

How Financial Ratios Affect Company Efficiency

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Abstract

The subject of this investigation is a manufacturing firm that is publicly traded on the Indonesia Stock Exchange. The goal of this research is to investigate and assess the impact of leverage (DER), liquidity (CR), and profitability (ROA) on firm efficiency. (TATTOO). The sample count is a total of 18 manufacturing companies obtained through the purposive sampling technique. This study employs a causality study design. A descriptive quantitative study was used in the research, and the data was analyzed using multiple linear regression methods. This study's findings suggest that: 1) DER has a negative and significant effect on TATO, 2) CR has a non-significant positive effect on TATO, and 3) ROA has a positive and significant effect on TATO.

Keywords: Company Efficiency; leverage; Liquidity.

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INTRODUCTION

In some in the last period, a number of studies have considered efficiency in companies and their relationship with other financial ratios that measure several variables such as company size (Sukmayanti & Triaryati, 2020); leverage (Hidayat, 2018); asset pricing link ages (Calice, Kutlu, & Zeng, 2021); corporate governance (Simanungkalit, 2017); profitability (Santosuosso, 2014); stock price (Theogene, Mulegi, & Hosee, 2017). In addition there are several studies that target it in various sectors such as in the manufacturing sector (Agustin & Setiawan), the agricultural sector (Merry & Nasir, 2013), and the banking sector (Aktaş & Seyfettin, 2015).

Practically speaking, financial ratios provide an explanation that takes into account the financial situation of a company. Different analyzes are used to analyze a company's financial position such as cross-sectional analysis and comparative analysis. Academic studies find a positive interaction between efficiency & other financial ratios such as profitability (Santosuosso, 2014); stock market performance (Aktaş & Seyfettin, 2015); company size (Sukmayanti & Triaryati, 2020). Efficiency in the cosmetics and household industries listed on the Indonesia Stock Exchange has a positive effect on leverage (Sunardi, Husain, & Kadim, 2020). Currently, stability and sustainability are the main challenges facing companies in Indonesia. Knowledge of the internal and external environment when the company operates is an obligation for the company. The company's current goal is to achieve efficient company operations. This can be seen from the ability of managers to identify efficiency status such as related financial ratios as indicators. These indicators are crucial for companies in Indonesia, especially at the end of 2018 because the rupiah has depreciated. In such a situation, reduced incentives and unprecedented inflation resulted in low productivity in the long run.

Companies must use resources efficiently to achieve competitive advantage, so that the required rate of return is lower. Very few studies have empirically examined and discussed the characteristics of firm efficiency and its relationship to other factors, however, increasing efficiency in firms has become the greatest concern in academic studies. (Simanungkalit, 2017))have empirically tested whether there is a link between corporate governance and corporate investment efficiency, the data includes 131 companies listed on the IDX between 2010 and 2013, with the exception of financial and banking companies. The findings show that corporate governance and investment efficiency have a negative relationship, but the effect on investment efficiency is statistically significant. They conclude that corporate governance reforms increase corporate efficiency. On the other hand, the study of financial ratios is the best means of evaluating the performance of any company by looking at liquidity, leverage and profitability. Some of the results of previous studies related to the relationship between efficiency measurement ratios and financial ratios were carried out (Sunjoko & Arilyn, 2016). They found efficiency ratio to have a positive and significant relationship with profitability when they examined a sample of pharmaceutical companies in Indonesia between years 2007 and 2013. Another study was conducted Santosuosso (2014) which examines the relationship between efficiency, corporate profitability, stock market value and operating cash flow. By analyzing data from 215 Italian companies over 10 years between 2004 and 2013, he found a positive correlation between efficiency ratios and their respective profitability and operating cash flow, but not with stock market indicators.

