Percipience
Writing Culture for a Brighter Future

LIQUIDITY, SOLVABILITY AND FINANCIAL PERFORMANCE (STUDY ON MANUFACTURING COMPANIES LISTED IN INDONESIA STOCK EXCHANGE)

Peni Moegi Lestari[1]
[1]Program Pascasarjana
Universitas Islam Batik Surakarta

Kartika Hendra Titisari[2]
[2]Program Pascasarjana
Universitas Islam Batik Surakarta
email: kartikatitisari@gmail.com

Istiatin[3]
[3]Program Pascasarjana
Universitas Islam Batik Surakarta
email: istiatinumi@gmail.com

Abstract: Good company performance will be able to help management in achieving the company's goals. The higher the company's performance, the better the company's value in the eyes of investors. Assessment of the company's financial performance is one of the ways that management can meet its obligations to funders and also achieve the goals set by the company. The purpose of this study is to test and analyze the effect of liquidity, debt to assets ratio solvency and equity ratio affect the profitability of Return on Assets of manufacturing companies listed on the Indonesia Stock Exchange from 2015 to 2019. This research data is panel data where panel data is a combination of cross section and time series. The samples in this study were nine pulp and paper sub-sector manufacturing companies listed on the Indonesia Stock Exchange from 2015 to 2019. Data analysis techniques using panel data regression analysis. The results explain that the liquidity ratio calculated by cash ratio has no significant effect on financial performance. The solvency ratio calculated by the Debt to Assets Ratio affects financial performance. The solvency ratio calculated by the Debt to Equity Ratio affects the company's financial performance.

Keywords: *liquidity, solvency, financial performance, panel regression*

INTRODUCTION

One way to assess the current financial performance and business prospects that will be dating is by analyzing the company's financial statements consisting of balance sheets, profit and loss statements, cash flow statements, and reports of changes in financial position. In general, with high operating profit and an increasing number of shareholders, the company's performance in good or bad condition can be done using ratio analysis (Sandy, 2015).

The amount can see indicators of the company's performance measurement of profit earned by the company in a specific time. The amount of profit of the company is one of the important things considered by potential investors before investing. Because the profit generated can predict the company's performance has a reasonable prospect or not in the future (Yustisia, 2011).

ROA is used to see the extent to which investments invested can provide a return on profit as expected based on the assets owned. The source of asset funding within the company is divided into two categories, namely internal funding sources and external funding sources. Internal funding sources can be obtained from equity from both the owner and the company's profits, while who can bring external sources of funding from creditors called debt.

Some previous studies have shown different results, among others :p Enelitian Utama and Muid (2014), Darmawan and Nurochman (2016), Armalinda (2019), Silfina and Gunawan (2019), Ben-Calep, et.al (2013), Ejoh (2014) and Al Nimer, Munther (2015) proves that current ratio has a significant influence on Return On Assets. This explains that the greater liquidity that companies have identified with the significant current asset value will increase significantly in the company's ROA ratio. Liquidity has a negative and significant influence on the profitability of the company. This indicates that liquidity is unable to improve profitability. That is, the greater the company's liquidity, the company's ability to generate profit will decrease. . That is, the greater the company's liquidity, the company's ability to generate profit will decrease. The study results were proven by Dwiyanthi and Sudhiarta (2017) and Arifin, et.al (2018). The research is different from research conducted by Supardi,et.al, (2016), Pitoyo and Lestari (2018) and Setyaningsih and Cunengsih (2018) which proves that liquidity produced by current ratio does not have a significant influence on the profitability of Return On Assets. Liquidity ratio has a reasonably close relationship with the company's ability to earn profit by showing the level of availability of working capital in operational activities and the fulfillment of the company's current obligations. The company's working capital's availability can improve the financial performance of the company's assets (Nurpitasari, et.al., 2018).

Solvency ratios are used to measure the extent to which liabilities, both short-term and long-term, finance a company's assets. In this study, the authors used two solvency ratios, namely Debt to Assets Ratio (DAR) and Debt to Equity Ratio (DER), to determine how the role and effectiveness of capital derived from loans. Research conducted by Darmawan and Nurochman (2016), Supardi , et.al, (2016) and Utami and Pardanawati (2016) proved that solvency measured by DAR negatively affects the financial performance of ROA companies. The higher the DAR which means the lower solvency, the lower the financial performance of ROA companies. Different research results were conducted by Utama and Muid (2014) and Zulkarnaen (2018), that Debt To

Asset did not have a significant influence on ROA.

