Journal of Applied Business, Taxation and Economics Research (JABTER)
Vol. 2, No. 3, February 2023 (Page: 266-287) P-ISSN 2828-4976
DOI: 10.54408/jabter.v2i3.168 E-ISSN 2808-263X

The Effect of Return on Assets, Debt to Equity Ratio and Current Ratio on Firm Value

Kevin Louis Jonathan [1], Sri Purwaningsih [2*]

[1,2] Department of Accounting, Universitas Mercu Buana. Jakarta, Indonesia

Corresponding Author: sri.purwaningsih@mercubuana.ac.id [2*]

Keywords **:** *Return on Asset, Debt Equity Ratio, Current Ratio, Price Book Value*

Abstract:
This study aims to examine the effect of Return On Assets (ROA), Debt to Equity Ratio (DER) and Current Ratio (CR) on Firm Value. This study uses signaling theory as the relationship between financial performance variables and firm value. The object of research is the transportation sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2017-2020. This research method uses a quantitative approach with a sample of 15 companies and a total of 60 data observations. The analytical method used is multiple regression using the SPSS 25 analysis tool. The results show that partially the ROA and CR variables have a significant positive effect on firm value as measured using Price Book Value (PBV), but DER has a significant negative effect on firm value. So it can be concluded that ROA, CR and DER can be a signal to investors to increase company value in transportation sector companies in Indonesia.

Introduction

The value of the company reflects the success of the company in achieving its goals. Even the company's competition in the business world to attract investors is the company's encouragement to increase the value of the company, Anggraini et al., (2020). In addition, company value is an important concept for investors because company value is an indicator of how the market values the company as a whole. To measure firm value, Azari & Fachrizal, (2017) say it can be seen from the magnitude of the share price in the capital market. Therefore, managers are expected to be able to manage company finances effectively and efficiently to increase company value.

Dewi, at al (2014) say the value of the company is very important because it describes the condition of the company that can affect the views of investors towards the company, so that every company owner will try to show good performance so that potential investors are interested and invest. Internal factors that can be used to measure company value are generally controllable, which means they can be controlled by the company, such as profit performance and company debt policies. According to Astika & Akhmad, (2015) The company's performance is a signal for investors who evaluate the company.

Monalisa & Yahya, (2019) say there is a significant positive relationship between ROA and firm value, because the higher the ROA, the greater the company's ability to generate profits from its assets. Utami & Pernamasari, (2019) explained profit is a performance measure used to see the efficiency of management in using its assets, therefore competition is a trigger for management to manage company assets efficiently. This result is in line with several other studies such as Winarso, (2018), Listari, (2018) and Azari & Fachrizal, (2017) which says that earnings performance can give effect to firm value. But according Meivinia, 2018) ROA has no significant effect on firm value, because besides the profit factor, there are many other factors that can affect the value of the company, for example the company's debt policy.

In addition to profit performance, which can have an influence on company value is debt policy. Leverage has an influence on company value because according to Rejeki & Haryono, (2021) an increase in the debt ratio can increase financial risk and result in an increase in the cost of capital. Thus, the company is expected to be able to achieve the expected profitability and be able to lower leverage, Al-Slehat, (2019). Several studies support that leverage has a negative effect on firm value, Permana & Rahyuda, (2019), Dewi & Agustin, (2019) dan Kahfi et al., (2018). The DER ratio will reflect the relatively high risk of the company. This will reduce the interest of investors to buy company shares, resulting in a decrease in the company's stock price in the capital market. But according Sintarini & Djawoto, (2018) and Astutik, (2017) Companies that have a DER value that does not exceed the debt limit value will attract investors' attention, as long as the debt is used for company development.

Another factor that can have an impact on firm value is liquidity as measured by the current ratio (CR). A high CR level reflects cash adequacy and a high level of liquidity as well, so that the level of investor confidence increases, this will improve the company's image in the eyes of investors so that it will affect the value of the company, Utami & Welas, (2019), Annisa & Chabachib, (2017), Nurhayati et al., (2019). These results are also supported by research Sondakh, (2019) and Naja & Fuadati, (2018).

Although research on financial performance on firm value has been carried out in many previous studies. However, there are still many differences in results because the company objects measured are different. In this study measuring transportation companies, because export-import activity in this sector has increased in the last 5 years. Based on the background above, the problem can be drawn, namely whether financial ratios have a significant effect on firm value in transportation sector companies?

