



## Effects of Return on Asset, Debt to Asset Ratio, Current Ratio, Firm Size, and Dividend Payout Ratio on Firm Value

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Received: 20 July 2019

Accepted: 01 September 2019

DOI: <https://doi.org/10.32479/ijefi.8595>

### ABSTRACT

The purpose of the research is to determine the effect of return on assets, debt to asset ratio (DAR), current ratio (CR), firm size, and dividend payout ratio (DPR) to the firm value of manufacturing companies listed in Indonesia Stock Exchange for the period 2013-2016. The sampling method was purposive sampling techniques and obtained from 32 samples out of 138 firms that met the criteria. The analysis technique applied was a multiple regression analysis. The research found that the return on asset and firm size have effects on firm value, DAR, CR, and DPR, but do not affect firm value. This paper shows that return on asset has an effect firm value, DAR does not effects firm value, firm size has an effect firm value, and payout ratio has no effect on firm value.

**Keywords:** Firm Value, Return on Assets, Debt to Asset Ratio, Current Ratio, Firm Size, Dividend Payout Ratio

**JEL Classifications:** E10, E32, E60

### 1. INTRODUCTION

In general, firm value is the selling price of a company that is considered feasible for prospective investors. The main objective of the company's management is stockholder wealth maximization by maximizing the company's stock price. To maximize the company's stock price is carried out by increasing the enterprise value or firm value. The firm value is related to business management, policies, working environment conditions, and business ethics (Miles and Covin, 2000). The higher price book value (PBV), the more successful the company in creating the value and prosperity of the owner. According to (Barney, 1991) "the greater the PBV value, the higher the company is valued by the relative investors compared to the funds that have been invested in the company. "The better the financial performance of a company, the better the firm value." The higher the firm value, the higher the return obtained, and the higher the stock return, the more prosperous the shareholders. The financial decisions taken

by the financial manager are intended to increase the prosperity of the company owner indicated by the increasing value of the company (Thakur and Workman, 2016).

Several factors that influence investors in assessing the company's ability to increase the firm value are Return on Assets (ROA), Debt to Asset Ratio (DAR), Current Ratio (CR), Firm Size and Dividend Payout Ratio (DPR). One important indicator to see the firm value is the extent of the company's profitability. Profitability refers to the ROA. ROA is a ratio that shows how much assets contribute to creating net income (Shil, 1997).

This ratio measures management effectiveness as a whole which is addressed by the size of the level of profit gained in relation to sales and investment. The better the profitability ratio, the better it is to describe the company's high profitability (Weissenrieder, 1999). Profitability is the ability of a company to generate profits. (Blinch et al., 2011) say that companies with high returns on

investment will use relatively small debt. A high rate of return makes it possible to finance most of the funding needs with funds generated by internal companies.

Moreover, an important indicator to see the firm value is the Leverage Ratio. This study uses a DAR as the Leverage Ratio. DAR is performed to measure how much the company's assets are financed by debt or how much the company's debt affects its asset management (Vatansver and Hepsen, 2013). The higher the debt ratio, the greater the probability of the company not able to pay off its obligations, therefore the loan must be spent properly to obtain greater profit opportunities (PWC, 2017).

The liquidity ratio is also an important factor to see the firm value. Liquidity ratio is a ratio that shows the company's ability to meet its obligations or pay its short-term debt. In other words, the liquidity ratio is a ratio that can be used to measure to what extent the company's ability to pay off its short-term liabilities that are due soon. To meet its short-term obligations that are due soon, the company must have cash available or other current assets that can be converted into cash immediately (Muthoni et al., 2013).

The liquidity ratio used in this study is the CR. A CR is a ratio used to measure the ability of a company to meet its short-term liabilities that are due by using the total current assets available. In other words, this CR illustrates how much the availability of current assets owned by the company compared to the total current liabilities (Barth and Landsman, 2010).

