The Effect of Operating Cash Flow, Net Working Capital, and Earning Quality on Cash Holding of Consumer Goods Companies

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ABSTRACT

Cash holding is cash or cash equivalent available in the company that is used for operating expenses. Holdings of cash are considered as cash and cash equivalents that can be converted into cash when needed. A sufficient amount of cash holdings indicates good liquidity of a company.

The main objective of this study is to explore the effect of operating cashflow, networking capital, and earnings quality on consumer goods companies registered in the Indonesia Stock Exchange for the 2017-2019 period. Research data from 30 companies in the form of panel data were analyzed using multiple linear regression method using E-views 11 software. The results shown operating cash flow affect positively against cash holding, net working capital affect negatively towards cash holding, while earnings quality has no effect on cash holding.

Keywords: operating cash flow, net working capital, earning quality, cash holding

1. INTRODUCTION

The availability of cash is a crucial and liquid current asset, the company in conducting cash holding has 3 motives. First, cash is held to meet short-term cash inflows and outflows (transaction motive). Second, the company can hold cash on the basis of its ability to pay future obligations that cannot be predicted by the company (precaution motive). Third, retained cash is used for investment purposes by speculating on the possibility of future interest rate increases (speculative motive) [1]. The cash holding policy carried out by the financial manager has both advantages and disadvantages. In its application, cash holding provides benefits for companies such as minimizing the risk of bankruptcy due to cash reserves and also making it easier to meet liquidity [2]. With cash, the company is able to invest now and in the future because there is no need for outside funding. Another benefit is that the company benefits from future interest rate growth.

The weakness of a cash holding is that cash is a less profitable asset. This is because the value of money today will be different from the value of money in the future. As well as another weakness is the risk of the company experiencing conflict with investors due to dividend distribution issues. Where the financial manager will prioritize investment and operational needs, compared to distributing dividends in the form of cash to shareholders.

One example of a case related to cash holding caused by liquidity risk, experienced by consumer goods companies in

Indonesia was experienced by PT. Tiga Pilar Sejahtera Food Tbk (TPS Food) whose company shares have been suspended by the IDX since 5 July 2018 (CNBC Indonesia). TPS Food revealed that its cash and cash equivalent position as of 26 June 2018 was not sufficient to pay interest on bonds and sukuk maturing on 19 July 2018, this has also happened before, namely TPS Food had previously failed to pay interest on TPS Food I/2013 bonds. worth Rp.30.75 billion, and the ijarah fee for the TPS Food I/2013 'sukuk ijarah' of Rp.15.37 billion which if the total debt reaches Rp. 46.12 billion which should have been paid on July 5, 2018. Because of this case, PT. Jatisari Srirejeki, PT. Indoberas Unggul, and PT. Sukses Abadi Karya Inti, the grandson of the TPS Food company, was declared bankrupt because he was unable to pay off his obligations to bondholders. In this case, the new management of TPS Food continues to make improvements, in order to get fresh funds TPS Food plans to issue 1.56 billion new shares with a nominal value of Rp. 200/share. For the improvements that have been made, the company's management hopes that investors will be interested again in investing in TPS Food shares, so that the company can determine the appropriate level of cash holding, so that the company's operational needs and activities can be met without disturbing the company's liquidity.

This study aims to obtain empirical evidence regarding the effect of operating cash flow, net working capital, and earning quality on cash holdings listed on the Indonesian stock exchange.

The benefit of this research is to support the company in determining the optimal level of cash holding so that the company can run efficiently and effectively

2. THEORETICAL REVIEW

2.1. Grand Theory

2.1.1. Trade-Off Theory

According to Fereeira and Vilela in [3] holding cash has several benefits for companies, namely to carry out investment policies even though there may be financial difficulties in the company, reduce the possibility of financial distress in the company, and reduce costs. conversion of company assets into cash. In addition to the existing advantages, there are also limitations that companies will feel by holding cash, including that the company will waste opportunities to invest that might be profitable for the company [4]. [5] argued that if the company's cash holding is in a balanced position between its profits and losses, it will be easier for the company to increase its company value and increase the welfare and wealth of shareholders.

