hence the proposed hypothesis is:

H2: Leverage has a negative effect on dividends.

Effect Earning Growth on Dividends

According to Hanafi (2004: 375) companies that have a good cash flow or profitability can pay dividends or increase dividends. The opposite will happen if

the cash flow is not good. Another reason for dividend payout is to avoid acquisitions by other companies. Companies that have excessive cash are often targeted in the acquisition. To avoid the acquisition, the company can pay dividends, and at the same time also make the shareholders happy.
Research Nazir et al (2010) states the effect of earning growth on dividends. The faster the growth rate of a company, the greater the level of funding needs to finance expansion. The greater the future funding requirement, the more will enable the company to retain profits and the smaller the dividends are distributed. Therefore, the company's growth potential becomes an important factor determining the dividend policy. This is also supported by Nishat and Irfan (2001). Hence the proposed hypothesis is:
H3: Earnings growth has a positive effect on dividends.

Effect Asset Growth on Dividends

Asset growth shows how well the company has a total asset growth from year to year and the higher asset growth it will increase the dividend distributed because it means improving the good performance for the company concerned. Asset is the asset used for the company's operational activities. The greater the asset expected the greater the operational results generated by the company. Asset growth is defined as the annual change of total assets. Increased assets followed by increased operating results will further increase the confidence of outsiders of the company.

Research conducted by Nazir et al (2010) states the influence of asset growth on dividends. This is because with the asset growth indicating the company has good performance so it will be able to pay more dividends to its shareholders, hence thus can be said there is influence between asset growth to dividend. This is also supported by research by Conroy et al. (2000). Hence the proposed hypothesis is:
H4: Asset growth has a positive effect on dividends.

Effect Dividend on Stock Price Volatility

Dividends are defined as a periodic payout directed to shareholders to indemnify use by taking risks on the investment of funds (Henderson et al). According to Brigham, et al (2014), the optimal dividend policy is a dividend policy capable of balancing between the current dividend, future growth, and maximizing the company's stock price.

Dividends are the common shareholder's right to get a share of the company's profits. If the company decides to divide the profits in dividends, all ordinary shareholders earn the same rights. Distribution of dividends for common shares may be made if the company already pays dividends for preferred stock (Jogiyanto, 2013). Hanafi (2014) states that dividends are compensation received by shareholders, in addition to capital gains. This dividend is to be distributed to shareholders as a profit of the company's profits. Dividends are determined based on the shareholder general meeting and the type of payment depends on the leader's policy. Research conducted by Nazir et al (2010) states the influence of

dividends on stock price volatility. This is also supported by research by Rashid and Rehman (2008). Hence the proposed hypothesis is:

H5: Dividends have a positive effect on stock price volatility.

Effect Size on Stock Price Volatility

Size or size of the company shows how much total assets have a company. The higher the growth of assets owned will increase the credibility so that it will affect the volatility of stock prices. Stock price is the market price of ordinary shares, generally determined based on the strength of demand and supply in the capital market. The stock price that occurs in the market, is determined by agreement between the seller and the buyer. Large companies will be easier to obtain capital in the capital market than small companies, because the ease of access means big companies have greater flexibility (Sjahrial, 2008: 205). Companies with larger sizes, have greater confidence in getting the source of funds so it will be easier to get credit from outside parties. Therefore, large corporate size is a positive signal for lenders to lend. So the size of the company has an influence on stock prices. Hence the proposed hypothesis is:

H6: Size has a positive effect on stock price volatility.

Effect of Leverage on Stock Price Volatility

Leverage shows how much debt a company has. Higher leverage indicates high debt and bad indications for investors that will impact on stock price volatility. The relationship can be positive or negative depending on the type of company. Debt ratio has a bad impact on the performance of the company, because the higher debt levels indicate the company's dependence on outsiders is also higher. Hairani (2001) states that stock price volatility is affected by leverage. The higher the leverage indicates the higher the debt level so that the company will be affected in terms of ups and downs or the volatility of stock prices. Thus can be said the influence of leverage to stock price volatility. Hence the proposed hypothesis is:

H7: Leverage negatively affects stock price volatility.

