



Analysis of the Impact of Liquidity and Adequacy of Operational Cash Flow on the Detection of Financial Distress Risk in Retail Companies Listed on the Indonesian Stock Exchange

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ABSTRACT

The research investigates liquidity conditions and operational cash flow adequacy in retail companies listed on the IDX from 2016 to 2022, aiming to detect the risk of financial distress. Employing a descriptive and verification method, secondary data from annual financial reports were analyzed using logistic regression in SPSS. The findings reveal that, on average, the companies exhibit sufficient liquidity and operational cash adequacy. While financial distress is generally deemed safe, caution is warranted as values are above 0. The study establishes that liquidity and operational cash flow adequacy significantly impact the detection of financial distress, explaining 78.6% of the variance. Notably, 21.4% remains influenced by other factors. This underscores the importance of considering liquidity and cash flow when assessing a company's risk of financial distress. The implications for theory and policy suggest using these metrics as preemptive tools for companies, prompting the establishment of minimum standard liquidity and cash flow policies. Additionally, recommendations include creating standardized policies for receivables and inventory turnover, with key performance indicators (KPIs) for the receivables department. The research's novelty lies in the collaborative analysis of liquidity and operational cash flow adequacy as independent variables, focusing on retail companies listed on the IDX from 2016 to 2022. The utilization of logistic regression enhances the accuracy of the resulting model. These insights contribute to a more comprehensive understanding of the factors influencing financial distress in the retail sector, offering practical implications for management and policy formulation.

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ARTICLE INFO

Article History:

Submitted/Received 31 July 2023

First Revised 28 Aug 2023

Accepted 20 Nov 2023

First Available online 27 Nov 2023

Publication Date 01 Dec 2023

Keyword:

Adequacy of Operating Cash Flow,
Detection of Financial Distress,
Liquidity.

1. INTRODUCTION

The impact of the covid-19 pandemic and the implementation of restrictions on community activities (PPKM) has caused businesses in Indonesia to see their revenues decrease and losses increase. In some cases, businesses were forced to close completely or experienced significant losses. According to world bank statistics, as many as 60% of all businesses throughout the world (including businesses in Indonesia) have declared bankruptcy. On August 17 2020, 46 businesses with total assets of \$1 billion, or around IDR 14 trillion (assuming an exchange rate of 14,000) have filed for bankruptcy, 24 of which are retailers. When a business is in financial distress, the cash generated through operations is not enough to cover its ongoing commitments. If losses continue, the companies will experience bankruptcy (Fitri and Syamwil, 2020: 134).

On the other hand, the condition of companies going public on the IDX (aside from banking and financial institutions) over the last four years has had quite fluctuating average liquidity, in 2019 the average was 2.01, in 2020 it decreased significantly to an average of 1.82, in 2021 and 2022 will experience another increase to an average of 3.03 and 3.86 respectively. Furthermore, in these companies result the operational cash flow adequacy for the last four years from 2019 to 2022 averaged below 3.00. Meanwhile, financial distress or detection of the risk of financial distress using the interest coverage ratio (ICR) proxy for the last four years (2019 to 2022) averaged 0.25 (source of data processing results: 2022). This condition indicates that companies in the corridor must be careful.

According to several liquidity researchers, the adequacy of operational cash flow and detecting the risk of financial distress are closely related, where one of the causes of financial distress in a business is a lack of cash, which can make it difficult for the company to continue its operations (Dewi and Hadri, 2017: 29). According to several researchers, including (Syaiful Bahare Jafar, 2019; Irma Setyawati, 2016; Vinh, 2015), companies experience the risk of financial distress, one of which is caused by inadequate liquidity or the company's ability to pay short-term debt is relatively inadequate. These researchers collaborated with other variables including inflation rate, investigation, leverage. Then it was also stated by several researchers that the company's financial distress were caused by insufficient operational cash flow which was almost close to short-term debt in the sense that if operational cash flow decreased (smaller), it became more difficult for the companies to pay its short-term debt, whereas if it was left continuously this will reduce or erode capital, resulting in financial distress approaching bankruptcy (Naz Sayari, 2013; Gholamreza, 2011; Nur Adriana, 2015; Etti Ernita, 2022; Sonia Nanda, 2020).

