The Effect of Liquidity and Leverage Ratio on The Financial Performance of Sub-Sector Transportation Companies Listed On The Indonesia Stock Exchange In 2018-2021

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Abstract. The research aims to examine The effect of liquidity and leverage ratio on the financial performance of sub-sector transportation companies listed on the Indonesia Stock Exchange in 2018-2021. The structural equation model was the method of data analysis that was applied. The analysis tool is based on SmartPLS software. Even though financial performance is an endogenous variable in this research, the indicators are return on equity, return on investment, and net profit margin. The results of this research show that the liquidity ratio affects financial performance because the value of the T-statistic is 3,47, and the P-value is 0,00. The leverage ratio does not affect the financial performance because the T-statistic is 0,425 and the P-value is 0,671.

Keywords: Liquidity ratio, leverage ratio, and financial performance

1. Introduction

Nowadays, efficient and safe transportation is a crucial part of daily life. Transportation is required so that people and things can be transported rapidly from one location to another. Because the development of the transportation subsector will reflect a country's economic development, transportation serves a highly crucial and critical purpose. This is so that the services required for economic activity can be accelerated and supported. According to information from the Indonesian stock exchange, 54 companies are actively active in Indonesia's transportation subsector. Land, air, and marine transportation services are provided by this subsector company.

Since any company must compete with others in its industry to remain viable, every organization must raise the bar in each area where it can draw customers in. Companies also need to evaluate their competitors' businesses as well as their own performance. Employee performance and the business's financial performance are two different ways that company performance can be evaluated or measured. Determining the company's capacity to manage cash flow and available resources, as well as its capacity to fulfill planned spending targets, is made possible with the aid of this financial performance assessment. The company's plan for

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securing the necessary financing sources and utilizing them must strike a balance between the sources and uses of cash, revenues, and expenditures.

A business can examine its financial statements to determine its performance or achievements in a particular year. Financial report analysis may assist in reviewing and evaluating the company's financial performance in the upcoming year. The financial statements can show whether or not a firm is in excellent financial shape and how the company is doing financially. Details on wealth, the company's assets, capital, and debt is presented in the financial position report. The statement of income, additionally, offers specifics regarding the company's earnings and outlays.

For examining the company's financial performance, researchers applied methods from financial ratio analysis. This financial ratio analysis can be used to examine the company's financial performance during the accounting periods. To examine these financial ratios, researchers use multiple types of financial statements, such as the income statement and the statement of financial position. This is because researchers will examine the profitability, leverage, and liquidity ratios to assess financial performance.

Based on the previous background information, the study's search aims to determine the effect of liquidity and leverage ratio on the financial performance of sub-sector transportation companies listed on the Indonesia Stock Exchange in 2018–2021.

2. Literature Review and Hypothesis Development

2.1 Financial Performance

Financial performance looks at the financial statements owned by the business entity or company concerned, and this is proven by the data from the cash flow, income, and balance sheets as well as other sources, all of supporting the financial performance assessment. Financial performance is an analysis that is conducted to assess how far a company has executed the rules of financial implementation appropriately and correctly[1]. Financial performance is an outcome or success that has been attained by the company's management in carrying out its function of effectively managing the company's assets within a specific period[8]. Financial performance is required by the company to determine and evaluate a company's level of success based on the financial operations carried out.

2.2 Financial Ratio

The company must examine its financial statement using a variety of analyses and standardizations in order to assess its success. Financial ratio analysis is one of the methods that can be used for evaluating financial performance. Financial ratio analysis is a numerical representation of the relationship between one element and other factors in the financial statements. The connection between the financial statement items is expressed in a simple mathematical method[3]. Financial ratio analysis is a technique that demonstrates the connection between two accounting variables and allows owners of businesses to assess the financial condition of a business and performance[5].

In actuality, several additional financial ratios can be used to assess a company's performance. The ratios chosen will have a specific significance for the target's position. Financial ratios are

classified into several categories, including liquidity ratio, leverage ratio, activity ratio, profitability ratio, growth ratio, and valuation ratio.