Effect of Earning Growth on Stock Price Volatility

Profitability is an important thing that investors consider in investing in a company. The higher profit owned by the company means good news and will have an impact on stock price volatility. Damayanti and Achyani (2006) stated that the size of the profits obtained by the company will affect the volatility of stock prices. There are two types of ratios included in the profit margin ratio: Net Profit Margin and Gross Profit Margin. Net Profit Margin is the ratio between net income and net sales, while Gross Profit Margin is the ratio between gross profit and net sales.

Research conducted by Nazir et al (2010) states that the ratio of ROA has a significant effect on stock price volatility. So the higher the ROA value shows higher profits and good corporate performance that will affect the volatility of stock prices. Hence the proposed hypothesis is:

H8: Earnings growth has a positive effect on stock price volatility.

Effect of Asset Growth on Stock Price Volatility

Asset growth shows how well the company has total asset growth from year to year and the higher asset growth it has will affect stock price volatility. The higher growth of the company's assets indicates that the company is performing well and can expand so that it will have an impact on the stock price increase. Thus can be said the influence of asset growth on stock price volatility.
Research conducted by Nazir et al (2010) states the influence of asset growth on stock price volatility. The higher the asset growth then shows a good performance that will have an impact on stock price volatility. This is also supported by Nishat and Irfan (2001). Hence the proposed hypothesis is:

H9: Asset growth has a positive effect on stock price volatility.

Dividends can mediate the effect of Size on Stock Price Volatility

According to Sartono (2008: 249) suggests that companies that are well established (having a strong position) have a level of ease in obtaining funds from the capital market and net sales value of the company for a particular year because the net sales value of the company is large, then in the measurement converted in logarithma Natural.

Research conducted by Nazir et al (2010) concluded that there is a strong and significant relationship between dividend policy and stock price volatility. In addition, determinant determinants of dividend are size, leverage, earnings growth and asset growth. Masum (2012) concludes that dividends have a positive effect on stock prices. This is in accordance with the agency cost and hypothesis of dividend signaling theory. Abdullah (2013) concludes that there is a significant negative influence between dividends and stock price volality. The larger the size of the company means the larger the scale and total assets increased so that will affect the increase dividend distribution company and ultimately affect the stock price volatility. Hence the proposed hypothesis is:

H10: Size has a positive effect in mediating dividends against stock price volatility.

Dividends can mediate the effect of Leverage on Stock Price Volatility

Dividend signaling theory introduced by Ross (1977) was later developed by Bhattacharya (1979), Miller and Rock (1985) and John and William (1985). Ross (1977) argues that managers as insiders who have complete information about the firm's cash flow will choose to create clear cues about the future of the company if they have the right impetus to do so. Ross proves that an increase in paid dividends can lead to clear signals to the market that the company's prospects have improved. Research conducted by Nazir et al (2010) concluded that there is a strong and significant relationship between dividend policy and stock price volatility. In addition, the determinant determinant of dividend is leverage. This is also supported by Nishat and Irfan (2001). Hence the proposed hypothesis is:

H11: Leverage has a negative effect in mediating dividends against stock price volatility.

Dividends can mediate the effect of Earning Growth on Stock Price Volatility

The role of dividends as a signal may indicate a strong influence on stock price volatility. Firms with increasingly high volatility of profits show high growth that will increase dividends distributed to shareholders, this will have an impact on stock price volatility. Every company is trying to get the maximum profit. Profit obtained by the company will affect the survival of the company. Companies will want an increase in profits earned in each year. Increase and decrease in earnings seen from profit growth. Profit growth is the increase and decrease in profits earned by the company compared to the previous year. With the increase in profit or earnings growth it will be good news for investors so that the impact on the volatility of stock prices of companies concerned.

Research conducted by Nazir et al (2010) concluded that there is a strong and significant relationship between dividend policy and stock price volatility. This is also supported by Nishat and Irfan (2001). In addition, the determinant determinant of dividend is earnings growth. Hence the proposed hypothesis is:

H12: Earnings growth has a positive effect in mediating dividends on stock price volatility.

Dividends can mediate the influence of Asset Growth on Stock Price Volatility

Significant dividend dividends may indicate a strong influence on stock price volatility. Companies with an increasing number of assets show high asset growth that will increase dividends distributed to shareholders, this will have an impact on stock price volatility.

