

The Effect of Dividend Policy, Firm Size, and Productivity to The Firm Value

Lihard Stevanus Lumapow Ramon Arthur Ferry Tumiwa* Economics Faculty, Manado State University, Tondano 95618, Indonesia

Abstract

The purpose of this study is to investigate the determinants of dividend policy, firm size and productivity on firm value. The sample is a manufacturing company listed on the Indonesia Stock Exchange (IDX) from 2008 to 2014, the method used in sampling that is purposive sampling. Analysis tool in this research is panel data regression with Random Effect Model (REM) approach. The test results show that dividend policy has a negative and significant effect on firm value; Furthermore, firm size has a positive and significant impact on firm value; and lastly, the productivity of the company has a positive and significant impact on the firm value.

Keywords: dividend policy, firm size, company productivity, firm value, company age

1. Introduction

The purpose of the company to increase profits in maximizing prosperity for the owners of the company. The company's profit is reflected in the net income of the company's financial statements. Watson and Head (2010) declare that as the owner of the company or shareholder, the main purpose of corporate finance is usually expressed as maximizing shareholder wealth. Since shareholders receive their wealth through dividends and capital gains, shareholder value will be maximized by maximizing the value of dividends and capital gains received by shareholders over time.

One of the determinants of the company is dividend policy. In a company the de-tax policy is complex because it involves the interests of many stakeholders. The purpose of shareholder investment is to improve its welfare by obtaining return from the invested funds. As for the management of the company is more oriented to increase the firm value. The creditor needs information on the dividend policy to assess and analyze the probability of returns to be earned if lending to a company.

The dividend policy is basically the determination of the portion of the profit to be given to the shareholders. Dividend payment decision policy is important regarding whether cash flow will be paid to investors or will be retained for reinvestment by the company. The amount of dividends distributed depends on the dividend policy of each company. The Proportion of Net Income After Tax which is distributed as dividend is usually presented in Dividend Pay Out Ratio (DPR). Dividend Pay Out Ratio is what determines the amount of dividend per share (Dividend Per Share). If a large dividend is paid then it will increase the stock price which also result in an increase in the firm value.

Another determinant that may affect firm value is firm size (SIZE). The larger the size of the company will cause a large cost so as to reduce profitability, but on the other hand large companies have economies of scale and flexibility compared with small companies so it will be easier to obtain loans that can increase profitability. Therefore firm size is used as a variable to test its effect on firm value. The size of the company is considered capable of affecting the firm value. Because the larger the size or scale of the company it will be easier the company also obtain the source of funding.

While the next determinant is the productivity of the company. Investments in the company's assets will increase the company's operational activities resulting in an increase in the net sales of a company (Total Asset Turn Over), which in turn will increase the profit of the company or profit for the owner of the company so as to increase the firm value. Thus the size of the company can affect the firm value. The purpose of research to determine the effect of dividend policy, firm size and productivity of company on firm value.

2. Literary Review

2.1 Effect of Dividend Policy on Corporate Value

There are three groups that have different views on dividend policy that is irrelevant dividend policy which means there is no optimal dividend policy because dividend does not affect firm value. The second group is the relevant dividend ie the smaller dividend risk than capital gain, so the dividend after tax and offer higher dividend yield will minimize the cost of capital. The third group is that since dividends tend to be taxed rather than capital gains, investors will demand a higher profit rate for stocks with high dividend yields. This group suggests that with a lower dividend payout ratio (DPR) will maximize the firm value. The three opinions seem contradictory, but we consider the information content it can be said that the payment of dividends is often followed by a rise in stock prices.

Sujoko and Soebiantoro (2007), and Amidu (2007), found that dividend policy has a positive and significant impact on firm value. Increased dividend payouts can benefit the shareholders or owners of the company. Thus it



can be derived hypothesis as follows:

Hypothesis 1: The dividend policy has a positive effect on firm value

2.2 The Effect of Firm Size on Firm Value

Firm size is a measure that describes the size of the company that can be assessed from the total value of the company's assets. The size of a large company shows that the company is experiencing good growth. Firms with large growth will find it easy to enter the capital market as investors capture positive signals for companies that have large growth so that a positive response reflects the increasing firm value.

