The Effect of Cash Flow and Receivables Turnover on the Liquidity of Basic Material Companies Listed on the Indonesia Stock Exchange

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Abstract
This study aims to analyze the effect of cash flow and accounts receivable turnover on liquidity in Basic Materials companies listed on the Indonesia Stock Exchange (IDX) for the 2020–2024 period. A quantitative approach was used with secondary data in the form of annual financial reports from 10 sample companies over five years. Data analysis was performed using multiple linear regression using SPSS. The results show that cash flow has a positive and significant effect on liquidity, meaning that the greater the operating cash flow, the greater the company's ability to meet short-term obligations. Similarly, accounts receivable turnover has a positive and significant effect on liquidity, indicating that efficient collection of receivables strengthens the company's cash position. Simultaneously, both variables significantly influence liquidity, with a coefficient of determination (R^2) of 0.643. This study emphasizes the importance of cash flow and accounts receivable management in maintaining a company's financial stability. Keywords: Intrinsic motivation, Performance.

Keywords: *Cash Flow, Accounts Receivable Turnover, Liquidity*

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Introduction

The basic materials sector plays a central role in supporting economic development due to its role as a supplier of basic materials that form the foundation for manufacturing, construction, and energy activities (Aritonang & Rahardja, 2022). In Indonesia, companies in subsectors such as cement, basic chemicals, petrochemicals, and metals not only carry out production functions but also serve as indicators of the health of the upstream and midstream industries. Global economic dynamics, including commodity price fluctuations, supply chain disruptions, and changes in demand following the Covid-19 pandemic, have placed new pressures on cash flow continuity and accounts receivable management (Agustin et al., 2022). These pressures directly impact a company's ability to meet its short-term obligations. In other words, pressure on cash flow and receivables collection can erode liquidity, ultimately impacting the company's operational stability and investment capacity. This phenomenon is evident in various subsector financial reports, which have experienced fluctuations in operating cash flow and liquidity ratios over the past few years. This creates an empirical need to examine the relationship between cash flow, receivables turnover, and liquidity, particularly in basic materials companies listed on the Indonesia Stock Exchange (IDX) (Firdaus & Rivandi, 2023).

Liquidity measures a company's ability to meet its short-term obligations without having to hastily sell productive assets (Nuthqi, 2023). In financial management practice, liquidity is not merely a ratio but also reflects managerial flexibility in responding to external shocks, ensuring production continuity, and maintaining stakeholder trust. The basic materials sector is characterized by high working capital, long production cycles, and reliance on industrial sales contracts, making cash flow management and trade credit policies key determinants of liquidity. If cash inflows weaken or receivables turnover slows, companies are forced to rely on short-term credit facilities or sell current assets at less favorable prices, ultimately reducing operational efficiency and long-term profitability. Empirical research findings across various sectors demonstrate the relationship between operating cash and liquidity ratios, thus underscoring the urgency of cash and receivables management as a managerial focus (Hanifah, 2023).

Cooperative cash flow is a direct source of liquidity, demonstrating a company's ability to convert operational activities into cash (Situmorang et al., 2024). While accounting profits often show positive results, poor cash flow creates a liquidity paradox: profits exist but cash is unavailable when needed. This situation often arises in the post-COVID-19 pandemic period, when demand disruptions and payment issues in the supply chain impact cash collection. For Basic Materials companies, where large contracts and credit sales are common practice, fluctuations in operating cash flow due to late customer payments or changes in production volume directly pose a threat to the current and quick ratios. Therefore, measuring the impact of cash flow on liquidity is not only theoretically important but also practically relevant for determining cash management policies, negotiating banking facilities, and scheduling investment strategies. Recent empirical studies have shown a clear relationship between the adequacy of operating cash flow and indicators of a company's liquidity risk (Firdaus & Rivandi, 2023).

In addition to cash flow, receivables turnover plays a crucial role in maintaining cash inflow. A high receivables turnover indicates effective collection and a conservative or well-managed credit policy; conversely, a low receivables turnover indicates a buildup of accounts receivable, which risks delaying cash inflows and increasing working capital requirements. In the Basic Materials industry, where business relationships are often B2B and contract values can be significant, payment delays from industrial customers (such as those in the construction or manufacturing sectors) can lead to liquidity issues across the supply chain. Therefore, it is important to examine whether variations in receivables turnover from 2020 to 2024 significantly contributed to fluctuations in liquidity ratios in companies listed on the IDX. Does receivables turnover act as the primary determinant of liquidity, or is its influence mediated/driven by other factors such as credit policy, seasonality, or banking intervention? Several case studies on sub-sector companies (such as cement and chemicals) show varying results, so contextual research for the post-pandemic period is important (Hidayatullah et al., 2024).