Research conducted by Nazir et al (2010) concluded that there is a significant influence between dividend policy and stock price volatility. This is also supported by research by Conroy et al. (2000). In addition, the determinant determinant of dividend is asset growth. Hence the proposed hypothesis is:

H13: Asset Growth has a positive effect in mediating dividends on stock price volatility.

RESEARCH METHOD

Population and Sample

The population in this study are all shares listed on the Indonesia Stock Exchange (BEI). The sampling technique used purposive sampling technique. The criteria used are as follows:

1. Companies registered on the Stock Exchange during the period of 2013-2015.
2. Companies that pay dividends during the period of observation.
3. The data is completely available.

Types and Data Sources

The type of data in this research is panel data and is secondary data. The data needed in this research is data about company size or size, leverage, earning growth, asset growth, dividend (DPR) and stock price volatility.

Data collection method in this research is documentation method, that is information data of past events collected and recorded in archives. While the source data comes from ICMD (Indonesia Capital Market Directory) and www.idx.co.id.

DATA ANALYSIS TECHNIQUE

SEM model analysis technique consists of 7 steps, namely:

1. Development of theoretical models.
2. Development of the flow diagram (Path Diagram)
3. Convert the flowchart into the equation,
4. Selecting input matrix and covariance model estimation or correlation.
5. Possible emergence of problem identification.
6. Evaluation of Goodness of Fit criteria.
7. Interpretation and modification of the model.

RESULT AND DISCUSSION

Statistics Deskriptif

Tablw 4.1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Size	90	25,58	33,09	29,1557	1,73182
DER	90	,15	4,01	,9196	,77819
EG	90	-,93	4,62	,1749	,67114
AG	90	-,12	,94	,2496	,19394
DPR	90	,02	6,33	,6998	,88492
VHG	90	-,29	3,51	,2476	,52671
Valid N (listwise)	90				

Source: Secondary Data Processed.

Data Analysis Process and Results

The seven steps of the SEM analysis process are briefly described as follows:

Step 1: Model Development Based on Theory

The research model developed is based on the results of the theoretical studies described in Chapter II. This model is used to answer research problems and as a means to achieve research objectives. The constructs that form this research model have also been described in the previous chapter where the modeling variable consists of 6 variables and constructor constructing indicators consisting of 6 indicators. The research model built has also been designed based on the analytical technique used SEM analysis, as stated in Chapter III.

Step 2: Develop a Diagram of the Diagram

The path diagram is formed based on the research model that has been developed from the results of the theory study as described in Chapter II. Flowchart that has been formed as stated in Figure 4.1. In Chapter IV, is used as one of the estimation process using AMOS program 18.

Step 3: Structural Equations and Measurement Models

The models expressed in the flow chart are converted into structural equations and Measurement Model measurement equations.

Step 4: Selecting Input Matrix and Estimation Technique

The input matrix used is the covariance matrix as input for the SEM operation process. The selection of inputs uses covariance matrices, because this study examines the relationship of causality (Ferdinand, 2004, p.47). The number of samples used in this study is 90 observations. From the results of the data that has been done, the data covariance matrix used looks like in Table 4.2

Table 4.2 ***Sample Covariances – Estimates***

	AG	EG	VHG	DPR	DER	size
AG	,036					
EG	-,001	,433				
VHG	-,001	,151	,267			
DPR	,004	-,134	-,028	,750		
DER	,035	-,075	-,045	,183	,580	
size	,057	-,172	-,181	-,214	,218	2,871

Source: Analysis Results

The estimation technique used is the maximum likelihood estimation method of the AMOS program. Estimation of structural equation model through Full Model analysis to see the suitability of model and causality relationship built in model.

Structural Equation Modeling Analysis

The next analysis after confirmatory analysis is a Structural Equation Modeling (SEM) analysis in Full Model. Results of data processing for SEM full model analysis looks like in Figure 4.1. Table 4.3 and Table 4.4.

Step 5: Assess the Identification Problem

The problem of model identification in principle is the problem of the inability of the model developed to produce a unique estimate. The symptoms of identification problems include:

- Standard error on one or more coefficients is very large.
- Appears strange numbers like negative error variance.
- There is a very high correlation between the estimation coefficient (> 0.90).

Based on the results of the analysis that has been done, it is known that in this study for standard error, variance error, and correlation between estimation coefficients are in the range of values that do not indicate any problem identification.

