

Assessing the Predictive Power of Net Income and Inventory on Operating Cash Flows: A Study of Food and Beverage Companies in Indonesia

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Abstract

This study investigates the ability of net income and inventory changes to predict future operating cash flows in manufacturing companies within Indonesia's food and beverage sector. This study uses a sample of firms listed on the Indonesia Stock Exchange from 2021 to 2024, the study employs multiple regression analysis to examine the partial and simultaneous effects of these variables. The results show that net income has a significant positive impact on future operating cash flows, indicating its usefulness for investors and stakeholders in financial decision-making. However, changes in inventory do not significantly affect future operating cash flows, suggesting limited predictive value in this context. Simultaneous testing reveals that net income and inventory changes together significantly influence future operating cash flows. The findings underscore the importance of focusing on profitability indicators when assessing cash flow potential in this industry.

Keywords: net income, inventory changes, operating cash flow, financial statement analysis

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INTRODUCTION

Predicting a company's future cash flow is a fundamental problem in accounting and finance that reminds us that the value of a company depends on its ability to generate cash flow (Barth et.al 2020). This assessment can be seen from financial reporting which is a report in the form of information that is very necessary for investors in making decisions. The information contained in a company's financial statements is a reliable tool for users of financial statements to reduce uncertainty in making economic decisions (Chen et.al 2014). Economic decisions that will be taken by users of financial statements require an analysis to assess or measure the company's ability to generate profits and cash flow, as well as the accuracy of the results of the analysis (Laksana,et.al 2023). The analysis carried out can be

used to evaluate past events and can also be used to predict future events and is an important tool for decision making related to opportunities and risks that will be faced in the future (Bilinski, P. (2022)). One effort that can be made by users of financial statements in making decisions is to predict future cash flows. The information contained in a company's financial report is important information for its users in making economic decisions.

The ability of economic actors to predict the company's future financial condition is very necessary before making an economic decision. The development of a company's financial condition can be seen from its performance. The better the performance of a company, the better the financial condition of the company. The financial condition of a company can be seen from the amount of the company's operating cash flow (Cuervo, R. 2023). This information is used as a basis for predicting the company's future condition and making economic decisions.

The uncertainty of economic conditions in Indonesia has made economic actors in Indonesia feel restless. According to the World Bank's Chief Economist, Shubham Chaudhuri, the World Bank has revised its projection of economic growth in 2023 from 5.7 percent to 5.2 percent. The decline in external demand, the decline in commodity prices, and the increase in economic uncertainty are the main reasons for the correction. Economic actors need other alternatives to increase their wealth through investment. Investment in the capital market is the main alternative after the choice of saving wealth in the form of savings or deposits.

Through financial reports, investors are able to find out the condition of the company now and in the future by looking at the information contained in the financial reports. However, not all investors have the ability to predict the financial condition of the company in the future (Farshadfar et.al 2021). The usefulness of accounting information decisions contains components that need to be considered by the presenters of accounting information so that the existing coverage can meet the needs of decision makers who will use it.

In predicting future company conditions, economic actors need historical data, financial reports, which can help economic actors predict this. Information users can use financial reports as a consideration in making economic decisions, one of which is the cash flow report (Junaidi et.al 2024). Predicting the company's future cash flow is a issue fundamental in accounting and finance which convey the value of a company's securities depending on the company's ability to generate cash flow. However, in reality, not all companies are able to generate cash inflow from operating activities that is higher than the company's cash outflow (positive operating cash flow). There are companies that actually generate negative operating cash flow (Khofifah, 2024). This means that there are companies that are not fully able to finance their own operational activities using the cash they generate. Based on data obtained from the Indonesia Stock Exchange, data showing that there are companies that have negative operating cash flow or the use of operating cash is higher than the company's operating cash sources is as many as 102 manufacturing companies listed in 2015, there were 15.68% of companies having negative operating cash flow. While in 2022 there were 20.58% of companies and in 2017 there were 16.67% of companies that had negative operating cash flow.

