

The Effect of Profitability on Dividend Policy in Indonesian State-Owned Banks

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ABSTRACT

This study is conducted to determine the effect of the profitability variable on dividend policy in Indonesian state-owned banks. The method used in this research is quantitative method using numerical data which are tested using panel data regression analysis. The population of this study is PT Bank Rakyat Indonesia (Persero) Tbk, PT Bank Negara Indonesia (Persero) Tbk, PT Bank Tabungan Negara (Persero) Tbk, and PT Bank Mandiri (Persero) Tbk, where the data samples are the financial statements for fiscal year 2011 through fiscal year 2019. The study result is the NPM (profitability) regression coefficient of -0.731653. This value indicates the negative direction on dividend policy. Moreover, the results of t-test obtain a significant level of 0.0409 which is smaller than 0.05 (level of significance). From these results, it can be concluded that profitability which is measured using net profit margin (NPM) has a negative but significant effect on dividend policy (DPR). This means that value of profitability which is measured by the *net profit margin* (NPM) is not the basis for the number of dividends that will be distributed by the company management to the shareholders.

Keywords: Dividend Policy, Profitability, State-Owned Banks

INTRODUCTION

Banks are financial institution that have an important role in economic activity where banks become intermediaries between parties who have excess funds and parties who need or lack of funds. In addition, banks also provide services in payment traffic and money circulation. In carrying out this role, banks need an injection of large enough funds to maintain their existence and expand their service business. The funds collected from third parties are insufficient, so they require funds in the form of investment by issuing securities.

Investment is a commitment form of a number of resources (funds) carried out at the present time with the aim that in the future it will benefit. On this basis, the main goal of each investor who invests in business organizations is to get return in the form of dividends.

Profits generated by business organizations/companies will be distributed in the form of dividends to all shareholders (investors). The policy of dividend distribution is a benchmark for investors to the extent to which the company is able to prosper them. In addition, dividend distribution is a form of stimulus from the company to be able to retain existing investors and attract potential new investors.

Dividend policy is a decision to distribute or to hold the profits to be reinvested in the company (Brigham, 2014). Dividends which are distributed to shareholders can be in the

form of cash dividends or stock dividends. The distribution depends on the policies set in each company. In order to determine the dividend policy well, the company management must balance the interests of shareholders through the dividend distribution and the interest of the company in terms of growth.

Dividend Payout Ratio (DPR) is used to measure the company's dividend policy. The DPR describes the number of dividends distributed to shareholders against the company's total net income. In Harjito and Martino (2011), DPR determines the amount of profit divided in the form of cash dividends and retained earnings as a source of funding. The size of DPR will influence the investment decisions of shareholders. If the company's financial performance is good, it is expected that the company will determine the size of the DPR according to investors' expectations without neglecting the company's interests. The factors that influence dividend according to Hanafi (2016), i.e. profitability, liquidity, leverage, investment opportunities, access to financial markets, the stability of income, and restrictions.

Profitability is one of the factors that can affect dividend policy. Profitability is used to assess a company's capability to generate profit at an acceptable level. Every company is obliged to maintain the stability of its profitability and even be guided as much as possible to experience a good increase from year to year. From the profit generated by the company, the management will decide how much profit will be distributed in the form of dividends to shareholders and how much profit will be retained for future investment needs of the company. The generated profit will affect the level of dividend payments distributed to shareholders. Net Profit Margin (NPM) can be used as a measure of profitability (Harjito and Martono, 2011).

Net Profit Margin is a ratio that measures the company's capability, in this case the bank, to generate net profit at a certain sales level. The greater this ratio, the better the capability of a bank to earn high profits. If the bank's capability to generate profits increases, the dividend distribution will increase.

The following is the Annual Financial Report in the form of data tables of Dividend Policy (DPR) and Profitability (NPM) in PT Mandiri (Persero) Tbk and PT Bank Negara Indonesia (Persero) Tbk.

