



DETERMINANT OF DIVIDEND DISTRIBUTION: EVIDENCE FROM INDONESIA STOCK EXCHANGE

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Abstract

This research aims to determine the effects of return on investment, operating cash flow, management assets, debt to equity ratio, and firm size on dividends. This research involved 23 companies listed on Indonesia Stock Exchange as the research sample. The sampling technique used was purposive sampling method. The analysis used multiple linear regression with E-Views version 9. The results show that return on investment has an influence on cash dividends, while operating cash flow, management assets, debt to equity ratio and firm size do not have an effect on cash dividends.

Keywords: *cash dividends, return on investment, operating cash flow, management assets, debt to equity ratio, firm size*

INTRODUCTION

In economic activities, investors will always face various risks and uncertainties which are difficult to predict. To reduce the risks and uncertainties that may occur, investors need information. The company's financial statements can be used by the company's managers as a tool for the responsibility of the company's managers to those who have an interest, for example investors (Latifa, 2016). When investing in a listed company, a shareholder or an investor has an expectation that she or he will get a return on the capital invested in the form of dividends. Payment of cash dividends is more desirable by investors, because it reduces the investor's sense of uncertainty in investing in the company. Cash dividends are part of operating income distributed to each shareholder in cash (Rudianto, 2012).

Wenas (2015) research on the effect of operating cash flow and net income on cash dividends indicated that operating cash flow and net income have a relationship with cash dividends with the conclusion that operating cash flow and net income are the main factors that must be considered and become a benchmark for the company to take the policy of cash dividends. Arfan (2014) found that quick ratio, earnings per



share, and return on investment had a positive effect on cash dividends. Return on investment (ROI) is a calculation of profits by reducing sales results from existing costs such as production costs (Holloman, 2014). ROI affects the return on capital because the distribution of dividends refers to the value of retained earnings in the previous period. If a company has a high ROI, the company's performance will get better. This makes investors interested, because good company performance can guarantee investors to get cash dividends. When a company has a high operating cash flow, the company is considered to be a good company by investors. This helps investors analyze the return or dividend that will be obtained.

Asset management is a science for managing all company assets by paying attention to all planning processes in order to manage assets effectively and efficiently within the company (Sugiyama, 2013). By managing the assets properly, the company can run effectively and efficiently. Debt to equity ratio, according to Kasmir (2014), is a ratio used to compare debt with equity. In other words, when companies calculate this ratio, the companies can see how much capital is used as collateral in debt. Further, how far the companies are financed by debt and the companies' ability to meet their obligations can be identified.

The size of the company is determined by the number of members associated with the selection of methods to control activities in an effort to achieve goals (Torang, 2012). It can be concluded that the size of a company is a good or small value of a company which is indicated by total assets, total sales and total profits so that it affects the social performance of the company and determines the achievement of the goals made by the company. According to Taliyang and Latif (2011), company size can be measured by the logarithm of natural total assets.

LITERATURE REVIEW

According to Irrelevancy Theory, dividend policy is not influenced by stock prices or the cost of capital of a company (Brigham and Houston, 2016). This theory argues that the value of a company is determined by the company's ability to make profits, not by how the profits are distributed to investors. This theory also explains that a company's value is not influenced by the size of the dividend payout ratio, but by profitability and business risks. Bird in the hand theory states that investors prefer dividends rather than capital gains. Dividend distribution gives investors more confidence because it can be felt immediately, while unrealized capital gains make investors distrust compared to dividend distribution. Signaling Theory refers to the impact of asymmetric information. Signaling theory explains ways of giving company signals to interested parties (Noor, 2015). Signals given by the company are in the form of company performance in financial and non-financial aspects. The company provides the results of company management to shareholders. The information shown reflects the company's condition in the past to the future.



A positive signal given by the company can influence the decisions of shareholders, which in turn will influence the increase in share ownership. Signals or cues are the result of an action taken by the company to give instructions on the prospects of management in realizing the wishes of the company (Brigham and Houston, 2016). The results of the information obtained can affect the decision of shareholders to invest in the company.

