# THE EFFECT OF WORKING CAPITAL AND OPERATING COST ON THE PROFITABILITY OF PT ADHI KARYA IN 2021 – 2023

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#### Abstract

Corporate financial management literature often mentions about the relationship between working capital and operational costs when it comes to profitability. These two should be well balanced to maintain the health of the firm's finances since the large costs endured by a company will decrease the company's profitability. Therefore, a company must have capital that at least meets the amount of operating costs in a company. This study aims to examine the effect of working capital and operating costs have on profitability in a company who has a struggle to manage effective working capital. Using quantitative methods, we found that working capital affects profitability, but operational costs surprisingly do not affect profitability

Keywords: working capital, operational costs, profitability

## Introduction

A company or an organization will certainly do everything possible to achieve the company's previously set goals, one of which is to get as much profit or profit as possible (Meiliana et al., 2024). Therefore, resources are needed to be well managed so that the company's goals are achieved. The company's goal that all the managers have eyes on is profit. Profit is used for the continuation of a company and the growth and development in business (Kulsum & Muniarty, 2020).

Working capital as one factor that builds firm's profit is often a major problem that is crucial for most companies. All focus is on processing working capital and current funds (Sulistyono et al., 2020). Each company generally requires working capital in spending activities such as purchasing materials, payrolling, and so on, in which all the money to get the resource surely can be obtained by the management in a short period either from the sales of services and products (Prasetia et al., 2022). The growth of a company is aligned with the need for working capital. Working capital management is crucial in maintaining the continuity and progress of the company in a stable manner (Kristanti, 2021). Any mistakes in working capital management can have a negative impact to the company, even potentially causing serious financial losses and bankruptcy risks (Mipo, 2023). Meanwhile, operating costs are costs incurred by the company in carrying out its daily operational activities. This includes all expenses directly related to the production of goods or the provision of services, including raw material costs, direct labor costs, factory overhead costs, distribution costs, marketing costs, utility costs, and so on (Bani et al., 2023). Operating costs are an important part of calculating a company's net profit because they reflect how efficient the company is in managing resources and carrying out its operational activities. Effective operational cost management can help companies increase their profitability by controlling expenses and improving operational efficiency (Zebua, 2022).

The relationship between working capital and operational costs is very close in the context of corporate financial management (Nursyamsu et al., 2020). Working capital, which is the amount of current assets owned by a company minus its current liabilities, is the capital used to support the company's daily operations. This includes purchasing raw materials, paying operating expenses, and financing inventory. As capital is used in operational activities, working capital directly affects operating costs. Operating costs, on the other hand, are costs incurred by the company to carry out its operational activities (Kristanti, 2021). These costs include daily expenses such as raw material costs, production costs, distribution costs, and administrative costs. Operating costs also include costs directly related to working capital, such as inventory costs and direct labor costs (Ginting et al., 2023).

The relationship between working capital and operating costs can be seen in terms of mutually supportive expenses. Working capital is used to finance the purchase of raw materials and inventory, which are the components of operating costs (Maulana & Euis, 2023). On the other hand, operating costs that are issued by the company will also affect working capital by reducing the amount of current assets available. Effective working capital management can help optimize the use of the company's financial resources and control operating costs (Kristanti, 2021). However, an efficient operating cost can help maintain adequate working capital and ensure the smooth operation of the company. Therefore, a good understanding of the relationship

between working capital and operating costs is essential for corporate financial management to maintain a healthy balance between the two.

PT Adhi Karya was chosen as the object of research because it has interesting characteristics and conditions to study. One of their problems is efficient and effective working capital management, where the company may have difficulty maintaining a balance between current assets and current liabilities, which can affect its liquidity. In addition, increasing operating costs without being balanced by appropriate income can also be a problem. This can be caused by increases in raw material prices, labor costs, or overhead costs. Changes in the external environment such as market fluctuations or regulatory changes can also affect the company's working capital needs and operating costs. In dealing with these problems, optimizing the use of resources is important, including the use of working capital and operating costs, to improve the company's efficiency and profitability. Therefore, research on the effect of working capital and operating costs on profitability at PT Adhi Karya is relevant to help identify factors that affect the company's financial performance and find the right solutions to improve company performance.

This study uses data from the period 2021 - 2023 because it is the most recent period available, so this data is more relevant to describe the current financial condition of PT Adhi Karya. This period includes the COVID-19 pandemic which has had a significant impact on the economy and the construction industry. The use of this data makes it possible to analyze how the pandemic affects the working capital, operating costs, and profitability of PT Adhi Karya. Data from three years is used to observe trends in working capital, operating costs, and profitability, not just a picture at one point in time. Data from several years can help filter out temporary fluctuations and show a more stable picture of the company's financial condition.

## Methods

The method used in this study is a quantitative approach method that uses data in the form of numbers or statistics to analyze phenomena or relationships between variables. This method focuses on the collection, analysis, and interpretation of data that can be measured quantitatively (Arikunto, 2017). The types of data used in this study include quantitative data. Data sources come from secondary data obtained from articles and related reference books.

## **Results and Discussions**

### Normality Test

The normality test is one of the important steps in regression analysis to ensure that the basic assumptions of the regression model are met. The assumption is that the residual value (i.e. the difference between the predicted value generated by the model and the actual observed value) has a normal distribution. This normal distribution is important because many statistical methods rely on this assumption, such as significance tests, confidence intervals, and predictions.

The Kolmogorov-Smirnov Z method is one of the techniques used to test data normality. This test compares the empirical distribution of residual data with the expected theoretical distribution (in this case, the normal distribution). The results of this normality test provide information about the extent to which the residual data follows a normal distribution.

