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To cite this article: Hidayati Nur Rochmah & Ardianto Ardianto | (2020) Catering dividend: Dividend premium and free cash flow on dividend policy, Cogent Business & Management, 7:1, 1812927

To link to this article: <https://doi.org/10.1080/23311975.2020.1812927>



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Published online: 31 Aug 2020.



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Received: 22 June 2020  
Accepted: 18 August 2020

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## ACCOUNTING, CORPORATE GOVERNANCE & BUSINESS ETHICS | RESEARCH ARTICLE

# Catering dividend: Dividend premium and free cash flow on dividend policy

Hidayati Nur Rochmah<sup>1</sup> and Ardianto Ardianto<sup>1\*</sup>

**Abstract:** This study aims to analyze how the effect of catering dividend as measured by dividend premium and free cash flow on dividend policy. This study uses quantitative data types and secondary data sources to measure the variables studied. The population in this study is manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2015–2018 period with 186 observations. This study was tested using multiple linear regression analysis with SPSS 20 software. This study found that catering dividends as measured by dividend premium showed a positive effect on dividend policy and free cash flow which also had a positive influence on dividend policy. These results indicate that the higher the dividend premium and free cash flow of the company, the better the company's dividend policy.

**Subjects:** accounting; financial accounting; management accounting

**Keywords:** dividend policy; dividend payout ratio; catering dividend; dividend premium; free cash flow

**MR Subject classifications:** G30; 635

### ABOUT THE AUTHOR

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### PUBLIC INTEREST STATEMENT

This paper analyzes the effect of the catering dividend and free cash flow on dividend policy, where the catering dividend is measured by dividend premium. This study uses 186 observations on manufacturing companies listed on the Indonesia Stock Exchange (IDX) for four periods from 2015–2018 and uses Multiple Linear Regression Analysis techniques to examine the hypotheses. This study found that catering dividends, as measured by dividend premium, showed a positive effect on dividend policy and free cash flow, which also had a positive influence on dividend policy. These results indicate that the higher the dividend premium and free cash flow of the company, the better its dividend policy. This paper provides support on the benefit of measure the dividend premium of the company and having free cash flow for the company. This paper's results indicate that companies that have an adequate dividend premium and free cash flow tend to increase the dividend payout ratio.

## 1. Introduction

The company has an intention to maximize profits earned to prosper its owners or shareholders through investment decisions, funding decisions, and dividend policies made by financial managers (Giriati, 2016; Mougoué & Mukherjee, 1994; Ozturkkal, 2015; Sundaram & Inkpen, 2004; Thamrin et al., 2017). The company requires sufficient funds to carry out its operational activities. The source of these funds can be gained through investment activities (Mason, 2006). Companies can get benefits to fulfill the funding needs of the industry through investment activities. Companies that have more funds will choose to make a real investment or financial investment. Share investment of the company has aimed to obtain a return on the investment in the form of dividends and capital gains. In the long run, investors generally invest in shares to get dividends (Aroni et al., 2014; Khoiruddin & Faizati, 2014), and duly if the investor expects to obtain the highest return from the investment he has done (Brigham & Houston, 2013).

The company's dividend policy is one of the crucial decisions made by decision-makers in the company (Booth & Zhou, 2017). The literature explaining why companies pay dividends has driven much research about dividend policy (Baker & Wurgler, 2004a; Booth & Zhou, 2017; Brunzell et al., 2014; Frankfurter & Wood, 2002; Harakeh, 2020; Kent Baker et al., 2018; Li & Lie, 2006; Miller & Modigliani, 1961; Yeo, 2018). According to Ekayanti et al. (2012), dividend policy is a decision to decide the amount of revenue to be distributed to shareholders and the portion to be retained as retained earnings of the company. The amount of dividends distributed by companies relies on the policy of each company. Thus, the dividend policy requires consideration from management due to interest differences between parties in the company.

Miller and Modigliani (1961) theoretically stated that the dividend payout policy has no relationship with the value and the cost of capital of the company. The value of the company does not rely on the profits distributed for dividends or retained earnings, but depends on the investment policy. Miller and Modigliani showed that building upon certain assumptions, including rational investors and perfect capital markets, the company's market value is apart from the dividend policy, this statement is supported by Black and Scholes (1974) and Jose and Stevens (1989). In real practice, this dividend payment policy is still widely debated in financial literature. Several other empirical studies have emerged and rejected the Miller and Modigliani (1961) dividend theory. One of them is the study of other theories discussing dividend distribution delivered by Gordon (1963) through the Bird In the Hand theory, which revealed that dividends would be better than capital gains because the dividends distributed were less risky, this statement was supported by Long (1978).

