# THE DETERMINANTS OF CASH HOLDING

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#### Submitted: 18-01-2024, Revised: 24-02-2024, Accepted: 18-04-2024

#### ABSTRACT

The aim of this research was to empirically prove the influence of profitability, leverage, sales growth, and capital expenditure on cash holding. The sample selection method used purposive sampling. The research sample was 63 primary consumer sector companies listed on the Indonesia Stock Exchange with a research period of three years and were processed by multiple regression analysis of panel data using the Eviews. The research results showed that there was only one variable, namely leverage, which had a negative impact on cash holding. Profitability did not have a positive impact on cash holding, while sales growth and capital expenditure did not have a negative impact on cash holding.

Keywords: Cash Holding, Profitability, Leverage, Sales Growth, Capital Expenditure

## 1. INTRODUCTION

Cash is the most important asset on a company's balance sheet. Ritonga and Harmain (2023) explain that a company's financial structure is very important and influences the amount of cash available. According to Rahman (2021), sufficient cash availability can streamline company activities so that the company does not experience financial problems. Holding excessive cash can reduce company efficiency. On the other hand, holding too little cash can disrupt the company's liquidity. Therefore, it is important for companies to maintain optimal cash levels in the hope of increasing company value.

According to Vukovic *et al.* (2022) the policy of maintaining optimal cash levels is one of the main objectives of company management. The cash holding policy is influenced by the company's operational and financing activities. Large operational activities and company financing encourage companies to hold large amounts of cash. Holding cash (cash holding) is one way for companies to survive financial difficulties. According to Yanti *et al.* (2022) cash holding is useful for fulfilling dividend policies, minimizing the possibility of financial distress, and reducing asset liquidity.

Vukovic *et al.* (2022) showed that profitability had a positive impact on cash holding but Cindy *et al.* (2023) found that there was a negative impact of profitability on cash holding. For leverage, Chandra and Rahman (2023) result showed that leverage had a negative impact on cash holding, on the contrary Endri *et al.* (2020) shows the positive impact of leverage on cash holding and Vukovic *et al.* (2022) showed that there is no significant impact of leverage on cash holding. Rustam and Rasyid (2022) stated that they found a negative impact of sales growth on cash holding but not significant, while Gionia and Susanti (2020) also Litungan and Surjadi (2023) showed that there is a negative impact of sales growth on cash holding. Wirianata *et al.* (2023) showed that capital expenditure had a negative impact on cash holding but not significant but Pausi (2022) stated that capital expenditure had a positive impact on cash holding.

The subjects of this research are primary consumer sector companies list, ed on the Indonesia Stock Exchange with a research period of three years. The primary consumer sector was chosen on the grounds that this sector experienced sales growth and financed capital expenditure.

This study replicates the research of Vukovic *et al.* (2022). The difference between this research and previous research is that this research adds sales growth from Suherman (2017) and capital expenditure from Suwaidan (2022). This research uses primary consumer sector companies listed on the Indonesia Stock Exchange with a research period of three years.

This implications of study are company can consider leverage in planning, managing and determining the optimal amount of cash holding for the company. For investors, the results of this research are expected to provide useful information in making investment decisions that can describe the condition of cash management in the company, so that investors can assess the company's capabilities.

Pecking order theory supports that a company's internal funding can be met from the company's level of profitability and liquidity. According to Eneh *et al.* (2019) this theory explains that companies prefer internal funding to external funding and debt before equity. This is the cheapest way of financing. When investment needs cannot be met, the company will use external funds by issuing debt as funding, and as final funding, the company will issue equity. Wirianata *et al.* (2023) state that companies utilize internal sources of financing first and if the investment value exceeds the amount of internal funds available, then cash holding has the potential to decrease because it is used to meet investment needs. According to Vukovic *et al.* (2022) in this theory, cash holding should be at a level that will achieve a balance between retained earnings and investment needs.

