

THE PROFIT PREDICTION PUZZLE: HOW GROSS, OPERATING, AND NET PROFIT INFLUENCE FUTURE CASH FLOWS WITH A DEPRECIATION AND AMORTIZATION TWIST

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Abstract

This study aims to analyze the effect of gross profit, operating profit, and net profit on predicting future cash flows, with depreciation and amortization (DA) as moderating variables. The data used in this research is secondary data from financial reports of manufacturing companies listed on the Indonesian Stock Exchange (IDX) from 2019 to 2023. The research applies panel data regression analysis, with Ordinary Least Squares (OLS), Fixed Effects, and Random Effects models to evaluate the impact of profitability measures on future cash flows. The results show that gross profit and operating profit have significant negative effects on future cash flows, while net profit has a significant positive effect. Furthermore, the introduction of DA as a moderating variable reveals that it significantly influences the relationship between gross profit and future cash flows, but does not significantly affect the relationship between net profit and cash flows. These findings suggest that non-cash expenses like depreciation and amortization should be considered when forecasting future financial performance.

Keywords: Gross Profit, Operating Profit, Net Profit, Depreciation, Future Cash Flows

1. Introduction

In today's dynamic and unpredictable business environment, accurate cash flow forecasting has become a critical tool for companies to ensure financial stability, make informed investment decisions, and maintain operational sustainability ((Wulandari et al., 2024);(Dasman et al., 2023);(Purba & Wulandari, 2024)). While many financial indicators are used to predict cash flows, profitability metrics such as Gross Profit, Operating Profit, and Net Profit are often considered primary benchmarks of a firm's financial performance. These profit metrics serve as reflections of past performance and potential predictors of future liquidity. However, the relationship between these profit indicators and future cash flows is not always linear or straightforward, as it may be influenced by various accounting treatments, particularly those involving non-cash expenses such as depreciation and amortization (Zhao et al., 2021).

Depreciation and amortization are non-cash charges that systematically allocate the cost of tangible and intangible assets over their useful lives. While these expenses do not directly impact cash flow, they significantly influence reported profit figures. Consequently, the presence of high depreciation and amortization can cause discrepancies between profit and actual cash availability, potentially weakening the predictive power of profitability on cash flows (Wang & Liu, 2022). Therefore, it becomes essential to understand the moderating role of depreciation and amortization to evaluate whether profitability remains a reliable indicator for future cash flows when these non-cash elements are considered.

Recent studies have emphasized the need for more sophisticated financial models that integrate both performance indicators and accounting treatments to forecast cash flows more accurately ((Chen & Zhang, 2023); (Cai & Zhang, 2018); (Jiang et al., 2021)). This research aims to bridge the gap by investigating how Gross Profit, Operating Profit, and Net Profit influence the prediction of future cash flows, and how these relationships are moderated by Depreciation and Amortization. The study's findings are expected to contribute to both academic literature and business practice by offering more nuanced insights into financial performance evaluation and decision-making processes.

The purpose of this research is to develop an analytical model that captures the dynamic interaction between profit indicators and depreciation-related adjustments in forecasting future cash flows. The outcomes are intended to benefit financial analysts, corporate managers, investors, and auditors in interpreting financial statements more effectively and making data-driven decisions (Tan & Huang, 2023). This paper is organized into several sections: the introduction outlines the research rationale and objectives; the literature review discusses relevant theories and prior studies; the methodology explains the research design; the results section presents the findings; and the conclusion highlights the implications and suggestions for future research.

2. Theoretical Background

2.1 Accrual Accounting Theory

This study is grounded in Accrual Accounting Theory, which provides the primary framework for understanding the relationship between profitability and cash flows. Accrual Accounting Theory states that revenues and expenses should be recognized when they are earned or incurred, rather than when cash is received or paid. This theoretical approach allows companies to present a more accurate picture of financial performance within a specific period by incorporating both cash and non-cash transactions into their financial reporting. However, this same approach can create discrepancies between reported profit and actual cash flow, particularly due to non-cash expenses such as depreciation and amortization (Ma & Sun, 2023).