Hypothesis Development

The company uses ROI to find out whether it has been effective in the use of assets in operational activities. The higher ROI percentage results of a company indicate that the company is already efficient in using assets. On the other hand, if ROI is low, the company still has to make plans again to streamline assets in operational activities. This relates to the theory of the bird in the hand, where investors will be more interested in the distribution of dividends, because with the distribution of dividends, investors feel confident that the company can share profits. This also relates to the signaling theory, where the company will provide signals on the distribution of profits to investors. ROI has a positive effect on cash dividends, because when a company is able to manage assets properly, it will generate high cash turnover and make the company can distribute dividends to investors (Ambarwati, 2014). According to Tiocandra (2016), profitability ratio is related to the distribution of dividends in cash whereas according to Rahmawati (2014), the calculation of return on investment does not significantly influence the distribution of cash dividends.

H1: Return on Investment has a positive influence on Cash Dividends.

Operating cash flow can help measure company liquidity in the short run. Using cash flow as opposed to net income is considered a more accurate measure because income is easily manipulated. It can be concluded that if the operating cash flow is high, then the company has been effective in managing its cash flow. Investors tend to review operating cash flow, as compared to net income, because there is less room to manipulate. This relates to the theory of the bird in the hand, representing the trust of investors who believe in the distribution of dividends. When a company has high operating cash flow, the company has good and profitable cash flow for investors. This is also related to the signaling theory, when a company can show evidence that its operating cash flow is good, then the company can give a positive signal to investors. Wenas (2015) shows that operational cash flow has a positive effect on cash dividends. Because the company manages its operating income and expenses properly, the distribution of cash dividends to investors can also take place properly. According to Tiocandra (2016), operational cash flow is related to cash dividends but not significantly, whereas according to Eckbo (2017), operational cash flow has a significant relationship with the distribution of cash dividends.



H2: Operational Cash Flow has a positive influence on Cash Dividends.

Assets Management is needed to decide what is needed to achieve business goals and then be able to maintain assets for the duration of the company's life. The higher the results of asset management, the company will be more efficient in managing assets. Based on the bird in hand theory, by showing good asset management, investors feel confident that the company will share profits. Further, when the company has shown good asset management results for investors, the company can provide signals for dividend distribution to investors. Study of Purnami (2016) shows that total asset turnover has a positive effect on cash dividends. The better a company can manage its assets, the higher is the opportunity for the company to distribute cash dividends to investors. Likewise according to Wijaya (2017) and Sulistyowati (2017), management assets affect cash dividends.

H3: Asset Management has a positive influence on Cash Dividends.

Study of Komrattanapanya (2013) shows that debt to equity ratio has an influence on cash dividends, because the higher value or the results of the debt to equity ratio indicates that the company has a greater debt than the capital issued, so that it is a bad sign for the company. On the other hand, if the amount of capital is greater than the debt, the company has been efficient in managing debt and capital used by the company. The lower the value of debt to equity ratio of a company allows the company to share cash dividends to investors. Based on the bird in the hand theory, investors will be interested in dividend distribution. So, company management must make the company not have a high debt to equity ratio; after that the company can use the signaling theory to distribute dividends to investors. Studies of Ambarwati (2014) and Rahmawati (2014) show that debt to equity ratio has a significant effect on cash dividends.

H4: Debt to Equity Ratio has a negative influence on Cash Dividends.

The size of the company is related to irrelevance theory, where the value of the size of the company is considered irrelevant in dividend distribution for investors because the size of the company is only a physical value calculation. Study of Dewi (2016) shows that firm size has an effect on cash dividends. Because the size of the company is a benchmark for the company, the larger the company, the overall total sales, revenue and financial cycle in the company will be higher. Meanwhile, the smaller the size of a company, the lower the financial cycle is. Studies of Komrattanapanya (2013) and Sari (2016) explain that company size has a positive influence on the distribution of cash dividends.

H5: Company size has a positive influence on cash dividends.



RESEARCH METHOD

The population in this study came from 600 companies from all sectors listed on the Indonesia Stock Exchange (IDX). The data comes from financial statements that have been audited by Independent Auditors for the 2014-2018 period. The companies taken as samples in this research must also have Dividend Payments (in cash), Liabilities, Current Cash Flow per Period, Sales and Changes in Assets. The sampling technique in this study used purposive sampling method.

