

Firms's Internal Factors that Influence Firm Values:

Empirical Evidences on State-Owned Firms in Indonesia

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Abstract—Firm value is an important factor to be researched because it is one of the indicators how market evaluates the firm as a whole. The objective of this research is to examine the influence of firm's internal factors on firm values of Indonesia's state-owned firms listed on the Indonesia Stock Exchange. The internal factors are: Dividend Payout Ratio, Firm Size, Return on Equity and Price Earning Ratio. This research uses quantitative approach and multiple linear regression method. The population of this research consist of Indonesia state-owned firms that are listed on Indonesia Stock Exchange. Samples were determined by purposive sampling method with a total number of 15 samples of Indonesia state-owned firms. This research uses secondary data by collecting information from 45 financial data sources. This research concludes that partially, Dividend Payout Ratio (X1), Firm Size (X2), Return on Equity (X3), Price Earning Ratio (X4) has significant influence to firm values.

Keywords—dividend payout ratio; firm size; firm value; price earning ratio; return on equity

I. INTRODUCTION

A firm is established with objectives. The objectives are to maximise firm values and to increase the prosperity of the shareholders. Firm values describe the firm's conditions, if the firm value is good, the firm will be viewed in a desirable way by potential investors. On the other hand, potential investors will view the firm with low value if the firm value is not good. Firm value is a price payable by potential buyer when the firm is sold [1]. Firm value is reflected from a stable share price that increases over time. The higher the share price is, the higher is the firm value.

Generally, firm value is influenced by internal factors and external factors. This research only focuses on factors from within the companies. These influencing internal factors includes dividend payment, the size of the firm, Profitability and Price Earning Ratio [1-6].

Firm may set dividend policy to accomplish firm's objectives. Dividend policy is a policy executed by a firm to determine whether to pay out dividend to investors and to determine the amount of dividend to be distributed to the investors [4, 7-10]. One of the ratios that may influence firm value in setting out dividend policy is the dividend payout ratio [4]. The dividend distributed is expected to increase the shareholder's prosperity. Parts of the net income that is not

paid out as dividend will be kept as retained earnings for reinvestment purpose. Dividend payout is expected to show to the investors that the firm has a high value [11, 12].

Another factor that determines firm value is the size of the firm [12]. This is possible because theoretically, the bigger the size or scale of a firm, the easier it will be for the firm to obtain financing, both internally and externally. In comparison to a small firm, a large firm that is able to maintain its existence well will have easy access to the capital market. A number of researchers found that ease of access to capital market means a firm has greater flexibility and has the ability to obtain financing in a short period of time. As a result, large firms usually have higher dividend payout ratio compared to smaller firms. This will in turn increase firm values that will drive potential shareholders to invest [4].

The next factor that influences firm value is Profitability [1, 13]. A number of financial ratio components are known in profitability ratio analysis. Tend to invest in companies with good financial performance, because good financial performance indicates high firm values [4]. Financial performance of a firm is shown through various financial ratios such as Return on Equity (ROE) [3, 10, 13]. ROE is the level of return on shareholder's equity. ROE is used to measure capital's ability to generate returns [13].

The last factor that influences firm value is Price Earning Ratio [6, 10]. This ratio is viewed by investors as an indicator to measure firm's ability to generate profit in the future [6, 14]. The firms having low growth, resultantly their earning also low and those firms which have high growth rate, their earning also high [14].

Based on the established background, the focus of this research is: (1) Does Dividend Payout Ratio have any impact on firm values of state-owned companies listed on Indonesia Stock Exchange (IDX) between 2014 to 2016? (2) Does firm size have any impact on firm values of state-owned companies listed on IDX between 2014 to 2016? (3) Does Return on Equity have any impact on firm values of state-owned companies listed on IDX between 2014 to 2016? (4) Does Price Earning Ratio have any impact on firm values of state-owned companies listed on IDX between 2014 to 2016?

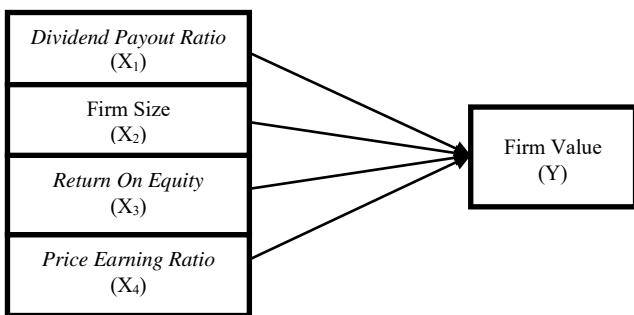


Fig. 1. Model of the study.