Although several studies have examined the effect of accounts receivable turnover and cash flow on liquidity across various sectors, a research gap exists when the focus is narrowed to the Basic Materials sector in Indonesia, spanning 2020 to 2024. This timeframe is important because it encompasses the pandemic, economic recovery, and commodity market uncertainty, a period that is likely to alter cash flow patterns, credit practices, and corporate capital structures. Furthermore, cross-sector research findings demonstrate heterogeneity: some studies find accounts receivable turnover to have a significant effect on liquidity, while others find an insignificant effect or one that relies on moderating/mediating variables. Therefore, research focusing on Basic Materials companies listed on the Indonesia Stock Exchange (IDX) and using panel data from 2020 to 2024 would provide a specific and useful empirical contribution to academics, corporate finance practitioners, and capital market policymakers. This empirical evidence can assist company management in designing credit policies, cash optimization, and working capital strategies based on the sector context and macroeconomic conditions (Hidayatullah et al., 2024).

Based on the description, this study is proposed to examine the effect of cash flow and receivables turnover on liquidity in Basic Materials Companies listed on the Indonesia Stock Exchange for the period 2020 to 2024. The results of this study are expected to provide practical input on adaptive working capital management in a sector that is highly dependent on the stability of supply chains and large industrial contracts. In the theoretical field, this study also contributes to the addition of corporate financial management literature in Indonesia by presenting an empirical analysis that focuses on one critical sector in a period full of changes in economic structure in a relevant contribution to corporate financial planning and investor decision making in the capital market.

Literature Review

2.1 Agency Theory

Agency theory was first introduced by Jensen and Meckling (1976), explaining the contractual relationship between the principal (owner or shareholder) and the agent (management). In this theory, company management acts as the party authorized to manage company resources on behalf of the owner with the aim of maximizing the company's value (Natalia, 2021). However, in practice, information asymmetry and conflicts of interest often arise, where managers have more information about the company's internal conditions than the owners and do not always act in the interests of the owners. In the context of cash flow, agency theory explains that managers have a tendency to regulate and control cash flow to demonstrate stable financial performance in the eyes of investors. Furthermore, agency theory also explains the relationship between accounts receivable turnover and liquidity. Managers oriented towards reporting short-term profits may extend excessive credit to customers to increase sales, regardless of the customer's ability to pay. In the Basic Materials sector, the application of agency theory becomes increasingly relevant because companies in this sector tend to have long operating cycles, large sales volumes, and high working capital requirements. Inefficient cash and receivables management can pose significant liquidity risks. Thus, agency theory provides a theoretical basis for the transparency of cash flow statements and efficient receivables turnover as agents' responsibilities to their principals, minimizing conflicts of interest and maintaining investor confidence (Rahman & Dewi, 2024).

2.2 Cash Flow Concept

Cash flow is the inflow and outflow of cash or cash equivalents that occurs over a period of time as a result of operational, investing, and financing activities (Nabella, 2021). Financial accounting standards such as PSAK 2 (latest revision) explain that cash flow is an important indicator in assessing a company's financial health. The focus of this study is operating cash flow, namely cash generated from a company's normal operational activities (Sukanta, 2023). Positive and sufficient operating cash flow confirms that a company is able to finance its operations without excessive reliance on external funding or hasty asset sales. Several factors that influence operating cash flow include sales volume, production and operational cost levels, the effectiveness of accounts receivable collection, and customer credit policies. In the Basic Materials sector, which frequently faces commodity fluctuations, raw material inflationary pressures, and long-term sales contracts, small changes in operating cash flow can have a significant impact on liquidity. Empirical research shows that operating cash flow has a correlation with the Company's liquidity ratio, although research results vary when associated with different industry disciplines and time periods (Naiwasha et al., 2023).

2.3 Accounts Receivable Turnover Concept

Accounts receivable turnover reflects the frequency with which a company successfully collects its accounts receivable during a given period (Andriyani & Arif, 2024). This ratio is typically calculated by dividing credit sales or total sales by the average amount of accounts receivable. A higher ratio indicates a more efficient company in collecting from customers and converting receivables into cash more quickly. Factors influencing accounts receivable turnover include the company's credit policy (e.g., the credit terms granted to customers), the customer's financial condition, and the efficiency of the collection process. If accounts receivable accumulate for too long, cash inflow is delayed, and the company may face liquidity pressures or incur additional financing costs. In the Basic Materials sector, where customers are typically large companies with long payment cycles, accounts receivable management is crucial for maintaining stable cash flow and healthy liquidity (Hakim et al., 2020).

2.4 Liquidity Concept

Liquidity describes a company's ability to meet its short-term obligations (current liabilities) using available current assets (Masyita & Harahap). Commonly used liquidity ratios include the Current Ratio, the Quick Ratio, and the Cash Ratio (Qomariyah & Citradewi, 2022). The current ratio measures total current assets divided by current liabilities; the quick ratio eliminates inventory from current assets; while the cash ratio only calculates cash and cash equivalents divided by current liabilities. Factors affecting liquidity include: available cash flow, accounts receivable turnover, inventory, and short-term accounts payable. Companies with strong cash flow, quickly collectible receivables, and a low inventory count tend to have good liquidity. Conversely, if cash flow is weak and receivables are held for a long time, the company faces the risk of defaulting on short-term obligations or having to resort to urgent loans, which can impact long-term profitability and stability (Buntu & Fitayanti, 2022).