2.2 Limitations of Accrual-Based Profitability Measures

Profitability metrics like Gross Profit, Operating Profit, and Net Profit are all constructed under the accrual basis. While these metrics are crucial for evaluating business performance, they may not always align with actual cash inflows, especially when significant non-cash charges are present. For instance, depreciation and amortization reduce reported earnings without affecting cash flow, thereby weakening the predictive power of profit-based indicators unless properly accounted for (Kim & Zhao, 2022). Thus, these non-cash items serve as key moderating variables in the relationship between profitability and future cash flows.

2.3 Prior Research

Prior empirical studies support the notion that profit metrics, when evaluated without considering depreciation and amortization, may offer an incomplete view of future cash-generating potential. Fernandez & Yu, (2021) found that high depreciation levels can distort the cash flow expectations derived from net income. Similarly, Li & Cheng, (2022) demonstrated that operating profit provides stronger predictive accuracy when depreciation is included in the analytical model. These findings reinforce the need for

models that incorporate the moderating effects of non-cash adjustments to improve the reliability of financial forecasts.

2.4 Hypotheses Development

Based on this theoretical and empirical foundation, the following hypotheses are proposed:

- H1: Gross Profit significantly influences the prediction of future cash flows.
- H2: Operating Profit significantly influences the prediction of future cash flows.
- H3: Net Profit significantly influences the prediction of future cash flows.
- H4: Depreciation and Amortization moderate the relationship between Gross Profit and future cash flows.
- H5: Depreciation and Amortization moderate the relationship between Operating Profit and future cash flows.
- H6: Depreciation and Amortization moderate the relationship between Net Profit and future cash flows.

These hypotheses aim to deepen the understanding of how traditional profitability measures can be used more effectively in financial forecasting when analyzed through the lens of Accrual Accounting Theory.

3. Methods

3.1 Research Design and Focus

This study employs a quantitative research design using a causal-comparative approach to investigate the effect of Gross Profit, Operating Profit, and Net Profit on predicting future cash flows, with Depreciation and Amortization as a moderating variable. The focus is to assess how profitability metrics, moderated by non-cash charges, influence a firm's future cash-generating ability.

3.2 Scope and Object of Research

The research object includes non-financial companies listed on the Indonesia Stock Exchange (IDX) from 2021 to 2023, chosen for the availability of comprehensive financial statement data during the post-pandemic recovery period. The population comprises all non-financial firms on IDX, while the sample is selected using purposive sampling, with criteria including (1) availability of complete financial reports for the observed period, (2) consistency in reporting Gross Profit, Operating Profit, Net Profit, and cash flows, and (3) firms reporting Depreciation and Amortization expenses.

3.3 Data Collection Techniques

The study uses secondary data collected from the official IDX website and company financial reports published during the 2021–2023 period. The data are compiled into a panel format for analysis, ensuring comparability across time and entities.

3.4 Operational Definitions of Variables

- 1) Gross Profit (GP): Revenue minus cost of goods sold (COGS), measuring basic profitability.
- 2) Operating Profit (OP): Earnings before interest and taxes (EBIT), representing core business profitability.
- 3) Net Profit (NP): Total earnings after all expenses, including taxes and interest.

- 4) Depreciation and Amortization (DA): Total non-cash charges recorded for tangible and intangible asset allocation.
- 5) Future Cash Flows (FCF): Cash flow from operations in the following year, used as the dependent variable.

3.4 Analysis Techniques

The research uses Moderated Regression Analysis (MRA) to test the moderating role of Depreciation and Amortization. Data analysis will be conducted using EViews, beginning with descriptive statistics, followed by classical assumption tests (normality, multicollinearity, heteroscedasticity, and autocorrelation), then regression analysis, and finally testing the interaction effects through moderation modeling.

This method enables the study to determine the direct effects of profitability on future cash flows, as well as how non-cash adjustments impact this predictive relationship.

4. Results and Discussion

4.1 Descriptive Statistics

The results of the descriptive analysis are summarized in Table 1 below.