In 2004, Baker and Wurgler proposed a theory about dividends known as the catering dividend theory. This new theory is distinct from the theory by Miller and Modigliani (1961). This theory explained that managers would pay dividends when investors place high stock prices on companies that pay dividends than companies that do not pay dividends (Baker & Wurgler, 2004a). The catering dividend theory expressed that the company's dividend policy is driven by investor demand for dividend payments, and managers will serve investors by paying dividends when the dividend premium is high. The dividend premium is measured by the difference between the average market to book ratio of companies that pay dividends and companies that do not pay dividends.

The catering dividend has been studied and discussed by researchers in various countries such as, Wang et al. (2016) which provides support for the effects of catering dividends on non-financial companies in Taiwan, through testing premium market dividends with dividend payouts company. Research by Li and Lie (2006) was corresponding with the results of the study by Wang et al. (2016). The finding by Ferris et al. (2009) stated that catering dividend incentives negatively impact on company's dividend payments during 1988–2002.

The scope of this study not only focused on catering dividends that proxied by dividend premium as an independent variable but also concentrated on free cash flow. Based on agency theory,

dividends can be a tool to minimize agency costs. This matter has a relationship with the independent variables raised in this study, the optimal payout that occurs is also caused by the necessity to distribute free cash flow of the company (DeAngelo et al., 2006). According to the free cash flow hypothesis, when a company has excess cash, it requires to fund projects that have a positive Net Present Value (NPV), but it is preferable for managers to return the excess cash to shareholders in the form of dividends to maximize shareholder's wealth. Companies with free cash flow tend to face higher agency costs due to conflicts of interest between stakeholders and managers (Yusof & Ismail, 2016; Zhang et al., 2016). Dividends can be an alternative to lessen the agency costs because they reduce the free cash flow available to managers.

Baker and Wurgler (2004a) claimed that managers would opportunistically modify dividend payment policies when the investor sentiment supports dividend payments. This theory emphasizes the demand of investors who are influenced by market sentiment. Thus, the main prediction of this theory is the dividend payment, which is influenced by dividend premiums and measured by stock prices. This catering theory is a new subject proposed by Baker and Wurgler as the development of the Miller and Modigliani dividend theory assumptions.

Evidence relating to catering dividends is still limited and varied. Research by Denis and Osobov (2008) discovered that in common law countries such as Canada and the United Kingdom, shareholders deliver strong pressure on managers, which supports the theory of catering dividends but with low significance. While civil law countries such as Germany, France, and Japan, shareholders put low pressure on managers, rejecting the theory of catering dividends. This subject is in line with annual financial and accounting data research from 23 countries during the 1995–2004 sample period from the global Compustat database by Ferris et al. (2009), which stated that in countries with common law, managers rationally respond to investor requests for dividends. While in civil countries, companies do not follow investor preferences for dividends. Wang et al. (2016) showed that, based on the results of a study, the 8,935 observations of a sample of non-financial companies listed on the Taiwan stock exchange during 1992–2011 indicated that companies would pay dividends if there is a catering incentive from positive dividend premiums. The results of other studies on the factors that influence dividend policy in Indonesia by Mangundap and Ventje Ilat (2018) pointed out that leverage has a significantly negative effect on dividend policy, and free cash flow has an insignificantly positive effect on policy. Arfan and Maywindlan (2013) presented that free cash flow and collateralizable assets have a positive effect on dividend policy.

This study uses a sample of manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2015–2018. The argument for preferring manufacturing companies is because they have more complex financial statement information. Manufacturing companies are large-scale companies and have stocks that are resistant to economic crises. This matter is caused by how much manufacturing products that are still needed, so there is little possibility of incurring a loss. Manufacturing companies consist of industrial subsectors to reflect the reaction of the capital market as a whole. The data used in this study is sourced from the financial statements of manufacturing companies from the Indonesia Stock Exchange (IDX) and can be obtained by downloading from the official website at [www.idx.co.id](http://www.idx.co.id). The analysis was carried out by using multiple linear regression analysis with SPSS 20 software.