Research conducted by Taswan (2003) which states that firm size has a positive effect on the firm value. Thus can be derived hypothesis as follows:

Hypothesis 2: Firm size has a positive effect on firm value

2.3 The Effect of Corporate Productivity on Firm Value

Company productivity proxies with Total Asset Turn Over (TATO) is part of the company's activity ratio. This ratio emphasizes on the important role of how a company in managing the overall assets owned by the company effectively to improve the company's sales results. Managers operating in a company depend on the number of productive assets owned by the company, this indicates that the more productive assets owned by the company, the operating activities will also increase, will eventually increase revenue for the company, thereby increasing the firm value. The positive impact between TATO and the firm value will be achieved by the more productive assets managed by the company (Armaya, 2010), if the total asset turnover of the company increases, then the firm value will increase. Thus, it is expected the higher Total Asset Turn Over (TATO) of the company will increase the firm value. Thus can be derived hypothesis as follows:

Hypothesis 3: The productivity of the firm positively affects the firm's value.

3. Research Method

In accordance with the objectives to be achieved then this form of research is verification, which aims to determine the relationship between variables through hypothesis testing.

3.1 Source and how to determine data

The data in this study is secondary data obtained from the annual financial statements of manufacturing companies listed on the Indonesia Stock Exchange (IDX) during 2008 to 2014. Sampling based on purposive sampling method. Based on the criteria then the number of samples obtained as many as 23 companies.

3.2 Operational Variables

The variables used in this study include the dependent variable is the firm value (TQ) and the independent variables are dividend policy (DPR), corporate productivity (TATO), firm size (SIZE), and control variable, ie firm age (AGE).

3.2.1 The Firm Value

This endogenous variable reflects Tobin's Q ratio. This ratio is measured by summing the stock price multiplied by the number of shares outstanding plus the total debt and divided by the total assets of the company, given the symbol TQ.

$$Q = \frac{MVE + D}{BVA}$$
Remarks:
$$T^{Q} = \text{Firm Value}$$

$$MVE = \text{Market Value of Equity}$$

$$D = \text{Debt Total}$$

$$BVA = \text{Book Value of Assets}$$

3.2.2 Dividend Policy

This exogenous variable is the ratio used to reflect the company's dividend policy that is part of the profits distributed to shareholders. Dividend payment policy is measured using dividend payout ratio which is dividend per share (DPS) divided by earnings per share (EPS), and given the symbol of DPR.

3.2.3 Firm Size

The size of the company in this study is expressed by total assets, the greater the total assets of the company will be the greater the size of the company. The greater the asset, the more capital invested. Company size can be seen from total assets owned by the company (Suharli, 2006). Company size is assessed by log of total assets. Log of Total Assets is used to reduce the significant difference between the size of the company that is too large and the



size of the company that is too small, then the total value of the asset is formed into natural logarithm, conversion of natural logarithm form aims to make the data of total assets distributed normally. Company size is measured using the natural log of total assets.

SIZE = *Log of Total Assets*

3.2.4 Company Productivity

The productivity of a company proxied by Total Asset Turn Over (TATO) illustrates the effectiveness of the use of all company assets in order to generate sales or in other words how much rupiah net sales can be generated from each dollar invested in the form of company assets. Total Asset Turn Over is a ratio that measures the company's activity in using assets owned by the company to increase the net sales results of the company and of course the higher the ratio indicated the more effective the company also in managing the company's assets to increase the company's sales. As for how to calculate Total Asset Turn Over is:

$$TATO = \frac{Net \ Sales}{Assets}$$

3.2.5 Age of Company

This control variable is measured by the natural Logarithm of the year of study undertaken minus the year the company stands, and is given the AGE symbol

3.3 Research model

In this study using multiple regression model can be expressed as follows:

$$TQ = \alpha_0 + \beta_1 DPR_{it} + \beta_2 SIZE + \beta_3 TATO + \beta_4 AGE + \varepsilon_i$$

In this study using panel data then tested Hausman. The Hausman test is a statistical test on which to base considerations in determining which test is appropriate, whether a fix effect model (FEM) or a random effect model (REM). Based on the results of the calculation through Hausman test shows the probability of random effect of 0.1566, as the basis of decision making greater than 0.5 then the random effect model (REM) used.

