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The Effect of Company Size as a Mediating Variable on the Relationship of Working Capital to Profitability

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Abstract: Working capital is one of the most important asset elements in a company because, without working capital, the company cannot meet its activities. Profitability is the company's ability to generate net income from activities carried out in the accounting period. Furthermore, the company's size, the size of the company can be determined based on total sales, total assets, and the average level of sales. This study aims to examine and analyze the effect of working capital on profitability mediated by company size. By using data from real estate companies listed on the IDX during the 2016-2019 period. The analytical tool in this research is SEM PLS with the application of Warp PLS version 7.0. This research proves that working capital and sales growth can be mediated by company size on profitability. That is in line with the signaling theory, which states that investors will adjust their decisions according to their understanding of the signals given by the company owner.

Keywords: size, working capital, signaling theory, return on assets.

公司规模作为中介变量对营运资金与盈利能力关系的影响

摘要：营运资金是公司最重要的资产一部分，因为没有营运资金，公司就无法支持活动。能力能力是公司从会计期间进行的活动中产生净收入的能力。再者，的规模，公司的规模。可以根据事件总、总资产，以及平均水平水平来确定。本研究旨在检查和分析营运资金对由公司引导导的使用能力的影响。通过2016-2019年期间在互联网数据显示上市本研究中的分析工具是结构方程建模偏最小二乘法，应用偏最小二乘法7.0版。这个研究证明，营运资金和销售增长可以通过公司规模对能力进行调节。信号理论，该理论家将根据他们对公司做出的信号的理解来调整他们的决策。

关键词：规模、营运资金、信号理论、资产回报率。

1. Introduction

Companies must optimize their resources to generate profits for the company so that the company's goals can be achieved, namely generating profits to maximize wealth for shareholders [1]. Therefore, every manager in the business must plan sales targets and good cost planning so that the targets to be achieved run smoothly so that the profit from the company will increase.

Profitability is the company's ability to generate net income from activities carried out in the accounting period [2]. Profitability can reflect the benefits of financial investment, meaning that good profitability growth means that the company's prospects in the future are considered to be even better [3]. Achieving profit from high sales volume has always been the main goal in the company because profit is one aspect of the company to be able to maintain the company's survival and implement its development plans. In globalization, the existing competition is getting tougher and economic actors are moving more and more dynamically; therefore, companies are required to improve their operations and services maximally. Three factors affect profitability, namely working capital, company size, and sales growth [4].

According to Boisjoly et al. [5], the working capital budget becomes a fund that must be available in every situation, whether normal or urgent, so that all

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operational activities continue to run smoothly. The definition of working capital is capital that is used to carry out company operations. Working capital is defined as an investment invested in current assets or short-term assets, such as cash, banks, marketable securities, accounts receivable, inventories, and current assets [6]. Sales growth illustrates a manifestation of investment success in the past period, which can be used to predict future growth [7]. Sales growth is market demand and company competitiveness in the industry. High sales growth will certainly affect increasing income [8]. Sales growth reflects the company's performance as well as the company's competitiveness in the market. That means that the increase in market interest in a company's products in a certain period is directly proportional to the increase in profit for the company.

Company size, in general, can be interpreted as a comparison of the size of a company. The size of the company is classified into 3 categories, namely large-firm, medium-firm and small-firm. Determination of the company's size can be determined based on total sales, total assets, and the average level of sales [9]. Large companies have a better chance of obtaining sources of funds from the capital market. That is a distinct advantage for large companies because investors will have more confidence in investing in these companies [10], [11].

The research gap in this study is the effect of working capital on profitability where the purpose of this study is to examine and analyze the effect of working capital, sales growth on profitability and to test and analyze company size as a mediator for the relationship between the effect of working capital, sales growth on profitability.

2. Literature Review

2.1. Signal Theory

The signal theory was first coined by Ross [12] in his research to explain that this theory involves two parties, namely an insider such as management who acts as a party that provides a signal and an outside party such as an investor who acts as a party receiving the signal. By providing a signal or signal, management tries to provide relevant information that investors can use. Then, the investor will adjust his decision according to his understanding of the signal.

2.2. Pecking Order Theory

Myers [13] states that companies with high levels of profitability have low levels of debt because companies with high profitability have abundant internal sources of funds. This theory was first introduced by Donaldson [14], while the naming of pecking order theory was carried out by Myers [13]. Companies prefer internal sources of funds (retained earnings and depreciation) to external funds (debt and equity). If they have to use an external, the company will choose the safest and most secure. Debt issuance is a signal of "good news" in the form of more confident managers about the company's future performance. The relationship of pecking order theory with this research shows that high profitability shows that the working capital spent is related to internal and external funds.