This study uses signal theory which describes the relationship between financial ratio variables and firm value. In the signal theory that was discovered by Spence, (1973) mentions how the company should provide signals to users of financial statements. The signal in question can be in the form of information on financial statements, company policy information or other information owned by company management. The results of this study contribute to investors in considering the decision to buy shares and provide input to company management that financial ratios are still considered important for investors, so that their performance needs to be maintained.

ROA and company value

The greater the value of return on assets will certainly attract investors, because the company is considered to be able to generate profits from assets and manage its investments well, Monalisa & Yahya, (2019). The higher the company's profit, it is expected to increase the confidence of investors and potential investors in the company. If the value of return on assets is getting smaller, it indicates that the company's performance is in a bad condition. Conversely, if the value of return on assets is greater, it indicates that the company's performance is in good condition and can increase firm value. Research (Pantow et al., 2015) shows that ROA has a significant effect on firm value. So the hypothesis can be drawn:
H1 : Return on assets has a positive and significant effect on firm value..

DER and company value

Debt to equity ratio is the ratio used to assess a company's ability to guarantee how much the company's debt can be guaranteed with the company's capital. The greater the value of the debt to equity ratio, it can be said that the company requires large funds to build long-term projects, Rejeki & Haryono, (2021). If the greater the value of the debt to equity ratio, the smaller the profit distributed to shareholders. This will reduce the interest of investors and potential investors, because they assess the company's performance as not good and cause a decrease in company value. Research Permana & Rahyuda, (2019), Dewi & Agustin, (2019) and Kahfi et al., (2018) resulting in DER having a significant negative effect on firm value. So the hypothesis can be drawn:
H2: DER has a significant negative effect on firm value

CR and company value

The company's good operations can be seen from the large value of the resulting current ratio, because the company is considered capable of paying off short-term debt smoothly, (Annisa & Chabachib, 2017). If the current ratio is large, it is not certain that the company is in good condition. Ideally the value of the current ratio is 2 to attract investors and potential investors, because it assesses the company's performance in meeting short-term obligations. The ideal current ratio is expected to increase firm value. Research results (Nurhayati et al., 2019), (Sondakh, 2019) and (Naja & Fuadati, 2018) result CR significant positive effect on firm value. So the hypothesis can be drawn:
H3: CR has a significant positive effect on firm value.

Research Method

This study uses a quantitative approach method. Determination of the sample was carried out by means of purposive sampling, namely the technique of determining the sample with certain considerations and criteria Sugiyono, (2013). A total sample of 15 companies was obtained that met the criteria and based on the number of observation years 2017-2020, a total of 60 data were obtained.

The dependent variable in this study is the company's value as measured using Price book value (PBV). While the independent variables used are Return on Assets (ROA) which is measured by total net income to total assets, Debt to equity ratio (DER) is measured by total liabilities to total equity, and Current Ratio (CR) which is measured by current assets to liabilities don't short company.

Tabel 1. Variable operasional

No	Variabel	Pengukuran	Sumber
1	Price book value	Stock price/Book value	Kasmir, (2014)
2	Return on aseet	Earning after tax/total asset	Kasmir, (2014)
3	Debt to equity ratio	total liabilities / total equity	Kasmir, (2014)
4	Current ratio	Current assets / Short-term liabilities	Kasmir, (2014)

The relationship between variables can be described in the following framework:

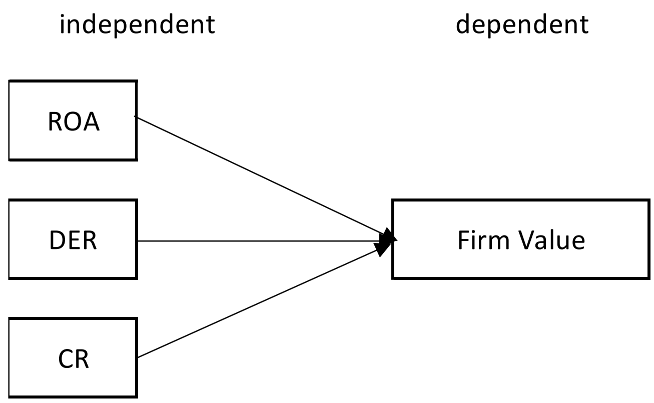

Figure 1. Research Model

P-ISSN 2828-4976
E-ISSN 2808-263X

The analytical method of this study uses multiple regression with the SPSS.26 analysis tool. The steps taken are descriptive test, classic assumption test, model suitability test.