2.1.2. Pecking Order Theory

Pecking Order Theory was first put forward by Myers and Majluf [6] who explained that companies tend to use internal sources of funds rather than external sources of funds. This is because internal sources of funds are considered more profitable than external sources of funds. In this theory, there is no cash target that every company needs to have. The pecking order theory shows a theory that is contrary to the trade-off theory by arguing that there is no best level of cash holding and cash is only a buffer between funds for investment needs and retained earnings. This pecking order theory shows that the cash held by the company is only with the motive to avoid external financing for the company's activities, including investment. Internal financing is considered to be the cheapest financing for the company. This theory also predicts that companies that have better growth opportunities will have higher levels of internal funding cash to avoid financial difficulties.

2.1.3. Agency Theory

Agency theory describes the agency relationship as a contract between managers and shareholders [7]. Agency relations explain that shareholders delegate authority to managers to make the best decisions for shareholders. Separation of ownership and control by shareholders and managers in a company tend to create agency conflicts between managers and shareholders. High cash holding can lead to agency conflicts (Jensen, 1986). Where high cash holding tends to be misused by managers for personal gain. managers by incurring costs to bind managers, auditing

financial statements and so on [8].

2.2. Operational Theory

2.2.1. Operating Cash Flow

According to [9], operating activities involve the cash effects of transactions that enter into the determination of net income, such as cash receipts from the sale of goods and services, and cash payments to suppliers and employees for the acquisition of inventories and costs. . The amount of cash flows arising from operating activities is a key indicator of the extent to which an entity's operations have generated sufficient cash flows to repay loans, maintain the entity's operating capability, pay dividends, and make new investments. without the help of external funding sources. Based on [10] PSAK No. 2 concerning cash flow statements, operating cash flow itself has the meaning that the main income generating activity of the entity and other activities that are not investing and financing activities. Cash flows are cash inflows and outflows and equivalent (cash equivalents).

2.2.2. Net Working Capital

Net working capital is one of the factors that can affect the company's cash availability. According to Najema & Asma [11] net working capital (net working capital) is part of current assets, if the company has assets that are greater than the amount of debt or obligations owned by the company. Which means that the greater the net capital owned by the company, the greater the amount of cash owned by the company that can be used for company operations. Meanwhile, according to Gitman and Zutter (2015) Net working capital is not only correlated with assets, but also correlates with company liabilities, which can be concluded that the difference between the two can be used in company activities without disturbing the company's liquidity. Based on the explanations of the experts above, it can be concluded that net working capital is the company's net working capital which is invested in current assets which have a larger amount than the company's current liabilities.

2.2.3. Earning Quality

Earning quality according to [12] is information that shows the real condition of the company's management performance. Earning Quality (earnings quality) is the level of difference between reported net income and actual earnings so that it reflects the actual performance of the company without any manipulation. Quality earnings are useful in decision making because they have the character of relevance, reliability, and comparability or consistency

2.3. The Relation Between Variables

2.3.1. Operating Cash Flow and Cash Holding

Cash flow is an important key for company liquidity, cash flow can suppress the level of cash needs that are above normal (Ferreira and Vilela, 2003) in [13]. . Companies in general will prioritize the use of internal funding sources first. In the event of a shortage in the stock of internal funding sources, the company can choose a strategy to use external funding sources that are considered the safest. This is a result of information asymmetry [14].

Research examining the relationship between cash flow and cash holding has been carried out by other researchers several times in the past, including those conducted by [13] where this researcher proves that there is a negative and significant effect of cash flow on cash holding. Tayem[14], Saleh Afif & Prasetiono [14]; Maheshwari & Rao [15] proved that there was a positive and significant effect between cash flow and cash holding.