Company size also needs to be considered by investors to see the firm value. According to (Thakur and Workman, 2016), company size can be measured by using the total assets, sales or capital of the company. Companies that have great assets indicate that they have reached maturity stage and are considered to have good prospects in a relatively stable period and are able to generate profits compared to companies that have small total assets.

One of the indicators to see the firm value is dividend policy. Dividend policy is an important policy in the company's finances. Since the company's goal is to grow and survive amid intense competition, it must be able to manage the profits whether distributed in dividends or retained. Dividends are products of a dividend policy that will be received by shareholders. Shareholders look forward to having dividends from the capital invested in the company so that high dividend is highly expected by shareholders, but it will affect company's low retained earnings which makes it difficult for the company to invest. Investment is important for the development of a company. It will increase sales and the firm value (Vickery et al., 2004). In this study, the dividend policy is in the form of shared cash dividends measured by using DPR that compares dividends divided by earnings after tax (Konovalov, 1964). According to (Viswanathan and Dickson, 2007) ROA affects the firm value. A high profit indicates good company prospects so that it triggers investors to participate in increasing stock demand since rising stock demand will increase firm value.

(Makri et al., 2014) states that debt ratio variables or DAR have a significant effect on price to book value. This can also be compared

through raw data where the size of the debt ratio affects the size of the price to book value. Low debt ratio value is followed by a low price to book value, whereas high debt ratio value is followed by a high price to book value.

The result of the study by (Mutmainah, 2015) showed that firm size has a significant effect on firm value, while that by (Erlangga and Mawardi, 2016) and Juniarti showed that firm size has a significant effect on firm value.

(Wardana, 2015) found that there were thirteen manufacturing companies measured by the CR, ROA, and DAR resulting in CR, ROA, and the DAR affect firm value. The research conducted by (Vatansver and Hepsen, 2013) found that DPR has no significant effect on firm value. While the research conducted by (Faulkender and Petersen, 2006) showed that DPR has a significant effect on firm value.

The result of the study performed by (Nurainy et al., 2013) found that dividend policy (DPR) does not affect firm value, investment decisions (PER) does not affect firm value, funding decisions (DER) affects firm value, debt policy (DAR) does not affect firm value, Liquidity (CR) does not affect firm value, dividend policy (DPR), investment decisions (PER), funding decisions (DER), debt policy (DAR), liquidity (CR) simultaneously affect firm value.

## 2. LITERATURE REVIEW

### 2.1. Effect of ROA on Firm Value

High profitability shows good company prospects so that investors will respond positively to these signals prompting the increase of firm value. This is understandable because the company that managed to record increased profits indicates that the company has a good performance that generates a positive sentiment for investors and increase the company's stock price. Increasing stock prices in the market will increase the firm value. This is supported by the results of (Terpstra and Verbeeten, 2014) finding that profitability ratio as measured by ROI or ROA has a significant effect on firm value.

H1: ROA affects the firm value of manufacturing companies listed on the Indonesia Stock Exchange for the period 2013-2016.

### 2.2. Effect of DAR on Firm Value

According to (Siahaan et al., 2016), the debt ratio is the ratio of the total debt of a company to company assets. The lower the debt ratio, the lower the source of financing through debt. Conversely, the higher the debt ratio, the higher the source of financing through debt.

H2: The DAR affects the firm value of manufacturing companies listed on the Indonesia Stock Exchange for the period 2013-2016.

### 2.3. Effect of CR on Firm Value

According to (Wardana, 2015), based on his ratio calculation, the company which has a small CR indicate that it has small current assets to pay their short-term liabilities, but the company which has a high CR is not necessarily said to be good since a high CR

may occur due to lack of effective cash and inventory management. Therefore, to say whether a company has a good level of liquidity or not, a standard ratio is needed, such as the ratio standard of similar business segments.

H3: CR affects the firm value of manufacturing companies listed in Indonesia Stock Exchange for the period of 2013-2016.

