

INFLUENCE OF OPERATING CASH FLOW AND LONG-TERM LIABILITIES ON PT WASKITA KARYA TBK'S

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Abstract

This study aims to analyze the effect of Operating Cash Flow (OCF) and Long-Term Liabilities (LTL) on Cash and Cash Equivalents at Year-End (CCEYE) at PT Waskita Karya Tbk for the 2015–2024 period. The background of this research is based on significant fluctuations in the financial performance of this state-owned construction company, where the management of cash flow and capital structure plays a crucial role in maintaining liquidity. The method used is a quantitative approach with a causal-associative design, utilizing secondary time-series data from annual financial reports over ten years. Data analysis was carried out using multiple linear regression after conducting classical assumption tests, preceded by Pearson correlation analysis. The correlation test results show a very weak relationship between OCF and CCEYE ($r = 0.047$) and a weak negative relationship between LTL and CCEYE ($r = -0.189$). The partial test results (t-test) indicate that individually, Operating Cash Flow (Sig. = 0.694) and Long-Term Liabilities (Sig. = 0.539) have no significant effect on Cash and Cash Equivalents at Year-End. Similarly, the simultaneous test results (F-test) show that OCF and LTL together do not have a significant effect on CCEYE (Sig. = 0.810). This indicates that variations in CCEYE during the period are largely explained by other factors beyond the two independent variables studied, such as financing or investing cash flows.

Keywords: Operating Cash Flow, Long-Term Liabilities, Cash and Cash Equivalents

Introduction

The financial performance of construction companies, particularly those involved in large-scale infrastructure projects such as PT Waskita Karya Tbk, is highly dependent on the management of liquidity and funding structure. Cash and Cash Equivalents at Year-End (CCEYE) serve as a vital indicator of a company's liquidity, reflecting its ability to meet short-term obligations and finance growth. Theoretically, the main components influencing cash are operating activities and financing activities.

Operating Cash Flow (OCF) reflects a company's ability to generate cash from its core business operations. Ideally, a positive OCF should be the primary source of liquidity. However, in the case of PT Waskita Karya Tbk, the data show fluctuations in OCF, with several years even recording negative values (2016, 2017, 2022, and 2024). This

phenomenon raises questions about the extent to which OCF remains a key determinant of year-end liquidity.

On the other hand, Long-Term Liabilities (LTL) play an important role in providing funds for major investments (projects). While they supply capital, LTL also carry implications for future interest expenses and principal repayments, which can exert pressure on the company's cash position. Data show that PT Waskita Karya Tbk's LTL experienced a sharp increase, peaking in 2022. The influence of LTL on CCEYE can be either positive (if borrowed funds enhance revenue) or negative (if principal and interest payments reduce cash).

This research is crucial to understanding the extent to which the dynamics of OCF and LTL financing policies affect CCEYE in the context of PT Waskita Karya Tbk, whose financial condition is highly dynamic. The purpose of this study is to examine both the partial and simultaneous effects of Operating Cash Flow and Long-Term Liabilities on Cash and Cash Equivalents at Year-End.

Theoretical Framework

The research data are presented in Table 1.

Table 1. Data on Operating Cash Flow, Long-Term Liabilities, and Cash and Cash Equivalents at Year-End (2015–2024)

Year	Operating Flow (X1)	Cash (X2)	Long-Term Liabilities (X2)	Cash and Cash Equivalents at Year-End (Y)
2015	0,65		6,97	5,51
2016	-7,76		13,37	10,65
2017	-5,95		22,83	6,09
2018	4,01		38,7	10,84
2019	9,01		48,45	9,26
2020	0,41		40,77	1,21
2021	0,19		60,84	13,16
2022	-0,11		62,86	2,22
2023	2,32		61,09	1,34
2024	-2,38		46,78	2,52
Average	0,039		40,266	6,28
Min	-7,76		6,97	1,21
Max	9,01		62,86	13,16

Source: Processed Data (2025)

Operating Cash Flow (X1)

Operating Cash Flow (OCF) is the net cash flow generated from a company's primary operational activities. Theoretically, a positive OCF indicates operational efficiency and is expected to have a positive and significant effect on Cash and Cash Equivalents

at Year-End (CCEYE), as it represents the most stable source of cash. Previous studies (Aprilianti & Yuniarti, 2020; Prasetyo, 2017) indicate that operating cash flow is an important factor in determining liquidity.

