

THE IMPACT OF FREE CASH FLOW ON DIVIDEND PAYOUT RATIO OF MANUFACTURING FIRMS LISTED IN INDONESIA STOCK EXCHANGE

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Abstract

This research examines the impact of free cash flow on dividend payout ratio. The population of this research is all manufacturing firms listed in Indonesia Stock Exchange (BEI) from 2012 – 2015. Sample is taken using purposive sampling technique. The research uses 216 samples that are taken from 82 manufacturing firms that are listed in the Indonesia Stock Exchange (IDX) from 2012-2015.

The result of this research shows that free cash flow has an impact on dividend payout ratio of manufacturing firms listed in Indonesia Stock Exchange. Size also has an impact on dividend payout ratio but the age of the firms does not have an impact on dividend payout ratio. This research conclude that firms with higher free cash flow will also produce more dividend.

Keywords: Free Cash Flow, Dividend Payout Ratio, Firm Size, Firm Age

INTRODUCTION

Research Background

The main purpose of a firm is to maximize profits for its owners. The owner of a firm is its shareholders. Shareholders wealth can increase through the increasing return generate by the firm. Return can be in the form of capital gains or dividends. Dividends are more attractive for long-term investors rather than capital gains. Capital gains are the gains or losses from a sale of stock. Thus it will only exist when investors have sold the stock they owned. Dividends are the amount of profit that a firm pays to the investors who own its stock. Dividends are more certain and relatively stable than capital gains because stock prices are always changing. According to Paramita (2015), dividend payment is influenced by investors' behaviour who think that dividends received today are more valuable than the capital gains received in the future.

According to BEI in 2013 (investasi.kontan.co.id; 1 February 2013), some firms in Indonesia has a trend to pay no dividend. A firm's decision not to distribute dividend might due to the need for business expansion, pay debts, loss, or if the firm has negative retained earnings. As stated in UU No. 40 Year 2007, firms may only distributed dividend if it has positive retained earnings and approved by RUPS. However, according to BEI, the reason for expansion are often misused and some firms are simply reluctant to pay dividends. The decision to pay dividend or not is the right of the firms. For that reason, BEI as the regulator can not punish firms that do not distribute any dividends.

Indonesian Capital Market Directory (ICMD) that issued by ECFIN published a financial highlight that also contains the information about dividend payment by all listed firms in the last five years (2012 – 2016). From the ICMD 2016, the researcher found the dividend trend that happened in Indonesia. The trend describe the dividend trend from 2012 – 2015. According to ICMD, in the last four years (2012 – 2015), listed firms in Indonesia that pay dividend is still very low. The average of firms that generate profit in the whole period (2012 – 2015) is quite high, about 79%. Moreover, the number of firms with positive retained earnings is also high, around 76%. But the average of firms pay dividend in the period (2012 – 2015) is just around 37%. This number is low if we compare with the percentage of firms with profit and positive retained earnings that actually can pay dividends. BEI also stated that there is also a firm that only pay a very low dividend, and assumed that it's just a formality.

The firms that pay dividend is the firm that have a profit. In reality not all firms with profit distribute dividend even though the firms is in good condition. One of the reason why firms choose not to pay dividend is because it will decrease the firm's source of internal fund. If a firm does not pay any dividend, the cash is kept as retained earning that can be used for reinvestment purpose. Smaller and younger firms also generally did not pay cash dividends. This kind of firms may retain all its earnings for many years to help finance its growth. As firm matures, typically it will distribute dividend. At some point the firm will increase the proportion of its earning that are paid out in dividends.

Dividends are one of the factors why an investor decide to invest in a certain firms. Dividend can be one of the indicator if the firm is in a good condition. Firms that always pay dividends will get a negative reaction if the firms lower its dividend payout. Conversely, if a firm increase its dividend payout, or give more return, the firm will get positive reaction from the investor.

Shareholders that expect dividends payment are always looking for a factor to predict the dividend pay out. There are a lot of research that investigate the determinants of dividends. However, free cash flow is remain the key factors for the dividend payments. This is because the free cash flow is the main source of cash that firms will use to pay dividends. The free cash flow that is not used for dividend payment will go to the firms' retained earnings.