2.3.2. Net Working Capital and Cash Holding

In this connection, networking capital, which is basically a current asset, can be converted into company cash as long as the transaction costs are not high. So that net working capital can be a substitute for cash when the company experiences a cash shortage compared to using external funding which is much more expensive. Therefore, companies that have a large net working capital tend to have a low amount of cash holding. Many researches have been carried out in the past to find out the connection between net working capital and cash holding, including: Research conducted by Ali et al, [1] which proves a negative influence between net working capital toward cash holding. Khalil & Mukhtiar [16] found there was no effect of net working capital on cash holding.

2.3.3. Earning Quality and Cash Holding

Earning quality in a company reflects a performance in a certain period without any manipulation. Earning quality has a relevant effect on cash holding. Companies with low earning quality levels will reflect high company cash holding and vice versa [12]. Profits that have good quality will be useful in decision making because they have relevance, reliability, and comparability or consistency [17]. Various studies have been conducted before to find out the relationship between earning quality and cash holding. Farinha [18] found a negative influence between earning quality towards cash holding.

The framework of thought obtained from the discussion above can be explain by the following research model:
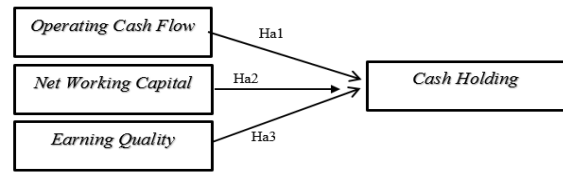

Figure 1 Research Model

The hypothesis is formulated as follows:
H1 : Operating cash flow has a negative effect on cash holding
H2 : Networking capital affect negatively on cash holding
H3 : Earning quality affect positively on cash holding

3. METHODOLOGY

The methodology in this research is descriptive research with data obtained from the Indonesia Stock Exchange in the 2017-2019 period. The technique used in this sampling is purposive sampling with the criteria of 1) consumer goods companies listed consecutively on the Indonesian Stock Exchange during the 2017-2019 period, 2) Companies that present financial statements in rupiah currency during the 2017-2019 period, 3) Companies that did not experience losses during the 2017-2019 period. 4) Consumer goods companies that issued financial statements that ended on December 31. The total number of valid samples was 30 companies.

Operationalization of variables is shown in the following table:

Table 1 Operationalization of Variables

Variable	Measurement	Reff.
Cash Holding	$\text{Cash holding} = \dfrac{\text{Cash and cash equivalent}}{\text{Total asset}}$	[20], [4]
Operating Cash Flow	$\text{CFO} = \dfrac{\text{Operating Cash Flow}}{\text{Current Liabilities}}$	[21]
Net Working Capital	$\text{NWC} = \dfrac{\text{Current Assets}-\text{Current Liabilities}-\text{Cash and Cash Equivalent}}{\text{Total Assets}}$	[4]
Earning Quality	$\text{EQ} = \dfrac{\text{Operating Cash Flow}}{\text{Net Income}}$	[22]

4. RESULT AND DISCUSSION

4.1. Population and Samples

This research was conducted with the aim of knowing the effect of the independent variable, namely operating cash flow, net working capital, and earning quality on the dependent variable, namely cash holding. The population of this study is consumer goods sector companies listed on the Indonesia Stock Exchange (IDX). The research sample was taken by purposive sampling method with the following criteria:

Table 2 Sample Selection Criteria

No.	Sample Criteria	amount
1	Total *consumer goods* companies	57
2	Consumer goods companies that were not listed consecutively on the IDX during year 2017-2019.	(14)
3	Companies that incurred losses during the 2017-2019 period	(13)
	Number of Consumer Goods Companies that were sampled	30

4.2. Data Model Estimation

The first step that must be taken in this study is to determine the panel data model estimation. The panel data model estimation used consists of three models, namely the common effect model, the fixed effect model, and the random effect model. This research uses a random effect model that has been determined after after going through the Chow test, Hausman test and Lagrange Multiplier test.