Research on the effect of solvency ratios produced with DER conducted by your Rehman (2013), Utama and Muid (2014), Silfina and Gunawan (2019) proves that DER has a significant impact on the performance of ROA companies. The results of wartono (2018) and Arifin, et.al (2018) confirm that DER has a negative and insignificant influence on the company's profitability. The greater the use of debt by the company, the ability of the company to generate profit will decrease. The research is different from the results of research conducted by Setyaningsih and Cunengsih (2018) and Enekwe, et.al (2014), proving that DER does not affect ROA.

Based on several previous studies that showed different results, this study will retest the effect of liquidity and solvency ratios produced by DAR and DER on roa financial performance in pulp and paper sub-sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2015-2019.

Based on this background, the hypotheses in this study are:

Hypothesis 1 : Liquidity does not affect the profitability of the company's ROA.

Hypothesis 2 : Debt to Assets Ratio (DAR) affects the profitability of the company's ROA.

Hypothesis 3 : Debt to Equity Ratio (DER) affects the profitability of the company's ROA.

METHOD

The approach used in the research is a quantitative approach, where this approach of data is obtained in the form of numbers and analyzed following the statistical methods used. This research data is a panel data which is a combination of timeseries and cross-section data where the data used has many objects in the same year or data collected at one time against many things. This research was conducted using data on the financial statements of sub-sector pulp and paper manufacturing companies published by the Indonesia Stock Exchange (IDX) on the www.idx.co.id website. from 2015 to 2019. Based on purposive sampling using the above criteria, samples were obtained as many as 8 companies as follows:

Table 1. Sample List of Pulp and Paper Sub-Sector Companies

BONDS CODE	EMITEN
ALDO	Alkindo Naratama Tbk
FASW	Fajar Surya WisesaTbk
INKP	Indah Kiat Pulp & Paper Tbk
INRU	Toba Pulp Lestari Tbk
KBRI	Kertas Basuki Rachmat Indonesia Tbk
KDSI	Kedawung Setia Industrial Tbk
SPMA	Suparma Tbk
TKIM	Pabrik Kertas Tjiwi Kimia Tbk

Source: Idx.co.d

Data analysis techniques in this study is the regression of panel data using evies 8 software. Previously conducted statistical data test, Data Panel Regression Test Selection, classic assumption test, then conducted regression data panel using fixed

effect model.

FINDINGS AND DISCUSSION

FINDINGS

a. *Descriptive Statistics*

Descriptive statistics present the minimum, maximum, mean, and standard deviation values. The following are the results of the descriptive statistics in this study:

Table 2. Descriptive Statistics Result

	Minimum	Maximum	Mean	Std. Deviation
ROA	-0,12	0,11	0,0279	0,05109
Liquidity	0,02	2,11	0,8076	0,50284
DAR	0,42	5,10	0,7162	0,71875
DER	0,72	10,43	1,9141	1,74337

Based on table 2, it can be concluded that:

1) Financial performance

The financial performance variable as measured by Return On Assets (ROA) has an average (mean) of 0.0279. the minimum value is -0.12, the maximum value is 0.11 and the standard deviation is 0.05109.

2) Liquidity

The liquidity variable measured using the Quick Ratio has an average value (mean) of 0.8076, a minimum value of 0.02, a maximum value of 2.11 and a standard deviation of 0.50284.

3) Solvency Debt to Asset Ratio (DAR)

The solvency variable measured using the Debt to Asset Ratio (DAR) has an average value (mean) of 0.7162, a minimum value of 0.42, a maximum value of 5.10, and a standard deviation of 0.71875.

4) Solvency Debt to Equity Ratio (DER)

The solvency variable measured using the Debt to Equity Ratio (DER) has an average value (mean) of 1.9141, a minimum value of 0.72, a maximum value of 10.43 and a DER standard deviation of 1.74337.

b. *Data Panel Regression Test Selection*

In this test was conducted testing with Chow and Hausman test. If the test results are determined that the common effect model is used, there is no need to run the hausman test. However, if the chow test results determine the fixed effect model used, it is necessary to conduct a follow-up test that is hausman test to determine the fixed effect model or random effect used.

