

The Influence of Profitability, Liquidity, Firm Size and Leverage on Cash Holding

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ABSTRACT

The purpose of this research is to examine the influence of profitability, liquidity, firm size, dan leverage towards cash holding in manufacturing companies listed on Indonesia Stock Exchange in period of 2016-2018. The technique of sample selection is using purposive sampling method and the data source of this research is a secondary one and obtained a 74 sample manufacturing companies. The analytical method used in this research is a regression analysis of panel data with fixed effect model using E-Views software of version 10. The results of this research show that profitability, liquidity, and leverage have positive effect on cash holding but firm size has no effect on cash holding.

Keywords: *profitability, liquidity, firm size, leverage, cash holding*

1. INTRODUCTION

Companies aware of the importance of cash management in their companies. An assessment of cash management performance is needed because it reflects the company's ability to manage cash and cash equivalents optimally. Cash management is one of the most important elements because cash and cash equivalents are the most liquid assets and are also used to finance the company's operational activities, the need for unexpected activities, and also as a measure in the company's ability to pay its obligations on time.

Companies that hold large amounts of cash holdings have advantages and disadvantages. The advantages are getting a trade discount and maintaining the company's position in the credit rating. While the one of drawbacks is the loss of opportunity to get profits because cash is only stored and the money does not provide income. However, if holding cash with too little an amount also has a negative impact on the company because the company will have difficulty meeting its short-term needs and obligations. Companies that hold good cash holdings will generate interest for investors which is useful for the company in the future. There are many factors can influence cash holding.

Profitability can influence cash holding because the greater profitability could make the greater cash for company. Previous studies conducted by Ali et al. (2016) and Saputri and Kuswardono (2019) found that

profitability has a positive influence on cash holding. Different result by Jamil et al. (2016) which says that profitability does not affect cash holding. Then research according to Fauziah (2017) found that profitability has a negative influence on cash holding.

Cash holding can also be influenced by liquidity. Companies that have a high level of liquidity indicate that the company can meet its short-term needs with its liquid assets. Previous research has been conducted by Nafees et al. (2017) found that liquidity had a positive effect on cash holding. Suherman (2017) found that liquidity does not affect cash holding. But it is different from the research from Basheer (2014) and Chireka and Fakoya (2017) which say that liquidity has a negative influence on cash holding.

The greater firm size allows companies to obtain external funding sources more easily so that the company's cash also increases. Ali et al. (2016) which says that firm size has a positive effect on cash holding, but Tayem (2017) and Suherman (2017) found that firm size has a negative effect on cash holding. Different result founded by Chireka and Fakoya (2017) and Basheer (2014) that firm size has no effect on cash holding.

Companies that have high leverage ratios describe the ability of a company to get funds from external parties by issuing debt to get cash. Previous research conducted by Christian and Fauziah (2017), Suherman (2017), and Jamil et al. (2016) found that leverage does not affect cash holding. Then further research

conducted by Fahrozi (2018) stated that leverage positively affects cash holding. In contrast to the research conducted by Tayem (2017) and Saputri and Kuswardono (2019) which states that leverage negatively affects cash holding.

This research is based on a phenomenon in the Indonesian economy, where the reason for selecting manufacturing companies listed on the Indonesia Stock Exchange in the 2016-2018 period is because manufacturing companies can provide accurate information on the variables to be examined in this study. The dependent variable of the study is cash holding, and the independent variables of the study are profitability, liquidity, firm size, and leverage. Previous studies have shown inconsistent results on the factors that influence cash holding.

The formulation of the problem of this research are as follows: a. Does profitability have an influence on cash holding? b. Does liquidity have an influence on cash holding? c. Does firm size have an influence on cash holding? d. Does leverage have an influence on cash holding?

2. THEORETICAL REVIEW

Trade off theory states that a company's cash holding is managed by considering the boundary between costs and benefits (costs and benefits) obtained from holding cash (Marfuah and Zulhildi, 2017). The right decision in managing cash holding will be in line with the company's goal of maximizing the value of the company.

Pecking order theory provides an explanation for corporate financing behavior. Companies have a tendency to prioritize internal funding sources as the main funding source rather than external funding sources and cash is used as a buffer between retained earnings and investment needs, so that the purpose of holding cash is to avoid external financing (Suherman, 2017).

According to the Indonesian Institute of Accountants (IAI) (2018) in PSAK no.2, cash holding is available cash which will later be used as an investment in physical assets and also distributed to investors. Cash consists of demand deposits (demand deposits) and cash balances (cash on hand), and cash equivalents are assets or investments that are highly liquid because they are short-term in nature and can be quickly cashed into cash in amounts with the risk of small value changes or not significant. In determining cash holding can be based on several motives namely transaction motive, precaution motive, and speculation motive.