The method used in this research is Multiple Linear Regression Analysis.

$$DIV = \alpha + \beta_1 \cdot ROI + \beta_2 \cdot OPC + \beta_3 \cdot INV + \beta_4 \cdot DER + \beta_5 \cdot FRM + e$$

Where :

DIV : Cash Dividend (Dividend Payout Ratio)

α : Constant

β : Regression Coefficient

ROI : *Return on Investment (ROI)*

OPC : *Operating Cash Flow (Ln Net Cash Provided by Operating Activities)*

INV : *Inventory Turnover*

DER : *Debt to Equity Ratio*

FRM : *Firm Size (Ln Total Asset)*

e : Error

RESULTS AND DISCUSSION

This study was conducted to examine factors that influence cash dividend policy, which are return on investment, operating cash flow, management assets, debt to equity ratio, and company size. This quantitative research used secondary data obtained from the Indonesia Stock Exchange (IDX) by selecting companies of all sectors as the research population.

Table 1. Sample Criteria

No	Criteria	Amount
1.	Number of companies listed on the Indonesian Stock Exchange (IDX) as of December 31, 2018.	600
2.	Companies that do not have successive annual financial reports for 2014-2018	-3
3.	Companies that do not routinely distribute Cash Dividends for the 2014-2018 period	-522
4.	Financial statements using foreign currencies.	-1
5.	The company's profit is negative	-36
6.	Financial statements have no inventory value	-15
	Total number of sample companies	23
	Period	5
	Total of Sample Data	115



Below are the results of descriptive statistical calculations in tabular form.

Table 2. Statistic Descriptive

	n	Minimum	Maximum	Mean	Std. Deviation
DIV	115	0.028434	24.27184	1.210464	2.521114
ROI	115	0.013737	0.333992	0.107160	0.066345
OPC	115	22.25826	30.95216	27.68828	1.688179
INV	115	0.623802	69.95285	8.648241	7.213073
DER	115	0.070740	2.208257	0.617639	0.435109
FRM	115	26.74362	34.18568	30.24533	1.533440

Regression models that can be used properly must pass four types of classical assumption tests, namely the normality test, the autocorrelation test, the multicollinearity test, and the heteroscedasticity test. Here are the results of the normality test conducted by the researchers:

Table 3. Normality Test

<i>Standardized Residuals</i>	
<i>Jarque-Bera</i>	1,371404
<i>Probability</i>	0,503736

Based on the OLS (Ordinary Least Squared) test, the probability value indicates a value of 0.503. Significant Value Test results show that the value is > 0.05. Therefore, the sample meets the normality test requirements.

Based on the results of the Durbin Watson Autocorrelation Test, the DW value indicates a value of 1.575260 which is between the values of -2 and 2. This shows that this regression model does not have autocorrelation.

Table 4. Multicollinearity Test

<i>Variable</i>	<i>Centered VIF</i>
C	NA
ROI	1.060296
OPC	2.123029
INV	1.193527
DER	1.336370
FRM	2.201317

Based on the test results in table 4, this regression model is good because there is no single variable that exceeds the value of 10 on VIF. Heteroscedasticity test was performed to assess whether there is a variance in residual variance for all observations in the linear regression model. Based on the White Test heteroscedasticity test results, it is found that the value of Prob. Chi-Square of 0.3215 and 0.3298. These results indicate that the value of heteroscedasticity > 0.05. When



the results exceed 0.05, the data used do not experience heteroscedasticity.

Table 5. Statistical Test T

<i>Method: Panel EGLS (Cross-section random effects)</i>	
Variable	Prob.
C	0.2360
ROI	0.0002
OPC	0.2253
INV	0.6693
DER	0.1181
FRM	0.8466

The significant value of the ROI variable is 0.002. This shows that the ROI variable has a partial effect on cash dividends. Significant level also shows a positive value. The significant value of the OPC variable is 0.2253. This shows that the OPC variable has no partial effect on cash dividends. The significant value of the INV variable is 0.6693. This indicates that the INV variable has no partial effect on cash dividends. The significant value of the DER variable is 0.1181. This shows that the DER variable has no partial effect on cash dividends. The significant value of the FRM variable is 0.8466. This shows that the FRM variable has no partial effect on cash dividends.