II. RESEARCH METHODOLOGY

The approach used in this research is quantitative approach. This approach is a research method where the data comprises of numbers and the analysis uses statistical data with the objective of testing the established hypotheses. This research is associative in nature that describes the relationship between five variables. The objective of this research is to learn the impact of Dividend Payout Ratio, firm size, Return on Equity (ROE), Price Earning Ratio on firm values.

Dividend Payout Ratio is a firm's policy in distributing profit earned as dividend to investors or retaining profit earned to be re-invested by the firm [15]. Dividend payout reflects a firm's financial condition and it also impact market perception. The distribution of adequate dividend payout ratio will be one of investors' consideration in buying and retaining the shares [4]. Dividend payout ratio is generated by dividing the total amount of dividend payout against net profit.

Firm size is a scale to classify how large or small a firm [10]. Firm size may be determined by a number of ways such as by its turnover, number of employees, log size, total assets, and total capital. The larger a firm get, the easier it is for the firm to access information. In another word, larger firms will gain more financing compared to firm that has less access to information. The size of a firm itself can be measured by its total assets, its turnover or its capital.

Return on Equity ratio is also known as return on net worth. This ratio reviews how well a firm utilises its resources to generate return on equity [11]. Return on Equity (ROE) is used to measure the level of return that the shareholders have. The higher this ratio is, the better it is as this means that the firm is in a strong position. The formula to calculate this ratio is to divide net profit by total equity [11].

Price Earning Ratio (PER) is a measure to determine how market determine values or market price on firm's shares. Investors' desires to conduct shares analysis using financial ratios such as PER is due to investors' (or potential investors) desires to get reasonable return from a particular share investment. In this research, researchers calculate PER of any particular share by dividing the share price against earning per share [14].

Firm value is firm's fair value which reflects investors' perception on the firm that is always associated with its share

price. Firm value can be seen from the firm's share price. Firm value in this research is represented by Price Book Value (PBV) which is the comparison between share price and book value per share [15].

The scope of this research is state-owned companies listed on Indonesia Stock Exchange between 2014 to 2016. Total population of state-owned companies listed on Indonesia Stock Exchange is 20 companies. Sample is part of the total number and characteristic possessed by a population. Sampling technique used is purposive sampling, and the criteria are state-owned companies listed on Indonesia Stock Exchange from 1 January 2014 to 31 December 2016, companies that have submitted audited financial reports for year 2014 to year 2016, companies that made profit from 2014 to 2016 consecutively, and companies that present their financial reports in Rupiah currency. Based on the set criteria, 15 out of 20 state-owned companies listed on Indonesia Stock Exchange between 2014 to 2016 fulfilled the requirements and were selected as samples.

Data analysis technique used to solve problems in this research is multiple linear regression analysis with the following formula:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e_i \quad (1)$$

Description:

Y = Firm value

a = Constant coefficient

b_1 = Regression coefficient - Dividend Payout Ratio (DPR)

X_1 = Dividend Payout Ratio

b_2 = Regression coefficient - Return On Equity (ROE)

X_2 = Firm size

b_3 = Regression coefficient – firm size

X_3 = Return On Equity (ROE)

b_4 = Regression coefficient - Price Earning Ratio

X_4 = Price Earning Ratio (PER)

e_i = Prediction error

III. RESULTS AND DISCUSSION

Based on table 1, it can be explained that coefficient alpha of 3.457 means that statistically when all independent variables are equal to zero then all dependent variables will be 3.46 or 346%. DPR (Dividend Payout Ratio) variable has regression coefficient of -1.060 which shows a negative coefficient between dividend payout ratio variable (X_1) and firm value which is represented by PBV (Y) of -1.060 which means if dividend payout ratio is increased by 1% then firm value will decrease by 106% with the assumption that the rest of the independent variables are constant.

TABLE I. T TEST RESULT

Model	Unstandardized Coefficients		Beta	t	Sig.
	B	Std. Error			
1 (Constant)	3,457	1,951		1,772	,085
DPR	-1,060	,328	-,173	-3,229	,003
SIZE	-,150	,061	-,155	-2,461	,019
ROE	16,326	1,674	,553	9,754	,000
PER	,091	,007	,871	13,857	,000

Size variable (firm size) has a regression coefficient of -0.150 that shows there is a negative coefficient between firm size variable (X2) and firm value which is represented by PBV (Y) of -0.150 which means if firm size is increased by 1% then firm value will decrease by 15% with the assumption that the rest of the independent variables remain constant.