The study of dividend catering theory is still limited in Indonesia, and the decision of dividends payment is still an enigma. We predict this theory can explain dividend payment policies in the Indonesian market. Our study is the first study discussing catering dividends by linking dividend policies in Indonesia, especially with a sample of manufacturing companies. This study aims to determine the effect of catering incentives as measured by dividend premium and the association of free cash flow on Indonesian manufacturing companies' policies. The researcher examines whether market sentiment factors can influence dividend decisions and whether a lot of free cash flow will also be able to association dividend policy. Based on these differences, this study will provide different empirical findings from previous studies. The results of tests and analyses

conducted on 186 samples of manufacturing companies listed on the Indonesia Stock Exchange in 2015–2018 showed that catering dividends proxied by dividend premium showed a positive effect on dividend policy, then free cash flow has a positive effect on dividend policy as well.

Our results contribute to the financial literature that discusses dividend policy, specifically dividend catering theory. Our study finds that there is an influence of market sentiment that affects dividend policy in Indonesia. This study supports the existence of catering dividends as a determinant factor for dividend policy in Indonesia. Our study also contributes to literature for investors in making decisions about where to invest in companies that can provide maximum returns for them. For management, our research can be taken into consideration in decision making, company management, and policymaking, especially on corporate dividend policy. It is necessary to pay attention to premium dividends to attract investors. Our literature also contributes to adding insight and knowledge about dividend policy and providing to research entitled dividend policy and dividend catering, which is one of the new theories of Baker and Wurgler (2004a).

Furthermore, this research will be outlined with the arrangement as follows: Section 2 contains an explanation of the literature review and development of the research hypothesis; Section 3 contains an explanation of the variables and samples as well as the research model; Section 4 contains empirical analysis and results of hypothesis testing and sensitivity test results; and Section 5 contains a summary or conclusion from the research, including the suggestions for further research.

## 2. Literature review and development

### 2.1. Catering dividend theory

Baker and Wurgler (2004a) developed a dividend theory called “A Catering Theory of Dividends.” Catering theory states that companies satisfy investors’ demands by paying dividends when investors place a higher premium stock price on companies that pay dividends compared to companies that do not pay and vice versa. This is done by the company to maximize the market value of equity. Baker and Wurgler calculate their main proxy, with dividends premium as the difference in the logarithm of the market to book ratio of companies that distribute dividends, and those that do not distribute dividends. Baker and Wurgler (2004a, 2004b) found the managerial decisions to pay dividends driven by investor demand. In that study, Baker and Wurgler (2004a) tested various explanations based on agency costs, tax awareness, dividends clientele, and catering. The results of the study explained that catering incentives illustrate fluctuations in the tendency to pay dividends well.

In the next paper, Baker and Wurgler (2004b) provide catering explanations for unexpected reductions in the percentage of dividend-paying companies in the United States. Li and Lie (2006) extended the study of Baker and Wurgler to show that the work of catering dividends is not only for the initiation of dividends but also for the increase and decrease in the level of dividend payments. Li and Lie also discovered that capital markets appreciate managers because they pay attention to investor demand for dividends. Based on the catering dividend theory developed by Li and Lie (2006), the premium placed by the stock market on dividends influenced the decision to change dividends and the amount of change in dividends.

#### 2.1.1. Agency theory

Agency theory provides arguments for activities and actions between principal and agent (Mahadwartha & Ismiyanti, 2008). In agency theory, principals and agents are assumed to be economic individuals who have rational minds and are only motivated by individual interests. From this issue, a conflict of interest arises due to differences in desire to maximize their utility (Nasution, 2019; Putra et al., 2018). These problems will raise costs, namely, agency costs. Agency cost theory that emphasizes solutions to reduce costs due to principal-agent problems

shows that dividend payments are a mechanism that can reduce agency costs related to factors such as free cash flow, debt financing, company growth, investment opportunities, company size, major shareholders, and risk (Anazonwu et al., 2018; Denis et al., 1994; Utami & Inanga, 2011; Wei et al., 2011; Yoon & Starks, 1995). Dividend payments can reduce problems related to information asymmetry. Jensen (1986) argued that managers in public companies have pressure to expand the company beyond the optimal size, although this is done on projects that have a negative Net Present Value (NPV) and can lead to overinvestment.