It was also stated (Amalia *et al.*, 2020: 3302) that the smaller the risk of a company experiencing financial distress, the better the company will fulfill its short-term obligations, while selling investments and assets is the safest option for companies experiencing cash flow problems and is the most appropriate option. conservative for companies facing liquidity problems. Pressure on a company's finances can also be caused by having too much cash on hand from normal business operations. The ability to generate healthy operating cash flow is critical to a company's financial health; without operating cash flow, no business can survive (Tutliha and Rahayu, 2019:98). According to (Ramadhani and Khairunnisa, 2019:77) and (Giarto and Fachrurrozie, 2020) a lack of operating cash flow will make investors wary in putting money into a company, and if this situation continues and cannot be corrected, the company will experience financial distress. Therefore, a company can be said to be protected from the risk of financial distress as long as it has sufficient operating cash flow. The research results show that the risk of financial distress is influenced by leverage and cash flow but is not influenced by sales growth. According to Irma Setyawati, the current ratio, operating cash flow and inflation rate can predict financial distress in companies listed on the IDX (2018).

Based on the problems and research results described above, so this research aims to determine the condition of liquidity and adequacy of operational cash flow as well as the risk of financial distress and to examine and prove the hypothesis whether these two variables have an impact on the risk of financial distress in retail companies listed on the IDX in the period 2016 to 2022. It is hoped that this research can provide input or advice, especially to retail companies that go public on the IDX, that one way to anticipate the risk of financial distress is to always pay attention to the liquidity and adequacy of the company's operational cash flow.

The limitation of the research is that it only examines and applies to retail companies that are public and listed on the IDX. The novelty in this research is firstly trying to collaborate between liquidity and the adequacy of a company's operational cash flow as independent variables in predicting the risk of financial distress. Generally, researchers use cash flow consisting of three activities in this research, focusing on operational activities, apart from that, the variables that are often used by researchers that influence the risk of financial distress are leverage, operating capacity, sales growth, corporate governance mechanisms and sales growth, Profitability, CAMEL and CSR. The second novelty is that retail companies that go public on the IDX are used as samples, which are very rarely used as samples because they think they will not have financial distress or are always considered going concern because they are companies that produce products that are needed daily. The novelty of the three models produced uses logistic regression, so the results will be more accurate if this model is used as an early anticipation tool for companies in determining future strategies.

2. METHODS

The research uses quantitative methodology with a descriptive and verification approach. The descriptive method will describe the condition of liquidity, the adequacy of the company's operational cash flow and the risk of financial distress, and verification will test the impact of liquidity and the adequacy of operational cash flow on detecting the risk of financial distress in retail companies listed on the Indonesia Stock Exchange both in terms of partial or simultaneous, the data used is secondary data taken from annual financial reports and using logistic regression analysis with the help of SPSS 25 calculations as an analysis tool. Apart from that, documentation methods are also used. The research population consists of 32 retail companies listed on the Indonesia Stock Exchange during the 2016-2022 period. The sample was drawn using a nonprobability sampling technique with a purposive sampling strategy, with the criteria (1) Retail companies listed on the IDX from 2016 to 2022 (2) Retail companies that have completed their IPO before the observation period and (3) Retail companies that publish reports annual and financial reports during the observation period. So the sample used 22 companies. The period is 2016 to 2022.

The research uses a logistic regression test. It can analyze the dependent variable in the form of a dummy variable with a probability between 1 = danger zone and 0 = safe zone. The dependent variable used is detection of the risk of financial distress and the independent variables are liquidity and adequacy of operational cash flow. Liquidity compares current assets with current liabilities (Hery, 2015). Operational cash flow adequacy measures the ratio of operational cash flow to current liabilities (Harahap, 2018: 257), and financial distress is proxied by the interest coverage ratio (ICR), namely the ratio of profits before interest and taxes divided by interest expenses (Fitri and Syamwil, 2020: 134). According to Horne and Wachowicz (2012:134), this ratio functions as a measure of a company's ability to make interest payments to avoid bankruptcy.