According to the Basic Framework for the Preparation and Presentation of Financial Statements paragraph 22 2012, accrual is where revenues and expenses are recognized or recorded when the transaction occurs, not when cash for the transactions is received or paid. Accrual components that can affect the prediction of future operating cash flows are changes in inventory.

According to (Kuster, 2023), inventory changes are increases and decreases in inventory that indicate an increase or decrease in sales, and these sales will affect the cash

flow in operating activities when the income is received, the more sales will increase income and the faster the costs previously incurred will be charged. So that changes in inventory will affect the cash flow of operating activities in the future. future, and revenue from sales will also increase cash inflow in the future.

Inventory is needed because demand patterns are basically irregular and companies often have difficulty in determining the amount of inventory that must be provided to meet demand (Ochiai et.al 2020) The importance of knowing the relationship between the components of net income variables, changes in inventory as a basis for predicting future cash flows because variable components such as net income can describe an increase or decrease in future operating cash flows if net income increases or decreases (Rahmadani, et.al 2024) . The variable components of inventory changes can describe an increase or decrease in sales so that they can affect cash inflows when the income is received. The purpose of this study is to empirically test the effect of net income and changes in inventory both partially and simultaneously in predicting future operating cash flows.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Literature Review

Financial Statements

Definition of Financial Statements according to Financial Accounting Standards Statement No. 1 is part of the financial reporting process. Complete financial statements usually include a balance sheet, income statement, statement of changes in financial position (which can be presented in various ways, for example, as a cash flow statement, or a cash flow statement), notes and other reports and explanatory materials that are an integral part of the financial statements. In addition, it also includes schedules and additional information related to the report, for example, financial information on industrial and geographical segments and disclosure of the effects of price changes.

Meanwhile, (Kieso & Warfield, 2007) defines financial statements as follows. "Financial statements are a means that can be used by an entity to communicate conditions related to its financial condition to interested parties, both from within the entity and external to the entity". This definition means that financial statements are a description of the financial condition and performance of a company, so that interested parties can make business decisions. Financial statements aim to provide information on the financial position, performance, and cash flow of an entity that is useful for most users of the statements in making economic decisions (Ochiai et.al 2020). Financial statements also show the results of management's accountability for the use of company resources. To achieve these objectives, financial statements present information about the entity including: assets, liabilities, equity, income and expenses including profits and losses, contributions from and distributions to owners in their capacity as owners and cash flow. This information and other information contained in the notes to the financial statements can help users of financial statements in predicting future cash flows, especially in terms of the timing and certainty of obtaining cash and cash equivalents (Rahmadani et.al 2024).

Cash Flow

(Rimet et.al 2024) stated that cash flow statements consist of three parts, namely operating activities, investing activities, and financing activities. Cash flow from operating activities reports cash receipts and payments related to the company's operations. Net cash flow from operating activities usually differs from the amount of net income for the current period. This difference occurs because revenues and expenses are not always received or paid in cash. Cash flow from investing activities reports cash transactions for the purchase or sale

of fixed or permanent assets (Saragih, et,al 2021) . Cash flow from financing activities reports cash related to owner investments, borrowing funds, and withdrawals by the owner.

a. Operational Activities.

Operating activities generate revenues and expenses from a company's primary operations. Therefore, operating activities affect the income statement, which is reported on an accrual basis. The cash flow statement reports its impact on cash. Operating cash inflows come from cash collections from customers, interest received on loans, and dividends on stock investments. Operating cash outflows include payments to suppliers and employees, and interest and tax payments. A large positive cash flow is a good sign for a company. In the long run, a company's operating activities should be the company's primary source of cash (Shen, R., et al. 2020) Failure of a company's operations to generate large cash inflows for an extended period of time may be a sign of trouble for the company.

b. Investment Activities.

Investing activities increase and decrease the long-term assets that a company uses to conduct its activities. The purchase or sale of fixed assets such as land, buildings, or equipment is an investment activity, or it can also be the purchase or sale of investments in stocks or bonds of other companies (Sitorus et,al 2021). In the cash flow statement, investing activities include more than just the purchase and sale of assets that are classified as investments on the balance sheet. Lending is also an investment activity because the loan creates receivables for the borrower. The repayment of the loan is also reported as an investment activity on the cash flow statement. Investments in fixed assets provide the basis for future operating activities.

c. Funding Activities.