Data Table of DPR & NPM in PT Bank Mandiri (Persero) Tbk and PT Bank Negara Indonesia (Persero) Tbk

Fiscal Year	Bank Mandiri		Bank BNI	
	DPR	NPM	DPR	NPM
2011	0.34	0.68	0.29	0.74
2012	0.19	0.76	0.20	0.80
2013	0.28	0.81	0.29	0.81
2014	0.29	0.79	0.29	0.80
2015	0.24	0.79	0.24	0.81
2016	0.28	0.80	0.24	0.80
2017	0.42	0.78	0.34	0.80
2018	0.43	0.78	0.34	0.79
2019	0.44	0.67	0.24	0.77

Source: processed data

According to the table above, the Dividend Distribution which is proxied using Dividend Payout Ratio (DPR) and the Profitability which is proxied by using Net Profit Margin in PT Bank Mandiri (Persero) Tbk and PT Bank Negara Indonesia (Persero) Tbk from the fiscal year 2011 to the financial year 2019, has experienced fluctuations. The fluctuations that occur in dividend policy are not directly proportional to the fluctuations in profitability. On this basis, the researcher proposes a study entitled "The Effect of Profitability on Dividend Policies in Indonesian State-Owned Banks".

Research Problem

The formulation of the problem in this study is "Does profitability have a significant effect on dividend policy in Indonesian state-owned banks?"

Research Purpose

The purpose of this study is "To determine and analyze the effect of Profitability on Dividend Policy in Indonesian state-Owned Banks."

Dividend

Dividends are compensation received by shareholders, besides capital gains (Hanafi, 2004). Stice, et al. (2005) in Suharli (2007) defines dividend as a distribution of profit to the company shareholders in proportion to the number of shares held by each owner. In Hanafi (2004), dividends consist of two types, i.e. cash dividends and non-cash dividends. For non-cash dividends, there are stock dividends and stock splits.

There are several types of dividends that can be paid to shareholders, depending on the position and capabilities of the company concerned. According to Brigham (2012), the types of dividends, i.e.:

1. Cash Dividend; Cash Dividend is dividend paid in cash.
2. Stock Dividend; Stock Dividend is dividend paid in shares, not in cash.
3. Property Dividend; Property dividend is dividend paid in the form of goods (assets, other than cash).
4. Scrip Dividend; Scrip Dividend is a dividend paid in the form of debt securities scrip.
5. Liquidating Dividend; Liquidating Dividend is dividend distributed based on the reduction of the company's capital and based not the profit obtained by the company.

Dividend Policy

Dividend policy is a decision to distribute or to hold the profits to be reinvested in the company (Brigham, 2014). Dividend policy is an integral part of the company's financing decisions. The Dividend Payout Ratio determines the amount of profit that can be retained as a source of funding. The greater the retained earnings, the less the amount of profit allocated to dividend payments (Van Horne and Wachowicz, Jr., 1998).

Dividend Payout Ratio can be measured by using the following formula:

$$DPR = \frac{\text{dividend}}{\text{net income}}$$

Where :

dividend : The total dividend distributed in the current year

Net Income : Net income of the current year

Brigham and Houston (2014) state that there are three theories of investor preference, i.e.:

a) Dividend Irrelevance Theory

This theory, Dividend Irrelevance Proposition, was introduced by Miller and Modigliani (1961). The paper explains that in a world without taxes, and the transaction costs are not taken into account, also the market conditions are perfect, the dividend policy will provide any effect on the market price of the stock as well as the prosperity of shareholders of the company.

In Harjito and Martono (2011), Modigliani and Miller (MM) stated that the *Dividend Payout Ratio* (DPR) is only a small part of the company's funding decisions. The DPR does not affect shareholder wealth. MM argues that the company value is determined independently by the ability of company assets to generate profits or investment policy. So, the sharing of company profits into dividends and retained earnings does not affect the company value.

b) Bird in the Hand Theory

This theory was introduced by Myron Gordon (1959) and John Lintner (1956) who argued that the company equity or value would decrease if the dividend payout ratio was increased, because the investors were less sure about the receipt of capital gains acquired from retained earnings, compared to supposing the investors receive dividends. Gordon (1959) and Lintner (1956) argue that investors actually appreciate the expected income from dividends much more than the expected return from capital gains.

In Hanafi (2016), Bird in The Hand Theory or high-paid dividends theory argues that dividend payments reduce uncertainty, which means reducing risk, which in turn reduces the rate of return required by shareholders. High dividends will help reduce uncertainty and reduce agency conflicts between managers and shareholders.

c) Tax Preference Theory

There are three reasons related to tax to assume that the investors may prefer a low dividend distribution over a high one, i.e.:

- a. Capital gains are subject to a lower tax rate than the dividend income. Therefore, wealthy investors (who own most of the shares) may prefer the company to hold and reinvest profits in the company. Profit growth might be considered to result in an increase in the share price, and the lower tax of the capital gains would substitute the dividends which are heavily taxed.
- b. The tax on profits is not paid until the shares are sold, so there is a time value effect.
- c. If a share is owned by a person until his death, absolutely there is no payable capital gain tax.

