

FACTOR INFLUENCING OF PROFITABILITY: A CASE OF TEXTILE AND GARMENT COMPANIES LISTED IN INDONESIA STOCK EXCHANGE

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Abstract

This study aims to determine whether there is an influence between Current Ratio and Debt to Asset Ratio on Return on Assets in Textile and Garment Companies listed on the Indonesia Stock Exchange. The methodological approach used in this research is associative research. The data analysis techniques, such as a classical assumption test, correlation, t-test, F-test, and the coefficient of determination. Using secondary data, this study obtained from textile and garment companies listed on the Indonesia Stock Exchange, while the samples as the purposive criteria were 8 textile and garment companies from 2008 to 2011. The results showed that the t-test value on Current Ratio and Debt to Asset Ratio are partially significant, also the F test results in the study showed positive results. Based on the coefficient of determination test results, the value of R square in the regression model leads to strong results. It can be seen that Current Ratio and Debt to Asset Ratio have a significant effect on Return on Assets partially or simultaneously.

Keywords: Return on Asset, Current Ratio, Debt to Asset Ratio, Profitability

1. INTRODUCTION

A good management defined as an organization who can manage activity effectively and efficiently (Gervais, M. 2003). We know that business always has a goal to achieve an optimal profit, and the company maintains their business to get higher profit (Li, Y., Bai, X., & Xue, K. 2020). The company will be able to survive, grow and develop and be able facing their competition (Miotto, G., et, al 2020). The company can choose the right strategy to outperform the competition to get higher profitability and going concern. In addition, management also needs to evaluate its financial performance periodically. Management can see the progress of the company from useful information in the future, namely profitability (Pratiwi, R. D. 2020).

Furthermore, a company is demanded to attract an external capital. One of techniques is to create higher profitability (Sohn, S. Y., Joo, Y. G., & Han, H. K. 2007). The profitability is an important aspect because if companies want to exist, they should be certainly generating higher income to allocate their obtained funding for operational to be able survive (Malik, H. 2011). Profitability can be used as a measurement tool of a successful company to make sure the investors from the prospect of return on capital. Moreover, this aspect also can be used to assess the company's ability for working capital effectively to produce certain expected profit levels (Davidsson, P., Steffens, P., & Fitzsimmons, J. (2009).

As a part of this research, Return on Asset (ROA) is a common technique analysis using by relevant previous study (Larasati, C., & Rivai, A. 2020). The top management can measure the effectiveness of company's operations from this ratio. Return on Asset (ROA) itself is concerned of profitability ratio, which is intended to measure the company's ability from the overall investment funds allocated in assets operations to generate profits. This value of current assets must be sufficient to be able covering debt of a satisfactory level of safety (margin safety). As we know, the current assets impacting revenue due to the company's daily activities. This ratio however proved that the company in low level of liquidity condition and does not affected the ability to pay short term liabilities. Therefore, the current asset management is the most appropriate way for companies to maintain and increasing profits (Irman, M., & Purwati, A. A. 2020).

The liquidity is an important aspect for sustainability. If the company able to pay their liabilities for example short-term liabilities, then the company can be categories as a health company (Sandoval, W.

S. (2019). The level of profitability can be measure by comparing the expected rate of return on investment with the actual return. If the expected return is smaller than the actual return, then the investment is said to be very good. A high current ratio will have a negative effect on the ability to earn profits, because some working capital does not rotate or experiences unemployment, and vice versa. The higher current ratio value affected a good company's liquidity (Irman, M., & Purwati, A. A. 2020). It should be noted that excess liquidity will reduce the risk of inability to meet maturing short-term obligations, and this will reduce profits. According to Kasmir (2008) if the current ratio is low, it can be defined as the company has low capital to pay off debt or liabilities. However, if the ratio measurement results are high, it is not necessarily that the financial condition showing in good condition. If the current ratio increases, then ROA will decrease and vice versa.

To measure Debt to Asset Ratio, Kasmir (2008) explained that assets are funded from long term liabilities. This situation can impact increasing financial risk. If the company cannot manage the funds from debt productively, so this situation will be able impacted negative effect and making the company's profitability decrease (Brigham and Houston, 2001). Kasmir (2008) is also explained if this ratio identify from debt funding, so that can be more difficult to obtain additional loans. This loan is making the company worry about their assets covering for debt. A high level in debt will have an impact on low profitability which is indicator of financial operational activities of the company. However, The increasing or decreasing DAR is followed by value of return on assets, we can understand that textile and garment data sectors is relevant with previous study showed the level of solvability directly proportional of profitability and liquidity (Van Horne, 2005, p. 313).