		Unstandardiz ed Residual
Normal Paramete rs <sup>a,b</sup>	Mean Std. Deviation	,0000000 2,93251784
Most Extreme Differences	Absolute Positive Negative	,102 ,102 -,102
Kolmogorov-Smirn ov Z Asymp. Sig. (2- tailed)		,102 ,200

a. Test distribution is Normal.

b. Calculated from data.

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Table 1 shows the results of the Kolmogorov-Smirnov normality test for unstandardized residuals in the regression analysis. In the table, the parameters of the normal distribution calculated from the data are given, including the mean and standard deviation of the unstandardized residuals. In the "Most Extreme Differences" section, the largest extreme differences between the distributions are presented. The residual data is categorized with the expected normal distribution, which in this case is 0.102. The Kolmogorov-Smirnov test statistic (Kolmogorov-Smirnov Z) is also listed, with a value of 0.102.

The main focus is the asymptotic significance value (two-sided) of the normality test, which is recorded at 0.200. This result indicates that the residual value of the data used in this study is not significantly different from the normal distribution, because the significance value (0.200) is greater than the significance level commonly used (0.05). In a normality test, a significance value of 0.05 indicates that there is a 5% chance of obtaining statistical results that show deviations from the normal distribution, assuming the data is normally distributed. If the significance value of the normality test is > 0.05, then the data is normally distributed. Conversely, if the significance value of the normality test is < 0.05, then the data is normally distributed. Thus, the conclusion that can be drawn is that the assumption of normality in the regression model is met, and regression analysis can be carried out with higher confidence.

## Multiple Linear Regression Analysis

Multiple linear regression analysis is a statistical method used to understand the relationship between one dependent variable (response variable) and two or more independent variables (predictor variables). The main goal is to model and understand how these independent variables affect the dependent variable. With the presentation of the coefficient results that can be seen in the table below:

Table 2. T-test									
Coefficients									
Model		Unstandarrdized Coefficientts		Standarrdized Coefficients	t	Sig.			
		В	Std. Eror	Beta	Ľ	Jig.			
	(Constant)	.048	0.29		1.647	.107			
1	Working Capital	.321	.075	.473	3.418	.002			
	Operational Costs	.012	.017	.113	.921	.530			

The initial regression equation can be written as follows:

## $Y = \beta 0 + \beta 1 X 1 + \beta 2 X 2 + \varepsilon$

In this equation:

- Y is the dependent variable (in this case, the variable to be predicted).
- X1 and X2 are independent variables used to predict the dependent variable Y.
- $\beta 0$  is the intercept (bias) of the regression model.
- β2 is the regression coefficient that shows how much change in Y is caused by a one-unit change in X1 and X2 respectively.
- $\epsilon$  is the error term (residual) that represents the uncertainty in the regression model.

This is the regression equation used to predict the value of Y based on the values of X1 and X2. The t-test is also often referred to as partial, this test is carried out to measure how much influence each independent variable has. The working capital coefficient ( $\beta$ ) is 0.321 with a t-statistic value of 3.418 and a significance (sig.) Of 0.002. This shows that there is a positive and significant relationship between working capital and profitability. This means that an increase in the company's working capital will increase its profitability.

Several studies with similar findings were conducted by Syamsuriani (2021) who analyzed the effect of working capital turnover and operating costs on profitability at PT Des Teknologi Informasi. Agustyawati (2019) conducted a study on the analysis of the effect of working capital on profitability in manufacturing companies listed on the Indonesia Stock Exchange (IDX). The results of his study showed that working capital has a positive and significant effect on profitability.

There are several reasons why a positive relationship between working capital and profitability can occur, namely adequate working capital allows companies to increase inventory so that they can better meet customer demand and increase sales. Well-managed working capital allows companies to collect receivables more quickly and minimize bad debts. This will increase cash flow and accelerate the conversion of working capital

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into profit. Companies with sufficient working capital will not be hampered by limited funds when needed, so they can carry out business strategies more effectively and increase profitability.

The next analysis is about the operating costs. Based on Table 2, the operating cost coefficient ( $\beta$ ) is 0.012 with a t-statistic value of 0.921 and a significance (sig.) Of 0.530. This shows that there is no significant relationship between operating costs and profitability. This means that an increase or decrease in operating costs does not directly affect changes in the company's profitability. Research with similar findings by Trisnaningsih (2018) analyzed the influence of working capital and operating costs on profitability. The results of her research showed that partially there was no influence between working capital and operating costs on profitability.

There are several reasons why operating costs do not have a significant effect on profitability in this study, namely, the method of measuring operating costs may vary between companies, making it difficult to compare their effects accurately. In addition to working capital and operating costs, many other factors can affect profitability, such as company strategy, macroeconomic conditions, and other external factors. The data used may only reflect the condition of the company in a certain period, so it cannot be generalized for the long term. Thus, it is necessary to consider the quality of operating costs, industry structure, economic scale, and analysis period when evaluating the effect of operating costs on profitability.

Although several studies show similar results, the fact is that each company has different characteristics and conditions. There are several possible reasons why operating costs do not have a significant effect on profitability in this study, namely, the method of measuring operating costs may vary between companies, making it difficult to compare their effects accurately. In addition to working capital and operating costs, many other factors can affect profitability, such as company strategy, macroeconomic conditions, and other external factors. The data used may only reflect the condition of the company in a certain period, so it cannot be generalized in the long term.

## Conclusions

Based on the research that has been conducted, the working capital affects profitability but not the operating costs. Future studies may use more varied than this study so that data collection is more effective and efficient which of course results in more data collection. Moreover, PT Adhi Karya should be able to provide more focus on calculating working capital because working capital is one of the factors that has a good impact on profitability at PT Adhi Karya.

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