Table 2. Chow dan Hausman Test	
	Chi-Square Test
Chow Test	0.0043
Hausman Tets	0.1016

The result in table 2 shows the probability of chi-square being 0.0043 lower than 0.05. So, according to the decision criteria, this model uses a fixed-effect model. Because in the selected chow test using fixed-effect model, it is necessary to do advanced testing with Hausman test to determine the fixed effect model or random effect used. The probability value of chi-square of 0.1016 means that hausman choose to use a fixed-effect model in the test results.

c. *Classic Asumption Test*

1) *Normality Test*

Normality test is used to test whether the variables in the study have a normal distribution or not (Ghozali, 2005). The following is the result of the Kolmogorov-Smirnov calculation with SPSS:

Table 3
Normality Test Results

	Unstandardized Residual	Conclusion
Asymp Sig.	0,057	Normal distribution

Based on the table above, it can be seen that the significance value is 0.057, which means it is greater than 0.05, so it can be concluded that the research data is normally distributed.

2) *Autocorrelation Test*

The autocorrelation test is used to test whether in the linear regression model there is a correlation between the residuals in the t period and the residuals in the t-1 period (the previous period). To see the presence of autocorrelation used Durbin Watson Test (DW).

Table 4
Autocorrelation Test Results

du	4-du	DW Value	Conclusion
1,659	2,341	1,824	Non-autocorrelation

The results of the autocorrelation test in the table show that the Durbin-Watson value is 1.824, which is between the value of du (1.659) and the value of 4-du (2.341), so it can be concluded that there is no autocorrelation.

3) *Heteroscedasticity Test*

Heteroscedasticity test is used to test whether in the regression there is an inequality of variance from the residuals of one observation to another. The calculation results can be seen in the following table:

Table 5
Heteroscedasticity Test Results

Variable	Sig.	Conclusion
Liquidity	0,059	Non-heteroscedasticity
DAR	0,222	Non-heteroscedasticity
DER	0,362	Non-heteroscedasticity

Based on the Glejser test that has been carried out from Table 4 it clearly shows that none of the independent variables that are statistically significant affect the dependent variable Absolute Residual value (ABSRES). This can be seen from the significance probability above the 0.05 confidence level. So it can be concluded that the regression model does not contain heteroscedasticity (no heteroscedasticity).

4) *Multicollinearity Test*

The multicollinearity test is used to determine the presence or absence of multicollinearity by investigating the magnitude of the inter-correlation between the independent variables. The results of the multicollinearity test can be seen in the following table :

Table 6
Multicollinearity Test Results

Variable	Calculation		Conclusion
	Tolerance	VIF	
Liquidity	0,758	1,319	Non-multicollinearity
DAR	0,233	4,293	Non-multicollinearity
DER	0,211	4,733	Non-multicollinearity

Based on the table above, it shows that all independent variables have a Tolerance value 0.10 and a VIF value 10. Thus, it can be concluded that all independent variables in this study do not occur multicollinearity.

d. *Panel Data Regression*

Table 7. Panel Data Regression

Variable	Coeff Regression	t statistic	Sig. t
(Constant)	10.29865	5.549704	0,000
Liquidity	29.68060	0.511798	0.6127
DAR	-6.88E-05	-0.234619	0.0162
DER	-5.24E-05	-0.518678	0.0079
R square	0.438345		
F statistic	2.263309		
Sig. F	0.042131		

The results of the regression test panel data using random effect above the regression equation formed in this study are as follows:

Y = 10.298+ 29.68 X1 – 6,88 X2 – 5,24 X3

The regression equation of the panel data can be explained as follows:

1. A constant of 10,298 means that if an independent variable remains then the dependent variable (ROA) is 10,298

2.   The coefficient of liquidity variable regression (X1) is 29.68 meaning that if other independent variables are fixed value and liquidity (X1) increases by 1% then Profitability will increase by 29.68.

3. The coefficient of regression of DAR variable (X2) is -6.88 meaning that if other independent variables remain fixed value and DAR (X2) increases by 1% then ROA will decrease by -6.88. A negative coefficient means a negative relationship between DAR (X2) and ROA.

4. The coefficient of der variable regression (X3) is -5.24 meaning that if other independent variables remain fixed value and DER (X3) increases by 1% then ROA will decrease by -5.24 Coefficient of negative value means that there is a negative relationship between DER (X3) and ROA.

e. *F-Test*

Based on Table 7, the F Test result with a significant rate of 0.026330 is smaller than 0.05 or 0.026 < 0.05 which indicates that the model used in this study is worth using for further analysis.

f. *T-Test*

Based on the t test in Table 7 above, what can partially interpret it the influence of the relationship between independent variables namely liquidity ratio (X1), solvency ratio dar (X2) and DER (X3) to dependent variables financial performance (ROA) below:

1) Liquidity Ratio (CR)

Calculation of hypothesis test (t test) using SPSS tools above obtained the results of hypothesis test (t test) of 0.511798 and significance value of 0.612 greater than 0.05 or 0.466 > 0.05 then the decision taken is Ho accepted. Thus it can be concluded that the liquidity ratio (X1) has no significant effect on financial performance (ROA) in tbk manufacturing company sub pulp and paper sector.