In this study, we identify the textile and garment sector by looking at the company's net profit which has decreased by 63% as a result of the company's debt increased by 31%. This is because the value is used to cover the company's debt. We also identify that current debt owned by the company was 38% greater than the current assets owned by the company, which was 15%, which indicates that the company was in an illiquid condition. Then, the total assets owned by the company tend to be unstable so that it has decreased by 38%, this situation is due to the total debt which has increased by 31%. Also, the amount of debt to textile and garment companies has increased by 31% and the total capital obtained by the company has decreased by 10%, this indicates that the company has experienced a decrease in profits and difficulties in its operational activities. Therefore, the objective of this study is how to measure liquidity and solvability influence profitability in textile and garment sector, we are looking for those aspect giving positive impact for Indonesia companies.

2. LITERATURE REVIEW

Brigham and Houston (2001) explain the solvency ratio has three important implications, namely: First, obtaining funds through debt allows shareholders to maintain control over companies with limited investment. Second, creditors see equity or funds deposited by owners to provide a safety margin, so that if shareholders only provide a small portion of total financing, then the company's risk is largely on the creditors. Third, if the company gets a greater return on investment financed with borrowed funds than interest payments, the return on owner's capital will be greater. Furthermore, Sawir (2001) stated the solvency can be used to increase shareholder returns, but at the risk of increasing losses during dark times. If the company uses more debt than its own capital, the level of solvency will increase because the interest expense that must be borne also increases. This will have an impact on decreasing profitability.

Basically, if the company increases the amount of debt as a source of funds, this can increase financial risk. The company cannot manage the funds obtained from debt productively; this can have a negative effect and have an impact on decreasing the company's profitability (Brigham and Houston: 2001, p. 84). Companies that get an excess current ratio, which will have cash or investment in securities that give low yields until inventory increases again and funds are needed, the results can reduce the value of return on assets (Arthur J. Keown, 2010, p. 243). If the higher liquidity, so this can make the better the company's

position in creditor's perception. Therefore there is a greater likelihood that the company will be able to pay its obligations on time.

Based on previous studies, it can be seen that the relationship between working capital ratios and profitability shows inconsistent results. Research conducted by Ambarwati, et, al. (2015) and Siwi (2005) shows that the working capital ratio has a positive and significant effect on profitability. Otherwise, the research of Faurani (2004) shows that the working capital ratio has no significant effect on profitability.

Meanwhile, research of Syarief Dienan Yahya (2011) showed that DAR in Indonesian telecommunications companies listed on the IDX has a significant positive effect on increasing profitability. Rimbun Reka T (2011) also showing that the Current Ratio has no significant effect on profitability in food and beverage companies listed on the Indonesia Stock Exchange in 2005-2009 period

Based on the previous study above, we develop the hypothesis as follow:

H1: There is an influence current ratio on return on assets in listed textile and garment companies in Indonesia.

H2: There is an influence debt to asset ratio on return on assets in listed textile and garment companies in Indonesia.

H3: There is an influence current ratio and debt to asset ratio on return on assets in listed textile and garment companies in Indonesia.

3. RESEARCH METHODS

The methodological approach in this research was using associative research. The dependent variable in this study is profitability which is measured by return on assets (ROA). The formulation of return on assets or ROA is as follows:

$$ROA = \frac{Net\ Income\ After\ Tax}{Total\ Asset} \quad [1]$$

Solvability is a measurement of financial performance to pay all its debts, both short and long term. Using Debt ratio to total assets / debt ratio (DR) Debt ratio creditors can be comparing their debt to total assets, the equation as follows

$$DAR = \frac{Total\ Payable}{Total\ Asset} \quad [2]$$

Liquidity describes a company's ability to settle their short-term liabilities; this ratio can be calculated from working capital information such as current assets and current liabilities:

$$Current\ Ratio = \frac{Current\ Asset}{Current\ Liabilities} \quad [3]$$

The population used in this study was textile and garment companies listed on the IDX during 2008-2011, totaling 14 companies in 2008-2011. The sampling technique is using purposive sampling. The criteria used in selecting the sample in this study were textile and garment companies listed on the IDX in 2008-2011, these companies were not delisted from the IDX in 2008-2011 and these companies had complete and accurate data. Based on these criteria, from 17 populations of textile and garment companies

listed on the IDX, 8 samples of companies that meet the three criteria are obtained. We can see table 1. The data collection technique using documentation techniques, by looking for data were obtained from the Indonesia Stock Exchange (BEI) through the official IDX website.