Result and Discussion

Descriptive test results

Table 2. Descriptive Test Results

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	60	,006	,168	,05092	,037883
DER	60	,113	3,229	1,13225	,760952
CR	60	,430	2,979	1,14455	,625670
PBV	60	,192	6,011	1,70603	1,301863
Valid N (listwise)	60				

Source: processed data SPSS.26

Based on the table of descriptive test results, it shows that Return on assets (ROA) has a minimum value of 0.006 or 0.6% owned by PT. Indo Straits Tbk (PTIS) in 2019 and a maximum value of 0.168 or 16% owned by PT. Weha Transportasi Indonesia Tbk (WEHA) in 2017. On average, transportation sector companies in 2017-2020 have an ROA value of 0.0509, which means that the company's ability to generate profit from its total assets is 5.09%.

Debt to equity ratio (DER) value shows a minimum value of 0.113 or 11.3% which is owned by PT. Jasa Armada Indonesia Tbk (IPCM) in 2018. While the maximum value is 3.229 or 322.9% owned by PT. Humpuss Intermoda Transportasi Tbk (HITS) in 2017. On average, transportation sector companies in 2017-2020 have a DER value of 1.1325, which means that of the total capital owned, it is financed by debt of 113.2% or less good because more than 80%.

Current Ratio (CR) value shows a minimum value of 0.430 which is owned by PT. Pelayaran Tempuran Emas Tbk (TMAS) in 2018. While the maximum value is 2,979 owned by PT. Humpuss Intermoda Transportasi Tbk (HITS) in 2017. On average, transportation sector companies in 2017-2020 have a CR value of 1.1445, which means the company's ability to pay short-term debt is 1.14x, this value is close to the ideal industry standard by 2 times.

PBV value shows a minimum of 0.192 which is owned by PT. Soechi Line Tbk (SOCI) in 2019 and a maximum value of 6.011 owned by PT Humpuss Intermoda Transportasi Tbk (HITS) in 2017. On average, transportation sector companies in 2017-2020 have a value of 1.70603, which means they are in good condition because the stock price is 1.7 times the book value or more than 1.

Classic assumption test results

Table 3. Classical Assumption Test Results

	Uji Multikolinearitas		Uji Heterokedastisitas (Gletsjer)
	Tolerance	VIF	Sig
ROA	0,948	1,055	0,364
DER	0,942	1,062	0,086
CR	0,974	1,026	0,332
Durbin Watson	1,881		
Asymp.Sig (2-tailed) One-Sample Kolmogorov-Smirnov Test : 0,099			

Source: data processed by SPSS.26

Based on the results of the classic assumption test, it can be explained that for the one sample Kolmogorov Smirnov test it shows a sig value > 0.05 so it can be concluded that the data has been normally distributed. The multicollinearity test shows that the tolerance value is > 0.1 and the VIF value is < 10 so that the data is free from the multicollinearity test. Furthermore, the heteroscedasticity test using the Gletsjer test yielded a sig value > 0.05 so that it can be concluded that there is no heteroscedasticity in the regression model. Then for the autocorrelation test using the Durbin Watson test, the DW value was 1.881, the DL value was 1.4797 and the DU value was 1.6889. The DW value obtained is between DU (1.6889) < DW(1.881) < 4-DU (2.3111). So it can be concluded that there are no signs of autocorrelation or no positive or negative autocorrelation in the data of this study.

Model fit test results

Table 4. Model fit Test Results

	Koefisien	t	Sig
Constant	-0,806	-2,551	0,014
ROA	5,944	2,168	0,034
DER	0,292	2,129	0,038
CR	1,642	10,028	0,000
Uji F	0,000		
R Square	0,662		

Source: data processed by SPSS.26

Based on the table of model suitability test results above, it can be explained as follows:

In the determinant test, the R Square value is 0.662 or 66.2%, meaning that the influence exerted by the ROA, DER and CR variables is 66.2%, while the rest (100% - 66.2% = 33.8%) influenced by other factors outside of this study. The magnitude of the influence of other variables is called error (e). then on the F test obtained a sig value <0.005 it can be concluded that the hypothesis is accepted or this research model is fit or feasible to be accepted or the variables ROA, DER and CR simultaneously have a significant effect on firm value (PBV).