Step 6: Evaluation of Goodness of Fit Criteria

Testing the suitability of the model is done through a review of the criteria of goodness of fit. Based on the results of the analysis that has been done, it is known that the built model has met the criteria of feasibility testing index as

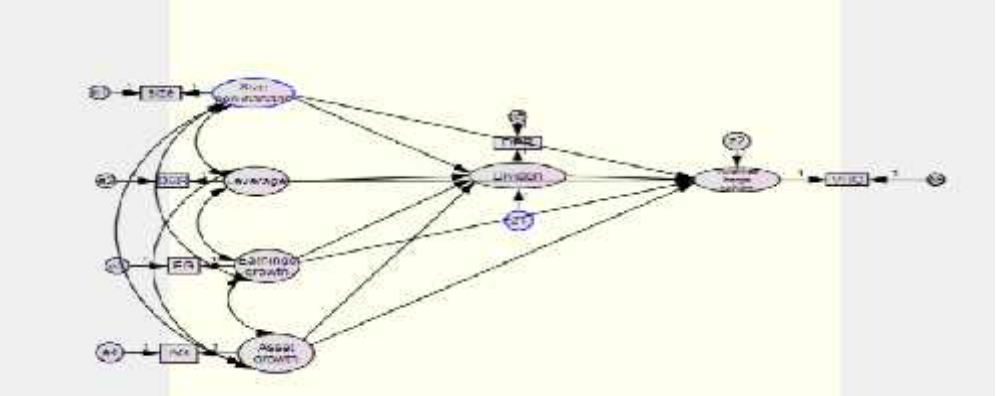
shown in Table 4.3. So this test yields good confirmation of the factor dimensions as well as causality relationships between factors.

Table 4.3 *Goodness of Fit Indexes* untuk *Full Model*

Goodness of Fit Indeks	***Cut of Value***	**Result**	**Evaluasi Model**
Chi Square	124.3	104,456	Good
Probability	≥ 0.05	0,060	Good
AGFI	≥ 0.90	0,975	Good
GFI	≥ 0.90	1,000	Good
TLI	≥ 0.95	0,950	Good
CFI	≥ 0.95	1,000	Good
CMIN/DF	≤ 2.00	1,554	Good
RMSEA	≤ 0.08	,067	Good

Source: Analysis Results

Figure 4.1. Analysis *Structural Equation Modellling*



Step 7: Interpretation and Modification of the Model

Tests on residual value indicates that significantly modified the model is acceptable and residual value is set at □ □1,96 at significance level of 5% (Hair, et.al, 1995). Standardized Residual Covariance processed using AMOS program can be seen in Appendix. From the table it can be seen that the data used in this study can be accepted significantly with residual value □ +2,58. Therefore there is no need to modify the model being tested.

Hypothesis Testing Research

Hypothesis testing is used to test the research hypothesis as proposed in Chapter II. Hypothesis testing is based on data processing research by using SEM analysis, by analyzing the regression value as shown in Table 4.4. Hypothesis testing is done by analyzing the value of CR (Critical Ratio) and P (Probability) on the results of data processing Regression Weights, compared with the limits of statistically required, ie the value of CR (Critical Ratio) above 2:00, and the value of P (Probability) under 0:05 . If the result shows the value that fulfills the requirement, then the proposed research hypothesis can be accepted.

Table 4.4 Regression Weights Full Model

			Estimate	S.E.	C.R.	P
Dividen	<---	Size_perusahaan	.916	.479	2.912	.006
Dividen	<---	Leverage	.779	.267	2.920	.005
Dividen	<---	Earnings_growth	.282	.205	4.376	.000
Dividen	<---	Asset_growth	.171	.117	5.458	.000
Volalitias_harga_saham	<---	Dividen	.554	.093	5.938	.000
Volalitias_harga_saham	<---	Size_perusahaan	.835	1.090	2.601	.008
Volalitias_harga_saham	<---	Leverage	1.666	.531	3.140	.003
Volalitias_harga_saham	<---	Earnings_growth	.813	.378	2.148	.012
Volalitias_harga_saham	<---	Asset_growth	.456	.215	2.126	.014

Source: Analysis Results

The test of the model hypothesis shows that this model corresponds to the data or fit of available data as seen from the significance level of the model, where the CR (Critical Ratio) value is above 2.00, and the P value (Probability) is below 0.05. Overall the other index values are also within the expected range of values, and therefore the model is acceptable.

