



THE EFFECT OF PROFITABILITY, LEVERAGE, AND FIRM SIZE ON CASH HOLDING INDUSTRY COMPANY

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Abstract

This study aims to empirically prove the effect of profitability, leverage, and firm size on cash holding in industrial sector companies listed on the Indonesia Stock Exchange during 2019-2022. This research uses quantitative methods. The population in this study amounted to 63 industrial sector companies. The sample used in this study was selected using purposive sampling with predetermined sample criteria. Therefore, the total sample of this study was 22 industrial sector companies. The data used is secondary data obtained from the annual financial statements of selected industrial sector companies. The data is analyzed using multiple linear regression. The results of this study indicate that profitability and leverage influence cash holding, while firm size does not. Suggestions that can be proposed are that future research can add variables that have a stronger relationship. In addition, it is hoped that future research can add a more extended sample or research period that might show better and more accurate results.

Keywords: Cash holding, Profitability, Leverage, Firm Size

INTRODUCTION

The economic recession during the pandemic has caused a decline in sales in all sectors. In addition, economic recession causes a decrease in consumer demand, thus disrupting business. PT Astra Internasional experienced the same thing. PT Astra Internasional's sales decreased by 40% compared to sales before the economic recession. It impacts cash holding. Cash holding is the company's total cash and liquid assets as a reserve fund to deal with urgent financial needs.

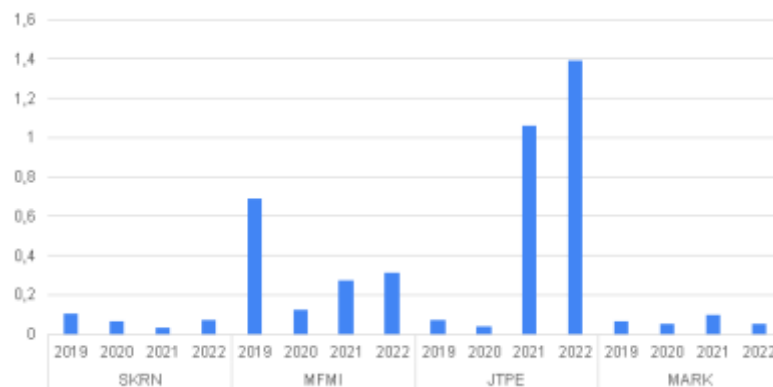


Figure 1 Cash Holding Ownership of Industrial Sector Companies

The decreased cash holding is not only experienced by PT Astra International but has also happened to several other industrial sector companies. It can be seen through the data above that cash holding in four industrial sector companies in 2019 and 2020 is very low compared to 2021 and 2022.

It indicates that companies will reduce their cash holding levels in response to economic uncertainty caused by the pandemic.

The decrease in cash holding is the company's response to economic instability because a company needs to make cash reserves to optimize its cash. Optimal cash reserves need to be maintained so that the amount is manageable so that it can be limited to the amount needed (Maarif et al., 2019). Having too much cash holding can provide weaknesses in the form of lost opportunities to earn profits because the cash owned by the company is only stored and can harm shareholders due to low stock returns (Wijaya et al., N, 2019). If the company only keeps its money without investing, its stored value will decrease. Cash holding is significant for companies to meet the needs of their operational activities, such as debt payments. Several factors can influence cash holding, including profitability, leverage, and firm size.

Profitability is the company's ability to manage its wealth to generate profits in a certain period. A company carries out its operational activities to make a profit. The higher the profit the company gets, the higher the company's cash holding. Companies that have high profitability indicate that they have good financial performance. Good financial performance can attract investors because of the increase in share prices. It aligns with the explanation of agency theory, which states that investors or shareholders authorize company management to manage company assets to generate maximum profit.

Leverage is the debt owned by the company to carry out its operational activities. If the company has low leverage, its funds finance its operational activities. Meanwhile, companies with a high level of leverage do not fund their operational activities using their funds but use funds obtained from outside the company to fund their operational activities. Companies that use outside the company must pay debt installments and interest because this can influence the company's cash holding.

Firm size can affect cash holding because companies with large sizes also tend to have significant cash holdings due to the company's high need to fund its operational activities. In addition, large companies are often involved in investment projects, so they need adequate cash reserves to support their projects.

There are two theories that regulate cash-holding behavior, namely, trade-off theory and pecking order theory. When associated with this research, trade-off theory shows that determining the optimal value of a company's cash holding can be done by considering the company's costs and profits (Ningrum et al., 2023). Meanwhile, the pecking order theory supports that companies with high profits prioritize funding costs using internal costs.

With the phenomena that researchers find and the differences from previous research results, researchers want to find out and further examine the factors that affect the company's cash holding, namely profitability, leverage, and firm size. This study uses industrial sector companies because the industrial sector is one of the sectors affected by the COVID-19 pandemic. This study aimed to determine whether profitability, leverage, and firm size affect cash holding. The difference between this

research and previous research lies in the research object chosen. Thus, this study uses the annual reports of industrial sector companies in 2019-2022. This study uses 2019-2022 because, in that year, researchers can see the state of the company's cash holding in the years before, during, and after the pandemic.