Hypothesis test or t test is indicated on the value of t and sig. From the table above, it is found that all the variables measured have a sig value of <0.05, which means that all

P-ISSN 2828-4976
E-ISSN 2808-263X

variables have a significant positive effect on firm value. So it can be concluded that **H1 and H3 are accepted** while **H2 is rejected**.

Discussion

The hypothesis results show that ROA has a significant positive effect on firm value as measured by PBV. A positive value indicates that the profit generated from assets while in operation can increase the value of the company. The higher the value of return on assets (ROA), the more attractive it will be to investors, because the company is considered to be able to generate profits and manage its investments well. So the ratio of return on assets (ROA) can affect the value of the company so as to provide a signal and trust for investors and potential investors. This is in accordance with research conducted by Monalisa & Yahya, (2019), Winarso, (2018), Listari, (2018) stating that return on assets (ROA) has a positive and significant effect on firm value.

The hypothesis results show that DER has a significant negative effect on firm value. These results are contrary to theory, but these results show that even though the DER value is higher, it does not reduce the interest of investors and potential investors in investing their funds. This is considered a signal for investors for many opportunities for company expansion or development so that the company's value continues to increase. This is in accordance with research conducted by Sintarini & Djawoto, (2018) and Astutik, (2017) stating that DER has a positive and significant effect on firm value.

The hypothesis results show that CR has a significant positive effect on firm value. A positive value indicates that the value of current assets is able to cover its short-term liabilities so that the company's performance is considered good. A high CR value is considered by investors as a good signal, which illustrates that the company can manage its investment well. This is consistent with research conducted by Nurhayati et al., (2019), Sondakh, (2019) and Naja & Fuadati, (2018) stating that the current ratio (CR) has a positive and significant effect on firm value.

Conclusion

A positive ROA shows that the company's performance in increasing profits is considered good and can increase stock prices in the market indicating an increase in company value.

A positive DER shows a signal to investors that the company is able to guarantee all of its obligations and is still considered ideal so that it can increase the value of the company.

A positive CR indicates that the company's operations are considered smooth because it is able to fulfill its short-term obligations properly so that it can increase the value of the company..

References

Al-Slehat, Z. A. F. (2019). Impact of Financial Leverage, Size and Assets Structure on Firm Value: Evidence from Industrial Sector, Jordan. *International Business Research*, *13*(1), 109. https://doi.org/10.5539/ibr.v13n1p109

Anggraini, F., Seprijon, Y. P., & Rahmi, S. (2020). Pengaruh Intellectual Capital terhadap Nilai Perusahaan dengan Financial Distress Sebagai Variabel Internvening. *Jurnal Informasi, Perpajakan, Akuntansi, Dan Keuangan Publik*, *15*(2), 169–190.

Annisa, R., & Chabachib, M. (2017). Analisis Pengaruh Current Ratio (CR), Debt To Equity Ratio (DER), Return on Assets (ROA) Terhadap Price To Book Value (PBV), Dengan Dividend Payout Ratio Sebagai Variabel Intervening (Studi Kasus pada perusahaan industri manufaktur yang terdaftar di BEI P. *Diponegoro Journal of Management*, *6*(1), 1–15.

Astika, S. D., & Akhmad, R. (2015). *Kinerja Keuangan, Corporate Social Responsbility,Good Coporate Governance Dan Nilai Perusahaan* (4th ed.).

Astutik, D. (2017). Pengaruh Aktivitas Rasio Keuangan Terhadap Nilai Perusahaan. *Jurnal STIE SEMARANG*, *Vol. 9*.

Azari, T. M., & Fachrizal. (2017). Pengaruh Asimetri Informasi, Profitabilitas, dan Leverage terhadap Nilai Perusahaan pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2012-2014. *Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi (JIMEKA)*, *2*(1), 82–97.

Dewi, R., & Agustin, S. (2019). Pengaruh Likuiditas, Leverage dan Profitabilitas Terhadap Nilai Perusahaan Pertambangan di BEI. *Jurnal Ilmu Dan Riset Manajemen*, *STIESIA Surabaya*.