#### 2.4. Effect of Firm Size on Firm Value

According to (Mutmainah, 2015), the company size can be measured by the total assets, sales or capital of the company. Companies that have great total assets indicate that they have reached the maturity stage and considered to have good prospects in a relatively stable period and been able to generate profits compared to companies that have small total assets. When a company has great total assets, the management has many preferences to use the assets. Viewed from the management side, the ease with which it controls the company will increase the value of the company (Rajgopal and Venkatachalam, 2011). This is supported by the results of the research conducted by (Nurainy et al., 2013) showing that firm size has a significant effect on firm value.

H4: Firm size has a significant effect on the firm value of manufacturing companies listed on the Indonesia Stock Exchange for the period of 2013-2016.

#### 2.5. Effect of Dividend Payout on Firm Value

The stable DPR and the company capability to increase the ratio will ensure the investors that management announces positive changes in the company's expected profits. The management and the board of directors should give signals and fully convince that financial conditions are better than those reflected in stock prices. This dividend increase will be able to have a positive effect on stock prices which will also later give a positive effect on PBV (Crane et al., 2016). This is supported by (Crane et al., 2016) stating that the DPR has a significant effect on firm value.

H5: DPR affects the firm value of manufacturing companies listed on the Indonesia Stock Exchange for the period 2013-2016.

### 3. METHODOLOGY

The research applied a quantitative method, and the data were secondary data which included independent variables namely ROA, DAR, CR, firm size, and DPR and a dependent variable that was the firm value of manufacturing companies listed on the Indonesia Stock Exchange for the period 2013-2016. The data were obtained from the official website on the Indonesia Stock Exchange (IDX) addressed in [www.idx.co.id](http://www.idx.co.id) in the form of financial statements. The dependent variable (Y) was the firm value measured using PBV, and the independent variables were:  $X_1 = \text{ROA}$ ,  $X_2 = \text{DAR}$ ,  $X_3 = \text{CR}$ ,  $X_4 = \text{Firm size}$ , and  $X_5 = \text{DPR}$ .

The population was 138 manufacturing companies listed on the Indonesia Stock Exchange for the period 2013-2016. The method of determining the sample was purposive sampling. The sampling applied several specific criteria consisting of

(1) Manufacturing companies listed on the Indonesia Stock Exchange (BEI) for the period 2013-2016. (2) Manufacturing companies that publish complete financial statements for the period 2013-2016. (3) Manufacturing companies that present financial statements in rupiah (Rp.) for the period 2013-2016. (4) Manufacturing companies that experience profits for the period 2013-2016. (5) Manufacturing companies that distribute dividends in a row for the period 2013-2016. After the sample selection, samples of 32 out of 128 companies were obtained.

According to (Suryana et al., 2013), a dependent variable (variable Y) is a variable that is affected or which results from the existence of independent variables. The company value is proxied by PBV. PBV ratio is a ratio that is often used to determine the value of a company by comparing market prices per share with the book value of the company. According to (Watts and Zimmerman, 1978), the PBV formula is as follows:

$$\text{Price book value} = \text{Market Price Per Share} : \text{Book Value Per Share}$$

According to (Fiechter, 2011) book value per share can be calculated using the formula as the following:

$$\text{Book Value Per Sheet} = \frac{\text{Number of Equities}}{\text{Number of distributed Shares}}$$

#### 3.1. Independent Variables

##### 1. Return on Asset

ROA measures a company's ability to generate profits that can guarantee the firm value. ROA was calculated by comparing net income and total assets. According to (Makri et al., 2014), ROA can be calculated using the following formula:

$$\text{ROA} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

##### 2. DAR

It compares corporate debt which is obtained from the ratio of total debt divided by total assets. The formula of debt to total assets is (Vatansever and Hepsen, 2013):

$$\text{Debt to Asset Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

##### 3. CR

A CR is a ratio used to measure the ability of a company to meet its short-term obligations that are soon due by using the total current assets available. In other words, this CR describes how much the availability of current company assets compared to the total current liabilities. Therefore, the CR is the result of the division between the total current assets and total current liabilities. The following is the formula to calculate the CR (Eng and Spickett-Jones, 2009).