Table 1. Descriptive Statistics

Variable	Min	Max	Mean	Std Deviation
Gross Profit (GP) (X1)	166666.14	36050469	3300059	6333038
Operating Profit (OP) (X2)	3860.735	19693110	1723313	3499916
Net Profit (NP) (X3)	-25917.77	11493733	1132718	2039305
Future Cash Flows (FCF) (Y)	-25945916	1838137	-1201194	3606991
Depreciation and Amortization (DA)(Z)	-190813.0	38249889	3936580	6363269

Source: Proceed Data, 2025

The descriptive statistics in Table 1 provide an overview of the characteristics of the data used in this study, which investigates the predictive relationship between profitability metrics—Gross Profit (GP), Operating Profit (OP), and Net Profit (NP)—on Future Cash Flows (FCF), with Depreciation and Amortization (DA) acting as a moderating variable. These statistics reveal the range, average (mean), and standard deviation of each variable, offering insight into the distribution and variability of the data.

Gross Profit (GP) shows a minimum value of 166,666.14 and a maximum value of 36,050,469, with a mean of 3,300,059 and a standard deviation of 6,333,038. This wide range and high deviation suggest significant differences in cost management and revenue generation capabilities across the sampled companies. A similar pattern is observed in Operating Profit (OP), which ranges from 3,860.73 to 19,693,110, with an

average of 1,723,313 and a standard deviation of 3,499,916. These figures indicate variability in operational efficiency among the firms.

Net Profit (NP) displays more volatility, with a minimum of -25,917.77 (indicating net loss) and a maximum of 11,493,733, showing the extent to which companies vary in their financial results after accounting for all expenses, taxes, and interest. The mean net profit is 1,132,718, and the standard deviation of 2,039,305 implies a high spread from the average, suggesting that some firms are more profitable than others, while some struggle to remain profitable or are incurring losses.

The dependent variable, Future Cash Flows (FCF), also reflects a wide range, from a minimum of -25,945,916 to a maximum of 1,838,137, with a negative mean of -1,201,194 and a standard deviation of 3,606,991. The negative average value may indicate that, on average, firms in the sample experienced net cash outflows in the following period. This underlines the importance of analyzing how profit indicators, when adjusted by depreciation and amortization, can more accurately forecast future liquidity performance.

Depreciation and Amortization (DA), the moderating variable, ranges from a negative -190,813 (which may reflect reclassification or adjustments) to 38,249,889, with a mean of 3,936,580 and a high standard deviation of 6,363,269. This variation emphasizes the inconsistency in non-cash charges among firms, reinforcing the rationale to explore its moderating effect. Overall, these descriptive statistics highlight the diversity and dynamic financial behavior of firms in the sample, justifying the need for more nuanced analysis beyond surface-level profitability.

4.2 Choosing the Panel Data Regression Model

The model used in this study is panel data regression, which tests the model specifications and the suitability of theories with reality. Ordinary least squares model (OLS) or common effect model (CEM), Hausman Test (Fixed Effect, Random Effect).

Table 2. Chow Test Results

Effects Test	Statistic	d.f	Prob.
Cross-section F	2.334809	(40.78)	0.0007
Cross-section Chi-square	96.831345	40	0.0000

Source: Proceed Data, 2025

To determine the appropriate panel data regression model, the study initially applied the Chow Test to compare the Common Effect Model (CEM) with the Fixed Effect Model (FEM). The test results, shown in Table 2, indicate a Cross-section F-statistic of 2.334809 with a probability value of 0.0007, and a Chi-square value of 96.831345 with a probability of 0.0000. Since both probability values are below the 0.05 significance level, the null hypothesis that the Common Effect Model is sufficient is rejected. Therefore, the Fixed Effect Model is more appropriate, as it better captures the individual heterogeneity across firms in the sample, aligning the model specification more accurately with the theoretical framework and real-world financial behavior of the observed companies.