Long-Term Liabilities (X2)

Long-Term Liabilities (LTL) are obligations that the company must repay over a period exceeding one year. LTL serve as a significant external funding source for large-scale projects. The effect of LTL on CCEYE is ambiguous (dual in nature). On one hand, the inflow of loan funds can increase CCEYE; on the other hand, rising LTL will increase future interest and principal payment burdens, potentially reducing CCEYE. Studies by Anwar & Hidayat (2019) and Iskandar & Salim (2017) have examined the impact of capital structure, including LTL, on corporate liquidity.

Cash and Cash Equivalents at Year-End (Y)

Cash and Cash Equivalents at Year-End (CCEYE) reflect a company's liquidity—its ability to provide funds to meet short-term obligations and finance operational or investment activities. A higher CCEYE is often associated with better financial health.

However, previous studies have rarely examined how operating cash flow and long-term liabilities jointly influence year-end liquidity in state-owned construction companies, especially in Indonesia.

Hypotheses Development

Based on a review of the literature on cash and funding management, the research hypotheses are formulated as follows:

1. H1: Operating Cash Flow (X1) has a significant effect on Cash and Cash Equivalents at Year-End (Y).
2. H2: Long-Term Liabilities (X2) have a significant effect on Cash and Cash Equivalents at Year-End (Y).
3. H3: Operating Cash Flow (X1) and Long-Term Liabilities (X2) simultaneously have a significant effect on Cash and Cash Equivalents at Year-End (Y).

Method

This study employs a quantitative approach with a causal-associative research design. This design aims to analyze the cause-and-effect relationship or influence between the independent variables (X1 and X2) and the dependent variable (Y). The type of data used is secondary time-series data, sourced from the annual financial statements of PT Waskita Karya Tbk. The observation period covers the years 2015 to 2024 (10 years). The population and sample in this study consist of data on Operating Cash Flow, Long-Term Liabilities, and Cash and Cash Equivalents at Year-End for a period of ten years (2015–2024), which are treated as a population sample. The data analysis technique used is multiple linear regression analysis with the assistance of the SPSS software. Before testing the hypotheses (t-test and F-test), Pearson correlation analysis and classical assumption tests (including Normality, Multicollinearity,

Heteroscedasticity, and Autocorrelation tests) were conducted to ensure that the regression model meets the BLUE (Best Linear Unbiased Estimator) criteria.

Results

The results show that

Data Normality Test

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Operating Cash Flow	.188	10	.200*	.959	10	.777
Long Term Liabilities	.169	10	.200*	.910	10	.279
Cash and Cash Equivalents at Year-End	.201	10	.200*	.900	10	.220

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: Processed from SPSS Output, Table Tests of Normality

Based on the results of the normality test, variable X1 (Operating Cash Flow) has a significance value of 0.188, X2 (Long-Term Liabilities) of 0.169, and Y (Cash and Cash Equivalents) of 0.201. Since all p-values are greater than 0.05, the data are normally distributed.

Multicollinearity Test

Model	Coefficients ^a											
	B	Unstandardized Coefficients	Standardized Coefficients	Std. Error	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics
							Lower Bound	Upper Bound	Zero-Order	Partial	Part	
1	(Constant)	8.648	3.983		2.17	.066	-.770	18.067				
	Operating Cash Flow	.157	.384	.169	.410	.694	-.751	1.065	.047	.153	.150	.791 1.263
	Long Term Liabilities	-.059	.091	-.266	-.646	.539	-.275	.157	-.189	-.237	-.237	.791 1.263

a. Dependent Variable: kas dan setara kas

Source: Processed from SPSS Output, Table Coefficientsa

Based on the Coefficientsa table, the VIF value for X1 is 1.263 and for X2 is 1.263. Since both values are less than 10 and the Tolerance values are greater than 0.10, it can be concluded that there is no multicollinearity between the independent variables.