ROE (Return On Equity) variable has a regression coefficient of 16.326 that shows positive coefficient between return on equity variable (X3) and firm value which is represented by PBV (Y) of 16.326. This means if return on equity is increased by 1% then firm value will increase by 1,632.6% or 1,633% with the assumption that the remaining independent variables remain constant.

PER (Price Earning Ratio) variable has a regression coefficient of 0.091 which shows a positive coefficient between return on equity variable (X4) and firm value which is represented by PBV (Y) of 0.091. This means if Price Earning Ratio is increased by 1% then firm value will increase by 9.1% with the assumption that the remaining independent variables remain constant.

Based on the result of the research, regression coefficient for Dividend Payout Ratio variable is -1.060 and generated t_{count} of -3.229 with significant value of 0.003. The value of $t_{count} > t_{table}$ (-3.229 > -2.02619) and significant value of 0.003 is less than 0.05 (0.003 < 0.05). Therefore, it can be concluded that partially, dividend payout ratio variable has significant influence over firm value of state-owned companies in Indonesia. With the increase of dividend, it can be concluded that companies will generate good income in the future. This will lead to the increase of share price which eventually increase firm value. It can therefore be concluded that Dividend Payout Ratio variable can be used to assess firm value of state-owned companies. The result of this research is consistent with the result of research conducted by Hughes which conclude that dividend payout ratio has significant influence over firm value [9].

It is discovered from the research that the regression coefficient for firm size variable is -0.150 and generated t_{count} of -2.461 with significant value of 0.019. The value of $t_{count} > t_{table}$ (-2.461 > -2.02619) and significant value of 0.019 which is smaller than 0.05 (0.019 < 0.05). Therefore, it can be concluded that partially, firm size variable has significant influence over firm value of state-owned companies in Indonesia. This shows that the larger the assets held by the companies, the larger the capital of the companies. This will surely increase firm value. Therefore, it can be concluded that firm size variable can be used to assess firm value of state-owned companies.

The result of this research is inconsistent with the result of research conducted by Setiadharma and Machall which states that firm size has no direct effect over firm value [12]. However, this study supports the result of research conducted by Risqia et al. which states that firm size affect firm value [5]. Comment these findings, Setiadharma and Machall also argues that based on the result of previous studies, direct influence of firm size on firm value did not show a consistent results [12].

This research found that regression coefficient for Return on Equity variable is 16.326 and generated t_{count} of 9.754 with significant value of 0.000. The value of $t_{count} > t_{table}$ (9.754 > 2.02619) and significant value of 0.000 is less than 0.05 (0.000 < 0.05). Therefore, it can be concluded that partially, Return on Equity variable significantly influence firm value of the state-owned companies being researched.

This shows that when companies experience increases in profit, share price will also increase which lead to the increase in firm value. This will drive investors' demand on the companies' shares. The increased demand for shares will increase firm value as well. Therefore, it can be concluded that Return on Equity can be used to assess the firm value of state-owned companies. The result of this research is consistent with the result of research conducted by Rosikah et al. which concludes that return on equity has significant influence on firm value [3].

This research found that regression coefficient for Price Earning Ratio variable is 0.093 and generated t_{count} of 13.857 with significant value of 0.000. The value of $t_{count} > t_{table}$ (13.857 > 2.02619) and significant value of 0.000 is less than 0.05 (0.000 < 0.05). The result concluded that partially, the Price Earning Ratio variable has significant influence over firm value of state-owned companies being researched. This shows that higher investment made on companies will lead to higher firm values. The higher the Price Earning Ratio is, the higher the price per share will be. This indicates good firm value and this will put firm's shares under blue-chip category in the stock exchange. It can therefore be concluded that Price Earning Ratio variable can be used to assess firm value of state-owned companies. The result of this research is consistent with the research conducted by Mahmood and Waheed which states that Price Earning Ratio has significant influence over firm value [6].

As indicated in Table 2, coefficient of determination is shown in the value of Adjusted R Square of 0.884 which means that 88.4% of firm value is influenced by Dividend Payout Ratio, firm size, Return on Equity and Price Earning Ratio. The remaining 11.6% is influenced by other factors which are not part of the research.