Cash holding can be optimal if it helps the company profit from its primary or other activities. Companies with a lot of cash holding will make it easier for companies to invest. The more profitable the company is, the more cash the company has. It also aligns with the pecking order theory, explaining that the company's structure prioritizes internal funding.

H₁: Profitability Affects Cash Holding

Companies that have a high level of leverage usually have high cash reserves. Generally, companies with collateral against debt will find it easier to access external sources of funds than companies that do not have collateral (Umdiana & Claudia, 2020). It allows the company to reduce its cash holding as part of its financial policy. It implies that the higher the company's debt, the less cash it has because it is used to pay the loan and interest. Trade-off theory explains that companies will use debt to increase shareholder value due to tax cuts, which makes the debt an optimal asset (Hertanti & Wardianto, 2022). It can be concluded that companies that use external funding and manage it appropriately increase cash holding.

H₂: Leverage Affects Cash Holding

Large companies tend to have more assets used as collateral. The larger the company's size, the greater the need for funding it requires. In addition, companies with larger sizes tend to have easier access to capital markets and seek other external sources of funds to maintain higher cash holding. It is in line with the pecking order theory, which explains that large companies tend to have higher cash holdings because they have more stable sources of income and earn higher profits.

H₃: Firm Size Affects Cash Holding

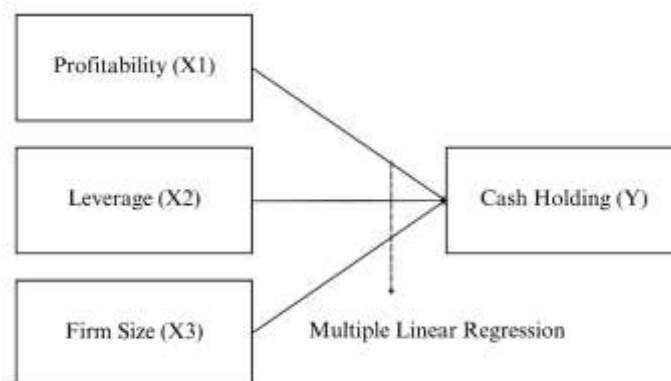


Figure 2 Data processed by researchers (2024)

METHOD

The method chosen in this research is the quantitative method. The quantitative method is a research method based on positivism philosophy used to examine specific populations and samples. Data is collected through research instruments and analyzed statistically to test the hypothesis set (Sugiyono, 2019).

The population used in this study were all industrial sector companies listed on the Indonesia Stock Exchange (IDX) in 2019-2022, totaling 63 companies. The study sample included all industrial companies listed on the Indonesia Stock Exchange (IDX) from 2019 to 2022. The research data used is secondary data obtained from the company's annual financial statements accessed through www.idx.co.id. The data was obtained using documentation techniques with the results of 22 companies in the 2019-2022 period, so the total sample in this study was 88 company data. The research model applied is a multiple linear regression model, which tests how much influence two or more independent variables have on one dependent variable (Ghozali, 2021). In this study, cash holding is calculated by the formula:

$$\frac{\text{Cash and cash equivalents}}{\text{total assets}}$$

Profitability is approximated by return on asset (ROA) because ROA can show the net profit generated by a company from each capital used in total assets. The measurement scale of ROA is in the form of a ratio obtained through the following formula:

$$\frac{\text{Net Income}}{\text{Total assets}}$$

The debt approximates leverage to assets ratio (DAR) because the debt to assets ratio (DAR) can measure the company's ability to fulfill its obligations, which is indicated by the amount of assets used to pay its debts. The DAR measurement scale is calculated through the formula:

$$\frac{\text{Total Liabilities}}{\text{Total assets}}$$

Firm size is a scale that describes the size of a company's condition. Firm size can be measured using the formula:

$$\text{Firm size} = \text{Log Natural (Total assets)}$$

RESULTS AND DISCUSSION

Normality Tests (Kolmogorov-Smirnov Test)

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		87
Normal Parameters ^b	Mean	,0000000
	Std. Deviation	,10273369
Most Extreme Differences	Absolute	,090
	Positive	,090

	Negative	-,061
Test Statistic		,090
Asymp. Sig. (2-tailed)		,078 ^c

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.

Source: SPSS Processing Results (2024)

Based on the table above, it is known that Asymp. Sig. of 0,078 > 0,050. Indicates that the variables in this study can be considered normally distributed.