4.2.1. Chow Test

The Chow test is a test conducted by comparing The Fixed Effect Model (FEM) and the Common Effect Model (CEM), in order to get the most appropriate one for use in this study. The hypotheses used are: H0: CEM is more suitable, Ha: FEM is more suitable. By comparing the level of significance (α=5%) with the probability of cross section (F). Therefore, if F>5%, then H0 is accepted and Ha is rejected. So the more suitable model is the common effect model and vice versa. Chow test output are displayed in the following table, where Prob is 0.0000<0.05, meaning Ha is accepted. So the selected model based on Chow Test is Fixed Effect Model

Table 3 Chow Test Result

Effects Test	Statistic	d.f.	Prob.
Cross-section F	12.902041	(29,55)	0.0000
Cross-section Chi-square	184.904528	29	0.0000

4.2.2. Hausman Test

The Hausman test is a test conducted to compare the most appropriate model to use, between the fixed effect model and the random effect model that will be applied in this study. The hypotheses used are: H0: Random Effect Model, Ha: Fixed Effect Model. By comparing the level of significance (α=5%) with the probability of a random cross section. Therefore, if the result of random cross section probability > 5%, then H0 is accepted and Ha is rejected. So the right model to choose is the random effect model and vice versa. Hausman test results are shown in the following table, where Prob is 0.0546 >0.05, meaning H0 is accepted. So the selected model based on Hausman Test is Random Effect Model

Table 4 Hausman test Result

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	7.616259	3	0.0546

4.2.3. Lagrange Multiplier Test

In determining the right model to use between random effects or common effects. Can use the Langrange multiplier test, using the following hypotheses: H0: CEM is more suitable, Ha: REM is more fit. LM test results are shown in the following table. The Breusch Pagan probability value is 0.000 <0.05, so Ha is accepted. So the best estimation model is the Random Effects Model

Table 5 Lagrange Multiplier Test

| | Test Hypothesis | | |
	Cross-section	Time	Both
Breusch-Pagan	49.63904 (0.0000)	1.344817 (0.2462)	50.98386 (0.0000)

After conducting several tests, it can be concluded that what is used in this study is to use a random effect model

4.3. Hypothesis Testing

4.3.1. Random Effect Model

After performing the Chow, Hausman, and LM tests, it found the most representative regression model is the Random Effect Model.
The result of Random effect Regression estimate for Cash Holding is presented in Table 6 below.

Table 6 Regression Estimation Result for Cash Holding

Variable	Coefficient	T Statistic	P Value
C	0.139853	5.625494	0.0000
Operating Cash Flow	0.056074	3.354744	0.0012
Net Working Capital	-0.189177	-3.003463	0.0035
Earning Quality	0.189177	1.710025	0.0909

4.3.2. T-Test

The t-test was conducted with the aim of seeing the effect of the independent variables, namely operating cash flow, networking capital, and earnings quality partially against the dependent variable, namely cash holding. The significance level used was 5% (0.05) and the 95% confidence level.
To determine the significance in this test is to compare the P-Value with a predetermined level of testing (α = 0.05). If the p-value <0.05 then the hypothesis is accepted, so there is a partial effect between the independent variables on the dependent variable. Conversely, if the p-value > 0.05 then Ha is rejected, so there is no partial effect between the independent variables on the dependent variable. The

coefficient column shows the magnitude of the influence of the independent variable on the dependent variable in units The results obtained from the t-test using the Random Effect Model are presented in Table 6.