Tabel 1. Selected sample Textil dan Garmen company

No	Company	Initial
1	Argo Pantes Tbk	ARGO
2	Centex Tbk	CNTX
3	Ever Shine textile Industry Tbk	ESTI
4	Karwell Indonesia Tbk	KARW
5	Apac Citra Centertex Tbk	MYTX
6	Pan Asia Filament Inti Tbk	PAFI
7	Sunson Textile Manufacturer Tbk	SSTM
8	Unitex Tbk	UNTX

The data testing technique was using normality, which is detecting the normality by using Kolmogorov Smirnov from the standardized residuals in research model. In this study, the multicollinearity test uses tolerance and value inflation factor where the VIF value must be below the value of 10. If the VIF value of the regression results is greater than 10, then it can be ascertained that there is multicollinearity between the independent variables. Furthermore, to detect the presence or absence of autocorrelation, a Run Test can be used. If there is no correlation between residuals, it is said that the residuals are random. Run test is used to see whether the residual data is random or unsystematic. If the results show a probability of more than 0.05 then H0 is accepted, meaning that there is no autocorrelation. We also using for partial test by using T test and F Test for simultaneous test, and R square for coefficient determination.

The data analysis in this study was using multiple regression analysis. The general equation for multiple regression in this study as follow:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where:

Y = Profitability

a = Constanta

β = Slope or coefficient regression or intercept

X₁ = Liquidities

X₂ = Solvability

e = Error

4. RESULT AND ANALYSIS

The results showed the calculation of Return on Asset, Current ratio and Debt to asset ratio of Textile and Garment Companies listed on the Indonesia Stock Exchange during the 2008-2011 periods are shown in Table 2 as follow.

Table 2. Return on Asset, Current ratio and Debt to asset ratio in Textile and Garment

Code	Financial Component											
	Return On Asset				Current Ratio				Debt To Asset Ratio			
	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011
ARGO	-0.11	-0.05	-0.09	-0.07	0.47	0.65	0.61	1.03	2,32	5.00	3.75	4.64
CNTX	-0.22	-0.04	-0.03	0.10	0.79	0.63	0.70	1.06	1,73	1.87	0.20	0.22
ESTI	-0.04	0.01	0.00	0.05	1.30	1.38	1.19	1.14	0.11	0.13	1.14	0.11
KARW	-0.40	-0.07	0.00	3.47	0.30	0.11	0.05	0.48	1.01	1.01	1.08	25.66
MYTX	-0.07	0.01	-0.05	-0.07	0.46	0.41	0.43	0.46	1.55	1.77	1.90	1.82
PAFI	-0.25	-0.03	-0.26	-0.19	0.88	0.67	0.31	0.54	0.27	3.02	0.20	5.32
SSTM	-0.08	0.04	0.01	-0.29	10.95	1.23	2.01	1.83	14.71	1.49	2.30	12.12
UNTX	-0.44	0.02	-0.16	-0.51	0.24	0.25	0.26	0.28	1.06	1.08	1.07	1.07
Average	-0.20	-0.03	-0.07	0.31	1.92	0.67	0.69	0.85	2.84	1.92	2.46	5.12

Based on Table 2 above, it can be seen that the profitability of textile and garment companies has volatile every year. From the profitability, we can see the average in the range - 0.20 to 0.31. In 2008 the average was -0.20 and in 2009 the average profitability increased to - 0.03, then in 2010 it increased to -0.07, then in 2011 it increased by 0.31. The volatility of profitability is caused by various factors that influence it. Hence the liquidity is defined as the Current Ratio. Further more the result of Table 2 above, we also can be seen that the Current Ratio in textile and garment companies has increased every year. The average of current ratio is showing value in the range of 1.92 to 0.85. In 2008 the average was 1.92. In 2009 the average Current Ratio decreased to 0.67, and then in 2010 it increased to 0.69, then in 2011 increased 0.85. The solvability in this study is Debt to Asset. The solvability has increased every year from the range of 2.84 to 5.12. In 2008 the average was 2.84. In 2009 the average Debt to Asset Ratio decreased to 1.92, then in 2010 it increased to 2.46, then in 2011 it increased by 5.12.

Analysis Result

Table 3 Multicolienarity test

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Current_Ratio	.857	1.167
Debt_To_Asset_Ratio	.857	1.167

Based on table 3 above, the multicollinearity test of VIF and tolerance values shows that all the variables used in this study have a VIF value of more than 10 and a tolerance approaching 1 or less than 0.1, which means that the regression model does not contain multicollinearity.

Table 4 Kolmogorov Smirnov test

		Unstandardized Residual
N		32
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.32364443
Most Extreme Differences	Absolute	.104
	Positive	.057
	Negative	-.104
Kolmogorov-Smirnov Z		.587
Asymp. Sig. (2-tailed)		.880

From table 4, it can be seen that the K-S values of the Profitability, Liquidity and Solvency variables have been normally distributed because each of the variables has a probability of more than 0.05. The value of each variable that has a defined standard can be seen in the Asymp.Sig (2-tailed) line. From this row the value of Asymp sig (2-tailed) = 0.880 which is greater than 0.05 indicates that the variables are normally distributed.