4. Results and Discussion

4.1 Research result

To test the hypothesis there is no influence by looking at the coefficients in each equation. The results of the analysis can be summarized in the table below.

Table.1 Analysis Result of Regression for Firm Value (TQ)

Variable	Expected sign	Model (1)	Model (2)	Model (3)	Model (4)
C		1.535***	-0,647	-1,224	-2,206
DPR	(+)	-0,241**	-0,108***	-0,290***	-0,289***
SIZE	(+)		0,191***	0,171***	0,136*
TATO	(+)			0,239*	0,228*
AGE	(+)				0,431
\mathbb{R}^2		0,0261	0,897	0,078	0,091

Remarks: DPR is a dividend payout ratio; SIZE is company size; TATO is productivity (asset turnover); AGE is the age of the company.

Firm Value (TQ) Equation Regression Test Result

$$TQ = \alpha_0 + \beta_1 DPR + \varepsilon \dots (1)$$

$$TQ = \alpha_0 + \beta_1 DPR + \beta_2 SIZE + \varepsilon$$
 (2)

$$TQ = \alpha_0 + \beta_1 DPR + \beta_2 SIZE + \beta_3 TATO + \varepsilon$$

$$TQ = \alpha_0 + \beta_1 DPR + \beta_2 SIZE + \beta_3 TATO + \beta_4 AGE + \varepsilon$$
(4)

Based on the result of testing the equation of firm value in table 1 shows model (1) gives information that dividend policy has negative and significant sign to firm value. For the equation model (2), SIZE has positive and significant coefficients, and the firm's productivity variable (TATO) has positive and significant coefficients in

equation model (3) whereas the control variable (AGE) has a positive but insignificant effect. Overall the variables of DPR, SIZE and TATO, both did not use and use control variables the results remain consistent, where each variable is significant.

4.2 Dividend policy on firm value

Companies that increase dividend payouts, interpreted by investors as a signal or a sign of improved company performance. Dividend payout is better than future capital gain. This argument is based on Gordon's (1963) argument that explains that investors prefer high dividends because the dividends received are less risky and reduce uncertainty than the undistributed profits in the form of retained earnings.

^{*} is significant at 10% level;

^{**} is significant at the 5% level;

^{***} is significant at the level of 1%



This result supports research conducted by Taswan (2003); Nidar (2008) and Geng and Liu (2011), who found that dividend policies negatively and significantly impacted firm value. For some investors a high dividend payout is indicated as the company's inability to manage free cash flow. Myers and Majluf (1984) argue that profitable firms have a relatively low incentive to pay dividends in order to have substantial internal funds to finance investment projects. For the company to grow, the increase in dividends can be bad news because it is suspected that the company is reducing the investment plan which will then affect the company's value.

A high dividend payout ratio does not necessarily indicate that the company is good. High dividend payouts can be perceived by investors as the inability of the company to manage its free cash flow well. Perceptions of investors like this can lower the firm value.

4.3 Firm Size on Firm Value

In the firm value equation, SIZE variable has positive and significant coefficients. This is not in accordance with the research conducted by Cho, (1998) and Chen et al. (2006) who asserted that assets have a negative influence on Tobin's Q. In this study contrary and in accordance with research conducted by Davies et al. (2005), where the larger the company's size the greater the company's value as measured by Tobin's Q. Because large and established firms are easier to access the needs of funds in the capital market. With the ease of connecting with the capital market, large firms have greater flexibility to acquire the much needed funds to implement profitable investment opportunities. Thus, the opportunity to increase profitability in large companies is higher than that of small companies. The results of this study are consistent with research conducted by Ekawati (2004) and Bardosa and Louri (2003) which indicate that SIZE has a positive effect on firm value.

4.4 Productivity on Firm value

The positive impact of productivity variables proxied by TATO with firm value will be achieved with an increase in sales (Armaya, 2010), if the total asset turnover of the firm increases, then the firm value will increase. Because the higher the ratio indicated, of course, indicates that the better the company in managing assets owned by the company in order to increase the company's sales results, this indicates that the future prospects of the company are very promising for the owners and potential investors. TATO emphasizes on the important role of how a company in managing the overall assets owned by the company effectively to improve the company's sales results. Therefore, the more effective the company's assets operate can increase the firm value. The results of this study are consistent with the results of Afriyanti (2011), Witjaksono (2012) and Alivia (2013) studies which states that TATO has a positive and significant impact on the firm value proxied by ROA.