2.3 Hypothesis

The results of the research was to determine the impact of liquidity and leverage ratios on financial performance, therefore the folllowing hypothesis were developed :

H1 : ***The effect of liquidity ratio on the financial performance of sub-sector transportation companies listed on the Indonesia stock exchange in 2018-2021***

The liquidity ratio describes a company's ability to pay short-term debt. The liquidity ratio includes five indicators: current ratio, quick ratio, cash ratio, cash turnover, and inventory to net working capital. In study researched by Rizki [6], Ningsih [7], the result is liquidity ratio does not affect financial performance.

H2 : ***The effect of leverage ratio on the financial performance of sub-sector transportation companies listed on the Indonesia stock exchange in 2018-2021***

The leverage ratio measures how much of a company's assets are financed with debt. The use of a lot of debt will harm the company since it will become locked in high debt, making it harder to lessen the debt burden. According to Purnamasari's research, the leverage ratio hurts financial performance. The debt-to-equity ratio is a significant indicator of leverage [8]. In the study researched by Agusria [10], there isn't a partial effect of leverage on financial performance.

3. Research Methods

Indonesia Stock Exchange lists 54 transportation companies, which account for the study's overall population. There are various aspects of the samples in this study that make them suitable for use as research samples. Purposive judgment sampling is another name for this method of sampling. According to the justification provided, a corporation must fulfill a number of requirements in order to qualify as a research sample, including:

1. Transportation companies listed on the Indonesia Stock Exchange
2. From 2018-2021, businesses in the transportation subsector will submit their financial reports in a straight line
3. Rupiah (Rp) is the currency used in financial reports.
4. The business in the transportation sector has not suffered a loss in the last four years.

Based on the characteristics of the sample selection above, there are 9 companies that can be used as research samples.

The following operational definition of the variable is listed in Table 1 below :

Table 1. Definition of Operational Variables

Variable	Definition	Measurement
Liquidity Ratio	The ratio demonstrates the company's ability to repay short-term debt [5].	- *Current Ratio* - *Quick Ratio* - *Cash Ratio*
Leverage Ratio	A measure of how much of a company's assets are debt-financed [5].	- *Debt to Asset* - *Debt to Equity* - *Long Term Debt to Equity*
Financial Performance	The results or successes that the company's management achieved in successfully carrying out its job to manage the company's assets throughout a particular year [2].	- *Return On Investment* - *Return On Equity* - *Net Profit Margin*

According to the just provided explanation, the conceptual basis for this study is as follows:

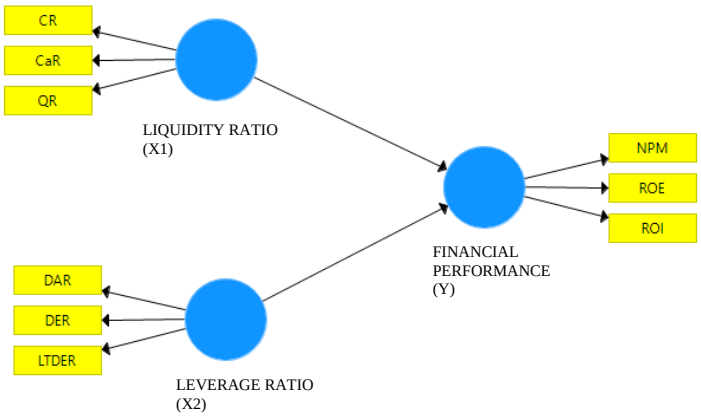

Fig. 1. The conceptual basis

3.1 Data Analysis Technique

The outer model (measurement model) and the inner model (structural model) are the approaches to evaluating the measurement model in the PLS-SEM analysis technique.

The outer model analysis describes the way each manifest variable connects to its latent variable so it is known how the manifest variable can explain the latent variable. Outer model analysis is used to test construct validity and reliability. Composite reliability is useful in measuring a reliability of latent variables. Composite reliability is also used to see the stability and consistency of internal indicators. The composite accuracy value must exceed 0.7. Construct validity includes convergent validity, average variance extracted (AVE), and discriminant validity.