Financing activities include activities to obtain cash from investors and creditors needed to run the company's activities. Financing activities include issuing stock, borrowing money by issuing promissory notes and bond loans, selling treasury stock, and payments to shareholders such as dividends and purchases of treasury stock (Sutarmi, C. 2023) Payments to creditors only include payments on principal.

Future Cash Flows

Predicting a company's future cash flows is a fundamental problem in accounting and finance. According to the Financial Standards Board (FASB) in its Financial Accounting Concepts No. 1 statement, the objective of financial statements should be to provide information to help investors, creditors, and others assess the amount, timing, and uncertainty of net cash flows to the company. One way to reduce the uncertainty of cash flows is by analyzing the company's financial statements.

With this financial reporting, economic actors can predict the condition of the company in the future. Economic actors can use financial reports as a consideration in making economic decisions, one of which is the cash flow report. Based on PSAK No. 2 of 2009, all companies are required to make a cash flow report and present the report as an inseparable part (integral) of the financial report for each specific period in its presentation. Cash flow components consist of operating activities, investment activities, and financing activities.

Net Profit

Net income is the excess of all income over all expenses for a certain period after deducting income tax presented in the form of an income statement. Suemarso in his research (Wowor & Mangantar, 2014) explained that net income is the excess of all income and profits over all expenses. Net income helps attract new investor capital who hope to receive dividends

from successful company operations in the future. Net income (net income or earning) can be used as a measure of company performance during a certain period.

Inventory Changes

PSAK No. 14 (Paragraph 4) states that inventory includes goods purchased and held for resale, for example, merchandise purchased by a retailer for resale, or the acquisition of land and other property for resale. Inventories also include finished goods that have been produced, or goods in progress that are being produced by the company, and include materials and supplies that will be used in the production process. Inventory measurement should be measured based on cost or net realizable value, whichever is lower.

Changes in inventory occur due to transactions or production activities related to products that will later be sold or used, these changes will have an impact on inventory and cash in the company. (Van et.al 2021) Changes in inventory are obtained from the difference in inventory in the following year with the observation year or period t in the financial statements.

Hypothesis Development

The Influence of Net Income in Predicting Future Operating Cash Flows

The income statement provides information needed by investors and creditors to help them predict the amount, timing, and uncertainty of future cash flows (wahyuni et.al , 2023). Information about the various components of income such as revenues, expenses, gains and losses shows the relationship between these components and can be used to assess the risk of a company's failure to achieve a certain level of cash flow in the future.

Profit not only provides different information about cash flows connected to past transactions, but also predicts future cash flows connected to predictions of future operating activities and future investments. Information about profit in financial statements provides a good signal to investors in making economic decisions, so that investors can use this information as a consideration in making economic decisions (wulandari et.al 2022).

(Yustisia et.al , 2020) stated that profit information is related to cash flow because when the company's profit increases, there will be an increase in dividends that will be distributed by the company to shareholders or investors and this will attract other investors to invest their capital. When the company gets additional capital, the company has more funds to increase the company's operational activities, when the company's operational activities improve, the company can generate cash flow to pay dividends, pay off loans and increase the company's operational activities. The higher the profit, the greater the impact on future operating cash flow. Based on the explanation above, the development of the first hypothesis is:

H1: Net Profit Has an Influence in Predicting Future Operating Cash Flow

The Influence of Inventory Changes in Predicting Future Operating Cash Flows

Accrual components can provide signals in the form of information to users of financial reports, especially investors, in making a decision. With the existence of this information is expected to help investors in making decisions in making investments. One of the accrual components that affects cash flow from operating activities is inventory. Changes in inventory illustrate that there is an increase and decrease in sales, thus affecting the flow of cash inflows in future operating activities when the income is received. (Barth et.al 2022) stated that inventory is an asset available for sale in business activities, in the production process, or in the form of supplies to be used in the production process or providing services.