5. Conclusions and Suggestions

5.1 Conclusion

Based on the results of general research on dividend policy, firm size, corporate productivity to firm value can be prepared based on research result:

- The result of this research is only able to give negative and significant influence to firm value. A high dividend payout ratio does not necessarily indicate that the company is good. High dividend payouts can be perceived by investors as the inability of the company to manage its free cash flow well. Perceptions of investors like this can lower the firm value.
- 2) The result of this research is able to give positive influence and significant company size to firm value. The size of the company has easier access to enter the capital market to require external funds to invest. Companies investing is a good signal for investors because the company has good prospects in the future, thus the firm value increases.
- 3) The result of this research is also able to give positive influence and significant productivity of company to firm value. More productive assets used to generate sales. The more productive assets that are used can reflect the trust for investors to the company so as to increase the firm value.

Suggestion

- 1) For the company, the size of the company encourages companies to continue to increase the size of the company because it is easier to enter the capital market in obtaining external funds in the form of debt because the greater the scale of the company will increase the firm value. However, the use of debt should be careful, because the level of debt is too high will make the company will bear the cost of debt agency.
- 2) For investors, the results of the study indicate that firm size and productivity variables have a positive and significant influence. Recommendations for investing in firms that have larger firm sizes.
- 3) For the researcher, the limitations in the number of samples used because the sampling must meet the specified criteria. These criteria must have a DPR during the study period. For further research, in order to increase the sample, it is expected to use dummy variables.



References

- Amidu, Mohammed., (2007), How Does Dividend Policy Affect Performance Of The Firm On Ghana Stock Exchange?, *Investment and Financial Innovations*, Vol. 4, Issue 2.
- Barbosa, Natalia and Helen Louri, (2003), "Corporate Performance: Does Ownership Matter? A Comparison of Foreign and Domestic-Owned Firms in Greece and Portugal," **Working Paper Series**, No. 26
- Chen Carl. R and Steiner Thomas. L., (1999), "Managerial Ownership and Agency Conflicts: A Nonlinear Simultaneous Equation Analysis of Managerial Ownership, Risk Taking, Debt Policy, and Dividend Policy," *FinancialReview*, Vol. 34 no. 1,
- Cho, Myeong-Hyeon., (1998), "Ownership Structure, Investment, and the Corporate Value: An Empirical Analysis," *Journal of Financial Economics* 47, pp. 103–121.
- Davies, J. R., Hillier, David., and McColgan, Patrick., (2005), "Ownership Structure, Managerial Behavior dan Corporate Value", *Journal of corporate Finance*. Vol. 11, p. 645-660.
- Geng, Chengxuan and Liu, Chenxi, (2011) A Research about How the Dividend Policy Influences the Enterprise Value on the Condition of Consecutive Cash Payoff, *World Academy of Science and Technology*, Vol. 5
- Gordon, Myron, J, (1963), Optimal Investment and Financing Policy, Journal of Finance, p. 264-272
- Myers, Stewart, C., and Majluf, Nicholas, S., (1984), Corporate Financing and Investmen Decisions When Firms Have Information The Investors Do Not Have, *Working Paper* No. 1396
- Nidar, Sulaeman, R, (2008), Pengaruh Struktur Kepemilikan, Pertumbuhan Perusahaan, Volatilitas Pendapatan, Dan Ukuran perusahaan Terhadap Kebijakan Dividen, Struktur Modal, Dan Kinerja Emiten Terbaik, *Disertasi*, Unpad Bandung.
- Sujoko dan Soebiantoro, Ugy., (2007), Pengaruh Struktur Kepemilikan Saham, Leverage, Faktor Intern Dan Faktor Ekstern Terhadap Nilai Perusahaan, *Jurnal Manajemen dan Kewirausahaan*, Vol. 9, No. 1, h. 41-48.
- Taswan, (2003), Analisis Pengaruh Insider Ownership, Kebijakan Hutang dan Dividen terhadap Nilai Perusahaan serta Faktor-faktor yang Mempengaruhinya, *Jurnal Bisnis dan Ekonomi*.