### **2.2. Dividend premium and dividend policy**

Baker and Wurgler (2004a) revealed a new theory of dividends, known as the catering dividend theory. The theory explains that managers' decisions to pay dividends are motivated by the needs of the stock market that pays dividends. They use a dividend premium as a proxy to capture investor demand for dividends. In this context, dividend premium can be understood as the difference of market to book ratio between the average of dividend payer and non-dividend payer (Baker & Wurgler, 2004a; Karpavičius & Yu, 2018; Kulchania, 2013; Li & Lie, 2006; Riyanti & Yulianto, 2018).

Tangjitprom (2013) found that a number of companies will pay dividends if there are catering incentives, where the dividend premium shows positive results. Investors prefer companies that pay dividends and give premium prices to companies that distribute dividends. Dividends premium have an essential role in influencing dividend policy. Dividends premium can prevent managers from cutting dividend payments, especially when managers ignore dividend payments when the amount of dividend premium is high. Managers can do market timing to maximize market value with dividend payment decisions. Companies can adjust dividend payments based on catering incentives or dividend premium. Managers can decide to pay dividends or make dividend payments when dividends premium are high (Baker & Wurgler, 2004a; Li & Lie, 2006; Riyanti & Yulianto, 2018; Tangjitprom, 2013). Study by Riyanti and Yulianto (2018) discovered that dividend change decision has a significant positive relationship with dividends premium, this study supports the findings of Tangjitprom (2013), Li and Lie (2006), and Baker and Wurgler (2004a). However, significant negative relationships were found in civil law countries in the study by Ferris et al. (2009). Based on this elucidation, the research hypothesis can be formulated as follows:

#### **H1: The dividend premium has a positive effect on dividend policy**

### **2.3. Free cash flow and dividend policy**

Rosdini (2009) argued that free cash flow could portray a company's condition, where companies with excess free cash flow have better performance than other companies because they benefit from opportunities not obtained by other companies. Companies with high free cash flow will benefit more than companies that have low free cash flow. This is because companies with high free cash flow can survive in turbulent times. Companies with high free cash flow can hinder the agency problem because companies with high free cash flow tend to distribute large dividends to shareholders. This is intended so that the existing free cash flow is not only used for profitable projects.

Study conducted by Chen and Dhiensiri (2009) examined the factors that affect dividends for companies listed on the New Zealand Stock Exchange and found that free cash flow has a significant positive effect on dividend payments. High free cash flow will cause agency conflict, with the emergence of pressure from shareholders to distribute cash in the form of dividends. The manager has an intention to reinvest in the company's assets. An increment in free cash flow can increase dividend policy. Companies with high free cash flow can reduce agency conflict with shareholders through the distribution of company dividends. Study by Chen and Dhiensiri (2009) was supported by the finding of Arfan and Maywindlan (2013) who discovered that free cash flow

had a positive effect on dividend payments. However, a significant negative relationship was notified by Utami and Inanga (2011). Based on this description, the research hypothesis can be formulated as follows:

## H2: Free cash flow has a positive effect on dividend policy

### 3. Research design

#### 3.1. Sample and source of data

The population in this study includes all manufacturing companies that listed on Indonesia Stock Exchange from 2015 to 2018. The initial sample data was 476, but after excluding all companies that did not distribute their dividends and their financial statements report which ended on 31<sup>st</sup> of December, it was found that the final sample is 186, which can be seen from Appendix A. The data that have been used in this study are secondary data, which is the company's financial statements that are obtained from the Indonesia Stock Exchange's website [www.idx.co.id](http://www.idx.co.id).

#### 3.2. Operational definition and variable measurement

This study uses the dependent variable, specifically the dividend policy (Y). In this study, the proxy of dividend policy is measured by the formula of the dividend payout ratio, which is the comparison between the dividend paid and the net profit obtained. Usually, this ratio presented as a percentage (Adiputra & Hermawan, 2020; Susanti et al., 2020). The higher the dividend payout ratio, the more benefit it will be for the investment, however it will weaken the company's internal finances since it reduces retained earnings. On the other hand, if the dividend payout ratio get lower, then it will ruin the shareholders (investors), but the company's internal financial strength will be getting stronger.