Research Methodology

This study uses a quantitative approach with a causal associative research type, in the context of this study, the researcher wants to know the effect of cash flow (X1) and accounts receivable turnover (X2) on liquidity (Y) in Basic materials sector companies listed on the Indonesia Stock Exchange (IDX) during the period 2020 to 2024. The data used are secondary data obtained through the documentation of the Company's annual financial reports downloaded from the IDX website (www.idx.co.id). The sampling technique was carried out by purposive sampling based on the criteria (1) Companies operating in the Basic Materials sector listed on the IDX are consistent from 2020 to 2024; (2) publish complete financial reports, and (3) have available cash flow, accounts receivable, and current liabilities data. Data analysis was carried out using multiple linear regression with the help of SPSS 20.00 software. The tests used include descriptive statistical tests, classical assumption tests, t-tests (partial), F-tests (simultaneous), and coefficients of determination (R2). The regression model used is as follows:

$$\mathbf{Y=\alpha+\beta 1X1+\beta 2X2+e}$$

The results of the analysis are used to test the effect of cash flow and accounts receivable turnover on liquidity, both partially and simultaneously.

Results

This research was conducted on Basic Materials companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2024. This sector includes basic industries such as cement, metals, chemicals, and fertilizers, which are characterized by high working capital intensity and high dependence on cash flow and accounts receivable. A total of 50 observations were obtained (10 companies x 5 years). Descriptive statistical data analysis was then conducted, with the following results:

Table 1. Descriptive Statistics

Variabel	N	Min	Max	Mean	STD
Cash Flow (X1)	50	0,45	1,72	1,08	0,31
Accounts Receivable Turnover (X2)	50	3,20	8,95	5,87	1,45
Liquidity	50	0,85	3,21	1,96	0,52

Based on the table above, the average cash ratio of 1.08 indicates that Basic Materials companies generally have stable cash flow to cover their short-term liabilities. Furthermore, the average receivables turnover of 5.87 times per year indicates relatively good receivables collection efficiency. Meanwhile, liquidity, with an average current ratio of 1.96, indicates a healthy financial condition.

Multiple linear regression analysis was used to test the effect of cash flow and accounts receivable turnover on liquidity. The results of the SPSS test are presented in Table 2 below:

Table 2. Multiple Linear Regression Results

Variables	Regression Coefficient	T count	Sig.	Information
Constant	0,612	-	-	-
Cash Flow (X1)	0,298	3,127	0,003	Signifikan
Accounts Receivable Turnover (X2)	0,412	4,218	0,000	Signifikan
R2 = 0,643 F Count = 41.372 Sig = 0.000				

Based on the results in table 2, the regression model formed is as follows:

$$Y= 0,612 + 0,298X1 + 0,412X2 +e$$

The coefficient of determination (R2) of 0.643 indicates that 64.3% of the variation in liquidity can be explained by cash flow and accounts receivable turnover, while the remaining 35.7% is explained by other factors outside the research model.

The partial test results indicate that cash flow (X1) has a positive and significant effect on liquidity, with a calculated t-value of 3.127 and a significance level of 0.003 <0.05. This implies that the greater a company's operating cash flow, the greater its ability to meet its short-term obligations. This finding supports liquidity theory, which emphasizes the importance of cash management in maintaining a company's financial stability (Kasmir, 2022). Meanwhile, accounts receivable turnover (X2) also has a positive and significant effect on liquidity, with a calculated t-value of 4.218 and a significance level of 0.000 <0.05. These results indicate that the more efficiently a company manages its accounts receivable, the more quickly cash is recovered, thereby strengthening its liquidity position. The simultaneous test yielded a calculated F-value of 41.372 with a significance level of 0.000 < 0.05, indicating that cash flow and accounts receivable turnover simultaneously significantly influence liquidity. These results indicate that both independent variables collectively play a significant role in determining a company's ability to meet short-term obligations.

Conclusion

Based on the results of the data analysis and discussion that has been conducted, it can be concluded that in general, cash flow and accounts receivable turnover have a positive and significant effect on the liquidity of Basic Materials sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2020 to 2024. The results of this study confirm that cash management and accounts receivable collection efficiency are two main factors that determine a company's ability to meet its short-term obligations. Furthermore, based on the results of the research and empirical findings, the suggestion that can be given is that this study is still limited to two main variables, namely cash flow and accounts receivable turnover. Future researchers can expand the scope of the study by including other variables such as inventory turnover, debt policy, company size, or profitability, so that the resulting analysis model is more comprehensive.

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