Firts Hypothesis

Hypothesis I in this study is size has a positive effect on dividends. From processing data known that CR value (Critical Ratio) for influence between variable size to dividend as seen in table 4.3 is equal to 2,912 with value of P (Probability) equal to 0.006. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus it can be said that hypothesis I in this study is acceptable.

Second Hypothesis

Hypothesis II in this research is leverage have negative influence to dividend. From data processing known that CR value (Critical Ratio) for influence between leverage to variable of dividend is equal to 2,920 with P value (Probability) equal to 0.005. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus it can be said that the hypothesis II of this study is acceptable.

Third Hypothesis

Hypothesis III in this study is earnings growth has a positive influence on dividends. From data processing known that CR value (Critical Ratio) for influence between earning growth variable with dividend variable is 4,376 with P value (Probability) equal to 0.000. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus it can be said that the hypothesis III of this study is acceptable.

Fourth Hypothesis

Hypothesis IV of this research is asset growth has a positive influence on dividends. From Table 4.15. It is known that CR value (Critical Ratio) for influence of asset growth variable to dividend variable is 5,458 with P value

(Probability) equal to 0.000. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus the IV hypothesis in this study is acceptable.

Fifth Hypothesis

Hypothesis V in this study is the dividend has a positive influence tehadap volatility stock prices. From data processing known that CR value (Critical Ratio) for influence between dividend variable with variable of stock price volatility is equal to 5,938 with P value (Probability) equal to 0.000. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus it can be said that the hypothesis V of this study is acceptable.

Sixth Hypothesis

Hypothesis VI this study is size has a positive effect on stock price volatility. From the test results note that the value of CR (Critical Ratio) for the effect of variable size to stock price volatility is equal to 2.601 with the value of P (Probability) of 0.008. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus the hypothesis VI in this study is acceptable.

Seventh Hypothesis

Hypothesis VII in this study is leverage has a negative effect on stock price volatility. From data processing known that CR value (Critical Ratio) for influence between leverage to stock price volatility variable is equal to 3,140 with P value (Probability) equal to 0.003. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus it can be said that the hypothesis VII of this study is acceptable.

Eighth Hypothesis

Hypothesis VIII in this research is earnings growth has a positive effect on stock price volatility. From data processing known that CR value (Critical Ratio) for influence between earnings growth variable with variable of stock price volatility is 2,148 with P value (Probability) equal to 0,012. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus it can be said that the hypothesis VIII of this study is acceptable.

Ninth Hypothesis

Hypothesis IX this research is asset growth has a positive effect on stock price volatility. From the test results note that the value of CR (Critical Ratio) for the influence of asset growth variable to stock price volatility variable is 2,126 with P value (Probability) of 0.014. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus the hypothesis IX in this study is acceptable.

Ten Hypothesis

The test results with the test sobel showed that the indirect effect was significant. It can be seen in column p-value all test both Sobel, Aroian and Goodman test show t-statistic> 1,66 therefore that indirect effect on hypothesis is significant, that independent variable indirectly influence to dependent variable through intervening variable . So the accepted hypothesis means that dividends are able to mediate the positive effect of size on stock price volatility.

Eleven Hypothesis

The test results with the test sobel showed that the indirect effect was significant. It can be seen in column p-value all test both Sobel, Aroian and Goodman test show t-statistic> 1,66 therefore that indirect effect on hypothesis is significant, that independent variable indirectly influence to dependent variable through intervening variable . So the hypothesis is accepted, meaning that dividend is able to mediate the negative influence of leverage on stock price volatility.

Twelve Hypothesis

The test results with the test sobel showed that the indirect effect was significant. It can be seen in column p-value all test both Sobel, Aroian and Goodman test show t-statistic> 1,66 therefore that indirect effect on hypothesis is significant, that independent variable indirectly influence to dependent variable through intervening variable . So the hypothesis is accepted, meaning that the dividend is able to mediate the positive effect of earnings growth on stock price volatility.