Multiple Linear Regression Test

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,039	,046		,844	,401
	ROA	1,101	,147	,676	7,466	,000
	DAR	,092	,042	,196	2,161	,034
	Firm size	-,003	,004	-,055	-,913	,364

a. Dependent Variable: Cash holding

Source: SPSS Processing Results (2024)

Based on the table above, It can be recognized that the regression equation model in this study is:

$$Y = 0,039 + 1,101 X_1 + 0,092 X_2 - 0,003 X_3 + e$$

The above equation means that the constant value is 0.039, which indicates that if the value of the three variables is considered none or zero, the value of cash holding increases by 0,039. The coefficient X_1 is 1,101, indicating a positive correlation between profitability and cash holding; if profitability increases, cash holding will increase by 1.101. The coefficient from the X_2 variable is 0,092, indicating a positive correlation between leverage and cash holding; if leverage increases, cash holding will increase by 0.092. While the coefficient X_3 is -0.003, which indicates a negative correlation between firm size and cash holding, if firm size increases, cash holding decreases by 0,003.

F Test (Goodness of Fit)

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,136	3	,712	65,117	,000 ^b
	Residual	,908	83	,011		
	Total	3,044	86			

a. Dependent Variable: Cash holding

b. Predictors: (Constant), Firm size, ROA, DAR

Source: SPSS Processing Results (2024)

It shows that the significance number in the F - Anova test is 0.000, and based on the amount of data (n) and independent variables (k) in this study, then $n = 88$ and $k = 4$ shows the Ftable value of 2.475. With a significance value that shows a value of 0.000 and an Fcount of 65.117, it can be interpreted that the independent variables or independent variables in this study have a joint influence on the dependent variable

R² Test (Coefficient of Determination)

The R² test is used to determine the extent to which the model's ability to explain variations in the dependent variable, as well as describe how the behavior of the independent variable affects variations in the value of the dependent variable.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,838 ^a	,702	,691	,10457	1,848

a. Predictors: (Constant), Firm size, ROA, DAR

b. Dependent Variable: Cash holding

Source: SPSS Processing Results (2024)

Based on the table above, The R2 (R Square) value in this study is 0,702, which is more significant than 0,5. It means that the independent variable has a moderate relationship with the dependent variable, and 0,702 or 70,2% of the effect of profitability, leverage, and firm size on cash holding. Other variables outside this research model can influence the remaining 29,8% cash holding.

T Test (Partial Test)

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,039	,046		,844	,401
	ROA	1,101	,147	,676	7,466	,000
	DAR	,092	,042	,196	2,161	,034
	Firm size	-,003	,004	-,055	-,913	,364

a. Dependent Variable: Cash holding

Source: SPSS Processing Results (2024)

Based on the table above, the significance value of t for the profitability variable is 0,000, smaller than 0,05, and the count on the profitability variable is 7,466, greater than 1,662. Profitability has a significant effect on cash holding. The leverage variable produces a sig value of 0,034, smaller than 0,05, and the Thitung on the leverage variable is 2,161 greater than 1,662. This means that leverage has a significant effect on cash holding. The firm size variable shows a sig value of 0,364, greater than 0,05, and the Thitung on the firm size variable is -0,913, smaller than 1,662. It means that firm size does not affect cash holding.

The Effect of Profitability on Cash Holding

Based on the research result above, the significance value of the profitability variable in influencing cash holding shows sig. $0,000 < 0,05$, which means that the profitability variable affects cash holding. It implies that industrial sector companies listed on the Indonesia Stock Exchange (IDX) in 2019-2022 can generate high profits, affecting the increase in cash holding. The results of this study support the pecking order theory because profits from the company's operational activities are included in internal funding.

The Effect of Leverage on Cash Holding

Based on the research result above, the significance value of the leverage variable in influencing cash holding shows a sig value. $0,034 < 0,5$. It can be interpreted that the leverage variable affects cash holding. Explains that companies manage their cash by considering the balance between costs and benefits of holding cash. It can be concluded that when the company uses external funding, it is proportional to the costs incurred by the company. If the company's leverage increases or decreases, it affects the cash holding of industrial sector companies.

The Effect of Firm Size on Cash Holding

Based on the research result above, the significance value of the firm size variable in influencing cash holding shows a sig value. $0,364 > 0,5$. This means that the firm size variable does not affect cash holding. It can also be interpreted that if the industrial sector companies listed on the Indonesia Stock Exchange (IDX) in 2019-2022 have a large company size, it will not affect the cash holding owned by the company, according to Chandra, E. A (2022) This is because the size of a company only represents good financial performance. On the other hand, the company size scale cannot only be shown through the total assets, operational needs, or sales. Instead, the company's size is seen by the type of company, so each business company's cash-on-hand policy is also different.

CONCLUSION

The study aims to analyze and determine the influence of profitability, leverage, and firm size on cash holding in industrial sector companies listed on the Indonesia Stock Exchange (IDX) for 2019-2022. The analysis results show that profitability and leverage affect the cash holding of industrial sector companies on the IDX during this period. Meanwhile, firm size has no effect on the cash holding of industrial sector companies during this period.

For further research, variables that have a strong relationship with the variables in this study can be added by adding a more extended sample and research period in the hope that the results obtained are better and more accurate. Variables with insignificant results in this study deserve to be explored

using different measurement methods of these variables so that it is expected to get better research results.

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