According to Brigham (2014), there are two other theories that can help to understand dividend policy, i.e.:

a. Information content or signaling hypothesis

In this theory, Modigliani and Miller argue that dividend increases above the normal increases are usually a signal to the investors that the company's management is predicting a good income in the future. Conversely, a decrease in dividends that is below the normal decline is believed by investors to be a signal that the company is experiencing difficult times in the future.

b. Clientele Effect

This theory states that different shareholders will have different preferences for the company's dividend policy. The investors who need current income prefer a high *Dividend Payout Ratio* (DPR), on the other hand, the investors, who do not really need money at the present time, prefer that the company retain most of the company's net income.

Profitability

Profitability is the net result of series of policies and decisions (Brigham, 2014). In order to maintain the viability, a company must be in a profitable state. Generally, Profitability describes the company's ability to earn profits through all existing capabilities and sources, e.g., sales activities, cash, capital, number of employees, number of branches, etc. (Harahap, 2013). In other words, profitability is used to measure the extent to which the company is able to generate profits or a measurement of the effectiveness of company management, where the ability to earn profits can be measured from its own capital or all the funds invested in the company (Wiagustini, 2010).

The measurement of profitability uses ratio analysis. Profitability ratio is the ratio used to measure the efficiency of the use of company assets or the ability of a company to generate profit for a certain period (usually semi-annual, quarterly, etc.) to see the company's ability to operate efficiently (Irawati, 2010). According to Harjito and Martono (2011), Profitability ratios consist of two types of ratios that show profit relating to sales and the ratio that shows profit that related to investment. The profitability ratios related to sales are:

a) Gross Profit Margin is the ratio of net sales minus cost of goods sold to net sales or the ratio between gross profit and net sales.

The formula of Gross Profit Margin is as follows:

$$\text{Gross Profit Margin} = \frac{\text{Net Sales} - \text{Cost of Goods Sold}}{\text{Net Sales}}$$

b) Net Profit Margin, is the sales profit after calculating all costs and income taxes. This margin shows how net profit after tax compares to sales:

The formula of Net Profit Margin is:

$$\text{Net Profit Margin} = \frac{\text{Net Profit after tax}}{\text{Net Sales}}$$

The relationship of profitability ratio, profit and investment, i.e.:

a) Return on Investment (ROI), that is the ratio of profit after tax to total assets.

b) ROI and Dupont Approach, Dupont company uses a certain approach of ratio analysis to evaluate the effectiveness of the company. Dupont analyzes ROI by multiplying Net Profit Margin to Total Asset Turnover.

c) Return on Equity (ROE), or what is often called the profitability of own capital, is intended to measure how much profit belongs to the owner of the capital itself.

d) Economic Profitability, which is intended to measure the company's capability to earn operating profits using the assets to obtain the profit.

The Relationship of Profitability and Dividend Policy

Profitability, according to Hanafi (2016), is the ability of a company to make a profit. When the profitability of a company is higher, it means that it is better, because

the prosperity of shareholders and owners of the company will increase along with profitability increase (Prakoso, 2016). The profit earned by the company is used to pay dividends to shareholders. Therefore, in dividend distribution, profitability has an effect on it. When the profitability obtained by the company increases, the dividends received by the shareholders will also increase, conversely, the lower the profitability, the lower the dividend distribution or there will be no dividend distribution.

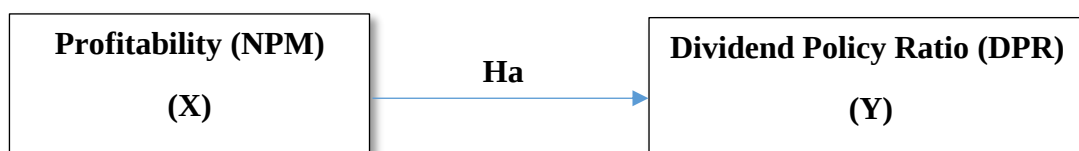
On the basis of this understanding, the management will try to get the maximum profit so that the ability to pay dividends increases (Darminto, 2008). The signaling theory explains that to show the company's success in earning profits, the company's management will provide a signal to shareholders by distributing dividends. So the existence of a high profitability value allows the company to be able to meet the expectations of shareholders in terms of company policy to be able to distribute dividends for them.