The value of inventory generally affects current assets. In the income statement, inventory shows the results of the company's operating activities in a certain period. Changes in inventory can reflect a decrease or increase in sales and subsequently affect the company's future operating cash flow because there will be cash inflows when income from the sale is received (Bilinski. 2022).

In his research (Ariska et,al 2023) it was proven that the accrual component, namely inventory, has an influence in predicting future operating cash flow, because the higher the inventory, the greater the company's demand, which will have a significant impact on the company's profit.Changes in inventory will affect the cash flow of future operating activities, and income from sales will also increase cash inflows in the future (Junaidi et al, 2024). These results have been proven by previous studies conducted by (Kholifah, 2024) and (Kuster, 2023). Based on the explanation above, the development of the second hypothesis is:

H2: Changes in Inventory Have an Impact on Predicting Future Operating Cash Flows

The Effect of Net Income and Inventory Changes in Predicting Future Operating Cash Flows

Cash flow information is often used as an indicator of the amount, timing, and uncertainty of future cash flows. In addition, cash flow information is also useful for assessing the accuracy of previously made estimates of future cash flows and in determining the relationship between profitability and net cash flow and the impact of price changes. Based on the explanation above, the development of the third hypothesis is:

H3: Net income and inventory changes have an effect on predicting future operating cash flows.

RESEARCH METHODS

Population, Sample, and Data Collection Techniques

The research design in this study is causality, where the population used is the consumer goods industry sector companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange (IDX) for the period 2021-2024. The sampling technique uses purposive sampling, with the following criteria: (1) Food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2021-2024; (2) disclose and present complete data needed in the study (operating cash flow, net profit, inventory) during the period 2021-2024 consecutively; (2) Food and beverage sub-sector companies that use rupiah in their financial reports; and (4) companies that do not experience losses or negative net profit during the observation period 2021-2024.

Operational Definition and Measurement of Variables

This study uses dependent and independent variables, the definition and measurement of the variables are as follows:

- a. Dependent variable (Y) = Future Operating Cash Flow. The operating cash flow used is the future operating cash flow obtained from the financial statements, namely the company's cash flow statement recorded as net cash flow from operating activities. This variable is measured after the observation year or in period $t+1$ (Binilang et al., 2017).
- b. Independent variables:
 - (X1) = Net Profit. Net profit is measured using the total profit for the current year.
 - (X2) = Changes in Inventory. Changes in inventory are obtained from the difference between the total inventory of the observation year and the previous year or in period t -

1 in the financial report (Binilang et al., 2017).

Data Analysis Methods

In this study, the data analysis used was multiple regression analysis using the SPSS 25 statistical application. The regression equation for this study is:

$$Y = a + bX_1 + bX_2 + e$$

RESULTS AND DISCUSSION

Table 1. Partial Coefficient Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	0.174	0.286		0.609	0.547
Net profit	0.852	0.152	0.869	5,578	0,000
Inventory Changes	-0.245	0.228	-0.161	-1,022	0.211

a: Dependent variable: future operating cash flow

Source: SPSS 25 processed data output, Year 2025

Hypothesis

The Effect of Net Income in Predicting Future Operating Cash Flows

The results of the study showed that the net profit variable has a positive regression coefficient value of 0.852. A positive regression coefficient value indicates that each net profit has a positive direction towards future operating cash flow. The results of the partial t test showed a t-value of 5.578 > 1.69226 and a significance for the net profit variable of 0.000, where this value is smaller than the expected significance value of 0.05 (0.000 < 0.05). So it can be concluded that the first hypothesis (H1) proposed in this study is accepted. The results of this study mean that net profit has an effect on future operating cash flow in food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2022-2025.

Users of financial statement information in investing and other interests need to pay attention to the net profit value as one of the considerations in decision making. This is because one of the components of profit is income in the form of sales, where every time sales increase it will also affect cash receipts. Positive and increasing profits reflect the level of success and stability of a company. The results of this study support the research conducted by (Khofifah 2024), and (Rahmadani et.al 2024). The results of this study indicate that net profit is a fairly good predictor in predicting future operating cash flows.