Heteroscedasticity Test

Model	Coefficients ^a										
	Unstandardized Coefficients			Standardized Coefficients		95.0% Confidence Interval for B			Correlations		
	B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Part	Part	Tolerance
1	(Constant)	1.852	1.750		1.058	.325	-2.286	5.989			
	Operating Cash Flow	-.048	.169	-.111	-.284	.784	-.447	.351	.082	-.107	-.099
	Long Term Liabilities	.043	.040	.423	1.080	.316	-.052	.138	.372	.378	.377
											.791
											1.263

a. Dependent Variable: ABSRES

Source: Processed from SPSS Output, Table Coefficientsa

Based on the results of the heteroscedasticity test, the significance value for variable X1 is 0.784, and for variable X2 is 0.316. Since the significance values of both variables are greater than 0.05, it can be concluded that there is no indication of heteroscedasticity. Therefore, the study can proceed to the next stage of analysis. The test can also be visually verified by examining the scatter plot between the predicted values of the dependent variable (ZPRED) and its residual values (SRESID).

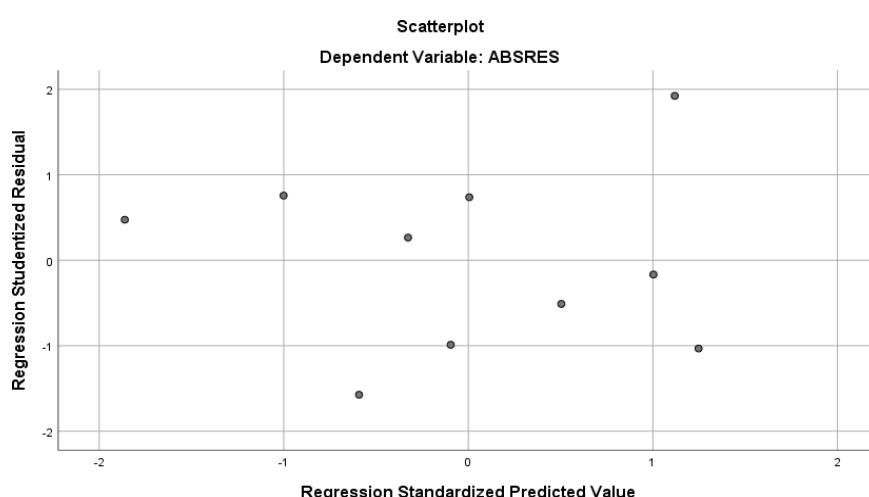


Figure 1. Scatterplot of Residuals

Based on the figure above, the points on the scatterplot do not show a clear or specific pattern of distribution. Thus, it can be concluded that there is no heteroscedasticity problem in the regression model, indicating that the regression model is appropriate for use.

Autocorrelation Test

Model Summary ^b					
Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Durbin-Watson
1	.241 ^a	.058	-.211	4.88606	2.567

a. Predictors: (Constant), Long-Term Liabilities, Operating Cash Flow

b. Dependent Variable: Cash and Cash Equivalents

Source: Processed from SPSS Output, Table Model Summary^b

The Durbin-Watson (DW) value indicates that there is no positive or negative autocorrelation among the residuals. Therefore, the regression model satisfies the autocorrelation assumption and can be used for hypothesis testing.

Pearson Correlation Test

		Correlations		
		Operating Cash Flow	Long Term Liabilities	Cash and Cash Equivalents at Year-End
Operating Cash Flow	Pearson Correlation	1	.457	.047
	Sig. (2-tailed)		.185	.897
	N	10	10	10
Long Term Liabilities	Pearson Correlation	.457	1	-.189
	Sig. (2-tailed)	.185		.601
	N	10	10	10
Cash and Cash Equivalents at Year-End	Pearson Correlation	.047	-.189	1
	Sig. (2-tailed)	.897	.601	
	N	10	10	10

Source: Processed from SPSS Output, Table Correlations

The correlation results show a very weak relationship between Operating Cash Flow (OCF) and Cash and Cash Equivalents at Year-End (CCEYE) ($r = 0.047$), as well as a weak negative relationship between Long-Term Liabilities (LTL) and CCEYE ($r = -0.189$).