2.3. Agency Theory

Shareholders and managers have different goals, and each wants their goals to be met; the result is a conflict of interest. Shareholders want a greater and faster return on the investment they invest. In contrast, managers want their interests to be accommodated by providing maximum compensation or incentives for their performance in running the company. Therefore, inevitably, managers try to increase profitability so that the needs of both shareholders and managers are met [15].

2.4. Hypothesis

2.4.1. The Effect of Working Capital on Profitability

Working capital is an investment from a company short-term such as receivables, cash, securities, and overall circulating assets / current assets [16]. Working capital is the main problem that will support its operational activities to achieve its goals [17]. The existence of working capital is very important in the company. Financial managers must plan finances well, including the amount of working capital to meet the company's needs. If there is an excess or lack of funds, this will affect company profitability [5].

H1: Working capital has a positive effect on profitability.

2.4.2. The Effect of Sales Growth on Profitability

Sales growth is an increase in sales between the current year and the previous year, expressed in percentage terms [18]. Sales growth can be an indicator of company growth, where sales growth reflects the company's success in investing in the past period to predict the company's growth in the future [19].

H2: Sales growth has a positive effect on profitability.

2.4.3. The Effect of Company Size on Profitability

Company size measures the size of assets owned by large companies, which generally have large total assets [20]. According to Dalci et al. [21], it is easier for large companies to access markets and obtain external funding sources. With more and easier access to sources of funds, companies can meet their needs, such as buying assets, investing, and so on [22].

Based on the above statement, hypothesis 3 states that working capital positively affects company size as a mediator on profitability. Furthermore, hypothesis 4 states that sales growth positively affects profitability through company size as an intervening variable. And hypothesis 5 is that company size has a positive effect on profitability.

3. Research Methods and Materials

This research was conducted at the property and real estate companies listed on the Indonesia Stock Exchange. Meanwhile, this unit of analysis is the financial statements of property and real estate companies listed on the Indonesia Stock Exchange in 2016-2019. The sample is part of the population, namely a certain number of people, events, objects, or objects selected from the population to represent that population. By using the following characteristics:

1. Property and real estate companies listed on the IDX during the observation period
2. Property and real estate companies that have complete and clear financial statement data during the observation period
3. Companies whose ratio cannot be calculated will be excluded
4. The company uses the rupiah currency in its financial statements during the observation period
5. Companies that do not publish their financial statements on IDX will be excluded

3.1. Operational Variables

3.1.1. Variable Independent

Working Capital:

$$\frac{\text{Current assets}}{\text{current liabilities}}$$

Sales Growth:

$$\frac{\text{Sales t} - \text{Sales t} - 1}{\text{Sales t} - 1}$$

3.1.2. Variable Intervening

Firm Size = Log total assets

3.1.3. Dependent Variable

$$\text{Return On Assets} = \frac{\text{Net Profit After Tax}}{\text{Total Assets}} \times 100\%$$

In this study, data analysis techniques used Partial Least Squares (PLS) - Structural Equation Modeling (SEM) with the WarpPLS 7.0 application. Based on that, this research is predictive and explorative. The use of PLS-SEM considers several advantages, including; SEM PLS can work efficiently with small sample sizes and complex models, the assumption of data distribution in SEM-PLS is relatively loose compared to other methods such as CB (Covariance-based) - SEM.

To test hypothesis 1 and hypothesis 3, a model equation can be made as follows:

$$ROA = \alpha 1 + \beta 1 WCapital + \beta 2 Sales\ Growth + \beta 3 Size + \epsilon 1 \quad (1)$$

$$SIZE = \alpha 2 + \beta 4 ROA + \epsilon 2 \quad (2)$$

4. Result and Discussion

4.1. Structural Model Evaluation (Goodness of Fit)

Based on the fit model results presented in Table 1, it can be concluded that this research model is fit. It is also supported by the AVIF value of 1,007 and the AFVIF value of 1,064, which is less than 3.3, indicating no multicollinearity problem between indicators and between exogenous variables. The model's predictive power is indicated by the GoF value of 0.292, so it can be concluded that the model's prediction is very large because it is greater than 0.36.

Table 1 Goodness of fit (WarpPLS 7.0 data processing)

Provisions	Conclusion
Average path coefficient (APC)=0.244, P=0.004	FIT
Average R-squared (ARS)=0.085, P=0.102	FIT
Average adjusted R-squared (AARS)=0.058, P=0.144	FIT
Average block VIF (AVIF)=1.007, acceptable if <= 5, ideally <= 3.3	FIT
Average full collinearity VIF (AFVIF)=1.064, acceptable if <= 5, ideally <= 3.3	FIT
Tenenhaus GoF (GoF)=0.292, small >= 0.1, medium >= 0.25, large >= 0.36	FIT

4.2. Effect Size Test and Variance Factor Test (VIF)

The test results have a VIF value that explains whether there is a vertical collinearity problem in this research model. The results presented in Table 2 show that, as a whole, all variables have a VIF value below 3.3 so that it can be categorized that there is no vertical multicollinearity relationship problem.