Modigliani and Miller (1958) explained that in trade off theory, companies consider the costs and benefits of holding cash. According to Wirianata *et al.* (2023) marginal costs arise when a company loses profitable investment opportunities because it holds cash as reserve funds. Marginal benefits are obtained by the company when the company avoids the costs of converting non-cash assets as well as external funding costs due to holding a certain amount of cash. According to Vukovic *et al.* (2022) trade off theory assumes that companies seek to determine the optimal level of cash holding, where the marginal benefits and marginal costs of holding cash are balanced. According to Asteria and Riauwanto (2022), if the benefits are greater than the costs incurred from holding cash, then the company has a tendency to hold large amounts of cash. Cash holding can minimize costs arising from external funding.

According to Rokhayati *et al.* (2023) cash holding is the ratio of cash and its equivalent to the company's total assets. Cash holding acts as a reserve fund for the company. According to Eneh *et al.* (2019) cash holding is the amount of company cash that is adjusted to the company's financial needs. This has advantages for the company when external funding has a higher capital cost than funds available internally within the company. Cash holding shows the amount of cash held by a company with the aim of carrying out its operational activities. According to Chandra and Rahman (2023) cash holding is an important decision for companies in providing company liquidity for their operational needs.

According to Rokhayati *et al.* (2023) profitability reflects profits from activities resulting from using company assets. Rustam and Rasyid (2022) explain that profitability measures the success

of a company's performance in managing its assets and resources, which is reflected in the amount of profit earned.

One measure of a company's ability to meet its financial obligations is the leverage ratio. According to Eneh *et al.* (2019) leverage shows that a company relies on a mixture of equity and debt to finance the company's operating activities and shows the amount of company debt. Uncontrolled debt levels can worsen company performance.

According to Rustam and Rasyid (2022) sales growth shows sales growth by comparing sales in the previous period and also reflects market demand regarding the company's products. Aimeeva and Aris (2023) explain that sales growth reflects the company's ability to increase its sales over time.

Capital expenditure is important for the growth and development of a company, so it is likely that companies will often allocate capital expenditure in their budget. According to Pausi (2022) capital expenditure is company expenditure to increase the productive capacity of fixed assets which will ultimately increase the company's operational efficiency. Capital expenditure shows expenses for investing in fixed assets.

Ritonga and Harmain (2023) explain that high company profitability is reflected in the company's capacity to generate substantial income, which ultimately increases the company's retained cash. Companies that generate high profits will tend to hold large amounts of cash for their investment needs.

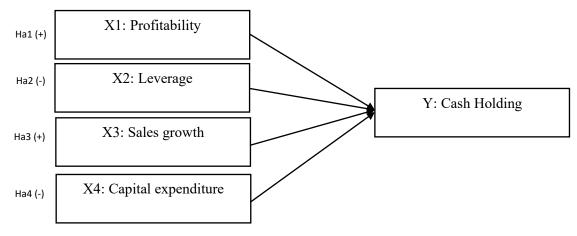
Ha1: Profitability has a positive impact on cash holding.

According to Asteria and Riauwanto (2022), the higher the leverage in a company, it shows that the company has strong access to corporate financing sources. This causes the company to have strong debt support in its funding sources and does not require large amounts of cash holding. According to Vukovic *et al.* (2022) leverage increases and cash holdings decrease when the investment level is greater than retained earnings, while leverage decreases and cash holdings increase when the investment level is smaller than retained earnings. High leverage indicates the company has issued large amounts of debt. High leverage gives rise to high interest expenses, this reduces the company's ability to hold cash, and conversely, decreasing leverage will increase the amount of cash held by the company.

Ha2: Leverage has a negative impact on cash holding.

Dewi and Effriyanti (2022) explain that sales growth affects cash holding, where companies with high sales growth tend to receive increased cash from their sales so that the amount of cash holding tends to be large. According to Yulita (2021) sales growth reflects the company's success. High sales growth reflects the company's increasing revenues and also indicates increasing cash holdings, which ultimately holds large amounts of cash. Ha3: Sales growth has a positive impact on cash holding.

Cindy *et al.* (2023) explain that companies that have large investment costs generate less surplus from internal funds to invest in liquid asset reserves, so the company holds a small amount of cash. Wirianata *et al.* (2023) explain that the greater a company's capital expenditure, the lower the amount of cash holding. Postponing non-urgent capital expenditure can maintain the amount of cash holding to maintain smooth operations. Capital expenditure can be made if the expenditure can increase the company's competitiveness.