Table 3. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	51.099904	4	0.0000

Source: Proceed Data, 2025

The Hausman Test is used to determine whether the Fixed Effect Model (FEM) or the Random Effect Model (REM) is more appropriate for panel data analysis. Based on the results shown in Table 3, the Chi-Square Statistic is 51.099904 with 4 degrees of freedom and a p-value of 0.0000. Since the p-value is less than the 0.05 significance threshold, we reject the null hypothesis that the Random Effect Model is suitable. This means that the Fixed Effect Model is preferred, as it provides more consistent and reliable estimates by accounting for time-invariant characteristics unique to each firm. Therefore, the study continues using the Fixed Effect Model for analyzing the effect of Gross Profit, Operating Profit, and Net Profit on predicting Future Cash Flows, moderated by Depreciation and Amortization.

4.3 The Effect of Gross Profit on Future Cash Flows

Table 4. Panel Least Squares

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	2044941.	1019720.	2.005395	0.0483
X1	-0.983660	0.303178	-3.244498	0.0017

Source: Proceed Data, 2025

Table 4 presents the results of the Panel Least Squares regression analysis to examine the effect of Gross Profit (X1) on Future Cash Flows (FCF). The coefficient for Gross Profit is -0.983660 with a t-statistic of -3.244498 and a probability value of 0.0017, indicating that the relationship is statistically significant at the 1% level. Interestingly, the negative coefficient suggests that higher gross profit is associated with lower future cash flows in the observed firms.

This inverse relationship may appear counterintuitive, but could be explained by potential inefficiencies in cost control, aggressive revenue recognition, or high levels of receivables that inflate gross profit without translating into actual cash inflows. It also implies that relying solely on gross profit as a predictor of future liquidity may be misleading, particularly in industries where margins are affected by volatile cost structures or revenue timing differences.

The intercept (C) of 2,044,941 indicates the expected future cash flow when Gross Profit is zero, although this value has limited practical interpretation without context. The standard error associated with the Gross Profit coefficient is 0.303178, and the relatively high t-statistic further confirms the strength of the negative relationship.

These findings support the need for deeper financial analysis that considers not just profitability, but also how effectively gross earnings convert into real cash, highlighting the importance of including moderating variables like depreciation and amortization in more advanced models. Thus, H1 is accepted.

4.4 The Effect of Operating Profit on Future Cash Flows

Table 5. Panel Least Squares

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	1566470.	649795.5	2.410712	0.0182
X2	-1.606013	0.360979	-4.449046	0.0000

Source: Proceed Data, 2025

Table 5 presents the results of the Panel Least Squares regression to evaluate the effect of Operating Profit (X2) on Future Cash Flows (FCF). The coefficient of Operating Profit is -1.606013, with a t-statistic of -4.449046 and a p-value of 0.0000, indicating a highly significant negative relationship at the 1% level. This suggests that

increases in operating profit are significantly associated with decreases in future cash flows, which may reflect underlying operational or accounting issues.

This counterintuitive result might be explained by companies that report high operating profits while incurring large non-cash expenses or engaging in aggressive accrual-based revenue recognition. These practices inflate earnings without corresponding increases in actual cash inflows, especially in industries with long receivable cycles or high levels of deferred expenses. Additionally, operational costs might be understated or capitalized, which would increase reported operating profit but not enhance short-term liquidity.

The constant term (C) is 1,566,470, representing the baseline estimate of future cash flows when Operating Profit is zero. While its economic interpretation is limited, it provides a starting point for understanding the model's behavior. The standard error for Operating Profit is 0.360979, reinforcing the statistical precision of the estimate given the strong t-value.

Overall, these results underscore the complexity of using operating profit as a predictor of future cash flows. Although it reflects a company's core earnings from operations, its connection to cash performance can be distorted without considering the quality of earnings and the role of non-cash elements like depreciation and amortization. Hence, further analysis involving moderating effects is essential to provide a more accurate forecast of financial performance. Then H2 is Accepted.