Table 6. Regression Results

<i>Method: Panel EGLS (Cross-section random effects)</i>	
Variable	Coefficient
C	-1.090861
ROI	-0.745106
OPC	2.987729
INV	-0.077152
DER	-0.292753
FRM	-0.549501

Through table 6, the regression model is obtained as follows:

$$Y: -1.090C -0.745 ROI + 2.987OPC - 0.077INV - 0.292DER - 0.549FRM + e$$

Based on the results of the F statistical test, an F-Statistic value of 8.652 was obtained with a Prob (F-Statistic) of 0.018772 < 0.05. Because the value of Prob (F-Statistic) has a value less than 0.05, it can be concluded that the return on investment, operating cash flow, management assets: inventory turnover, debt to equity ratio and firm size simultaneously influence the cash dividends in companies registered on the Indonesia Stock Exchange within the 2014–2018 period.



Here are the results of the determination coefficient test.

Table 7. Determination Coefficient Test

Weighted Statistics	
R-squared	0.074810
Adjusted R-squared	0.115389

The ability of independent variables to explain the dependent variable is 0.115 or 11.5%. The remaining 88.5% is explained by other independent variables not included in this study.

Discussion

The results of this study are consistent with previous studies, such as Arfan (2014) and Ambarwati (2014) whose results explain that ROI partially has a positive effect on cash dividends. The higher value of ROI in a company can increase the company's cash dividend distribution. The higher ROI of a company indicates that the company has run its operations well and can generate high cash turnover. With companies able to provide a high income, shareholders will enjoy the distribution of dividends on a regular basis.

The results of this test are different from the results of Wenas (2015) which explain that OPC partially has a positive effect on Cash Dividends. It was explained that the higher value of OPC in the company can increase the distribution of Cash Dividends by the company. According to Rahmawati (2014), having research results that are in line with this research, OPC has no effect on cash dividends. This decision is assumed to be correct, because the higher OPC value indicates that the company has been good at managing cash flow. On the other hand, when the value of the company's operating cash flow is high, the company cannot distribute dividends to investors with the reason to expand the company. So, investors cannot receive dividends from the company.

This study is in accordance with research of Dewi (2016) which explains that INV partially has no effect on cash dividends. The value of a company's assets does not guarantee the distribution of dividends. Because INV cannot be used as a reference in distributing cash dividends. When the value of the company's assets increases, it indicates that the company has managed its assets well. Meanwhile, if the value of assets decreases, it indicates that the company is not managing the assets well. When a company shows good INV results, it does not rule out the possibility of dividends. From the results of previous studies, assets are not always a reference in dividend distribution within a company.

The results of this test are different from the results of Ambarwati (2014) which explain that DER partially has no effect on Cash Dividends. The difference in research results can occur because basically the value of DER is the value of how



companies can pay or settle the value of liabilities within the companies. DER has no effect on the distribution of cash dividends because when the company gets bigger, the level of debt and the cash out are greater. When shareholders see excess cash results, they have confidence that cash dividends will not be distributed. However, because companies still have to provide investor confidence, the companies try to reduce the value of DER so that the value of the companies' debt looks lower in the eyes of investors and the company can use the signaling theory to distribute dividends to investors.

The results of this test are in conflict with research of Dewi (2016) which explains that FRM partially has no effect on cash dividends. The size of the company has no effect on the distribution of cash dividends. Basically, the company will be more concerned with the amount of cash than the size of a company. In addition, shareholders are more interested in the high cash value than the size of the company.

CONCLUSION

ROI has a significant effect on cash dividends. The OPC, INV, DER, and FRM variables does not have a significant effect on cash dividends. This research has several limitations. First, this research only involved companies listed on the Indonesia Stock Exchange. Second, the study was conducted within a short period, which is only 5 years. Third, due to the criteria (purposive sampling), the sample used to describe the overall population is small. Future researchers can develop this research by using a longer period of time or a more diverse number of variables.

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