##### 4. Firm Size

According to (Masakure, 2016) company size can be measured using the total assets, sales or company capital. Companies that have great total assets indicate that they have reached the maturity stage and been considered to have good prospects in a relatively stable period and generated profits compared to companies that have small total assets.

$$\text{Size} = \text{Total Assets}$$

## 5. DPR

In this study dividend policy was in the form of shared cash dividends measured by using the DPR which compares dividends divided by earnings after tax (Frank et al., 2009).

$$\text{DPR} = \frac{\text{Shared dividend}}{\text{EAT}}$$

The technique used to analyze data was multiple regression analysis calculated by using Microsoft Excel and SPSS version 21 programs. The regression equation models in this study were:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where: Y = Firm Value

$\alpha$  = Constant

$\beta = \beta_1 \beta_2 \beta_3$  = Regression coefficient

$X_1$  = Return on asset

$X_2$  = DAR

$X_3$  = CR

$X_4$  = Firm size

$X_5$  = DPR

$\varepsilon$  = error.

## 4. RESULT AND DISCUSSION

### 4.1. Effect of ROA on Firm Value

The first hypothesis was that ROA affect the firm value. The ROA value was t count 2.198 greater than t table 1.98081 and the Sig value was 0.030 <0.05. This showed that ROA has an effect on the firm value. High profit gives an indication of good corporate prospects so that it can trigger investors to participate in increasing stock demand. The rising of stock demand will cause the firm value to increase. The results of this study support (Thakur and Workman, 2016) research arguing that return on asset has a significant effect on firm value (PBV).

### 4.2. Effect of DAR on Firm Value

The second hypothesis was that DAR affects the firm value. The results of the research found that the DAR value was t count 0.193 greater than t table 1.98081 and the Sig value was 0.847 >0.05. This showed that the debt to asset (Rajgopal and Venkatachalam, 2011) ratio does not have an influence on the firm value. This was probably caused by high debt. The company managed the debt very well so that the higher debt increases the firm value (Duh et al., 2012). The results of this study support the research conducted by found that DAR has no significant effect on firm value (PBV).

### 4.3. Effect of CR on Firm Value

The third hypothesis was that CR affects the firm value. The result of the research showed that the CR value was t count 0.151 <t table 1.98081 and the Sig value was 0.881 >0.05. It can be concluded that CR does not have an effect on the firm value. This can also be viewed from the raw data comparison where the size of the CR does not affect the size of the PBV. High CR value does not reflect high PBV, conversely, low CR value does not reflect low PBV. Likewise, the inverse relationship does not apply, meaning that high CR value does not reflect low PBV, while a lower CR value does not reflect high PBV.

It can be said that to invest in a company, an investor does not pay attention to the CR of the company, because it merely shows the company's ability to cover the current debt with current company. The liquidity position is not considered by the investors. The results of this study are consistent with the results of (Eng and Spickett-Jones, 2009) study that CR does not have a significant effect on firm value (PBV).

### 4.4. Effect of Firm Size on Firm Value

The fourth hypothesis was that firm size affects the firm value. The result of the research showed that the value of firm size proxied with total assets was t count 3.257 >98081 t table 1 and the Sig value was 0.001 <0.05. This showed that the firm size has an effect on firm value. The greater the number of company assets, the greater the company capital. This will certainly increase PBV. The firm size is used as a benchmark that the company has a good performance so that the firm size has a positive effect on the firm value. It can be concluded that firm size can be used as a tool to assess PBV in manufacturing companies. The results of this study are consistent with the results of (Erlangga and Mawardi, 2016) study which states that firm size has a significant effect on PBV.