4.5 The Effect of Net Profit on Future Cash Flows

Table 6. Panel Least Squares

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	-2307356.	506456.5	-4.555882	0.0000
X3	0.976555	0.409835	2.38202	0.0195

Source: Proceed Data, 2025

Table 6 displays the Panel Least Squares regression results assessing the influence of Net Profit (X3) on Future Cash Flows (FCF). The coefficient of Net Profit is 0.976555, with a t-statistic of 2.38202 and a p-value of 0.0195, indicating a positive and statistically significant effect at the 5% level. This suggests that higher net profits are associated with an increase in future cash flows, aligning with theoretical expectations that net income should translate into greater cash availability, assuming accruals and non-cash items are minimal or properly accounted for.

Unlike gross profit and operating profit, which showed significant negative coefficients, net profit appears to provide a clearer signal of a company's cash-generating ability in the subsequent period. This is likely because net profit accounts for all expenses, including taxes, interest, and extraordinary items, giving a more holistic view of financial performance that is better aligned with actual cash outcomes.

The constant term (C) in the model is -2,307,356, implying that in the absence of net profit, firms would on average experience negative future cash flows. This negative intercept may reflect structural cash demands such as fixed overheads or capital expenditures that persist even when profits are low or zero.

The standard error of the net profit coefficient is 0.409835, and the t-value is relatively strong, reinforcing the reliability of this positive relationship. These results support the premise that net profit, as a bottom-line measure, is a more effective predictor of future cash flows compared to gross or operating profit alone.

In summary, the analysis confirms that net profit has a significant and positive impact on future cash flows, making it a key indicator for financial planning and investor decision-making, especially when paired with adjustments for non-cash items such as depreciation and amortization. Then H3 is accepted.

4.6 The Effect of Gross Profit with Depreciation and Amortization as a Moderating Variable on Future Cash Flows.

Table 7. Panel Least Squares 1

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	463834.0	212687.9	2.180820	0.0311
X1	-0.385497	0.058334	-6.608468	0.0000
Z	-0.099799	0.058057	-1.718996	0.0882

Source: Proceed Data, 2025

Table 8. Panel Least Squares 2

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	951320.1	1227901	0.774753	0.4408
X1	0.557498	0.330444	1.687121	0.0955
Z	-0.302208	0.275566	-1.096680	0.2761
X1Z	-5.86E-08	1.10E-08	-5.321036	0.0000

Source: Proceed Data, 2025

Tables 7 and 8 illustrate the results of two panel regression models used to test whether Depreciation and Amortization (Z) moderates the relationship between Gross Profit (X1) and Future Cash Flows (FCF). In Table 7 (Panel Least Squares 1), Gross Profit has a negative and highly significant effect on FCF ($\beta = -0.385497$, $p = 0.0000$), while Depreciation and Amortization (DA) also shows a negative, though marginally significant, effect ($\beta = -0.099799$, $p = 0.0882$). This suggests that, individually, both higher gross profits and depreciation/amortization levels are associated with reduced future cash flows, possibly due to aggressive cost capitalization or timing mismatches. However, Table 8 (Panel Least Squares 2), which includes the interaction term X1Z (Gross Profit $\times$ Depreciation & Amortization), reveals a significant moderating effect ($\beta = -5.86E-08$, $p = 0.0000$). Despite Gross Profit turning positive here ($\beta = 0.557498$, $p = 0.0955$), the strong negative coefficient of the interaction term suggests that as DA increases, the positive influence of gross profit on cash flows weakens. This confirms that Depreciation and Amortization negatively moderate the relationship between gross profit and future cash flows, indicating that non-cash charges may obscure the real liquidity benefits of gross profitability, reinforcing the importance of adjusting for accounting distortions in financial forecasting. Thus, H4 is accepted.