As an investor, it is important to know about the firm's free cash flow. It is one of the measurement to help investors understand the true profitability of a firm. Free cash flow is harder to manipulate rather than net income. Thus, free cash flow can give a better picture of how well a firm generate cash and profits. According to Richardson (2006), free cash flow is cash flow beyond what is necessary to maintain firm resources and to finance new investments. Ross et al. (2003) defined free cash flow as cash that is free to distribute to creditors and shareholders because it is not needed for working capital or investment in fixed asset. According to Habib (2011), free cash flow is the difference between operating cash flows and capital expenditure. Positive free cash flow indicate that a firm has a cash surplus after paying all its obligations and necessary investments. A negative free cash flows occur when the firm's expenditure is too much and the cash is falling down which is not always a bad news but the reason behind the number should be analyzed.

Free cash flow is one of the factors that can affect dividends. According to Brigham and Daves (2004), a firm can use its free cash flow for several purposes such as to repay debtholders, pay dividends or repurchase stock from shareholders. Firm with substantial free cash flow can face agency problem because management and investors are likely to have different interest about how to use the cash. Management tends to use the cash for poor investment or firm inefficiencies. Shareholders, on the other hand always expect return from their investment and want the cash to be given back to them through dividend payment.

The researcher wants to know if the phenomenon of low dividend payout in Indonesia is affected by firm's free cash flow. Prior research have been investigate the relationship between free cash flow and dividend payout ratio. Noroozani and Kheradmand (2014) investigated the factors affecting the dividend policy in Tehran and found that profitability, free cash flow, sales growth, and firm size have positive relationship with dividend payout ratio. Labhane and Das (2015) conducted the same research in Indian firms and found that firms with high free cash flow, larger size, more profitable and mature firms have higher dividend payout ratio.

From prior research, the researcher conclude that free cash flow has an impact in dividend payout ratio. This research will use manufacturing firms, which is the largest group of listed firms in Indonesia Stock Exchange (BEI) and has a characteristic of high sensitivity reacting to the economic changes. Manufacturing firms is choosen becasue it is more appealing for the study of free cash flow (Khan et al., 2012). The research period is taken from 2012 until 2015.

Research Problem

The key question of the impact of free cash flow and dividend payout ratio can be summarized as follows: "Does free cash flow have a positive impact on dividend payout ratio in manufacturing firms in Indonesia?"

Research Objective

The objective of this research is to give empirical evidence about the impact of free cash flow on dividend payout ratio in manufacturing firms listed in Indonesia stock exchange from 2012 until 2015.

HYPOTHESIS DEVELOPMENT

According to Jensen (1986), firm with high free cash flow can lead to agency problem because management and shareholders has a different interest. Shareholders want to maximize their return and received dividends while management are often overemphasis on firm size or growth of the firm. Agency costs occur when such problem arise. According to Gitman (2003), agency costs is the cost to monitor management behaviour. Thus, free cash flow can lead to the increasing of agency costs.

A firm with high free cash flow can increase dividends to reduce the control over the use of the cash and thus lowering the agency costs. If firms pay dividend to reduce agency cost of free cash flow, there would be a positive relationship between free cash flow and dividend payout ratio.

Dividend is distributed based on the previous year performance. When a firm has a high free cash flow in a current period, the dividend payout that will be distributed in the next period will be higher. This is because the total dividend distributed by the firm is higher and thus increase the dividend per share. Since dividend per share increase, the dividend payout ratio of the firm is also increase. This is because dividend payout ratio is calculated by divided dividend per share with earning per share of the firm.

Noorozani and Kheradmand (2014) conduct a research to find the factors affecting the dividend policy in Tehran Stock Exchange and found that free cash flow is one of the factors affecting dividend payout ratio. Hejavi and Moshtaghin (2014) concluded that the increase of free cash flow will result in the increase of dividends paid to shareholders. Labhane and Das (2015) found that that firms with high free cash flows, larger firm, more profitable and mature firms pay more dividends. Suci (2016) found that free cash flow has a positive impact to dividend policy of the firm. Thus, the researcher conclude the hypothesis as follows:

H₁: There is positive impact between free cash flow and dividend payout ratio

RESEARCH METHODOLOGY

Population and Sample

The population of this research includes all manufacturing firms listed in Indonesia Stock Exchange. The sample of this research is taken using purposive sampling using the following criteria:

1. Manufacturing firms that distribute dividends for the fiscal year 2012 - 2015.
2. The manufacturing firms that have a complete annual report in the research period (2012 – 2015) and have complete information that is needed to calculate FCF, DPR, SIZE and AGE.