The independent variable in this study is the dividend premium (X1). The dividend premium is the log difference between the average market to book ratio of companies that pay dividends compared to companies that not pay dividends (Baker & Wurgler, 2004a). This variable shows the tendency of investor demand for dividends, from the variable, it can be seen that the higher the dividend premium then the higher investor demand for dividends and vice versa.

$$\text{DivPremt} - 1 = \log(\text{MTBt} - 1_{\text{payer}}) - \log(\text{MTBt} - 1_{\text{non-payer}})$$

$$\text{MTB} = \frac{\text{Market price per share common stock}}{\text{Book value per share common stock}}$$

Free cash flow is the second independent variable in this study (X2). Free cash flow means cash flow that is genuinely available for distribution to all investors (shareholders and debt holders) after the company places all of its investments in fixed assets, new products, and working capital that needed to maintain on going operations (Brigham & Houston, 2007). Free cash flow is calculated by the formula (Jones & Sharma, 2001).

$$\text{FCF} = \frac{\text{Net Operating Cash Flow} + \text{Net Investment Cash Flow}}{\text{Total Assets}}$$

We use control variables to explain the phenomenon optimally because other variables can also influence the dependent variable. Control variables in this study are firm size, profitability, and leverage. We chose this variable because it has been shown to have a significant effect on dividend policy in previous studies (Agyemang, 2013; Ahmed, 2015; Baah et al., 2014; Denis & Osobov, 2008; Firer et al., 2008; Forti et al., 2015; Mehta, 2012)

The control variables in this study are company size, profitability, and leverage. The company size describes the size of a company that can be expressed by total assets or total net sales. The

greater the company's assets and sales, the higher the company's size. In addition, the greater the assets, the capital invested will be large, and the more sales, the more money circulation in the company. The profitability of a company illustrates the ability of a company to generate profits for a specified period at the level of sales, assets, and certain share capital (Maharani & Suardana, 2014). The proxy of profitability in this study is using ROA. Leverage reflects an incentive to manage income to avoid violating debt agreements (DeFond & Jiambalvo, 1994). Leverage is measured by dividing total liabilities by total assets.

### 3.3. Methodology

This study uses multiple linear regression models with SPSS 20 software. Before carrying out multiple linear regression analyses, firstly, we conduct the classical assumptions test. The classical assumption test aims to find the ideal conditions from the research results. The classic assumption test used in this study consists of (1) normality test which aims to test whether in the regression model the confounding variable or residual ( $\mu$ ) has a normal distribution, (2) multicollinearity test which aims to prove whether the regression model is found between independent variables, (3) the autocorrelation test which aims to test or the relationship between the observation members sorted according to time and space, and (4) the heteroscedasticity test which aims to test whether in the regression model there is an inequality of variants from the residuals of one observation to the opinion that other. The multiple regression analysis model in this study was formulated in the mathematical equation as follows:

$$DPR_{it} = \alpha + \beta_1 DP_{it} + \beta_2 FCF_{it} + \beta_3 Size_{it} + \beta_4 ROA_{it} + \beta_5 Lev_{it} + e_{it}$$

Where DPR is the Dividend Payout Ratio, DP is Dividend Premium, which is a proxy for catering dividend measurement, FCF is Free Cash Flow, SIZE is Company Size, ROA is a proxy for Profitability, LEV is Leverage.

## 4. Empirical result and discussion

### 4.1. The classical assumption test

This test is carried out to get the results of a regression model that can be estimated accurately and not biased or called BLUE (Best Linear Unbiased Estimation). This classic assumption test consists of 4 tests: normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test.

The results of the classical assumption test can be seen in the Appendix B. The normality test can be seen from the P-Plot image where the points spread around the diagonal line and follow the direction of the diagonal line, which indicates that the regression model meets the normality assumption. The multicollinearity test can be seen from the multicollinearity test table, where all the variables in this study have a tolerance value  $> 0.1$  and VIF  $< 10$ , which indicates that the variables tested are free from multicollinear problem. The heteroscedasticity test is shown by the scatter graphic plot image, where the scattering points do not gather and do not form a distinctive pattern, which indicates that the regression model is free from heteroscedasticity symptoms. For the autocorrelation test, it can be seen from the Durbin—Watson Test table, where the regression equation value is 1.762, which means that the Durbin-Watson value is still in the autocorrelation-free range because it is between  $-2$  to  $+2$ .

### 4.2. Descriptive statistics

Table 1 shows that from 186 data, the dividend premium variable has a range of  $-2.1673$  to  $7.2783$ , with an average value of  $1.429158$ . Free cash flow has a value of  $-0.2307$  to  $0.3376$ , with an average value of  $0.037507$  for the average sample company in the 2015-2018 period. The size of the company has an average value of  $29.091798$ , with a minimum value of  $25.6195$  and a maximum value of  $33.4737$  in the form of natural logarithms. The profitability of the sample has a range of  $0.0023$  to  $0.2615$  with an average value of  $0.075730$ , and leverage in this study has a range of  $0.0985$  to  $0.8197$  with an average of  $0.382096$ .