Profitability can be used to measure the level of operational success of a company within a certain period (Weygandt et al., 2015). Companies which have

high profit tend to have high cash holding in order to protect profitability risk in the future.

Liquidity describes the ability of a company to pay its obligations with its liquid assets (Kasmir, 2016). Companies which have high liquidity tend to have high cash holding.

Firm size can be described by the total assets, the number and average sales of a company (Christian and Fauziah, 2017). When the company gets bigger, it is assumed that the company has experienced success and the company is able to collect large amounts of money, its make cash holding become higher.

Leverage is a benchmark for companies in measuring how much a company has dependence on debt in obtaining its assets (Ali et al., 2016). When the level of leverage is high, the company has to pay their loans compare to have cash holding.

Hypotheses in this study are as follows:

Ha1: Profitability has a positive influence on cash holding

Ha2: Liquidity has a positive influence on cash holding

Ha3: Firm Size has a positive influence on cash holding

Ha4: Leverage has a negative influence on cash holding

3. METHODOLOGY

The research design in this study was a descriptive analysis research design with panel data obtained from the official website of the Indonesia Stock Exchange (www.idx.co.id) during the period from 2016 to 2018. The population that is the subject of this study are manufacturing companies listed on the Indonesia Stock Exchange during the study period from 2016 to 2018 in a row. The sampling technique in this study used a purposive sampling method. The criteria that have been determined in the sample selection: 1. Manufacturing companies that have been listed on the Indonesia Stock Exchange (IDX) in succession in the 2016-2018 period. 2. Manufacturing companies that have financial statements using the Rupiah (IDR). 3. Manufacturing companies that report earnings in the 2016-2018 financial statements.

This research consists of one dependent variable and four independent variables. The dependent variable in this study is cash holding. While the independent variables in this study are profitability, liquidity, firm size, and leverage. From the data selected according to predetermined criteria, 222 company data will be obtained as samples and the company data is taken from 74 manufacturing companies listed on the Indonesia Stock Exchange during the 2016-2018 period.

Cash holding is formulated with cash and cash equivalents divided by total assets. Cash holding is

available cash which will later be used as an investment in physical assets and also distributed to investors.

Profitability which is proxied by Return On Total Assets (ROA). ROA is a calculation to find out the size of a company in obtaining income by comparing profits against company assets.

Liquidity which is proxied by Current Ratio (CR). CR describes the ability of a company to fulfill its short-term obligations using its liquid assets.

Firm size which is formulated with the natural logarithm of total assets. Firm size can be described by the total assets, number and average sales of a company. The firm size formula is as follows:

Leverage proxied by Debt to Asset Ratio (DAR). DAR is a benchmark for companies in measuring how much a company has a dependency on debt in obtaining its assets.

In this study, using the E-Views 10 program to conduct the classic assumption test, descriptive statistical test, multiple regression analysis, F statistical test, t statistical test and Adjusted R2 test.

$$\text{Cash holding} = 0.760274 + 0.276702\text{ROA} + 0.021050\text{CR} - 0.028537\text{Firm size} + 0.208961\text{DAR} + \varepsilon$$

The probability value of ROA is 0.0000, lower than the specified significant level of 0.05, hence the profitability (ROA) has an influence on cash holding. The probability value of CR is 0.0000, lower than the specified significant level of 0.05, then liquidity (CR) has an influence on cash holding. The probability value of Ln Total Asset is 0.1366, higher than the specified significant level of 0.05, so firm size (Ln Total Asset) has no significant influence on cash holding. The probability value of DAR is 0.0031, lower than the significant level that has been determined by 0.05, then leverage (DAR) has an influence on the cash holding

Profitability (ROA) has a positive and significant influence on the cash holding, describing that the company with a high level of profitability accumulated its profits into the form of cash or cash equivalents, so that the company will hold a high amount of cash. The results of this study were in line with the research results of Ali et al. (2016), Cap (2014) and Aftab et al. (2018) who said that profitability had a positive influence on cash holding. But the result of this study was not in line with the research results from Christian and Fauziah (2017) who said that profitability have a negative influence on cash holding. It is different from the previous research results of Jamil et al. (2016) who said that profitability has no influence on cash holding. Liquidity (CR) has a positive and significant influence on cash holding, describing that the company is able to fulfill its short term needs with storage assets. It can be concluded that the companies in this research use the motive of the transaction that is using cash or cash equivalents to finance the needs of a short term, so that when the company has a high liquidity ratio then the availability of the cash is also high, and vice versa if the company has a low liquidity ratio then the level of availability of the cash is also low. The results of this study are in line with the research results of Nafees et al. (2017) Who say that liquidity has a positive influence on cash holding. However, the results of the study were not in line with the research results of Chireka and Fakoya (2017) and Basheer (2014) who said that liquidity had a negative influence on cash holding. It is different from the results of previous research from Suherman (2017) that says liquidity has no influence on cash holding.