Kahfi, M. F., Pratomo, D., & Aminah, W. (2018). Pengaruh Current Ratio, Debt To Equity, Total Assets Turnover dan Return On Equity Terhadap Nilai Perusahaan (Studi Kasus Pada Perusahaan Manufaktur Sektor Food and Beverage Yang Terdaftar Di Bursa Efek Indonesia Pada Tahun 2011-2016). *E-Proceeding of Management*, *Vol. 5*

Kasmir. (2014). *Analisis Laporan Keuangan*. PT Rajagrafindo Persada.

Listari, S. (2018). Analisis Faktor - Faktor yang Mempengaruhi Nilai Perusahaan pada Perusahaan-Perusahaan yang Terdaftar Dalam Indeks LQ45 di Bursa Efek Indonesia. *Jurnal Ilmiah Manajemen Kesatuan*, *6*(1), 051–060. https://doi.org/10.37641/jimkes.v6i1.36

Meivinia, L. (2018). Pengaruh Likuiditas, Profitabilitas, Struktur Modal dan Suku Bunga Terhadap Nilai Perusahaan. *Jurnal Muara Ilmu Ekonomi Dan Bisnis*, *Vol. 2*,

Monalisa, S., & Yahya. (2019). Pengaruh Solvabilitas, Profitabilitas dan Aktivitas Terhadap Nilai Perusahaan Farmasi yang Terdaftar di BEI. *Junal Ilmu Dan Riset Manajemen*, *STIESIA Surabaya*.

Naja, F., & Fuadati, S. R. (2018). Pengruh Leverage, Likuiditas dan Profitabilitas Terhadap Nilai Perusahaan. *Jurnal Ilmu Dan Riset Manajemen*, *STIESIA Surabaya*

Nurhayati, Ifa, K., & Paramita, R. W. D. (2019). *Pengaruh Return On Equity (ROE), Current Ratio (CR) dan Debt To Equity Ratio (DER) Terhadap Nilai Perusahaan*. *STIE Widyagama Lumajang1*.

Pantow, M. S., Murni, S., & Trang, I. (2015). Analisa Pertumbuhan Penjualan, Ukuran Perusahaan, Return on Asset, Dan Struktur Modal Terhadap Nilai Perusahaan Yang Tercatat Di Indeks Lq 45. *Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, *3*(1), 961–971. https://doi.org/10.35794/emba.v3i1.7801

P-ISSN 2828-4976
E-ISSN 2808-263X

Permana, A. A. N. B. A., & Rahyuda, H. (2019). Pengaruh Profitabilitas, Solvabilitas, Likuiditas dan Inflasi Terhadap Nilai Perusahaan. *E-Jurnal Manajemen Unud*, *Vol. 8*.

Rejeki, H. T., & Haryono, S. (2021). Pengaruh Leverage Dan Ukuran Perusahaan Terhadap Nilai Perusahaan Di Indonesia. *Invoice : Jurnal Ilmu Akuntansi*, *3*(1), 1–9. https://doi.org/10.26618/inv.v3i1.4969

Sintarini, R. El, & Djawoto. (2018). Pengaruh Profitabilitas, Likuiditas, Solvabilitas dan Aktivitas Terhadap Nilai Perusahaan Farmasi BEI. *Jurnal Ilmu Dan Riset Manajemen*, *STIESIA Surabaya*

Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, *87*(3), 355–374. http://www.jstor.org/stable/1882010

Sondakh, R. (2019). The Effect of Dividend Policy, Liquidity, Profitability and Firm Size on Firm Value in Financial Service Sector Industries Listed in Indonesia Stock Exchange 2015 – 2018 Period. *Economics and Business Faculty*, *Vol. 8*.

Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D.* Alfabeta.

Utami, W., & Pernamasari, R. (2019). Study on asean listed companies: corporate governance and firm performance. *International Journal of Business, Economics and Law*, *19*(5), 181–188.

Utami, P., & Welas. (2019). Pengaruh Current Ratio, Return On Asset, Total Asset Turnover dan Debt To Equity Ratio Terhadap Nilai Perusahaan (Studi Empiris Pada Perusahaan Manufaktur Sub Sektor Properti dan Real Estate Yang Terdaftar di Bursa Efek Indonesia Periode 2015-2017). *Jurnal Akuntansi Dan Keuangan*, *Vol.8*.

Winarso, E. (2018). *The Effect Of The Financial Ratio On Company Value Of Pharmaceutical Companies Listed In Indonesia Stock Exchange In 2013 – 2016*. Universitas Widyatama