Theoretical Framework

The Effect of Profitability on Dividend Policy

Profitability in this study is proxied by *Net Profit Margin* (NPM), which means the company's capability to generate profits by calculating the ratio of net profit after tax to sales. The author chooses NPM as a tool to measure profitability because net income will be used later for dividend distribution. Herni (2014) suggests that profit is obtained from the difference between incoming asset (income and profits) and discharged asset (expenses and losses). The company's profit may be retained (as retained earnings) and shared (as dividends). Therefore, it can simply be concluded that if the company does not earn profit, then no dividend will be distributed to the shareholders.

Figure of Theoretical Framework



Based on the framework above, the authors propose hypotheses as a provisional conjecture as follows:

Ho: There is no effect of Profitability (NPM) on Dividend Policy (DPR).

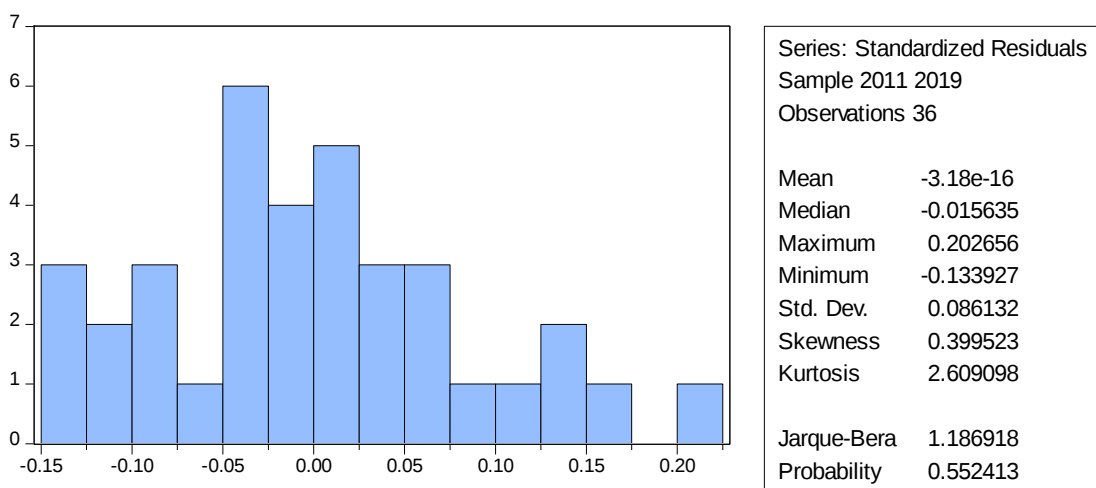
Ha: There is an effect of Profitability (NPM) on Dividend Policy (DPR).

RESEARCH METHOD

The method used in this research is quantitative method using numerical data and emphasizes the research process on measuring objective results using statistical analysis. The testing uses panel data regression analysis. The population as well as the samples that are the object of this study are Indonesian state-owned banks, i.e. Bank BRI, Bank BNI, Bank BTN and Bank Mandiri. The type of data used in this research is secondary data which are sourced from financial reports and annual reports for the financial years 2011 to 2019 which have been published on the official website of Indonesia Stock Exchange. The research is conducted in a month, i.e. July 8th to August 8th, 2020.

RESULTS AND DISCUSSION

Data Normality Test



Based on Jarque-Bera with probability of 0.552413 > 0.05, it means that the data is normally distributed.

Estimation Model Determination

1. Chow test

The chow test is a test to determine the best model between *Common Effect Model* (CEM) and *Fixed Effect Model* (FEM).

Table of Chow Test Result

Effects Test	Statistic	d. f.	Prob.
Cross-section F	5.427815	(3,31)	0.0041
Cross-section Chi-square	15.198229	3	0.0017

From the Chow test results above, it is shown that the probability value of the *Cross-section* Chi-square is 0.0017, where this value shows > 0.05 (the level of significance in this study). Based on the results of the Chow test, it can be concluded that H_1 is accepted. Thus, this research is better to use the Fixed Effect Model.

2. Hausmen Test

Hausmen test is a statistical test to determine whether Fixed Effect or Random Effect model is the most appropriate to be used in this research model.

Table of Hausmen Test Result

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.570317	1	0.0588

The results of the hausmen test show the *random cross-section* probability value of 0.0588, which means that it is more than $> \alpha = 0.05$ (significance level of this study). Based on the hausmen test, the results show that the random effect model is best to use. From the Chow test results, it obtains Fixed Effect Model, while after conducting the Hausmen test, it obtains a better Random Effect Model. Thus, this study uses the estimation of the Random Effect Model.