Ha4: Capital expenditure has a negative impact on cash holding.

Figure 1. Research Model

## 2. RESEARCH METHOD

The data in this research is secondary data, where the author uses financial report data from primary consumer sector companies listed on the Indonesia Stock Exchange with a research period of three years. The sample selection method uses a purposive sampling method with the criteria used, namely primary consumer sector companies that have been consistently listed on the Indonesia Stock Exchange for three years, and present audited financial reports as of December 31. Based on these criteria, a sample of 63 companies was obtained and with a research period of three years, 189 research data were obtained. This research used one dependent variable and four independent variables. Table 1 below is a summary of the operationalization of this research variable.

	Tabel 1. Operationalization od Research Variab	oles	
Variable	Proxy	Scale	Source
Cash Holding	$CH = \frac{Cash \text{ and } Cash \text{ Equivalent}}{Total \text{ Assets}}$		Vukovic <i>et al.</i> (2022)
Profitability	$ROA = \frac{Net Income}{Total Assets}$	Ratio	Vukovic <i>et al.</i> (2022)
Leverage	$DAR = \frac{\text{Total Debt}}{\text{Total Assets}}$	Ratio	Vukovic <i>et al.</i> (2022)
Sales Growth	$SG = \frac{\text{Total Sales } (t) - \text{Total Sales } (t-1)}{\text{Total Sales } (t-1)}$	Ratio	Suherman (2017)
Capital Expenditure	$CAPEX = \frac{Fixed Assets(t) - Fixed Assets(t-1) + Depreciation}{Total Assets}$	Ratio	Suwaidan (2022)

# 3. RESULTS AND DISCUSSIONS

In this research, before the model selection test and multiple linear regression test were carried out, the classical assumption test was first carried out consisting of the normality test, multicollinearity test, autocorrelation test and heteroscedasticity test. The test results show that all classical assumption tests in the regression model have passed. After the classical assumption test is carried out, the model selection test is then carried out. From the results of the Chow test, the prob value is obtained. The cross-section chi-square is 0.0000, where this value indicates that the better model to use is the fixed effect model, because this value is below 0.05. Next, the Hausman test was carried out. From the Hausman test results, the prob value is obtained. The random cross section is 0.4028, where this value is greater than 0.05 so the model chosen is the random effect model, and the test must be continued with the Lagrange Multiplier test. The Breusch-Pagan prob value is 0.0000, where this value is below 0.05 so it can be concluded that the best model to use in this research is the random effect model. In table 2 below shows the results of multiple linear regression testing:

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Variable	Coefficient	t-Statistic	Prob.	
С	0,152797	8,034432	0,0000	
ROA	0,072078	1,564955	0,1193	
DAR	-0,103076	-3,729688	0,0003	
SG	-0,016138	-1,328067	0,1858	
CAPEX	-0,001876	-0,033362	0,9734	
Adjusted R-squared		0,066751		
Sig. (F-statistic)		0,002154		

Table 2. Multiple Linear Regression Test Result

From the numbers in table 2, the Adjusted R-squared shows a value of 0.066751. This means that the variables used in this research, namely profitability (ROA), leverage (DAR), sales growth (SG), and capital expenditure (CAPEX) can explain the dependent variable, that is cash holding (CH) of 0.066751 or 6.6751%, while the remaining 93.3249% is explained by other variables not used in this research model.

The F test results show a sig value. (F-statistic) is 0.002154 where this value is smaller than 0.05 so it can be concluded that the independent variables used in this research which consist of profitability, leverage, sales growth, and capital expenditure have an impact on cash holding as the dependent variable.