### 4.5. Effect of DPR on Firm Value

The fifth hypothesis was that the DPR value was t count -1.500 <t table -1.98081 and the Sig value was 0.136 >0.05. This showed that the DPR does not have an effect on the firm value. In aggregate, an investor merely sees the total return on investment, but they don't see whether it is from capital gains or dividend income. Hence, whether the profit generated will be distributed as dividends or retained as retained earnings, it will not affect the value of the company. It can be concluded that the DPR cannot be used as a tool to assess PBV in manufacturing companies. The results of this study are consistent with the results of (Crane et al., 2016) study which states that the DPR does not have a significant effect on firm value (PBV).

### 4.6. Effect of ROA, DAR, CR, Firm Size and DPR on Firm Value

The sixth hypothesis was that ROA, DAR, CR, Firm Size, and DPR affect the firm value. The results of the Simultaneous Significance Test (F-test) showed the significant value was 0.002 < 0.05, meaning that the sixth hypothesis was accepted. This indicates that ROA, DAR, CR, firm size, and DPR affect the firm value.

## 5. CONCLUSION

This study was conducted on manufacturing companies listed on the Indonesia Stock Exchange for the period 2013-2016 which aimed to see whether the ROA, DAR, CR, firm size, and DPR has effects firm value. The sample was 32 out of 128 companies. This study used annual financial statements to obtain the data needed in this study.

The results of the test found that return on asset has an effect firm value, DAR does not have an effect on firm value, firm size has an effect firm value, and payout ratio has no effect on firm value. The overall test results showed that the return on asset variable, DAR, CR, firm size and DPR have effects firm value on Manufacturing

Companies listed on the Indonesia Stock Exchange for the period 2013-2016.

The researchers suggested that the next researchers add other variables that were not included in this study since the results of the study found only two variables that have positive and significant effects on firm value namely ROA and firm size. The researchers suggested that companies pay more attention to what factors influence the firm value and be more careful in making policies so as not to reduce the firm value. It is recommended to expand the model by adding the number of variables including the risk-taking policy variable that is measured with standard deviations from returns, or other possible variables. Subsequent research is expected to add a number of periods and use more samples so that the test results can be better.