2) Solvency Ratio (DAR)

Calculation of hypothesis test (t test) using SPSS tool above obtained hypothetical test result (t test) of -0.234619 and significance value of 0.0162 less than 0.05 or 0.0162 < 0.05 then the decision taken is Rejected. Thus it can be concluded that the solvency ratio (DAR) has a negative and significant effect on financial performance (ROA) in tbk manufacturing companies sub-sector pulp and paper.

3) Solvency Ratio (DER)

Calculation of hypothesis test (t test) using SPSS tool above obtained hypothetical test results (t test) of -0.518678 and significance value of 0.0079 smaller than 0.05 or 0.0079 < 0.05 then the decision taken is Rejected Ho. Thus it can be concluded that the solvency ratio (DER) has a negative and significant effect on financial performance (ROA) in tbk

(cc) BY-SA
Ciptaan disebarluaskan di bawah Lisensi
Creative Commons Atribusi-BerbagiSerupa 4.0 Internasional.

PERCIPIENCE Journal ~ **53**

manufacturing companies sub-sector pulp and paper.

g. R-Square Test

Based on Table 7 obtained the result of The Coefficient of Determination Test (R2) of 0.438345 or the value of the coefficient of determination is between 0 to 1. The influence can be said to be strong because it is close to number one. This means that independent variables, namely liquidity ratio (X1), DAR (X2) and DER (X3) solvency ratio, affect dependent variables i.e. financial performance (ROA) by 43.8%. While 67.2% was influenced by other variables outside this study.

DISCUSSION

1. Effect of Liquidity Ratio on Financial Performance

Liquidity ratio measured using cash ratio is a ratio used as an indicator to describe the company's ability to pay or pay off short-term debt that will soon mature using current assets. Based on the test results presented in Table 7, liquidity ratio does not affect financial performance.

Dwi Prastowo (2011: 80) mentioned that the liquidity ratio measures a company's ability to meet its short-term obligations. Liquidity of a company can describe the power of the company in fulfilling its short-term obligations to short-term creditors, the greater the comparison of cash to debt, the better. Liquidity ratios that describe the company's financial performance in terms of liabilities can affect the assessment of the public, especially investors to give confidence to the company to invest. If the company still has a good ability to meet its short-term obligations (one-year period) by using current assets, it can be liquid. Investors do not have to worry about investing their funds, if at any time something untoward happens.

The results of this study are in line with research that has been conducted by Khitmat and your Rehman (2014), Wartono (2018), and Arifin, et.al. (2018), that liquidity has a positive and insignificant effect on roa profitability. The research is different from research conducted by Supardi et.al, (2016), Pitoyo and Lestari (2018) and Setyaningsih and Cunengsih (2018) which proves that liquidity projected by the Current Ratio does not have a significant influence on the profitability of Return on Assets. Liquidity ratio has a reasonably close relationship with the company's ability to earn profit by showing the availability of working capital in operational activities and the fulfillment of the company's current obligations. The company's working capital's availability can improve the financial performance of the company's assets (Nurpitasari, et.al., 2018).

2. Effect of Solvency Ratio (DAR) on Financial Performance

The solvency ratio measured using Debt to Asset Ratio (DAR) is a useful ratio to measure financial performance in assessing the extent and extent of assets owned by the company to pay off long-term liabilities and finance its assets by relying on debt. Based on the test results presented in Table 7, the Debt to Asset Ratio (DAR)

solvency ratio affects financial performance.

Debt to Asset Ratio describes the capital structure of the company used as a source of business funding. If the Debt to Asset Ratio is higher, while the proportion of total assets is unchanged, then the debt owed by the company is greater. The greater the total debt means that the financial ratio or the ratio of failure of the company to repay the loan is higher. Conversely, if the Debt to Asset Ratio gets smaller, then the debt owed by the company will also be smaller, and this means the financial risk of the company repaying the loan is also smaller.

The test results are in line with the research of Supardi (2016), Darmawan and Nurochman (2016), Khitmat and your Rehman (2014) which stated that the solvency ratio projected by Debt to Asset Ratio (DAR) has a significant impact on roa's financial performance. This study is not in line with the main and muid (2014) and Zulkarnaen (2018) research, which states that Debt to Asset Ratio does not significantly influence ROA.