The Effect of Inventory Changes in Predicting Future Operating Cash Flows

The results of statistical tests using SPSS 25 show a t-value of -1.022 < 1.69226 and a significance value for the inventory change variable of 0.211, where this value is greater than the expected significance value of 0.05 (0.211 > 0.05). So it can be concluded that the second hypothesis (H2) proposed in this study is rejected. The results of this study mean that inventory changes do not affect future operating cash flows in food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2022-2025. The results of this study agree with the results of research conducted by (Shen et.al 2020 and Juanidi et.al 2024) where in their research they concluded that inventory changes have no effect on predicting future operating cash flows.

Users of financial statement information, especially investors in investing and other interests, do not need to pay attention to the value of changes in inventory as one of the predictors of future operating cash flow, because even though the inventory of a large company is estimated to have an impact on large sales and high quantities of company income or profit, it does not necessarily affect the operating cash flow of a company. Inventories that remain large at the end of each year certainly indicate that sales do not meet the target so that income declines and will be in line with small cash receipts, this tends to make operating cash flow negative if it continues.

Table 2. Results of Simultaneous ANOVAa Test

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	106,722	2	52,266	22,602	.000b
Residual	70,826	30	2,261		
Total	177,568	32			

Source: SPSS 25 output processed data, Year 2025

The Effect of Net Income and Inventory Changes in Predicting Future Operating Cash Flows

Based on the F test, the results of the study indicate that the independent variables, namely net income and changes in inventory, together have an effect on predicting future operating cash flow in food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange which has a significant value of 0.000, which is smaller than the significance level of 0.05 ($0.000 < 0.05$) and has an Ftable of $2.29 < F_{count} 22.602$. The results of this study agree with the research conducted by (Ariska et al., 2023).

CONCLUSION

The partial test results show that net income has an effect on future operating cash flow. Net income is related to cash flow and can be used to predict future operating cash flow. Where, net income measures the value that an entity can provide to investors and shows the portion of profit that will be retained in the company and that will be distributed as dividends (Subramanyam & Wild, 2008). While the test results on inventory changes do not affect future operating cash flow. This indicates that inventory changes cannot be used to predict future cash flow. Meanwhile, simultaneous testing shows that net income and inventory changes together have an effect on predicting future operating cash flow. Based on the results obtained in this study, the researcher provides the following recommendations:

1. For further research, other variables can be added to the research model, such as gross profit variables, changes in debt, changes in receivables and changes in depreciation.
2. Further researchers can expand and add to the research period, and
3. Using different data analysis test tools.

REFERENCES

- Ariska, I., et al. (2022). *Integrative analysis of traditional and cash flow financial ratios: Insights from a systematic comparative review*. *Risks*, 12(4), 62.
- Barth, M. E., Cram, D. P., & Nelson, K. K. (2020). *Accruals and the prediction of future cash flows*. *Journal of Accounting and Economics*.
- Bilinski, P. (2022). *Do analysts disclose cash flow forecasts with earnings estimates when*