3. RESULTS AND DISCUSSION

There are 154 observations studied, with 22 companies the minimum value of the liquidity parameter proxied by the current ratio was 0.011 and the maximum value was 12.047, with a standard deviation of 2.025 and a mean of 1.903. Those are indicates that the companies studied generally have quite good liquidity, but you still have to be careful because they are not yet in the good and very good categories. Operational cash flow adequacy has a minimum value of 0.000 and a high value of 1.834, and has a mean value of 0.257. This condition means that the adequacy of cash inflow is in the sufficient category. The interest coverage ratio functions as a proxy for the risk of financial distress which has a minimum value of 0 which indicates a safe zone and a maximum value of 1 which indicates a financial distress zone. The interest coverage ratio, which is a proxy for financial pressure, has a mean value of 0.27 and a standard deviation of 0.447%. This condition shows that in general the companies studied are in the safe zone, but you still have to be careful because generally they are above 0 or heading towards financial distress even though they are still far away (table 1).

Table 1. Descriptive statistic

	N	Minimum	Maximum	Mean	Std. Deviation
Liquidity	154	,011	12,047	1,90324	2,025537
Operating Cash Flow Sufficiency	154	,000	1,834	,27531	,369329
Financial Distress	154	0	1	,27	,447
Valid N (listwise)	154				

source: Processed Data (2023)

The Hosmer and Lemeshow goodness-of-fit test is used to test the feasibility of the regression model. Based on Table 2, the significance value of the Hosmer and Lemeshow test is 0.109 which is greater than the threshold of 0.05 (sig > 0.05), thus the model The research used is appropriate and able to reveal the relationship between the observed variables.

Table 2. H and L

Step	Chi-square	df	Sig.
1	13,076	8	,109

source: Processed Data (2023)

Based on Table 3 below, it shows that the omnibus test coefficient model obtained a probability reduction value of -2 (chi square) of 24.629 with a significance value of 0.000 which is smaller than the 0.05 level (sig 0.05) which indicates that liquidity and operational cash flow are sufficient. have a simultaneous impact on the risk of financial distress.

Table 3. Omnibus test

	Chi-square	df	Sig.
Step 1 Step	24,629	2	,000
Block	24,629	2	,000
Model	24,629	2	,000

source: Processed Data (2023)

In this study the coefficient of determination was evaluated using Nagelkerke's R Square. The results of the Nagelkerke's R Square coefficient of determination test can be seen in Table 4 below. Based on the data in the table above, the Nagelkerke' R Square value is 0.214, which indicates that adequate operational cash flow and liquidity have an influence of 21.4% on detecting the risk of financial distress, while the remaining 78.6% is influenced by other factors.

Table 4. Nagelkerke' R square test

Step	-2 Log likelihood	Cox and Snell R Square	Nagelkerke R Square
1	155,844 ^a	,148	,214

Source: Processed Data (2023)

The results of the matrix classification test can be seen in Table 5 below. Based on this test, of the 154 observations studied, 96.4% of them could be predicted accurately by the logistic regression model, while the remaining 4.8% could not be predicted with certainty. And this prediction model correctly predicted 71.4% of the samples, according to the results presented in table 5 below

Table 5. Classification matrix

Observed			Predicted		
			ICR		Percentage Correct
			Safe	Distress	
Step 1	Financial	Safe	108	4	96,4
	Distress	Distress	40	2	4,8
		Overall Percentage			71,4

Source: Processed Data (2023)

3.1. Examination of Hypotheses and Discussion

Based on the results of the logistic regression test and Wald test in the table below (table 6), the regression equation can be modeled as follows: $\ln p/(1-p) = -0,420 + 0,138x_1 - 4,500x_2 + \epsilon$

Table 6. Wald test results

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a Liquidity (X1)	,138	,121	1,316	1	,025	1,149
Operating Cash Flow Sufficiency X2	-4,500	1,192	14,261	1	,000	,011
Constant	-,420	,283	2,196	1	,138	,657

Source: Processed Data (2023)