Tabel 5. Autocolleration using Run test

Component	Unstandardized Residual
Test Value ^a	.00703
Cases < Test Value	16
Cases >= Test Value	16
Total Cases	32
Number of Runs	15
Z	-.539
Asymp. Sig. (2-tailed)	.590

Table 5. showed results the test value is 0.00703 with a probability of 0.590 at 0.05, which means that the null hypothesis is accepted, so it can be concluded that the residual is random, or there is no autocorrelation.

The following are the results of the regression analysis from the data obtained, these result also will showing into table 6. Below.

1. The value of " α " = -0.234 shows that the profitability consisting of liquidity (X1) and solvency (X2) is zero, so the profitability of textile and garment companies is only -0.234, in other words the profitability of textile and garment companies is -0.234.

2. The value of X1 = -0.132 shows that if liquidity has increased by 100% it will result in a decrease in the Current Ratio of Textile and Garment companies by -0.0132 with the assumption that the Debt To Asset Ratio is fixed or unchanged.
3. The value of X2 = 0.121 indicates that if the solvency has increased by 100%, it will result in an increase in the profitability of textile and garment companies by 0.121 with the assumption that profitability remains or does not change.
4. T Test Value For the t test criteria is carried out at the level of $\alpha = 5\%$ with two-way 2.5%. The value of t, for $n = 32 - 3 = 29$ is 1.669.

Tabel 6. Multiple regression test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.234	.073		-3.215	.003
Current_Ratio	-.132	.035	-.381	-3.810	.001
Debt_To_Asset_Ratio	.121	.013	.936	9.373	.000

Tabel 7. F test signification

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	9.847	2	4.923	43.971	.000 ^a
Residual	3.247	29	.112		
Total	13.094	31			

Based on the results of the F test in the table 7 above, the calculated F value is 43.971 with a significant 0.000. This shows that the Current Ratio and Debt to Asset Ratio simultaneously have a significant effect on ROA.

Tabel 8 R-Square test of Coefficient determination

R	R Square	Adjusted R Square	Std. Error of the Estimate
.867 ^a	.752	.735	.33462

The coefficient of determination test results in Table 8 above, shows that the value of the adjusted R² in the regression model for textile and garment companies is 0.735. In addition, it can be seen that the R² value is 0.752. If the R² value is close to 1, the independent variable will have a stronger influence on the dependent variable. This shows that the magnitude of the influence of the current ratio and debt to asset ratio variables is 0.5655 or 56.55%, which means that the influence of other variables not examined in this study is 43.45%.

Based on the results, the effect of liquidity on profitability shows that there is a t value of -3.810. This improve that t value of result is greater than t table 1.669. T table, which is located in the receiving area of H0 so that H0 is accepted (Ha is rejected), this indicates that there is an influence between liquidity on the profitability of textile and garment companies listed on the Indonesia Stock Exchange for the period 2008-2011. In the liquidity t test, it shows that there is an influence in the multiple regression coefficient of liquidity which shows a negative sign, this means that if liquidity has increased, profitability has decreased. Furthermore, the effect of liquidity on profitability in shows the t value of 9.373. This indicated that t value of profitability is greater than t table 1.669. This suggests that there is an influence between solvency on profitability in textile and garment companies listed on the Indonesia Stock Exchange during the period 2008-2011. And, based on the results of the F test, the F value is 43.971 with a significant 0.000. This is also indicated that the Current Ratio and Debt to Asset Ratio simultaneously have a significant effect on ROA.

5. CONCLUSION

From the discussion and research conducted by researchers, it can be concluded that a sample of 8 textile and garment companies has a negative and significant effect between liquidity on profitability. Then, the subsequent results show a positive and significant influence between solvability on profitability. Based on the sample taken, amounting to 8 textile and garment companies, it turns out that there is a simultaneous influence between liquidity and solvency on profitability in textile and garment companies listed on the Indonesia Stock Exchange in 2008-2011. This shows that liquidity and solvency are meaningful and have an important role in profitability, so in this case it can be concluded as follows: So that the company does not experience financial distress, the company must be wiser in making decisions to use corporate debt. The findings in this study indicate that liquidity and solvency have a significant positive effect on profitability. This positive influence is possible because the company gets an unfavorable profit. So that, the company can not allocates their funds optimally. In order to increase the company's profitability, you should calculate the amount of net income and assets owned by the company. Liquidity shows a significant negative effect on profitability, possibly because the company allocates the company's current assets not maximally so that the company's ability to pay is not good. So that the company can increase its profitability, the company must maximize the use of its current assets. The author suggests that the next research in conducting profitability research should be examining from a lower year to get stronger and more significant research results.

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