4.7 The Effect of Operating Profit with Depreciation and Amortization as a Moderating Variable on Future Cash Flows.

Table 9. Panel Least Squares 1

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	4751233	998886.4	4.756530	0.0000
X2	-1.181118	0.348643	-3.387758	0.0011
Z	-0.995024	0.250116	-3.978254	0.0002

Source: Proceed Data, 2025

Table 10. Panel Least Squares 2

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	1030828	932598.7	1.105329	0.2724
X2	0.511776	0.358307	1.428318	0.1571
Z	-0.096758	0.231023	-0.418822	0.6765
X2Z	-1.07E-07	1.48E-08	-70252256	0.0000

Source: Proceed Data, 2025

Tables 9 and 10 examine the moderating role of Depreciation and Amortization (Z) in the relationship between Operating Profit (X2) and Future Cash Flows (FCF). In Table 9 (Panel Least Squares 1), Operating Profit has a significant negative impact on FCF ($\beta = -1.181118$, $p = 0.0011$), while Depreciation and Amortization also show a significant negative effect ($\beta = -0.995024$, $p = 0.0002$). This implies that both higher operating income and increased non-cash charges are associated with lower expected cash inflows, potentially due to accounting adjustments or inefficiencies in converting operating income into real liquidity. Table 10 (Panel Least Squares 2), which introduces the interaction term X2Z (Operating Profit $\times$ Depreciation & Amortization), reveals a highly significant moderating effect ($\beta = -1.07E-07$, $p = 0.0000$). Interestingly, in this model, Operating Profit's coefficient turns positive ($\beta = 0.511776$) though not statistically significant ($p = 0.1571$), while the interaction term is strongly negative and significant. This indicates that as depreciation and amortization increase, the positive influence of operating profit on future cash flows is dampened significantly. In essence, the findings highlight that Depreciation and Amortization weaken the effect of Operating Profit on cash flows, suggesting the need to consider these non-cash elements when using operating metrics for forecasting liquidity and financial performance. Then, H5 is accepted.

4.8 The Effect of Net Profit with Depreciation and Amortization as a Moderating Variable on Future Cash Flows.

Table 11. Panel Least Squares 1

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	2726885	1001222	2.723555	0.0079
X3	1.176746	0.351808	3.344851	0.0013
Z	-1.336439	0.239719	-5.575020	0.0000

Source: Proceed Data, 2025

Table 12. Panel Least Squares 2

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	2447012	1101156	2.222222	0.0291
X3	1.392069	0.494473	2.815257	0.0062
Z	-1.254246	0.274521	-4.568846	0.0000
X3Z	-1.90E-08	3.05E-08	-0.622156	0.5356

Source: Proceed Data, 2025

Tables 11 and 12 investigate whether Depreciation and Amortization (Z) moderates the relationship between Net Profit (X3) and Future Cash Flows (FCF). In Table 11 (Panel Least Squares 1), Net Profit has a strong positive and significant effect on FCF ($\beta = 1.176746$, $p = 0.0013$), indicating that higher net profits are associated with increased future cash inflows. Depreciation and Amortization, however, exhibit a significant negative impact on FCF ($\beta = -1.336439$, $p = 0.0000$), reinforcing the notion that higher non-cash expenses can reduce reported liquidity. Table 12 (Panel Least

Squares 2), which incorporates the interaction term X3Z (Net Profit $\times$ Depreciation & Amortization), shows that while Net Profit's influence on FCF strengthens further ($\beta = 1.392069$, $p = 0.0062$), the interaction term itself is not statistically significant ($\beta = -1.90E-08$, $p = 0.5356$). This implies that Depreciation and Amortization does not significantly moderate the relationship between Net Profit and Future Cash Flows. In other words, even though depreciation and amortization negatively affect cash flow on their own, their interaction with net profit does not significantly alter how net profit influences future cash flows. Thus, Net Profit remains a strong, direct predictor of future liquidity, largely unaffected by variations in non-cash charges like depreciation and amortization. Thus, H6 is accepted.

4.9 Discussion

4.9.1 The Effect of Gross Profit on Future Cash Flows

The findings of this study reveal that gross profit has a significant negative effect on future cash flows, suggesting that higher gross profit does not necessarily lead to increased liquidity in the next period. This result may appear counterintuitive at first, as gross profit is generally viewed as a key indicator of operational efficiency. However, this negative association may be attributed to the presence of non-cash revenue recognition practices or increased cost of goods sold adjustments, which distort the actual cash generation capacity of the company (Subramanyam & Wild, 2021). Firms may report high gross profits due to credit sales or inventory adjustments, which do not translate directly into cash inflows, thus weakening the predictive power of gross profit on actual future cash flows.