Thirteen Hypotheses

The test results with the test sobel showed that the indirect effect was significant. It can be seen in column p-value all test both Sobel, Aroian and Goodman test show t-statistic> 1,66 therefore that indirect effect on hypothesis is significant, that independent variable indirectly influence to dependent variable through intervening variable . So the hypothesis is accepted, it means that the dividend is able to mediate the positive effect of asset growth on stock price volatility.

Discussion

Based on the results of the first hypothesis testing is known that the value of CR (Critical Ratio) for the effect between the variable size to dividend as shown in table 4.3 is 2.912 with the value of P (Probability) of 0.006. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus it can be said that the hypothesis I of this study is acceptable. The size of a large company makes it easier for companies to access the capital market. This makes it easier for the company to get additional funds for its operations. In addition, large companies will distribute dividends in order to maintain reputation in the eyes of investors. This corresponds to the theory of capital structure and the irrelevant dividend

theory of Miller and Mondigliani. The results of this study support the research conducted Winatha (2010) which states that the variable size, growth of sale and corporate tax that directly affect the dividend payout ratio.

Based on the result of the second hypothesis testing it is known that CR value (Critical Ratio) for influence between leverage to dividend variable is 2,920 with P value (Probability) equal to 0.005. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus it can be said that the hypothesis II of this study is acceptable. That is, the higher the DER value indicates that the company's debt is getting higher and this will lower the dividends paid to shareholders. Debt to equity ratio is the ratio used to measure the level of leverage (debt use) to total shareholders' equity owned by the company (Ang, 2010). This factor reflects the ability of the company to fulfill all its obligations indicated by several parts of its own capital used to pay the debt. The greater this ratio indicates the greater the liability and the lower the ratio will show the higher the company's ability to fulfill its obligations. If the company determines that the repayment of the debt will be withdrawn from retained earnings, then the company must withhold a substantial portion of its revenues for that purpose, which means that only a fraction of the income can be paid as dividends. The results of this study support research conducted Hairani (2001) which states that the dividend payout ratio is only influenced by DER.

Based on the result of the third hypothesis testing it is known that CR value (Critical Ratio) for the influence between earning growth variable with dividend variable is 4,376 with P value (Probability) equal to 0.000. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus it can be said that the hypothesis III of this study is acceptable. That is, the faster the growth rate of a company, the greater the level of funding needs to finance expansion. The greater the future funding requirement, the more will enable the company to retain profits and the smaller the dividends are distributed. Companies that have a good cash flow or profitability can pay dividends or increase dividends. The opposite will happen if the cash flow is not good. Another reason for dividend payout is to avoid acquisitions by other companies. Companies that have excessive cash are often targeted in the acquisition. To avoid the acquisition, the company can pay dividends, and at the same time also make the shareholders happy. The results of this study support the research conducted by Nazir et al (2010) which states that the influence of earning growth on dividends.

Based on the result of the fourth hypothesis testing it is known that CR value (Critical Ratio) for the influence of asset growth variable to dividend variable is 5,458 with P value (Probability) equal to 0.000. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus the IV hypothesis in this study is acceptable. This is because with the asset growth indicating the company has a good performance so that it will be able to pay more dividends to its shareholders, hence thus can be said there is influence between asset growth to dividend. Asset growth shows how well the company has a total asset growth from year to year

and the higher asset growth it will increase the dividend distributed because it means improving the good performance for the company concerned. Asset is an asset used for the company's operational activities. The greater the asset expected the greater the operational results generated by the company. Asset growth is defined as the annual change in total assets. The results of this study support the research yag done Nazir et al (2010) which states the influence of asset growth on dividends.

Based on the result of fifth hypothesis testing it is known that CR value (Critical Ratio) for dividend variable influence to stock price volatility is 5,938 with P value (Probability) equal to 0.000. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus the hypothesis V in this study is acceptable. Dividends are the common shareholder's right to get a share of the company's profits. If the company decides to divide the profits in dividends, all ordinary shareholders earn the same rights. Dividend distribution for common stock may be made if the company already pays dividends for preferred stock. The results of this study support research conducted Hanafi (2014) which states that dividends are compensation received by shareholders, in addition to capital gains.