From the results of the t test (from table 2) it can be seen that the profitability variable has a prob value. of 0.1193 and the regression coefficient of 0.072078. The regression coefficient is positive and the prob value. greater than 0.05, so the first hypothesis which states that profitability has a positive impact on cash holding cannot be accepted. These results show that increasing profitability can increase cash holding, but the effect is not significant. The lack of impact of profitability on cash holding could be because companies with a high level of profitability can use the profits they obtain to expand their operational activities, for example by purchasing additional fixed assets. Apart from that, companies can also invest. Thus, the cash held by the company can be low, even though the company has high profitability. These results are consistent with research by Asteria and Riauwanto (2022), Ritonga and Harmain (2023), and Rokhayati *et al.* (2023). However, the results of this study are not consistent with research by Rahman (2021), Rustam and Rasyid (2022), and Vukovic *et al.* (2022) who obtained profitability results had a positive impact on cash holding. Also inconsistent with the research results of Aftab *et al.* (2018) and Cindy *et al.* (2023) which found that there was a negative impact of profitability on cash holding.

Next, the leverage variable has a prob value. amounting to 0.0003 with a coefficient value of - 0.103076 which indicates that there is a negative impact of leverage on cash holding, so the second hypothesis which states that leverage has a negative impact on cash holding can be

accepted. With higher debt, the interest that the company must pay will also increase. This makes it difficult for companies to hold large amounts of cash. These results are consistent with research by Aftab *et al.* (2018), Ekadjaja *et al.* (2021), also Chandra and Rahman (2023). However, the results of this study are not consistent with the research of Endri *et al.* (2020) which shows the positive impact of leverage on cash holding. Also different from the research of Pausi (2022), Rustam and Rasyid (2022), Vukovic *et al.* (2022), Yanti *et al.* (2022), and Rokhayati *et al.* (2023) whose results state that there is no significant impact of leverage on cash holding.

The next variable, namely sales growth, has a prob value. of 0.1858 and the regression coefficient is -0.016138. The regression coefficient is negative and the prob value. greater than 0.05, so the third hypothesis which states that sales growth has a positive impact on cash holding cannot be accepted. These results show that increasing sales growth can reduce cash holding, but the effect is not significant. When sales growth is high, the company will have an increase in income so that the company will retain more cash from the income. It turns out that the research results show that the higher the company's sales growth, the company does not necessarily hold large amounts of cash, because this income could be used to finance the company's larger operations as a result of increasing sales within the company. These results are consistent with research by Rustam and Rasyid (2022). Suherman's research (2017) shows that there is a positive impact of sales growth on cash holding, while research by Gionia and Susanti (2020) also Litungan and Surjadi (2023) shows that there is a negative impact of sales growth on cash holding.

The last variable, namely capital expenditure, has a prob value. amounted to 0.9734 and the regression coefficient was -0.001876. The regression coefficient is negative and the prob value. is greater than 0.05, so the fourth hypothesis which states that capital expenditure has a negative impact on cash holding cannot be accepted. These results show that increasing capital expenditure can reduce cash holding, but the effect is not significant. According to pecking order theory, if a company has high capital expenditure, the company tends to have a low amount of cash holding because the cash holding will be used to finance the company's capital expenditure. Therefore, the greater the amount of capital expenditure incurred by the company, the lower the company's cash holding amount. However, the results of this study show that increasing capital expenditure has no effect on reducing cash holding. Companies with high capital expenditure may not affect the amount of cash held within the company if the expenditure is financed by debt (from external parties). Apart from that, if the value of capital expenditure is higher, more cash must be spent for investment needs, so the company has a tendency to hold large amounts of cash. These results are consistent with research by Suwaidan (2022), Nurvatno and Adi (2023), also Wirianata et al. (2023), but is not consistent with research by Cindy et al. (2023) who received capital expenditure results had a negative impact on cash holding. It is also different from Pausi's (2022) research which states that capital expenditure has a positive impact on cash holding.

## 4. CONCLUSIONS AND SUGGESTIONS

The aim of this research is to empirically prove the influence of profitability on cash holding, the influence of leverage on cash holding, the influence of sales growth on cash holding, and the influence of capital expenditure on cash holding. The research results show that there is only one variable, namely leverage, which has a negative impact on cash holding, while the other three

variables, namely profitability, sales growth and capital expenditure, have no impact on cash holding.

This research has limitations, including the limited number of independent variables used, the short research period, and the limited company sector used as the research sample. Thus, for further research, other independent variables can be used such as company size, extending the research period, and using companies from other sectors as research samples.

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