This outcome aligns with recent literature emphasizing the limited usefulness of accrual-based metrics like gross profit in predicting future liquidity, especially in capital-intensive or manufacturing sectors where inventory and cost allocations play a large role (Wahlen et al., 2022). These findings suggest that while gross profit may signal sales performance and cost efficiency, it may be less reliable for forecasting cash-based outcomes unless adjusted for timing and non-cash elements. As such, financial analysts and investors are advised to interpret gross profit with caution and consider complementary indicators such as net profit and cash flow from operations to obtain a more accurate picture of a firm's financial health and future liquidity potential.

4.9.2 The Effect of Operating Profit on Future Cash Flows

The results indicate that operating profit has a significant negative effect on future cash flows, which suggests that higher operating profits do not always result in stronger liquidity in subsequent periods. This could be because operating profit includes non-cash items such as depreciation and changes in working capital, which may not contribute to actual cash inflow (Wahlen et al., 2022). In some cases, firms may boost their operating profits through accounting adjustments, deferred revenues, or accrual-based income that does not translate into immediate cash availability. As such, while operating profit reflects core business profitability, it does not always capture the timing of cash receipts and payments, leading to a weaker or even inverse relationship with future cash flows.

Moreover, the findings support prior research indicating that accrual-based earnings components may reduce the reliability of operating income as a predictor of cash performance (Subramanyam & Wild, 2021). In industries with long operating cycles or substantial working capital needs, higher operating income can coincide with increasing

receivables or inventory buildup, which constrains cash flows. Therefore, users of financial statements should supplement operating profit analysis with cash flow statement data or adjusted earnings metrics to assess future liquidity more accurately. This emphasizes the importance of integrating accrual quality considerations and non-cash adjustments when using operating profit as a forecasting tool.

4.9.3 The Effect of Net Profit on Future Cash Flows

The results show that net profit has a significant positive effect on future cash flows, supporting the notion that higher net income is associated with increased liquidity in subsequent periods. Unlike gross or operating profit, net profit reflects the firm's bottom line after accounting for all expenses, taxes, and non-operating items, making it a more comprehensive measure of overall financial performance (Wahlen et al., 2022). This relationship suggests that firms with strong net income generation are more likely to sustain cash inflows in the future, as they demonstrate efficient cost control, sound financial management, and profitability that extends beyond operational activities.

This finding aligns with previous studies that highlight net profit as one of the most reliable predictors of future cash flows, especially when accrual components are minimized or consistently reported (Subramanyam & Wild, 2021). In contrast to gross and operating profit, net profit integrates all aspects of the company's financial outcomes, thus providing a more accurate indicator of value creation and liquidity potential. Consequently, investors and analysts often rely on net profit as a key metric for forecasting financial health, dividend potential, and investment returns. The strong, positive relationship evidenced in this study reinforces the practical relevance of net income in decision-making and future cash flow estimation.

4.9.4 The Effect of Gross Profit with Depreciation and Amortization as a Moderating Variable on Future Cash Flows.

The analysis shows that gross profit has a significant negative effect on future cash flows, and while depreciation and amortization (DA) also exhibit a negative impact, their interaction (X1Z) reveals an interesting dynamic. Based on the moderation test (Table 8), the interaction term between gross profit and DA is statistically significant ($p = 0.0000$), indicating that DA moderates the relationship between gross profit and future cash flows. This suggests that in firms with high levels of depreciation and amortization, the influence of gross profit on future cash flows becomes more complex. One possible explanation is that gross profit figures—typically based on accrual accounting—may not align well with real-time cash positions, especially when substantial non-cash expenses like depreciation are present (Subramanyam & Wild, 2021).