**Table 1. Descriptive statistics**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
DPR	186	0.0026	0.9773	0.341263	0.2320870
DP	186	-2.1673	7.2783	1.429158	2.0616718
FCF	186	-0.2307	0.3376	0.037507	0.0916266
SIZE	186	25.6195	33.4737	29.091798	1.7600338
ROA	186	0.0023	0.2615	0.075730	0.0538445
LEV	186	0.0985	0.8197	0.382096	0.1724241
Valid N (listwise)	186				

### 4.3. Regression result

Based on Table 2, the t-test value of the dividend premium (DP) variable is 3.055, with a significance level of 0.003. This significance value is smaller than 0.05, so it can be concluded that the dividend premium has a significant positive effect on dividend policy. Thus the hypothesis in this study is proven because H1 is accepted, and H0 is rejected. The t-test value of the free cash flow (FCF) variable is 3.201, with a significance level of 0.002. This significance value is smaller than 0.05, so it can be concluded that the amount of free cash flow has a significant positive effect on dividend policy. Therefore the hypothesis in this study is proven because H2 is accepted, and H0 is rejected.

The t-test value of the firm size (SIZE) variable is 2.564, with a significance level of 0.011. This significance value is smaller than 0.05, so it can be concluded that the amount of free cash flow has a significant positive effect on dividend policy. The T-test value of the profitability (ROA) variable is -3.094, with a significance level of 0.002. This significance value is smaller than 0.05, so it can be concluded that profitability has a significant negative effect on dividend policy. This negative value can be interpreted that the sample company prefers to invest rather than do dividend distribution because the investment is required by the company to enhance the company growth. This interpretation can be related to positive dividend premium value, which means that even though low profitability does not close the possibility, the company distributes dividends to

**Table 2. Result of multiple regression analysis**

<b>Independent Variable</b>	<b>REGRESSION MODEL</b>			
	<b>B</b>	<b>T</b>	<b>Sig</b>	<b>Conclusion</b>
(constant)	-0.207	-0.774	0.440	
DP	0.028***	3.055	0.003	H1 accepted
FCF	0.663***	3.201	0.002	H2 accepted
SIZE	0.024**	2.564	0.011	Affect
ROA	-1.326***	-3.094	0.002	Affect
LEV	-0.335***	-3.135	0.002	Affect
R square	0.142			
F statistic	5.956			
F Sig	0.000			

Source: Data Processed Result by SPSS

annotation:

\*\* = statistically significant at the level of significance 5%

\*\*\* = statistically significant at the level of significance 1%

attract investors. The t-test value of the leverage variable (LEV) is  $-3.135$ , with a significance level of  $0.002$ . This significance value is smaller than  $0.05$ , so it can be concluded that leverage has a significant negative effect on dividend policy.

#### **4.4. Determinant coefficient (R2)**

The determinant coefficient (R2) shows how much all the independent variables explain the dependent variable. In Table 4.5, the R2 value of  $0.142$  indicates that dividend premium, free cash flow, company size, profitability, and leverage can explain dividend policy variations of  $0.142$  or  $14.2\%$ . In comparison, the remaining  $0.858$  or  $85.8\%$  is explained by other variables outside the independent variable and control variables used in the study.

#### **4.5. Dividend premium on dividend policy**

Based on the results of this study, it is known that the dividend premium has a significant positive effect on dividend policy as measured using the dividend payout ratio (DPR) formula, and it can be concluded that the dividend policy by the company's management is influenced by market sentiment. The manager will serve investors' demand for dividends when investors place higher share prices on dividend-paying companies. This matter is influenced by the desire of investors so that companies pay higher dividends, the existence of investor demand can encourage companies to maximize their market prices. The results of this study support the catering dividends theory from Baker and Wurgler (2004a), where managers tend to divide dividends when investors place relatively high premium prices on companies that pay dividends. This is indicated by the positive value of the dividend premium. This study is also consistent with research conducted by Wang et al. (2016) and Tangjitprom (2013), who found that dividend premiums had a significant effect on dividend policy.