Type and Data Collection Method: This research uses secondary data and based on annual report that published in Indonesia Stock Exchange website (www.idx.co.id) and Indonesian Capital Market Directory (ICMD) 2016.

Measurement of Variables

1. Dependent Variable

DPR is the ratio of firm's earnings that is pay out as dividends. DPR describes the percentage of earnings generate by the firm that is pay out as cash dividends to the investors. If the DPR of a firm is higher, it means the amount of earnings that is paid as dividend is higher. According to Gitman (2003), dividend payout ratio indicates the percentage of earnings earned that is distributed to the shareholders in the form of cash. It is calculated by dividing the firm's cash dividend per share by its earnings per share.

$$\text{Dividend payout ratio} = \frac{\text{Dividend Per Share}_{t+1}}{\text{Earning Per Share}_t}$$

2. Independent Variable

Free cash flow is the available cash that is free to distribute to creditors and shareholders because it is not needed for working capital or investment in fixed assets. Free cash flow is one of the factors that affecting dividends. This is because the free cash flow provides firms the cash that is needed to distribute dividends. Ross et al. (2003) defined free cash flow as cash flow from assets. Thus, free cash flow can be calculated as follows:

$$FCF = \frac{\text{Operating cash flow} - \text{capital expenditure}}{\text{total assets}}$$

Where:

Operating cash flow = EBIT + Depreciation – Taxes

Capital expenditure = the value in the end of fixed asset – the value in the beginning of fixed asset

Total asset = total assets at the year

3. Control Variables

a. Size

$$Size = \log(Total\ Asset)$$

b. Age

Age = the year firm has been into existence

Data Analysis

Data analysis is done by normality test, multicollinearity test, heteroscedasticity test, autocorrelation test, and hypothesis testing. The model of hypothesis testing:

$$DPR_{i,t+1} = \alpha + \beta_1 FCF_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 AGE_{i,t} + e$$

Where:

DPR = Dividend payout ratio in year t+1 from firm i

α = constant

$\beta_1, \beta_2, \beta_3$ = coefficient regression

FCF = Free cash flow in year t from firm i

SIZE = Control variable for firm size in year t from firm i

AGE = Control variable for firm age in year t firm i

e = error term

DATA ANALYSIS AND DISCUSSION

Descriptive Statistic

Table 4.1
Descriptive Statistic

	N	Minimum	Maximum	Mean	Std. Deviation
DPR	212	-.605	1.459	.36308	.284376
FCF	212	-.185	.543	.09875	.118715
SIZE	212	8.046	14.390	12.11429	1.304799
AGE	212	4.000	114.000	42.51415	22.847004
Valid N	212				

From the table above, can be known that the mean of DPR is 0.36308, minimum point -0.605, and maximum point 1.459. The mean of FCF is 0.09875, minimum point -0.185, and maximum point 0.543. The mean of SIZE is 12.11429, minimum point is 8.046, and maximum point 14.390. The mean of AGE is 42.51415, minimum point is 4.000, and maximum point is 114.000.

Normality Test

Table 4.2
Normality Test Before Trimming

	Unstandardized Residual
Asymp. Sig. (2-tailed)	.010

The first result shows that Asymp. Sig (2-tailed) is lower than 0.05. This is an indication that the data is not normally distributed. It might happen because the data has a very extreme value from other data. Therefore, a trimming method is used to make the data normally distributed. There were 4 data trimmed in this research.

Table 4.3
Normality Test After Trimming

	Unstandardized Residual
Asymp. Sig. (2-tailed)	.078

The second normality test is done and the result shows that the Asymp. Sig (2-tailed) 0.078, which is above 0.05, indicates the data has ben normally distributed.

Multicollinearity Test

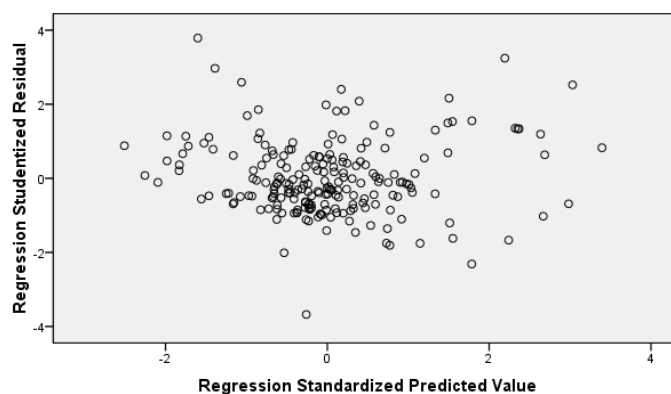
Table 4.4
Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
FCF	.899	1.112
SIZE	.989	1.011
AGE	.890	1.123

Based on the table above it can be seen that VIF value of all variables are less than 10 and value of Tolerance are more than 0.1, which means that no multicollinearity occurs.