The significant moderation effect implies that DA plays a buffering or amplifying role depending on the firm's cost structure and capital intensity. In capital-intensive industries, high depreciation can reduce taxable income and improve cash flows despite lower gross profit margins. This interplay reveals the importance of adjusting gross profit figures when forecasting liquidity, as failure to consider non-cash charges like DA may lead to misleading conclusions about a firm's financial health. These findings are consistent with recent literature emphasizing the role of non-cash adjustments in enhancing the accuracy of accrual-based indicators for predicting future cash performance (Wahlen et al., 2022). Therefore, the interaction between gross profit and

DA provides deeper insight into how profitability metrics can be fine-tuned for better cash flow forecasting.

4.9.5 The Effect of Operating Profit with Depreciation and Amortization as a Moderating Variable on Future Cash Flows.

The results reveal that operating profit alone has a statistically significant negative effect on future cash flows, indicating that higher reported operating profits may not translate directly into increased liquidity in the future. However, when Depreciation and Amortization (DA) is introduced as a moderating variable, a more nuanced relationship emerges. The interaction term between operating profit and DA (X2Z) in Table 10 is statistically significant ($p = 0.0000$), implying that DA significantly moderates the effect of operating profit on future cash flows. This means that in firms with higher depreciation and amortization expenses, the negative impact of operating profit on cash flows can be altered—either mitigated or intensified—depending on the specific financial and operational characteristics of the firm (Wahlen et al., 2022).

This finding aligns with the argument that operating profit often includes significant non-cash items, which can distort its usefulness in predicting future cash performance unless adjusted for factors like DA. In capital-intensive industries where DA represents a substantial portion of expenses, the moderating role of DA becomes particularly critical. It reflects how companies manage their long-term assets and match expenses with revenues. Therefore, incorporating DA into the model helps provide a clearer picture of a firm's real cash-generating ability, especially when operating profit might be inflated by accrual-based accounting practices (Subramanyam & Wild, 2021). The inclusion of this moderating effect reinforces the importance of adjusting earnings-based measures when assessing a firm's financial future.

4.9.6 The Effect of Net Profit with Depreciation and Amortization as a Moderating Variable on Future Cash Flows.

The findings indicate that net profit has a significant positive effect on future cash flows, reinforcing the idea that companies generating strong bottom-line earnings are more likely to sustain or increase cash inflows in subsequent periods. However, when Depreciation and Amortization (DA) is added as a moderating variable, the interaction term (X3Z) in Table 12 shows a statistically insignificant result ($p = 0.5356$). This suggests that DA does not significantly moderate the relationship between net profit and future cash flows. In other words, while DA is an important factor in cash flow analysis, it does not alter the strength or direction of the relationship between net profit and future liquidity outcomes in this study's sample (Wahlen et al., 2022).

This result could be attributed to the nature of net profit, which already accounts for depreciation and amortization as part of its calculation, unlike gross or operating profit, which may include more accrual-based distortions. Therefore, the effect of DA may already be absorbed into the net profit figure, limiting its ability to serve as a meaningful moderator. These findings align with prior research suggesting that net income, due to its comprehensive nature, is one of the most robust predictors of future cash flows and does not require as much adjustment for non-cash items as other profitability metrics (Subramanyam & Wild, 2021). The lack of a moderating effect underscores the sufficiency of net profit alone in projecting future cash positions, particularly when it is derived from transparent and consistent financial reporting.

5. Conclusion

This research investigates the impact of gross profit, operating profit, and net profit on future cash flows, with depreciation and amortization (DA) serving as a moderating variable. The findings reveal that gross profit and operating profit both have a significant negative effect on future cash flows, suggesting that these profitability measures, while essential, may not fully capture a firm's liquidity potential. In contrast, net profit demonstrates a significant positive effect on future cash flows, highlighting its reliability as an indicator of future financial health. However, when DA is introduced as a moderating variable, its impact varies across different profitability measures. While DA moderates the relationship between gross profit and cash flows, it does not significantly alter the connection between net profit and future liquidity. These results emphasize the importance of considering non-cash adjustments like depreciation in forecasting future cash performance, while also reinforcing the relevance of net profit as a reliable predictor of liquidity.

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