3. *Effect of Solvency Ratio (DER) on Financial Performance*

Solvency ratio measured using Debt to Equity Ratio (DER) is a useful ratio to measure financial performance in assessing the extent and extent of the company using funds earned from debt to pay off long-term liabilities and finance its assets by relying on debt. Based on the test results presented in Table 7 the Debt to Equity Ratio (DER) solvency ratio affects financial performance.

The results of the study are in line with Hanafi's theory (2013:41) which states that the use of high debt will increase the risk, meaning that the higher the debt, the more interest to be paid, so that the condition can lead to a high chance of the company experiencing bankruptcy. Thus, high debt needs to be offset by increased profits so that the company's operational activities continue to run. This test indicates that the company has a high debt with a level of profit that is not yet maximized. Therefore, companies need to re-control the use of debt so that it is not too high. Due to high debt, it impacts the company's operational activities, where the company must bear or pay interest costs incurred from the debt. Thus, this condition can affect the company's financial performance and hinder the company's growth.

The results of this test are in line with research conducted by your Rehman (2013), Utama and Muid (2014), Silfina and Gunawan (2019) proving that DER has a significant impact on roa's financial performance. The results of wartono (2018), Arifin, et.al (2018) and Irman (2020) prove that DER has a negative and insignificant influence on the profitability of ROA owned by the company. The greater the use of debt by the company, the ability of the company to generate profit will decrease. The research is different from the results of research conducted by Setyaningsih and Cunengsih (2018) and Enekwe, et.al (2014), proving that DER does not affect ROA.

Conclusion

This study aims to test the effect of liquidity ratio and solvency on the financial performance of manufacturing companies Tbk Sub pulp and paper sector in 2015-2019. Regarding the information from the results of the research conducted, the authors can

conclude that the Liquidity ratio calculated by cash ratio does not affect the financial performance of manufacturing companies Tbk sub-sector pulp and paper in 2015 until 2019. The solvency ratio calculated by the Debt to Total Asset Ratio affects the financial performance of Tbk's manufacturing companies in the pulp and paper sub-sector from 2015 to 2019. The solvency ratio calculated by the Debt to Equity Ratio affects the financial performance of Tbk's manufacturing companies in the pulp and paper sub-sector from 2015 to 2019.

Acknowledgements

References

Al Nuner, Munther, 2015, The Impact of Liquidity on Jordanian Banks Profitability through Return on Assets, European Journal of Business and Management, JSSY 2222-1905(Paper)JSSN2222-2839(0nline), Vol.7, No.7, 2015, wl1w.iiste.org.

Arifin, Dedy Samsul; Sarita, Buyung dan Madi, Riski Amalia, 2018, Pengaruh Likuiditas,Leverage, Ukuran Perusahaan dan Pertumbuhan Penjualan Terhadap Profitabilitas (Studi Pada Perusahaan Property dan Real Estate Yang Tcrdaftar di Bursa Efek Indonesia Tahun 2013-2017).

Armalinda, 2019, PengaruhRasio likuiditas Terhadap Kinerja Keuangan Ditinjau Dari Return on Assets (ROA) Pada PT. Matahari Putra Prima Tbk Di Bursa Efek Indonesia, Jurnal Media Wahana Ekonomika, Vol. 16. Vol.2, Juli 2019: 111-118.

Brighamdan Houston, 2010, Dasar-Dasar Manajemen Keuangan, Jakarta: Erlangga. Darmawan, Ahmad Darmawandan Nurochman, Alis Dwian, 2016, Pengaruh Current Ratio dan Debt to Asset Ratio Terhadap Return on Asset, Jurnal Studia, Akuntansi dan Bisnis, Vol. 4 No.2.

Fahrni, lrham, 2014, Analisis Laporan Keuangan, Bandung: Alfabeta.

Hery, 2015, Analisis Laporan Keuangan, Yogyakarta: CAPS (Center for Academic Publishing Service).

Sandy, Gyan Exgyu, 2015, Pengaruh Liquiditas Dan Solvabilitas Terhadap Kinerja Keuangan Perbankan Indonesia Yang Terdaftar Di Bursa Efek Indonesia Pada Tahun2010-2012, Jurusan Akuntansi, Fakultas Ekonomi, Universitas Jember (UNEJ).

Sartono, Agus, 2015, Manajemen Keuangan Teori dan Aplikasi Edisi 4, Yogyakarta: IKAPI.