Heteroscedasticity Test

Dependent Variable: DPR



The result shows that the scatterplot spread above and below 0 in the Y axis and do not have any certain pattern. It can be concluded that there is no heteroscedasticity or in other words it is homoscedasticity.

Autocorrelation Test

Table 4.5
Autocorrelation Test

Model	Durbin-Watson
1	2.145

The autocorrelation test is done by looking at the Durbin-Watson table and use $n=210$ and total independent variable $k=3$, the dU value from Durbin-Watson table is 1.79326. According to the test result, the Durbin-Watson score is 2.145, or between the dU values of 1.79 and 4-dU of 2.20674. Thus, there are no symptoms of autocorrelation in this regression model.

Hypothesis Testing

Table 4.6
Hypothesis Testing

Model	Unstandardize Coefficient	Sig.
	B	
(Constant)	-.271	.102
FCF	.837	.000
SIZE	.041	.003
AGE	.001	.100
Sig. F	.000	
Adjusted R. Square	.190	

Table 4.7 shows that the significant value of FCF is $0.000 < 0.05$ which means that FCF has a significant impact towards dividend payout ratio. Firms with free cash flow will have an effect on firm's dividend payout ratio. The significant value of SIZE is $0.003 < 0.05$ which means that SIZE of the firm has an impact towards dividend payout ratio. The significant value of AGE is $0.100 > 0.05$ which means that AGE does not have an impact towards dividend payout ratio.

The result shows the value of Adjusted R. Square is 0.190 or 19%. It means that 19% dividend payout ratio level can be explained by variations of independent variables in this research. The remaining 81% is explained by other variables outside the independent variable.

Discussion

The result from hypothesis testing shows the significant value of free cash flow that is lower than 0.05 and β_1 is positive (0.837). Thus, free cash flow has an

impact towards dividend payout ratio and the impact is positive. High free cash flow produce more cash dividend to be distributed for investors. Conversely, low free cash flow will produce lower dividend. The H_1 that stated that there is positive impact between free cash flow and dividend payout ratio is accepted.

Firms that are larger also shows to have positive impact on dividend payout ratio. This is because larger firms generate more sales and thus creating more profit and the cash that is needed to distribute dividends. However, the age of a firm does not has an impact on dividend payout ratio. It might be because firm does not consider the age of their firm when determined the dividend policy and thus make DPR tend to not consistently increase following the maturity of the firm.

This research indicates that free cash flow is a factor that can predict dividend payout ratio. When a firm generate free cash flow, investors may expect the cash to be distributed in the form of dividends.

This research support the finding in previous research conducted by Hejavi and Moshtaghin (2014), Noorozani and Kheradmand (2014), Labhane and Das (2015), and Suci (2016) that there is a positive impact between free cash flow and dividend ratio.

CONCLUSION AND SUGGESTION

The objective of this research wants to find out the impact of free cash flow towards dividend payout ratio by taking a sample of 216 manufacturing firms throughout the research period of 2012 – 2015. This research use multiple linear regression model and meet all the criteria of a good regression. It passes the four classical assumption tests consist of normality, multiollinearity, heteroscedasticity, and autocorrelation. The hypothesis of this research is accepted and conclude that free cash flow have a positive impact towards dividend payout ratio.

High free cash flow produce high payout ratio and conversely, low free cash flow produce low payout ratio. The phenomenon of low firms pay dividends in Indonesia can be explain by the low free cash flow generated by the firms. From the descriptive statistics, the mean value of free cash flow is only 10% (0.09875). There is still a lot of firms that generate low free cash flow or even negative free cash flow. From 216 sample firms, 33 firms or 15% generates a negative free cash flow.

The limitations of this research is the relatively short period which consist of only 4 years (2012 – 2015). The number of firms that pay dividends is also very low. In each year the sample is decrease by more than 50% because most of manufacturing firms did not pay cash dividends. Suggestions for future research is to use more data from all listed firms and lengthen the research period. Furthermore, future research can also use more proxy to find out the determinant of dividend payout ratio such as financial leverage, profitability and investment opportunities.

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