Based on the result of the sixth hypothesis testing it is known that CR value (Critical Ratio) for the effect of size against stock price volatility variable is 2,601 with P value (Probability) equal to 0.008. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus it can be said that the hypothesis VI of this study is acceptable. Size or size of the company shows how much total assets have a company. The higher the growth of assets owned will increase the credibility so that it will affect the volatility of stock prices. Stock price is the market price of ordinary shares, generally determined based on the strength of demand and supply in the capital market. The stock price that occurs in the market, is determined by agreement between the seller and the buyer. Before each meeting, each party has determined the proper price for a share, which is based on analysis and evaluation of the condition and prospects of the issuer, then made the transaction until the price agreed by both parties. Companies with larger sizes, have greater confidence in getting the source of funds so it will be easier to get credit from outside parties. Therefore, large corporate size is a positive signal for lenders to lend. So the size of the company has an influence on stock prices.

Based on the result of the seventh hypothesis testing it is known that CR value (Critical Ratio) for influence between leverage variable with stock price volatility variable is 3,140 with P value (Probability) equal to 0.003. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus it can be said that the hypothesis VII of this study is acceptable. This means that higher leverage indicates a higher level of debt so that companies will be affected in terms of ups and downs or volatility of stock prices. Thus can be said the influence of leverage to stock price volatility.

Leverage shows how much debt a company has. Higher leverage indicates high debt and bad indications for investors that will impact on stock price volatility. The relationship can be positive or negative depending on the type of company. Debt ratio has a bad impact on the performance of the company, because the higher debt levels indicate the company's dependence on outsiders is also higher. With increasing liabilities (both installment and interest), the results of the company's operations (profit) earned, some will be used to pay interest on the loan. The results of this study support research conducted Hairani (2001) which states that the volatility of stock prices influenced by leverage.

Based on the results of testing the eighth hypothesis is known that the value of CR (Critical Ratio) for the influence of variable earnings growth to stock price volatility variables is 2.148 with a value of P (Probability) of 0.012. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus the hypothesis VIII in this study is acceptable. This means that the higher ROA value shows higher profits and better corporate performance that will affect the volatility of stock prices. Damayanti and Achyani (2006) stated that the size of the profits obtained by the company will affect the volatility of stock prices. Profitability is an important thing that investors consider in investing in a company. The higher profit owned by the company means good news and will have an impact on stock price volatility. The results of this study support the research conducted Susanto (2008) which states that the ratio of ROA has a significant effect on stock price volatility.

Based on the results of the ninth hypothesis testing, it is known that CR value (Critical Ratio) for influence between asset growth variable and stock price volatility variable is 2,126 with P value (Probability) equal to 0.014. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability). Thus it can be said that hypothesis IX in this study is acceptable. Asset growth shows how well the company has total asset growth from year to year and the higher asset growth it has will affect stock price volatility. The higher growth of the company's assets indicates that the company is performing well and can expand so that it will have an impact on the stock price increase. Thus can be said the influence of asset growth on stock price volatility. The results of this study support the research conducted Nazir et al (2010) which states the influence of asset growth on stock price volatility.

Based on the results of this hypothesis testing is known that the value of P (Probability) below 0.05 so that the hypothesis accepted. Dividends are able to mediate the positive effect of size on stock price volatility. This is in accordance with dividend signaling theory. Dividend signaling theory introduced by Ross (1977) was later developed by Bhattacharya (1979), Miller and Rock (1985) and John and William (1985). The higher the size of the company will increase its ability to pay dividend so that the impact on stock price volatility. The results of this study support the research conducted Nazir et al (2010)

Based on the results of this hypothesis testing is known that the value of P (Probability) below 0.05 so that the hypothesis accepted. Dividends are able to mediate the negative effect of leverage on stock price volatility. This is in accordance with dividend signaling theory. Dividend signaling theory introduced

by Ross (1977) was later developed by Bhattacharya (1979), Miller and Rock (1985) and John and William (1985). Ross (1977) argues that managers as insiders who have complete information about the firm's cash flow will choose to create clear cues about the future of the company if they have the right impetus to do so. Ross proves that an increase in paid dividends can lead to clear signals to the market that the company's prospects have improved. The results of this study support research conducted by Nazir et al (2010) which concluded that there is a strong and significant relationship between dividend policy with stock price volatility. In addition, the determinant determinant of dividend is leverage. It also supports Nishat and Irfan (2001) research.