Multiple Linear Regression and Partial T-Test

Model	Coefficients ^a						Correlations			Collinearity Statistics	
	Unstandardized Coefficients		Beta	t	Sig.		Zero-order	Partial	Part		
	B	Std. Error							Tolerance	VIF	
1 (Constant)	8.648	3.983		2.171	.066						
Operating Cash Flow	.157	.384	.169	.410	.694	.047	.153	.150	.791	1.263	
Long Term Liabilities	-.059	.091	-.266	-.646	.539	-.189	-.237	-.237	.791	1.263	

a. Dependent Variable: Cash and Cash Equivalents at Year-End

Source: Processed from SPSS Output, Table Coefficients^a

Multiple Regression Equation: $Y = 8.648 + 0.157X_1 - 0.059X_2$

- H1 Testing (OCF toward CCEYE): The significance value (Sig.) for X_1 is 0.694. Since $0.694 > 0.05$, H1 is rejected. This means that Operating Cash Flow has no significant partial effect on Cash and Cash Equivalents at Year-End.
- H2 Testing (LTL toward CCEYE): The significance value (Sig.) for X_2 is 0.539. Since $0.539 > 0.05$, H2 is rejected. This indicates that Long-Term Liabilities have no significant partial effect on Cash and Cash Equivalents at Year-End.

Simultaneous F-Test

Model	ANOVA ^a					
	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	10.349	2	5.174	.217	.810 ^b
	Residual	167.115	7	23.874		
	Total	177.464	9			

a. Dependent Variable: Cash and Cash Equivalents at Year-End²

b. Predictors: (Constant), Long-Term Liabilities, Operating Cash Flow
Source: Processed from SPSS Output, Table ANOVA

H3 Testing (OCF and LTL simultaneously toward CCEYE): The Significance (Sig.) value of F is 0.810. Since $0.810 > 0.05$, H3 is rejected. This means that Operating Cash Flow and Long-Term Liabilities, when tested simultaneously, do not have a significant effect on Cash and Cash Equivalents at Year-End.

Discussion

The results of the study indicate that, both partially and simultaneously, Operating Cash Flow (OCF) and Long-Term Liabilities (LTL) do not have a significant effect on Cash and Cash Equivalents at Year-End (CCEYE) of PT Waskita Karya Tbk during the 2015–2024 period.

Partial Hypothesis Testing (t-test)

1. Operating Cash Flow (OCF) toward CCEYE (H1 Rejected):
 - a. OCF has a positive coefficient ($B = 0.157$), indicating a direct relationship, but it is not significant ($Sig. = 0.694 > 0.05$).
 - b. This insignificance indicates that OCF is not a key determinant of the company's year-end cash position during the study period. This finding is reinforced by the fact that OCF was frequently negative, suggesting difficulties in generating cash from core operations. The company's year-end cash position is likely dominated by financing cash flows (e.g., bond issuance or equity funding) or investment cash flows associated with large-scale projects.
2. Long-Term Liabilities (LTL) toward CCEYE (H2 Rejected):
 - a. LTL has a negative coefficient ($B = -0.059$), indicating an inverse relationship, but it is also not significant ($Sig. = 0.539 > 0.05$).
 - b. This result suggests that changes in LTL do not consistently impact CCEYE. Although LTL provides substantial funding, these funds are often immediately allocated to finance non-current assets (infrastructure projects) rather than retained as cash. Furthermore, increased debt repayments and interest expenses may offset the positive effects of new borrowings, resulting in a non-significant net effect on CCEYE.

Simultaneous Hypothesis Testing (F-test)

OCF and LTL simultaneously toward CCEYE (H3 Rejected):

- a. The Significance (Sig. F) value is $0.810 > 0.05$.
- b. This confirms that the regression model weakly explains variations in CCEYE during the 2015–2024 period. In other words, changes in CCEYE are largely influenced by other variables outside the model. Other factors that may play a more dominant role in determining liquidity for large construction companies include short-term liquidity ratios (such as the Current Ratio) or cash flows from financing and investment activities.