Firm size (Ln Total Asset) does not have a significant and negative influence on cash holding, describing that cash holding companies are not influenced by the small or magnitude of such companies. The results of this research are in line with the research results of Chireka and Fakoya (2017) who said that the firm size has no influence on the cash holding. The result is different

4. RESULTS

Descriptive statistical can be seen at Table 1 and Multiple Regression at Table 2.

Table 1. Descriptive Statistic

	CASHHOLD	ING	ROA	CR	LNASSET	DAR
Mean	0.112022	0.084828	2.569371	28.52237	0.421835	
Median	0.077973	0.057966	1.963076	28.42837	0.379915	
Maximum	0.632315	0.920997	15.16460	33.47373	2.055781	
Minimum	0.000864	0.000282	0.115971	25.21557	0.076894	
Std. Dev.	0.109972	0.100371	1.921730	1.591687	0.254067	
Observations	222	222	222	222	222	

Source: Modified by Eviews 10

Table 2. Multiple Regression with Fixed Effect Model

Dependent Variable: CASHHOLDING
 Method: Panel Least Squares
 Date: 06/25/20 Time: 00:15
 Sample: 2016 2018
 Periods included: 3
 Cross-sections included: 74
 Total panel (balanced) observations: 222

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.760274	0.536669	1.416654	0.1587
ROA	0.276702	0.062580	4.421547	0.0000
CR	0.021050	0.004597	4.578722	0.0000
LNASSET	-0.028537	0.019065	-1.496857	0.1366
DAR	0.208961	0.069409	3.010572	0.0031

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.912085	Mean dependent var	0.112022
Adjusted R-squared	0.865075	S.D. dependent var	0.109972
S.E. of regression	0.040395	Akaike info criterion	-3.310374
Sum squared resid	0.234975	Schwarz criterion	-2.114839
Log likelihood	445.4516	Hannan-Quinn criter.	-2.827692
F-statistic	19.40197	Durbin-Watson stat	2.618916
Prob(F-statistic)	0.000000		

Multiple linear regression equations used in the study are presented as follows:

from Suherman (2017) and Tayem (2017) who said firm size has a negative influence on cash holding, and also were not in line with the research results of Ali et al. (2016) and Aftab et al. (2018) who said that the firm size has a positive influence on cash holding.

Leverage (DAR) has a positive and significant effect on cash holding, illustrating that the financing of operational activities of these companies depends on debt, because companies that have been listed on the Indonesia Stock Exchange (BEI) in the 2016-2018 period have a high degree of leverage uses it as a source of financing for its operations or as a substitute for cash or cash equivalents, so that the company's debt will increase and the use of company cash will decrease.

5. CONCLUSION

Based on the tests that have been done, it was found that the profitability variable (ROA) has a positive and significant effect on cash holding, so the results of this test are in accordance with the research hypothesis which says that profitability has a positive effect on cash holding. Liquidity (CR) has a positive and significant effect on cash holding, the results of this test are in accordance with the research hypothesis which says that liquidity has a positive effect on cash holding. Firm size (Ln Total Assets) does not have a significant and negative effect on cash holding, so the results of this test are not in accordance with the research hypothesis which says that firm size has a positive effect on cash holding. Leverage (DAR) has a positive and significant effect on cash holding, the results of this test are not in accordance with the research hypothesis which says that leverage has a negative influence on cash holding. This happens probably because the company which has a high degree of leverage uses debt as a source of financing for its operational activities or as a substitute for cash or cash equivalents, so the company's debt will increase and the company's cash usage will decrease. The reduced use of company cash will increase the company's cash holding, so that the company's cash can be used as a reserve fund in the event of financial distress and can also be used to invest.

The limitation of this research is that it only examines manufacturing companies and only for a period of three years, 2016-2018, and this study only uses five independent variables, namely profitability, liquidity, firm size, and leverage.

Suggestions that can be given to conduct further research are expected to be able to cover a broader sector besides manufacturing companies such as service companies, raw material industries, etc., adding independent variables other than those already used in this study so that results are obtained more broadly, and

The reduced use of company cash will increase company cash, so that the company's cash can be used as a reserve fund in the event of financial distress and can also be used to invest. The results of this study are in line with the results of research from Cap (2014) and Dwitama (2018) which states that leverage has a positive influence on cash holding. The results of the study are not in line with research from Marfuah and Zuhilmi (2015), Tayem (2017), and Aftab et al. (2018) which says that leverage has a negative influence on cash holding. In contrast to the results of research from Suherman (2017) and Christian and Fauziah (2017) who say that leverage has no effect on cash holding.

extend observation period so that it will add to the number of samples which can better describe the state more accurately.

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