## REFERENCES

- Barney, J. (1991), Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Barth, M.E., Landsman, W.R. (2010), How did financial reporting contribute to the financial crisis? *European Accounting Review*, 19(3), 399-423.
- Blinch, J., Mccarron, B., Carmody, L. (2011), The future of fish in Asia. *Trends in Ecology and Evolution*, 27, 594-599.
- Crane, A.D., Michenaud, S., Weston, J.P. (2016), The effect of institutional ownership on payout policy: Evidence from index thresholds. In *Review of Financial Studies*, 29(6), 1377-1408.
- Duh, R.R., Hsu, A.W. Hsin, Alves, P.A.P. (2012), The impact of IAS 39 on the risk-relevance of earnings volatility: Evidence from foreign banks cross-listed in the USA. *Journal of Contemporary Accounting and Economics*, 8(1), 23-38.
- Eng, T.Y., Spickett-Jones, J.G. (2009), An investigation of marketing capabilities and upgrading performance of manufacturers in mainland China and Hong Kong. *Journal of World Business*, 44(4), 463-475.
- Erlangga, O.P., Mawardi, I. (2016), Pengaruh total aktiva, capital adequacy ratio (Car), finance to deposit ratio (Fdr) dan non performing financing (Npf) terhadap return on assets (Roa) bank umum syariah di indonesia periode 2010-2014. *Jurnal Ekonomi Syariah Teori Dan Terapan*, 3(7), 561-574.
- Faulkender, M., Petersen, M.A. (2006), Does the source of capital affect capital structure? *Review of Financial Studies*, 19(1), 45-79.
- Fiechter, P. (2011), Reclassification of financial assets under IAS 39: Impact on European banks' financial statements. *Accounting in Europe*, 8(1), 49-67.
- Frank, M.M., Lynch, L.J., Rego, S.O. (2009), Tax reporting aggressiveness and its relation to aggressive financial reporting. In *Accounting Review*, 84, 467-496.
- Kononov, A.N. (1964), Application of the splitting method to the numerical solution of dynamic problems in elasticity theory. *USSR Computational Mathematics and Mathematical Physics*, 4, 192-198.
- Makri, V., Tsagkanos, A., Bellas, A. (2014), Determinants of non-performing loans: The case of eurozone. *Panoeconomicus*, 2, 193-206.
- Masakure, O. (2016), The effect of employee loyalty on wages. *Journal of Economic Psychology*, 56, 274-298.
- Miles, M.P., Covin, J.G. (2000), Environmental marketing: A source of reputational, competitive, and financial advantage. *Journal of Business Ethics*, 23(3), 299-311.
- Muthoni, J.J, Shimelis, H., Melis, R. (2013), Potato production in kenya: Farming systems and production constraints. *Journal of Agricultural Science*, 5(5), 182-197.
- Mutmainah, M. (2015), Analisis good corporate governance terhadap nilai Perusahaan. *E-Journal Stiedewantara*, 10, 182-195.
- Nurainy, R., Nurcahyo, B., Kurniasih, A.S., Sugiharti, B. (2013), Implementation of good corporate governance and its impact on corporate performance : The mediation role of firm size (empirical study from Indonesia). *Global Business and Management Research: An International Journal*, 5, 1-13.
- PWC. (2017), IFRS 9, Financial Instruments-Understanding the Basics. Pwc. Thesis.
- Rajgopal, S., Venkatachalam, M. (2011), Financial reporting quality and idiosyncratic return volatility. *Journal of Accounting and Economics*, 51(1), 1-20.
- Shil, N.C. (1997), Performance measures: An application of economic value added. *International Journal of Business and Management*, 4(3), 169-177.
- Siahaan, E., Gultom, P., Lumbanraja, P. (2016), Improvement of employee banking performance based on competency improvement and placement working through career development (case study in Indonesia). *International Business Management*, 10(3), 255-261.
- Suryana, S, Sugiyono Y, Sekaran, U., Lee, S., Stearns, T., Geoffrey, G.M. (2013), Metode penelitian kuantitatif, kualitatif, dan R and D. *International Journal of Management*, 29, 1960.
- Terpstra, M., Verbeeten, F.H.M. (2014), Customer satisfaction: Cost driver or value driver? Empirical evidence from the financial services industry. *European Management Journal*, 32(3), 499-508.
- Thakur, R., Workman, L. (2016), Customer portfolio management (CPM) for improved customer relationship management (CRM): Are your customers platinum, gold, silver, or bronze? *Journal of Business Research*, 69(10), 4095-4102.
- Vatansever, M., Hepsen, A. (2013), Determining impacts on non-performing loan ratio in Turkey. *Journal of Finance and Investment Analysis*, 2(4), 119-129.
- Vickery, G., Sakai, K., Lee, I., Sim, H. (2004), ICT, E-business and Smes. OECD Conference of Ministers Responsible for SMEs. p46.
- Viswanathan, N.K., Dickson, P.R. (2007), The fundamentals of standardizing global marketing strategy. *International Marketing Review*, 24, 46-63.
- Wardana, R.I.P. (2015), Analisis pengaruh CAR, FDR, NPF, BOPO dan size terhadap profitabilitas pada bank umum syariah di Indonesia (studi kasus pada bank umum syariah di Indonesia periode 2011-2014). *Diponegoro Journal of Management*, 4, 1-65.
- Watts, R.L., Zimmerman, J.L. (1978), Towards a positive theory of the determination of accounting standards. *The Accounting Review*, 1978, 112-134.
- Weissenrieder, F. (1999), Value Based Management: Economic Value Added or Cash Value Added? Working Paper.