In the Indonesian context, there is still very little research that considers efficiency. Fauziah, Rifin, and Adhi (2020) reported that micro and small businesses in the food sector invested more in technological and labor capabilities in order to increase efficiency, but the level of efficiency decreased with unskilled labor. They concluded that in Indonesia, MSEs are technically more efficient than large firms. Another study that examined the MSEs obtained the results of measuring the level of technical efficiency that was not efficient in managing their assets carry out sales. Rodoni, Salim, Amalia, and Rakhmadi (2017) revealed that Islamic banks are relatively less efficient than foreign banks, when they examine the average data for the past five years which are unable to reach 100% efficiency level. On the other hand, research in the field of banking was also carried out by Muljawan, Hafidz, Astuti, and Oktapiani (2014). They used data for the period between 2016 and 2020, the results showed that there was an increase in efficiency during the study period, although banks in Asian countries showed higher efficiency compared to foreign and local banks. However this study deals with the efficiency of companies in Indonesia and by choosing the most financial ratio calculation examines whether there is a significant relationship between financial ratios and efficiency in Indonesian companies.

Based on the previous description which showed mixed results, the researchers felt the need to carry out further studies that related the three variables and efficiency ratios in companies in Indonesia, so this research was conducted with the aim of testing and analyzing the influence of leverage (DER), liquidity (CR), and profitability (ROA) to company efficiency (TATO). This research is different from others because it helps management to know the indicators related to the efficiency of their companies. In short, this research was conducted with the aim of looking at the relationship between leverage and company efficiency, company liquidity and company efficiency, and company profitability and company efficiency.

RESEARCH METHODS

The population in this review are 18 manufacturing companies from the consumer goods, chemical, and various industrial sectors listed on the Indonesia Stock Exchange (IDX), during the 2018-2022 period. The method used in data collection is purposive sampling because sampling is based on special considerations. Some of the criteria used as benchmarks for sampling are: company never suspended during the 2018-2022 period, the company has a positive Total Asset Turnover value, and the company issued an annual report consecutively during the study period. Based on these criteria, a total of 73 valid observations were obtained from 99 data obtained from 18 manufacturing companies. Each sample taken was sourced from the annual report of a manufacturing company which was published on the company's official website.

The data that has been collected is then analyzed using multiple regression analysis whose purpose is to analyze and test for the significant influence of each dependent and independent variable. The dependent variable is the company's efficiency as measured by using TATO, while the independent variables are the leverage ratio as measured by DER, the liquidity ratio as measured by CR, and the profitability ratio as measured by ROA. The equation model of this study can be stated as follows:

$$\text{TATO} = \alpha + \beta_1 \text{ Debt to Equity} + \beta_2 \text{ Current Ratio} + \beta_3 \text{ Return on Assets} + e$$

Information:

- α and $\beta_1 - \beta_3$ are regression coefficients;
- Debt to Equity (DER),
- Current Ratio (CR),
- Return on Assets (ROA) which is an explanatory variable,
- e is an error term

Furthermore, the data were analyzed with stages starting from descriptive analysis, then continued with the normality test, the classical assumption test, and finally the hypothesis test.

RESULTS AND DISCUSSION

The results of the descriptive statistical tests in this study yielded an average value (mean) for DER of 58.2139; the minimum value is 1.00 and the maximum is 179.01. The results of the descriptive statistics also show that the average value of the CR variable is 309.4627. The minimum value of CR is 45.50 and the maximum value is 802.00. This shows that the CR value is quite varied. Furthermore, the ROA variable has an average value of 11.4701. The highest ROA value is 65.90 and the lowest value is 0.00. The average for the TATO variable is 112.8784. The maximum value of TATO is 218 and the minimum value is 56.

The results of the normality test show the Kolmogorov-Smirnov Z value of 0.079 which is greater than 0.05, this means that the data is normally distributed. The results of the classical assumption test performed with the multicollinearity test and the autocorrelation test show the following results. The tolerance value is greater than 0.10 and the VIF value is less than 10.00, so it can be concluded that there is no multicollinearity between the independent variables. The results of the autocorrelation test show an R² squared value of 0.204, which means that the variation in the dependent variable can be explained by a variation of the independent variables (DER, CD, and ROA) of 20.4% while the rest is explained by other variables not examined in this study.