1. Convergent Validity

   The loading factor value indicates the outcome of the convergent validity test. The result of convergen validity is > 0.7, but many studies do not fulfill the value of loading factor > 0.7, so the value of loading factor of 0.5 is still declared valid.

2. Discriminant Validity

   The value of cross-loading is a method of testing discriminant validity. Its value for each variable is greater than 0.7.

3. Average Variance Extracted (AVE)

   The test results in an assessment of convergent validity where the result is > 0.5. This illustrates a good measure of convergent validity when the latent variable explains over half of the indicators used to assess the latent variable.

The path coefficient value of the t-statistic is used to examine the importance of the latent variables in the structural model (inner model). R-Square and significance are two components that develop into phases in the structural model. The R-Square value measures and assesses the manifest variable's capacity to explain the construct.

4. Results and Discussion

4.1 Research Data

The research information is in the form of annual accounting records for transportation sub-sector companies from 2018 to 2021, allowing the results of the company's liquidity ratio, leverage ratio, and financial performance (profitability ratio) to be determined. To determine the company's financial performance, many accounts must be included in the statement of financial position and the statement of earnings.

4.2 Analysis Of The Outer Results

4.2.1 Convergen Validity

Table 2. The result of loading factor

Indicator	*Loading Factor*	Explanation
CR	0.970	Valid
QR	0.962	Valid
CaR	0.914	Valid
DAR	0.956	Valid
DER	0.945	Valid
LTDER	0.938	Valid
NPM	0.950	Valid
ROE	0.724	Valid
ROI	0.940	Valid

According to the results of the loading factor for each manifest variable, it indicates a result of > 0.5, and if the results are > 0.5, there is a significant connection between the manifest and latent variables.

4.2.2 Discriminant Validity

The findings of cross-loading calculations for discriminant validity are as follows:

Table 3. The result of cross loading

Indicator	Variable		
	Liquidity ratio (X_1)	Leverage ratio (X_2)	Financial Performance (Y)
CR	0.970	-0.748	0.552
CaR	0.914	-0.685	0.651
QR	0.962	-0.749	0.494
DAR	-0.867	0.956	-0.553
DER	-0.637	0.945	-0.429
LTDER	-0.624	0.938	-0.406
NPM	0.662	-0.560	0.950
ROE	0.081	0.047	0.724
ROI	0.503	-0.406	0.940

According to the table above, it is known the manifest variables CR, QR, and CaR are focused on or addressed to the liquidity ratio latent variable. Compared to other manifest variables, the loading factor values of CR, CaR, and QR are greater for the latent variable liquidity ratio, so this data is declared valid. Likewise with the loading factor values of DAR, DER, and LTDER, which are intended for the leverage ratio latent variable, which is greater than the other latent variables. The NPM, ROE, and ROI loading factor values for the latent variables of financial performance are greater than the other latent variables.

4.2.3 Average Variance Extracted

Table 4. The Ouput Fornell-Lcker Criterion

	Financial Performance	Leverage Ratio	Liquidity Ratio
Financial Performance	**0.878**		
Leverage Ratio	-0.498	**0.946**	
Liquidity Ratio	0.606	-0.765	**0.949**

Based on the Fornell-Lacker Criterion, the AVE root of financial performance is 0.878, which is greater than the correlation with the leverage ratio of -0.498, and the correlation with the liquidity ratio of 0.606. Likewise, for each AVE root, the leverage and liquidity ratio have a greater impact than the other variables. Thus, he validity evaluation based on the Fornell and Lacker criterion is acceptable.

4.2.4 Reliability

Table 5. Cronbach's Alpha

Variable	*Cronbach's Alpha*	Explanation
Liquidity Ratio	0.945	Reliabel
Leverage Ratio	0.942	Reliabel
Financial Performance e	0.884	Reliabel

Cronbach's Alpha results show that each variable in this research is reliable because *Cronbach's Alpha* value is higher than 0.6.