3.2. The Impact of Liquidity on the Identification of Financial Distress

Based on statistical results, it shows that liquidity partially has a negative influence on the risk of financial distress. This means that in the company studied, part of the company's wealth, represented by current assets, is used to settle short-term liabilities. If liquidity is always maintained, the company will mostly pay short-term loans or company operations from retained profits and repayment of receivables, thereby avoiding financial distress. (Sari and Puteri, 2016:344). Liquidity is something that must be paid attention to because if it continues to decline, there will be financial distress and eroding capital and it is possible that the company will slowly sell investments to cover its debts. This finding strengthens previous research which shows that "the more liquid a company is, the quicker it will be able to fulfill its maturing obligations, thus avoiding financial distress" (Masdupi *et al.*, 2018), this research is supported by the research results of Dwiantari and Artini, (2021, p. 368), Septiani *et al.*, (2021:108). Then (Syaiful Bahare Jafar *et al.*, 2019; Irma Setyawati, 2016; Vinh, 2015) in general these researchers stated that a company's high level of liquidity can fulfill its financial obligations as soon as possible so as to avoid the risk of financial distress. However, if liquidity is too high, you have to be careful because there is a possibility that many assets are not being used or existing receivables have low turnover so they cannot pay short-term debts. Apart from that, you must also pay attention to inventory because of high liquidity, there is a possibility of turnover of inventory that has been in the warehouse for a long time at that time. Overall, liquidity does influence financial distress, but if liquidity remains high, you must still pay attention to the turnover/amount of receivables, inventory turnover and the size of inventory.

Operational cash flow has a Wald value of 14.261 and a significance value of 0.000 which indicates statistical significance at a significance level of 0.05 ($0.000 < 0.05$). As a result, the null hypothesis (H0) is refuted, while the alternative hypothesis (H2) is supported, which means that the effect of operating cash flow on the risk of financial distress is negative, although partial. The results of this research confirm previous research, namely (Sonia Nanda, 2020; Naz Sayari, 2013; Gholamreza, 2011; Nur Adriana, 2015; Etti Ernita, 2022; Anggun Putri, 2022).

that the company's financial distress are caused by insufficient operational cash flow which is almost close to short-term debt in the sense that if the operational cash flow decreases (small) then the more difficult it is for the company to pay its short-term debt, he also stated that companies that show low operational cash flow and trend persistent declines are at high risk of facing financial distress, conversely, companies that generate high levels of cash flow are less likely to experience financial distress.

Simultaneously, liquidity and operational cash flow adequacy influence the detection of financial distress risk by 21.4% and the remainder is influenced by other factors (78.6%), which means that together the company has greater current assets than current liabilities and adequacy. The company's operational cash flow exceeds current debt in conditions which are

higher, which will reduce the risk of financial difficulties. This influence is relatively small but quite significant. This condition is strengthened by the results of Irma Setyawati's research (2018). Meanwhile, other factors that influence financial distress are relatively large, the condition is strengthened by the results of Melania Galih Safitri's research, 2021, namely the Profitability and Leverage factors, then Rahmat, 2020 uses the Altman Z score variable, Springate Zmijewski and CAMEL and Adam Martin Immanuel, 2021 uses the CSR factor. Even though the influence of liquidity and operational cash flow is small, it is the main thing that companies must pay attention to because it is one of the core factors indicating bankruptcy/financial distress if it continues and is left unchecked. The results of this research illustrate that companies must be careful in maintaining liquidity and adequate operational cash flow in order to avoid the risk of financial distress. The decreasing level of liquidity and decreasing adequacy of cash flow can be used as an anticipatory tool by the company, so that the company must pay more attention and immediately create policies or strategies to anticipate it early to avoid financial distress, for example by increasing capital to pay short-term debts to suppliers, create strategies to increase income and analyze problems that occur so that risk mitigation and new policies can be created that can be implemented immediately. Apart from that, it accelerates or accelerates the turnover of receivables by motivating the collection department to carry out it effectively while maintaining revenue stability and looking at market and supplier conditions.

4. CONCLUSION

The Based on the results discussed, this study found concentrated ownership has no effect on earnings quality, institutional ownership has a negative effect on earnings quality, while foreign ownership has a positive effect on earnings quality.

These results contribute to investors who still use financial information and analyze earnings quality to be able to use the ownership structure, especially the level of foreign and institutional ownership.

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