TABLE II. TEST RESULT OF COEFFICIENT OF DETERMINATION

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,946 ^a	,895	,884	,61037	2,136

IV. CONCLUSION

Based on the findings and the analysis conducted in this research, it can be concluded that partially, Dividend Payout Ratio (X1), Firm Size (X2), Return on Equity (X3), Price Earning Ratio (X4) has significant influence over firm value. In addition to that, it can also be concluded that the four independent variables in this research can be used to assess firm value of state-owned companies particularly in Indonesia. This research also found that 88.4% of firm value of state-owned companies in Indonesia will be influenced by Dividend

Payout Ratio, Firm Size, Return on Equity and Price Earning Ratio.

These research findings can be used for the reference of the next researchers. This study also can be improved by using other variables that can affect the firm value or using other companies in other sectors.

REFERENCES

- [1] S. Ghosh, "Do leverage, dividend policy and profitability influence future value of firms? Evidence from India," SSRN, available at <https://ssrn.com/abstract=1158251>, 2008.
- [2] S.B. Naceur and M. Goaied, "The relationship between dividend policy, financial structure, profitability and firm value," *Applied Financial Economics*, vol. 12, no. (21), pp.843-849, 2002.
- [3] Rosikah, D.K. Prananingrum, D.A. Muthalib, M. Irfandy, Azis, and M. Rohansyah, "Effects of return on asset, return on equity, earning per share on corporate value," *The International Journal of Engineering and Science*, vol. 7, no. (3), pp. 6-14, 2018.
- [4] N.A. Nwabuisi, A.C.N. Aseoluwa, and O.O. Tolulope, "Dividend payout ratio and share price: evidence from quoted manufacturing companies in Nigeria," *IOSR Journal of Business and Management (IOSR-JBM)*, pp. 30-43, 2017.
- [5] D.A. Risqia, S. Aisjah, and Sumiati, "Effect of managerial ownership, financial leverage, profitability, firm size, and investment opportunity on dividend policy and firm value," *Research Journal of Finance and Accounting*, vol. 4, no. (11), pp. 120-130, 2013.
- [6] H. Mahmood and A. Waheed, "Relationship between price/earning, dividend yield, size and stock returns of listed Pakistani firms," *Journal of Basic and Applied Scientific Research*, vol. 4, no. (10), pp.83-90, 2014.
- [7] H. Ullah, S.E. Saqib, and H. Usman, "The impact of dividend policy on stock price volatility: a case study of selected firms from textile industry in Pakistan," *International Journal of Academic Research in Economics and Management Sciences*, vol. 5, no. (3), 2016.
- [8] M.B. Ali and T.A. Chowdury, "Effect of dividend on stock price in emerging stock market: a study on the listed private commercial banks in DSE," *International Journal on Economics and Finance*, vol. 2, no. (4), 2010.
- [9] J.P. Hughes, "R&D and dividend payments as determinants of corporate value in the UK: Empirical evidence after controlling for endogeneity," *International Journal of Managerial Finance*, vol. 4, no. (1), pp. 76-91, 2008.
- [10] A.I. Hunjra, M.S. Ijaza, M.I. Chani, S.U. Hassan, and U. Mustafa, "Impact of dividend policy, earning per share, return on equity, profit after tax on stock prices," *International Journal of Economics and Empirical Research*, vol. 2, no. (3), pp. 109-115, 2014.
- [11] Murekefu, T. Mahalang'ang'a, and O.P. Ouma, "The Relationship between dividend payout ratio and firm performance: a study of listed companies in Kenya," *European Scientific Journal*, vol. 8, no. (9), pp. 30-36, 2012.
- [12] S. Setiadharma and M. Machall, "The effect of Asset structure and firm size on firm value with capital structure as intervening variable," *Journal of Business & Financial Affairs*, vol. 6, no. (4), 2017.
- [13] A. Kijewska, "Determinants of the return on equity (ROE) on the example of companies from metallurgy and mining sector in Poland," *Metalurgija*, vol. 55, no. (2), pp. 285-288, 2016.
- [14] M.U.R. Bhayo, A.K. Mubashir, and S.S. Raja, "An idiosyncratic explanation of earning price ratio based on financial statement analysis," *International Journal of Busisnees and Social Science*, vol. 2, no. (9), pp. 243-249, 2011.
- [15] E.F. Brigham and J.F. Houston, *Fundamentals of financial management*, 14th ed., Cengage Learning, 2015.