#### **4.6. Free cash flow on dividend policy**

This study's results note that free cash flow has a significant positive effect on dividend policy. In accordance with the hypothesis in this study, free cash flow has a positive effect on dividend policy. Free cash flow tends to increase the dividend payout ratio because the more cash the company owns, the greater its ability to distribute dividends to its shareholders. Companies with high free cash flow can reduce agency conflict with shareholders through the distribution of company dividends. This is consistent with research conducted by Arfan and Maywindlan (2013) which showed that free cash flow has a positive effect on the dividend payout ratio. Jensen (1986) in Pujiastuti argued that if companies have a lot of free cash flow, they will be able to pay higher dividends, thereby reducing agency conflicts with shareholders.

#### **4.7. Additional analysis**

##### **4.7.1. Company size and dividend policy**

Our study shows that firm size has a significant positive effect on dividend policy. The company size in this study is proxied by using the natural log of total assets. The t-test result of company size in this study is  $2.564$ , which means that the size of the company affects the company's dividend policy, where the amount of assets or total assets is the determinant of the dividend policy. The greater the total assets owned by the company, the greater the company's ability to distribute dividends to shareholders, and vice versa, the smaller the size of the company, the smaller the company's ability to distribute dividends.

##### **4.7.2. Profitability and dividend policy**

Our study results indicate that profitability has a significant negative effect on dividend policy and vice versa. The phenomenon of increasing profitability and decreasing dividend distribution can be explained that in conditions of increased profitability, management makes it an opportunity to invest. The form of investment can be fixed assets in the form of land, machinery, equipment, buildings, and other fixed assets. The results showed that the ROA in the t-test was  $-3.094$ . This negative sign indicates that manufacturing companies listed on the IDX are more likely to invest than distribute dividends to their shareholders. Investments are needed by a company to invade or

grow for the company, which can be profitable in the long run. The negative results of profitability in our study can be relevant because, in our study, we show a positive result between dividend premium and dividend policy. It can be interpreted that the premium dividend indicates the existence of investor demand that can affect dividend policy, so we estimate that even in negative profitability, management will still pay dividends to attract investors to invest in the company.

#### 4.7.3. *Leverage and dividend policy*

The results of our study indicate that leverage has a significant negative effect on dividend policy. The results showed that the results of the t-test for leverage were  $-3.135$ . Leverage is the ratio of debt and equity in company funding and shows the company's own capital ability to meet all of its obligations. The higher the leverage indicates, the higher the company's liabilities and the lower the leverage ratio indicates, the higher the company's ability to meet its obligations. If the company decides to pay off its debt, the company will usually use the retained earnings to pay off the debt, so it would be very appropriate if the company had to withhold a large part of its income for company needs such as debt. Because of this, it usually results in a small number of company profits distributed for dividends.

### 5. Conclusion

Based on the results of data processing on 186 observations from all manufacturing companies listed on the Indonesia Stock Exchange in the period 2015–2018 and using the multiple regression analysis models with SPSS for Windows version 20 software, several results were found. Catering dividends measured by dividend premium and free cash flow have a positive effect on dividend policy. This positive value shows the higher the dividend premium and free cash flow, the higher the dividend policy of the company. Catering dividends emphasize investor demand for dividends influenced by market sentiment. The manager will serve investors' demand for dividends when investors place higher share prices on dividend-paying companies. This matter is influenced by the desire of investors so that companies pay higher dividends, the existence of investor demand can encourage companies to maximize their market prices. Free cash flow has a positive influence on dividend policy, meaning that the higher the free cash flow the company owns, the greater its enhancement of dividend policy. Companies with higher free cash flow will also have a greater ability to distribute dividends to their shareholders.

The results of this study offer useful input and insight for investors to be able to consider companies that have high free cash flow because it is proven that companies that have high free cash flow tend to distribute higher dividends. For management, the company can consider dividend premiums to find out investor demand for dividends to maximize the company's market price. Management also needs to provide more free cash flow to improve dividend policy.

This study has limitations. First, this research only focuses on manufacturing companies registered in Indonesia. Further research can increase the number of samples, both in adding years of study and areas (countries). Future studies can examine the relationship between catering dividends and other variables, such as comparing dividend policy effectiveness with stock repurchase or stock buybacks to raise stock prices. This study also uses a dividend premium in the past five years, because of the lack of access to financial statements from the company's official website. So, future studies can increase the range in determining premium dividends.