Based on the results of this hypothesis testing is known that the value of P (Probability) below 0.05 so that the hypothesis accepted. Dividends are able to mediate the positive effect of earnings growth on stock price volatility. This is in accordance with dividend signaling theory. Dividend signaling theory introduced by Ross (1977) was later developed by Bhattacharya (1979), Miller and Rock (1985) and John and William (1985). Ross (1977) argues that managers as insiders who have complete information about the firm's cash flow will choose to create clear cues about the future of the company if they have the right impetus to do so. Ross proves that an increase in paid dividends can lead to clear signals to the market that the company's prospects have improved. The results of this study support research conducted by Nazir et al (2010) which concluded that there is a strong and significant relationship between dividend policy with stock price volatility. In addition, the determinant determinant of dividend is earnings growth. This is also supported by Nishat and Irfan (2001).

Based on the results of this hypothesis testing is known that the value of P (Probability) below 0.05 so that the hypothesis accepted. Dividends are able to mediate the positive effects of asset growth on stock price volatility. This is in accordance with dividend signaling theory. Every company is trying to get the maximum profit. Profit obtained by the company will affect the survival of the company. Companies will want an increase in profits earned in each year. Increase and decrease in earnings seen from profit growth. Profit growth is the increase and decrease in profits earned by the company compared to the previous year. With the increase in profit or asset growth it will be good news for investors, resulting in the volatility of stock prices of companies concerned. The results of this study support research conducted by Nazir et al (2010) which concluded that there is a strong and significant relationship between asset growth with stock price volatility. This is also supported by Nishat and Irfan (2001).

Conclusion

Based on the results of the analysis can be drawn conclusion as follows:

1. Size has a positive effect on dividends. With result of test equal to 2,912 with value of P (Probability) equal to 0.006. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability).
2. Leverage has a negative effect on dividends. With result of test equal to 2,920 with value of P (Probability) equal to 0.005. Both of these values

show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability).

3. Earnings growth has a positive effect on dividends. With result of test equal to 4,376 with value of P (Probability) equal to 0.000. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability).
4. Asset growth has a positive effect on dividends. With test result of 5,458 with P value (Probability) equal to 0.000. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability).
5. Dividends have a positive effect on stock price volatility. With result of test equal to 5,938 with P value (Probability) equal to 0.000. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability).
6. Size has a positive effect on stock price volatility. With result of test equal to 2,601 with value of P (Probability) equal to 0.008. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability).
7. Leverage negatively affects the volatility of stock prices. With result of test equal to 3,140 with value of P (Probability) equal to 0.003. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability).
8. Earnings growth has a positive effect on stock price volatility. With result of test equal to 2,148 with value of P (Probability) equal to 0,012. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability).
9. Asset growth has a positive effect on stock price volatility. With result of test equal to 2,126 with value of P (Probability) equal to 0,014. Both of these values show eligible results, which are above 2.00 for CR (Critical Ratio) and below 0.05 for the P value (Probability).
10. Dividends are able to mediate the positive effect of size on stock price volatility. With test result of P value (Probability) below 0.05.
11. Dividends are able to mediate the negative effects of leverage on stock price volatility. With test result of P value (Probability) below 0.05.
12. Dividends are able to mediate the positive effect of earnings growth on stock price volatility. With test result of P value (Probability) below 0.05.
13. Dividends are able to mediate the positive effects of asset growth on stock price volatility. With test result of P value (Probability) below 0.05.

Managerial Implications

This research has managerial implication which for practitioner that is in capital market can pay attention to stock price volatility that happened so that it can optimize return earned, especially pay attention to dividend, size, leverage, asset growth, earnings growth of company. In addition to the management of companies issuers can also apply dividend policy in accordance with the company's ability to maximize the prosperity of its shareholders.

Limitations of Research

This study has the following limitations: only use four variables related to dividend and stock price volatility, so the coefficient of determination tends to be low and the limitation of research sample.

Future Research

For future research it is advisable to conduct a deeper study of the factors that influence the volatility of stock prices in Indonesia Stock Exchange (IDX). Should the issuers at companies listed on the BEI can pay attention to factors related to size, leverage, earnings growth, and asset growth as it is proven to be related to dividends and stock price volatility. In a similar study in the future can be added another variable that relates dividends and stock price volatility and add period observation period.

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