- The operating cash flow variable has a probability value of 0.0012 which means it is smaller than 0.05 (5%). The coefficient for the operating cash flow variable is 0.056074, so it can be interpreted that the operating cash flow variable has a positive and significant effect on cash holding. So in this study it can be concluded that Ha1 is rejected. The coefficient value of the operating cash flow is 0.056074, which means that if the operating cash flow increases by one unit, the cash holding will increase by 0.056074 with the assumption that other independent variables, namely net working capital and earnings quality, are considered constant.
- Net working capital has a probability value of 0.0035 which means it is smaller than 0.05 (5%). The coefficient for the net working capital variable is -0.189177, meaning that the net working capital variable has a negative and significant effect on cash holding. So in this study it can be concluded that Ha2 can be accepted. The coefficient value of the net working capital variable (NWC) is -0.189177, which means that if the net working capital increases by one unit, the cash holding will decrease by 0.189177 with the assumption that the other independent variables, namely operating cash flow and earnings quality, are considered constant.
- Earnings quality has a probability value of 0.0909 which means it is smaller than 0.05 (5%). The coefficient for the earnings quality variable is 5.70E-05, meaning that the earnings quality variable has no significant effect on cash holding, so it can be concluded that Ha3 is rejected. The coefficient value of the earnings quality variable (EQ) has a value of 5.70E-05, which means that if the earnings quality increases by one unit, the cash holding will increase by 5.70E-05 with the assumption that other independent variables, namely operating cash flow and net working capital, are considered constant

4.3.3. Coefficient of Determination Test (R^2)

The determination coefficient test was conducted to find out how big the contribution of the independent- variable was in explaining the dependent-variable. The value of the coefficient of determination is reasonable between 0 to 1. The value of the coefficient of determination which is getting closer to 1, indicates that the independent variable has a large contribution in explaining the dependent variable.

Table 7 Multiple Determination Coefficient Test (R^2)

R^2	0.179651
Adjusted R^2	0.151035

The test results for the multiple coefficient of determination (R^2) by looking at the value of the Adjusted R-squared is 0.151035. This means that 15.1035% of the dependent variable, namely cash holding, can be explained by the independent variable, namely operating cash flow, net working capital, and earning quality. While the rest of 0.848965 or 84.8965% can be explained by other independent variables.

4.4. Discussion

a. Operating cash flow formulated as cash & cash equivalent divided by total assets has a coefficient value of 0.056074, the coefficient value on the operating cash flow variable shows a positive sign and the probability value is 0.0012, thus meaning that operating cash flow has a positive effect on cash holding. The results of this study are in line with the results of research conducted by Tayem (2016) which shows that operating cash flow has a positive effect on cash holding, while the results of this study are not in line with the results of research conducted by [13]who found a negative and significant influence between operating cash flow on cash holding.

b. Net working capital, which is formulated as current assets-current liabilities-cash & cash equivalent divided by total assets, has a coefficient value of -0.189177, the coefficient value on the variable net working capital shows a negative sign and the probability value is 0.0035, so it means that net working capital has a negative influence on cash holding. The results of this study are in line with the results of research conducted by Ali et al [1] which show that net working capital has a negative effect on cash holding, while the results of this study are contrary to the results of research conducted by Khalil & Mukhtiar [16] which shows the result that net working capital has no influence on cash holding.

c. Earning quality which is formulated by operating cash flow divided by net income has a coefficient value of 5.70E-05, the coefficient value of the earning quality variable shows a positive sign and the probability value is 0.0909, thus meaning that earning quality does not have a significant effect on cash. holding. The results of this study are in line with the results of research conducted by Edi Setiawan [19] who found that there was no significant effect between earning quality on cash holding. The finding of this study are not support the results of research carried out by Farinha [18] who found a negative influence between earning quality on cash holding.

5. CONCLUSION

From the discussion and statistical tests have been carried out, it is concluded that the factors that affect cash holding in consumer goods companies listed on the Indonesia Stock Exchange are as follows:

1. Operating cash flow affect positively towards cash holding
2. Net-working capital has a negative affect on cash holding
3. Earnings quality is not affect on cash holding

The implication from this finding is that the results can be taken into consideration for companies to make decisions regarding the determination of the company's cash holding level to increase the company value.

Suggestions for further research are (1) to complete with various theories to support research. (2) adding independent variables in explaining cash holding such as: leverage, capital expenditure¸ growth opportunity, board size, etc. (3) research can be extended to various enterprise sectors, such as: banking sector, various industries, etc. (4) can extend the research period.

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