- earnings quality is low? Journal of Business Finance & Accounting.*
- Chen, K., Sommers, G. A., & Taylor, G. K. (2022). *Surrogate measures of operating cash flows: Problems and solutions*. SSRN.
- Cuervo, R. (2022). *Predictive AI for SME and large enterprise financial performance management*. arXiv.
- Farshadfar, S., & Monem, R. (2021). *The predictive ability of quarterly financial statements for future operating cash flows*. *Risks*, 9(2), 50.
- Fernandez, P. (2019–2020). *Cash flow is a fact. Net income is just an opinion*. SSRN.
- Jahan, N. (2020). *An empirical investigation of cash conversion cycle of manufacturing firms and its association with firm size and profitability*. arXiv.
- Junaidi, A., Pratiwi, D. E., & Pratiwi, A. J. (2024). *The influence of operating cash flow and accounting profit on stock returns with liquidity as a moderating variable: Islamic perspective (2012–2022)*. *Jurnal Ilmiah Ekonomi Islam*.
- Karatas, T., Klinkert, F., & Hirs, A. (2021). *Supervised neural networks for illiquid alternative asset cash flow forecasting*. arXiv.
- Khofifah, R. (2024). *The influence of cash flow, net profit and company size on stock prices in food and beverage companies listed on the Indonesia Stock Exchange (period 2018–2022)*. *Journal of Comprehensive Science (JCS)*, 2(11), 5064–5071. <https://doi.org/10.59188/jcs.v2i11.2907>
- Kušter, M. (2022). *Financial distress prediction using traditional and cash flow ratios: Evidence from Serbia*. In *Integrative analysis of traditional and cash flow financial ratios review*.
- Laksana, R. D., Shaferi, I., & Nazni, H. (2022). *The Effect of Operational Risks for Digital Banking Services at Banks*. *Jurnal Manajemen Bisnis*, 14(2), 451–468. <https://doi.org/10.18196/mb.v14i2.19202>
- Ochiai, T., & Nacher, J. C. (2020). *Unveiling the directional network behind financial statements data using volatility constraint correlation*. arXiv.
- Rahmadani, S. G., & Pangestuti, I. R. D. (2024). *Does working capital management impact profitability? A study on ASEAN 5 food and beverage companies*. *Jurnal Manajemen Teori dan Terapan*, 17(2).
- Rimet, R., & Luthfiah, A. (2024). *The effect of earnings, operating cash flows and accruals in predicting future operating cash flows*. *INVEST: Jurnal Inovasi Bisnis dan Akuntansi*, 5(1), 1–8. <https://doi.org/10.55582/invest.v5i1.796>
- Saragih, B. L., & Suzan, L. (2021). *The effect of cash turnover, inventory turnover and sales growth on profitability in food and beverage sector companies listed on the IDX (2017–2019)*. *ABEC Indonesia Conference*.
- Shen, R., et al. (2020). *Exploring the impact of the COVID-19 pandemic on firms' financial performance and cash holding: Evidence from China's agri-food sector*. *Agronomy*, 12(8), 1951.
- Sitorus, J. S., Siburian, E., Simbolon, Y., & Naibaho, R. E. (2021). *The effect of operating cash flow, net profit, ROA and ROE on stock return on IDX*. *Jurnal Akuntansi*, 11(2), 189–196.
- Sutarmi, C. (2022). *The effect of accounting profit information on stock prices in food and beverage companies on the Indonesian Stock Exchange*. *Journal on Economics, Management and Business Technology*, 1(2), 47–56.
- Van Der Merwe, N., & Ferreira, E. (2021). *Working capital management and its impact on profitability: Evidence from South African food and beverage firms*. *Journal of Contemporary Management*, 18(2), 112–130. <https://doi.org/10.35683/jcm20081.112>
- Wahyuni, E. S., & Putra, R. A. (2023). *Analysis of financial performance and its effect on cash flow*

- prediction in manufacturing companies listed on the Indonesia Stock Exchange. Jurnal Riset Keuangan dan Akuntansi*, 9(1), 33–44. <https://doi.org/10.31289/jrka.v9i1.1345>
- Wulandari, R., & Sari, D. P. (2022). *The effect of earnings and operating cash flow on stock returns: Evidence from consumer goods companies. International Journal of Economics, Business, and Accounting Research (IJEBAR)*, 6(3), 1458–1467. <https://doi.org/10.29040/ijebar.v6i3.5210>
- Yustisia, D. A., & Fitrani, E. (2020). *The predictive ability of accrual and cash flow components on future operating cash flows. Jurnal Ilmu dan Riset Akuntansi*, 9(7), 1–18. <https://ejournal.stiesia.ac.id/jira/article/view/3920>
- Zulaikha, L., & Hidayat, W. W. (2021). *Cash flow and earnings as predictors of future cash flows: A comparative analysis. Journal of Accounting and Investment*, 22(1), 35–48. <https://doi.org/10.18196/jai.v22i1.11120>