Table 1 Partial Hypothesis Test (t test)

Model	Coefficients ^a			t	Sig.
	Unstandardize		standardized		
	d		Coefficients		
	Coefficients				
	B	std. Error	Betas		
1 (Constant)	109,534	11,783		9,296	.000
DER	-.208	.088	-.269	-2,258	.027
CR	.001	.024	.003	.028	.978
ROA	1,278	.412	.336	3.103	.003
<u>a. Dependent Variable: TATO</u>					

a. Dependent Variable: TATO

Based on the information in table 1, there is a relationship between the three independent variables and TATO. The results of the DER variable with a significant value of 0.027 are less than 0.05, meaning that partially DER has a negative and significant effect on TATO, so that the ratio of debt and equity affects the level of efficiency of the company to a certain extent. The second variable is CR, with a significant value of 0.978 more than 0.05, so it can be concluded that partially CR has no significant effect on TATO. Thus, it means that liquidity does not affect the efficiency of the company. Furthermore, the ROA variable shows a significant value of 0.003 less than 0.05, this means that partially ROA has a positive and significant effect on TATO.

1.1. Effect of Leverage on Company Efficiency

Based on the results of data processing, it shows that the DER variable has a coefficient value of -0.208 with a significance value (Sig) of 0.027. The significance value of the DER variable has a negative effect on TATO. This means that the benefits obtained by the company through the amount of debt have a negative effect on the efficiency of the company. A strong negative relationship means that the more loans the company makes, the higher the risk of efficiency due to the unwise use of assets to make a transaction or sale. This supports the argument that choosing between debt and equity up to a certain level does not affect company ownership but affects the level of risk accepted by the company.

Research result Setiawati and Lim (2018) shows that leverage is influenced by firm value. The firm value shown in this study, namely the probability value of the leverage variable, is 0.001. Because the p-value (0.001) is smaller than the significance level, namely 0.05 or the T-count leverage is 3.456 which is greater than the t-table, so it can be concluded that leverage has a significant effect on the t-table value.

1.2. The Effect of Liquidity on Company Efficiency

In the analysis of the information above, the CR (liquidity) value obtained is positive but does not significantly affect TATO (company efficiency). The results of the tests carried out indicate that if not always a large Current Ratio can affect the company's efficiency as a proxy for Total Asset Turnover. Very large liquidity can make a company's ability to create low profits because many funds are idle. Conversely, very low liquidity will lower the level of confidence from internal and external parties. The results of this research are not in line with and do not match the results of research conducted by Alarussi (2021) the comment he conveyed was that liquidity has a negative and significant relationship to the efficiency of the company.

1.3. Effect of Profitability on Company Efficiency

The results of the analysis indicate if ROA has a positive and significant effect on TATO. The results of this research are similar to previous research conducted by Nulla (2013). He

showed that the influence between the company's ability to generate profitability and utilization of the energy resources owned by the company was positive and significantly matched the third hypothesis. High profitability is automatically caused by whether the company is good or not in managing its resources, when the company's profitability is large so that it will automatically have a positive influence on the company's efficiency level. Managers of companies are motivated to improve efficiency when they see the results of their efforts and make more profits (Prasetyo, Darminto, & Nuzula, 2016). This can be concluded if efficiency and profitability are interrelated or related, then when there is an increase in company efficiency it will have an impact on expenses, because it will be lower so that it can increase company profitability.

CONCLUSIONS

Based on the results of the research that has been done, it can be concluded that leverage is measured by the Debt to Equity Ratio (DER), liquidity is measured by CR, profitability is measured by Return on Assets (ROA). Simultaneously these three variables affect the efficiency of 20 manufacturing companies listed on the IDX in the period 2016 to 2020, efficiency is measured by TATO. Leverage matters negative and significant to the efficiency ratio. Liquidity has no significant positive effect. Meanwhile profitability has a positive and significant effect on the efficiency ratio.

As with other studies, this research has limitations, among others, because the sample size taken is relatively small, namely 18 companies with a five-year coverage (2018-2022). However, these results are expected to help management to identify indicators related to the efficiency of their company. Companies need to pay close attention to and properly manage their financial performance in order to run operations efficiently. In addition, it is hoped that further research can include more factors by conducting comparative studies with various other sectors in different countries to find out whether the determinants of efficiency are the same in different business environments.

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