Despite its limitations, our results contribute to the financial literature that discusses dividend policy, especially dividend catering theory, our study finds that there is an effect of market sentiment that affects dividend policy in Indonesia. Our study supports the existence of the catering dividend as a determining factor for dividend policy, especially in Indonesia. Our study also contributes to literature for investors in making decisions about where to invest in companies that can provide maximum returns for investors. For management, our research can be taken into consideration in decision making, company management, and policymaking, especially on

corporate dividend policy, that it is necessary to pay attention to premium dividends to attract investors. Our literature also contributes to adding insight and knowledge about dividend policy and contributing to research entitled dividend policy and dividend catering, which is one of the new theories of Baker and Wurgler (2004a).

#### Funding

The authors received no direct funding for this research.

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#### Citation information

Cite this article as: Catering dividend: Dividend premium and free cash flow on dividend policy, Hidayati Nur Rochmah & Ardianto Ardianto, *Cogent Business & Management* (2020), 7: 1812927.

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**Appendix A**  
**Sample Selection**

Annotation	2015	2016	2017	2018	Total
Population: Number of manufacturing companies listed on the Indonesia Stock Exchange in 2015-2018	119	119	119	119	476
Exclude: - Manufacturing companies that do not publish financial statements in 2015-2018 - Manufacturing companies that do not distribute dividends - Manufacturing companies that do not report financial statements that end on December 31	78	71	71	70	290
Total observation	41	48	48	49	186

**Appendix B**  
**The Classical Assumption Test**

**Normality Test**

**Result of Multicollinearity Test**

Variable	Collinearity Statistic		Annotation
	Tolerance	VIF	
DIVPREM	0,733	1.365	Free of Multicollinearity
FCF	0.713	1.402	Free of Multicollinearity
SIZE	0.908	1.101	Free of Multicollinearity
ROA	0.482	2.075	Free of Multicollinearity
LEV	0.755	1.325	Free of Multicollinearity

**Result of Heteroscedasticity Test**  
**Result of Durbin—Watson Test**

Model	Durbin—Watson
1	1,762

**Appendix C**

**Regression**

*Model Summary<sup>b</sup>*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.377 <sup>a</sup>	0.142	0.118	0.2179490	1.762

<sup>a</sup>Predictors: (Constant), LEV, DIVPREM, SIZE, FCF, ROA

<sup>b</sup>Dependent Variable: DPR

**ANNOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.415	5	0.283	5.956	0.000 <sup>b</sup>
	Residual	8.550	180	0.048		
	Total	9.965	185			

<sup>a</sup>Dependent Variable: DPR

<sup>b</sup>Predictors: (Constant), LEV, DIVPREM, SIZE, FCF, ROA

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	DIVPREM	FCF	SIZE	ROA	LEV
1	1	4.245	1.000	0.00	0.01	0.01	0.00	0.01	0.01
	2	0.926	2.141	0.00	0.03	0.41	0.00	0.01	0.02
	3	0.573	2.722	0.00	0.61	0.22	0.00	0.00	0.01
	4	0.189	4.734	0.00	0.28	0.33	0.00	0.46	0.16
	5	0.064	8.128	0.01	0.07	0.03	0.01	0.52	0.76
	6	0.002	49.529	0.99	0.00	0.00	0.99	0.01	0.04

<sup>a</sup>Dependent Variable: DPR

*Residuals Statistics<sup>a</sup>*

	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>N</b>
Predicted Value	0.117351	0.560511	0.341263	0.0874440	186
Std. Predicted Value	-2.561	2.507	0.000	1.000	186
Standard Error of Predicted Value	0.018	0.070	0.038	0.009	186
Adjusted Predicted Value	0.100437	0.551858	0.341555	0.0881141	186
Residual	-0.4418468	0.5899417	0.0000000	0.2149835	186
Std. Residual	-2.027	2.707	0.000	0.986	186
Stud. Residual	-2.076	2.739	-0.001	1.001	186
Deleted Residual	-0.4635060	0.6040329	-0.0002929	0.2216216	186
Stud. Deleted Residual	-2.096	2.790	0.001	1.007	186
Mahal. Distance	0.294	18.189	4.973	2.897	186
Cook's Distance	0.000	0.043	0.005	0.007	186
Centered Leverage Value	0.002	0.098	0.027	0.016	186

<sup>a</sup>Dependent Variable: DPR





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