Table 2. Effect size test and variance factor test (VIF) (WarpPLS 7.0 data processing)

Path Description	Effect Size	VIF
WCAPITA→ ROA	0.055	1.002
SGROWTH→ROA	0.199	1.016
SIZE → ROA	0.073	1.017

4.3. Full Model Testing & Mediation Effect Testing

Testing the first hypothesis shows that WCAPITAL has a positive effect on ROA. That is indicated by the coefficient value of 0.324 and p-value <0.001 so that the first hypothesis is accepted. For testing the second hypothesis, SGROWTH has a positive effect on ROA, with a coefficient value of 0.354 and a p-value of 0.401, so this hypothesis is rejected. Furthermore, testing the mediation effect on the third hypothesis, namely WCAPITAL, positively affects ROA through SIZE. With a coefficient value of 0.354 and p-value <0.001, this third hypothesis is accepted. The fourth hypothesis, SGROWTH, positively affects ROA through SIZE with a coefficient value of 0.189 and significant at 0.031, so this hypothesis is accepted. Furthermore, SIZE positively affects ROA, with a coefficient value of 0.330 and significant at <0.001, so that hypothesis is accepted.

Table 3 Result of path coefficient and P-value (WarpPLS 7.0 data processing)

Path Description	Path Coefficient	P-Value
WCAPITAL→ROA	0.324	<0.001
WCAPITAL→SIZE	0.354	<0.001
SGROWTH→ ROA	-0.026	0.401
SGROWTH→SIZE	0.189	0.031
SIZE → ROA	0.330	<0.001

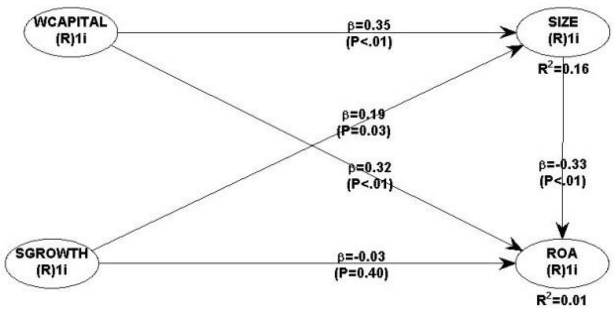

Fig. 1 Full research model

5. Discussion

Based on the research results of the first hypothesis, which states that working capital has a positive effect on profitability, data processing results support the hypothesis where this hypothesis is accepted. Working capital is the number of current assets. This amount is gross working capital. This definition is quantitative because it shows the number of funds used for short-term operating purposes. When working capital is available will depend on the type and level of liquidity of the elements of current assets, such as cash, securities, accounts receivable, and inventories [16].

Furthermore, the second hypothesis in this study was rejected with a significant value of 0.401. Sales activity is the company's main income because if selling products and services are not managed properly, it can directly harm the company. The expected sales target can explain it is not achieved, and income will decrease; sales are one of the sources of business income [18].

Furthermore, hypotheses three and four successfully prove that company size can mediate the effect of working capital on profitability and the effect of sales growth on profitability. This concept assumes that working capital is the number of current assets (gross working capital). This concept does not emphasize the quality of working capital, whether working capital is financed by the owners, long-term debt or short-term debt, so that large working capital does not reflect the large margin of safety of short-term creditors, even the large working capital according to this concept does not guarantee the continuity of future operations. It does not reflect the liquidity of the company concerned [21]. Sales are a source of company revenue. The company certainly wants its sales growth to remain stable or even increase, and costs can be controlled, so the profit earned will increase. If profits increase, the profits that investors will get can also increase. Sales growth reflects the success of investment in the past period and can be used to predict future growth [23]. Sales reflect the company's performance because an increase does not follow costs that exceed the sales growth rate. The signaling theory states that increased sales can convince investors that the company will provide high yield feedback followed by high operating efficiency.

6. Conclusion

The research gap in this study is the effect of working capital on profitability, where this study aims to test and analyze the effect of working capital on profitability. By using data on real estate companies listed on the IDX 2016-2019. This study succeeded in proving that working capital and sales growth can be mediated by company size on profitability. However, the second hypothesis of the effect of sales growth on profitability is rejected. This study uses a grand theory, namely the signaling theory, which states that management tries to provide relevant information that investors can use by providing a signal.

6.1. Suggestions and Contributions

The results of this study indicate that working capital has a positive and significant effect. It is recommended to maintain and improve the company's financial health so that the available funds have a good influence on its profitability. Suggestions for researchers who will carry out further research are expected to add other variables other than those the author studied or can replace one or several variables with other variables such as capital structure, working capital efficiency, or debt policy. And can increase the time and extend the research period and change the object of research.

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