4.3 Analysis Of The Inner Results

The result of evaluating the inner model with R-square :

Table 6. R-square

Variable	Explanation
Financial Performance	0.370

The value of R-square explains the financial performance latent variable can be explained by the liquidity and leverage ratios of 37% (0.370) and the remaining 63% (0.630) can be describe by each latent variable not examined in this research. Following the value of R-square, this research is moderate.

4.4 Research Discussion

Based on the result of bootsrapping, it can be observed the variable affects financial performance on sub-sector transportation companies :

Table 7. Path Coefficient

Hypothesis	*Original Sample* (O)	*Sample Mean* (M)	*Sample Deviation* (STDEV)	*T-Statistic* (|O/STDEV|)	*P-Value*
Liquidity ratio -> Financial Performance	0.542	0.564	0.144	3.774	0.000
Leverage ratio -> Financial Performance	-0.083	-0.072	0.185	0.448	0.654

4.3.1 Liquidity ratio affect financial performance

The path coefficients test results in table 4.9 show that the T-statistic value is 3.774, the value is greater than 1.96, and the P-value is 0.000. If the T-statistic value is greater than 1.96 and

the P-value is less than 0.05, the hypothesis that the liquidity ratio affects financial performance (H1) is accepted.

In an earlier study, researchers used the liquidity variable (cash ratio and quick ratio) as the X variable and the profitability ratio (return on assets) as the Y variable. The variables and indicators included in the study provide an analogy between this research and earlier studies. The research sample and indicators of liquidity and profitability ratios distinguish it apart from earlier studies.

In general, liquidity ratio analyzes a company's capacity to fulfill short-term obligations secured by current assets. Judging from a original sample value, the ratio of liquidity on financial performance is positive, at 0.542. If the original sample value is positive, the influence between one variable and the other variables is unidirectional. If the liquidity ratio increases, it impacts the company's financial performane. In contrast, as the liquidity ratio decreases it also impacts the value of the company's fianancial performance.

4.3.2 Leverage ratio affect financial performance

The path coefficients test in table 4.9 shows that a T-statistic value of 0.448, with the value of < 1.96 and a P-value of 0.654. However, this value fails to fulfill the a P-value limit of 0.05. As a consequence, the leverage ratio hypothesis (H2) is rejected since it has no meaningful effect on financial performance.

Previous research used leverage ratios with debt-to-asset and debt-to-equity ratio indicators to analyze financial performance (profitability ratio).

Based on the original sample, the leverage ratio has a negative value of -0.083, so the influence of the leverage ratio on financial performance of the company is in an opposite direction. It indicates that while the leverage ratio increases, the company's financial performance decreases, and vice versa. If this company continuously uses debt to finance operational activities, the total debt will continue to increase, as will the interest expense that must be paid by the company. This will reduce the profit (financial performance) of the company.

5. Conclusion

In accordance with a review from earlier searches, the study's conclusion is :

1. The liquidity ratio has an enormous effect on the financial performance of sub-sector transportation companies listed on Indonesia Stock Exchange during 2018 to 2021. This is because a company may pay current debts that are due quickly using current assets, cutting out the need for cash from other accounts, which would have an impact on the company's financial performance.

   The result of this study are similar to previous research, which indicated that the liquidity ratio did not affect the profitability ratio. This is because too much liquidity is not always profitable. After all, it has the potential to generate idle capital that can be invested in profitable projects for the whole company.

2. The leverage ratio has no substantial impact on the financial performance of sub-sector transportation companies listed on the Indonesia Stock Exchange from 2018 to 2021. This is because the leverage ratio cannot generate company earnings, however in this study, the profitability ratio is utilized to evaluate the company's financial performance.

   A low leverage ratio indicates the company's capital and current assets are insufficient to cover all of its short- and long-term debt. If the company gets a low leverage ratio, it could be losing money. With the ownership of the risk of loss, the costs incurred by the firm to meet its commitments grow because the company not only pays its obligations but also the interest, causing profitability to decline.

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