Conclusion

The main conclusion of this study is that Operating Cash Flow (OCF) and Long-Term Liabilities (LTL), both partially and simultaneously, do not have a significant effect on Cash and Cash Equivalents at Year-End (CCEYE) of PT Waskita Karya Tbk during the 2015–2024 period. Despite this statistical insignificance, PT Waskita Karya Tbk's contribution to the national economy remains substantial, particularly through the provision of public infrastructure, employment generation, and support for government investment activities. The absence of significant influence in this study suggests that the company's cash management is more strongly affected by other variables, such as financing cash flows, investment policies, or government policy interventions related to national strategic projects. Thus, the findings reinforce the understanding that external factors and project financing structures play a more dominant role compared to internal operational and long-term liability factors. From an academic perspective, this study contributes to the insight that in state-owned construction companies (SOEs) with highly dynamic financial conditions, Operating Cash Flow and Long-Term Liabilities, though fundamental, are not the primary determinants of year-end liquidity. The limitation of this study lies in its focus on only two independent variables. Therefore, future research is recommended to include additional variables such as Financing Cash Flow, Investment Cash Flow, and the Current Ratio to develop a more comprehensive model of corporate liquidity.

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References

Anwar, M., & Hidayat, A. (2019). Analisis dampak struktur modal dan liabilitas jangka panjang terhadap likuiditas perusahaan manufaktur. *Jurnal Ilmiah Bisnis dan Ekonomi Asia*, 13(2), 70–85.

Aprilianti, S., & Yuniarti, R. (2020). Pengaruh arus kas operasi, arus kas investasi, dan arus kas pendanaan terhadap likuiditas pada perusahaan manufaktur. *Jurnal Akuntansi dan Keuangan Indonesia*, 12(1), 1–15.

Budiyono, R., & Santoso, A. (2021). Peran arus kas operasi dalam menentukan tingkat kesehatan keuangan perusahaan sektor konstruksi di Indonesia. *Jurnal Riset Manajemen dan Bisnis*, 6(2), 101–115.

Handayani, D., & Widodo, A. (2020). Pengaruh arus kas operasi, liabilitas, dan ukuran perusahaan terhadap kinerja keuangan. *Jurnal Ekonomi*, 21(4), 310–325.

Iskandar, A., & Salim, A. (2017). Analisis pengaruh liabilitas jangka panjang terhadap cash ratio pada industri konstruksi. *Jurnal Keuangan dan Perbankan*, 21(3), 480–495.

Juniarti, K. (2022). Hubungan arus kas operasi, pendanaan, dan liabilitas jangka panjang dengan cash holding perusahaan. *Jurnal Bisnis dan Akuntansi*, 24(1), 1–15.

Pangestu, R., & Permana, B. (2019). Implikasi liabilitas jangka panjang terhadap ketersediaan kas dan setara kas. *Jurnal Manajemen Teori dan Terapan*, 12(3), 250–265.

Rahmawati, D., & Nugroho, P. (2021). The effect of cash flow activities and debt policy on company liquidity in the infrastructure sector. *Jurnal Akuntansi dan Keuangan Terapan*, 5(2), 145–156.

Simanjuntak, E., & Pasaribu, Y. (2020). Determinan cash holding perusahaan: Studi pengaruh arus kas operasi dan liabilitas. *Jurnal Ekonomi Akuntansi*, 6(3), 280–295.

Suhardi, T. (2018). Analisis liabilitas jangka panjang dan arus kas pendanaan dalam menjaga tingkat likuiditas perusahaan. *Jurnal Riset Akuntansi*, 7(3), 210–225.

Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40–55.

Widyawati, R., & Dewi, K. (2020). Pengaruh arus kas aktivitas operasi, investasi, dan pendanaan terhadap likuiditas perusahaan. *Media Riset Akuntansi, Auditing & Informasi*, 20(2), 180–195.

Wijayanti, A., & Kurniawan, E. (2023). Operating cash flow, leverage, and firm performance: Evidence from Indonesian state-owned enterprises. *Jurnal Keuangan dan Bisnis*, 10(1), 20–34.