Hypothesis test

Table of Random Effect Model

Dependent Variable: Y (DPR)				
Method: Panel EGLS (Cross-section random effects)				
Date: 08/06/20 Time: 06:20				
Sample: 2011 2019				
Periods included: 9				
Cross-sections included: 4				
Total panel (balanced) observations: 36				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.850717	0.267625	3.178766	0.0031
X (NPM)	-0.731653	0.344214	-2.125574	0.0409
Effects Specification				
CROSSID	Effect			
BNI	0.001814			
Mandiri	0.021586			
BRI	0.035891			
BTN	-0.059291			
			S.D.	Rho
Cross-section random			0.038120	0.2159
Idiosyncratic random			0.072654	0.7841
Weighted Statistics				
R-squared	0.109960	Mean dependent var		0.152235

Adjusted R-squared	0.083782	S.D. dependent var	0.078720
S.E. of regression	0.075350	Sum squared resid	0.193042
F-statistic	4.200517	Durbin-Watson stat	0.831699
Prob(F-statistic)	0.048189		
Unweighted Statistics			
R-squared	-0.015634	Mean dependent var	0.283889
Sum squared resid	0.259652	Durbin-Watson stat	0.618336

Based on the regression obtained using random effect model, it shows that the value of t-statistic profitability of -0.731653. The probability value is $0.0409 < 0.05$. These results indicate that profitability (NPM) has significant negative effect on dividend policy (DPR). Thus, H_a is accepted, where there is an effect of profitability on dividend policy.

The Effect of Profitability on Dividend Policy

The study result of the effect of profitability on dividend policy is the regression coefficient of NPM is -0.731653. This value indicates the negative direction on dividend policy. Moreover, from the results of the t-test, it obtains a significant level of 0.0409 which is smaller than 0.05 (level of significance). From these results, it is shown that the profitability measured using the net profit margin (NPM) has a negative but significant effect on dividend policy (DPR). This means that the high or low profitability as measured by *net profit margin* (NPM) is not the basis for the number of dividends to be distributed.

In this study, it is found that even though the company experienced an increase in profits compared to the previous financial year period, this does not mean that it is accompanied by an increase in dividends paid to shareholders, instead in a certain accounting year the percentage of dividend distribution decreases. On the other hand, company profits have decreased compared to the previous financial year, but the percentage of dividend distribution has actually increased. Thus, it can be concluded that in fact an increase in company profits does not guarantee that the distributed dividend will also increase. However, to be able to distribute dividends to shareholders, the company must be in a condition to generate profits, because if it suffers a loss, it is certain that there will be no dividend distribution.

According to the results of the author's investigation, the reason why in this study the profitability shows a negative direction towards dividend policy based on the information that the author obtained, is the amount of dividend distribution is determined by the shareholders through the Annual General Meeting of Shareholders (AGM). Therefore, the author chooses the Indonesian state-owned banks as the research object, because in this case, the Indonesian governments are the majority shareholder. Thus, it can be said that the amount of dividend which will be paid to shareholders is determined by the government itself.

Dividend policy is taken by management on the basis that the company earns a profit in a certain period of the financial year where the profit is allocated to two posts, i.e. retained earnings and dividends. In the case of dividend distribution made by Indonesian state-owned banks, where the nominal of distributed dividend is not directly proportional to the profit earned because a part of the profit is allocated to the retained earnings account. The retained earnings will be used for the company's development, both for short and long term. Thus, when the government prefers to allocate more profit to

retained earnings rather than dividends, it means that the government sees that the company has good prospects in the future and to be able to compete with other private companies. Therefore, it is necessary to have additional investment for future business development, so that the company is able to compete, even more than that the company can control the existing market share.

CONCLUSIONS

Based on the research and discussion that has been carried out on the effect of profitability on dividend policy at Indonesian state-owned banks, it can be concluded that the profitability has a negative but significant effect on dividend policy in Indonesian State-Owned Banks for the financial year 2011-2019. This means that the increase in company profits does not guarantee that the dividends that will be distributed will also increase. However, to be able to distribute dividends to shareholders, the company must be in a condition to generate profits, because if it suffers a loss, it is certain that there will be no dividend distribution.

1. Profitability has a significant effect on dividend policy making. However, in this study the effect is negative, where the increase in company profits does not guarantee that it will be followed by an increase in dividends received by investors. Even though the majority shareholder is Indonesian government, the government in this case must be sensitive to the expectations of private shareholders, which is when company profits increase, ideally the dividends will increase.
2. For further researchers, it is expected that they can add or use other variables besides those used in this study, and also use other companies as research object.

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