Silvina, Sucinia, dan Gunawan, Hendra, 2019, Pengaruh Manajemen Modal Kerja Dan Solvabilitas Terhadap Kinerja Perusahaan, Jurnal Akuntansi, Ekonomi dan Manajemen Bisnis, Vol. 7 No. 1, July 2019, 94-104.

Utama. Alfarizi Cahya dan Muid, Abdul, 2014, Pengaruh Current Ratio. Debt to Equity Ratio, Debt to Asset Ratio dan Perputaran Modal Kerja Terhadap Return on Asset Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun2010 ± 2012, Diponegoro Journal of Accounting, Volume 03, Nomor 02, Tahun 2014, Halaman 1-13/SS. V (Online):2337-3806.

Yustisia, Cita; Hariyani, Iswi dan Serfianto, 2011, Merger, Konsolidasi, Akuisisi, & Pemisahan Perusahaan: Cara Cerdas Mengembangkan & Memajukan Perusahaan, Jakarta: Vidimedia.

Ben-Caleb, Egbide (Ph.D Candidate); Olubukunola, Uwuigbe; Uwuigbe, Uwalomwa, 2013, Liquidity Management and Profitability of Manufacturing Companies in Nigeria, IOSR Journal of Business and Management (IOSR-JBM), e-ISSN: 2278-487X Volume 9, Issue 1 (MAR. -Apr. 2013), PP 13-21, w11T11.iosriournals.org.

Dwiyanthi, Novia dan Sudiartha, Gede Merta, 2017, Pengaruh Likuiditas dan Perputaran Modal Kerja Terhadap Profitabilitas Pada Perusahaan Manufaktur Sektor Industri Barang Konsumsi, E-Jurnal Manajemen Unud, Vol. 6, No. 9, 2017: 4829-4856, ISSN: 2302-8912.

Enekwe, Chinedu Innocent; Agu, Charles Ikechukwu and Eziedo, Kenneth Nnagbogu, 2014, The Effect of Financial Leverage on Financial Performance: Evidence of Quoted Pharmaceutical Companies in Nigeria, JOSR Journal of Economics and Finance (IOSR.JEF),e-ISSN: 2321-5933,p-ISSN:2321-5925.Volwne 5, Issue 3. (Sep-Oct. 2014), PP 17-25, www.iosriournals.org.

Nurpitasari; Paramita, Patricia Diana; dan Pranaditya, Ari, 2018, Pengaruh Rasio Likuiditas, Rasio Solvabilitasdan Rasio Activity Terhadap Kinerja Keuangan yang Mempengaruhi Laba Perusahaan PT Dong Bang Indo Tahun 2013-2016, Journal of Accounting 2018.

Pitoyo, Mikha Merianti dan Lestari, Henny Setyo, 2018, Pengaruh Likuiditas Terhadap Profitabilitas Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia, Kompetensi Jurnal Manajemen Bisnis, Vol. 13, No. 1, Januari - Juni 2018.

Setyaningsih, Eka Dyah danCunengsih, Cucun, 2018, Pengaruh Debt to Equity Ratio dan Current Ratio Terhadap Return on Assets pada PT. Midi Utama Indonesia, Tok, Account Vol 5 _Vo 2.

Sudana, I Made Sudana, 2011, Manajemen Keuangan Perusahaan Teori dan Praktik, Jakarta: Erlangga.

Supardi, Herman; Suratno dan Suyanto, 2016, Pengaruh Current Ratio, Debt to Asset Ratio, Total Asset Tum Over dan InflasiTerhadap Return on Asset, JJAFE (Jurnal Ilmiah Akuntansi Fakults Ekonomi), Volume 2, Nomor 2 Tahun 2016.

Sutrisno, 2012, ManajemenKeuangan Teori, Konsep dan Aplikasi, Yogyakarta:

Ekonosia.

Wartono, Tri, 2018, Pengaruh Current Ratio (CR) dan Debt to Equity Ratio (DER) Terhadap Return on Asset (ROA) (Studi pada PT Astra International, Tok), Jurnal KREATIF: PemosaranSSN: 2339 0689, E-ISSN: 2406-8616.

Zulkamaen,Zuliana, 2018, Pengaruh Debt To Assets Ratio Terhadap Return On Asset Pada Perusahaan Asuransi yang Terdaftar Di BEI Tahun2010 - 2015, Jurnal *Warta Edisi: 56, April 2018 I ISSN: 1829 - 7463.*