

The Effect of Earnings, Operating Cash Flows and Accruals in Predicting Future Operating Cash Flows

Pengaruh Laba, Arus Kas Operasi dan AkruaL Dalam Memprediksi Arus Kas Operasi di Masa Mendatang

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ABSTRACT

The purpose of this study was to analyse the effect of gross profit, operating profit, net profit, operating cash flow, changes in accounts receivable, changes in accounts payable, changes in inventory and depreciation expense simultaneously on the prediction of future operating cash flow. This research was conducted at food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX) and registered from 2017 to 2019, totalling 32 companies. The sample in this study amounted to 17 companies using purposive sampling method. Data analysis using panel data regression with the help of Eviews. The results of the study explain that gross profit, operating profit, net income, changes and trade receivables have a significant effect, while operating cash flow, changes in debt, changes in inventory and depreciation expense do not have a significant effect on the prediction of future operating cash flow in food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2019 period. Simultaneously gross profit, operating profit, net profit, operating cash flow, changes in accounts receivable, changes in accounts payable, changes in inventory and depreciation expense have an influence on the prediction of future operating cash flows in food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2019 period.

Keywords: Profit, Operating Cash Flow, Changes in Accounts Receivable, , Depreciation Expense and Predicted Operating Cash Flow

ABSTRAK

Tujuan dari penelitian ini adalah untuk menganalisis pengaruh laba kotor, laba usaha, laba bersih, arus kas operasi, perubahan piutang usaha, perubahan hutang usaha, perubahan persediaan dan beban penyusutan secara simultan terhadap prediksi arus kas operasi masa depan. Penelitian ini dilakukan pada perusahaan sub sektor makanan dan minuman yang terdaftar di Bursa Efek Indonesia (BEI) dan terdaftar dari tahun 2017 sampai dengan 2019 yang berjumlah 32 perusahaan. Sampel dalam penelitian ini berjumlah 17 perusahaan dengan menggunakan metode purposive sampling. Analisis data menggunakan regresi data panel dengan bantuan Eviews. Hasil penelitian menjelaskan bahwa laba kotor, laba operasi, laba bersih, perubahan dan piutang usaha berpengaruh signifikan, sedangkan arus kas operasi, perubahan hutang, perubahan persediaan dan beban penyusutan tidak berpengaruh signifikan terhadap prediksi arus kas operasi masa depan pada perusahaan sub sektor makanan dan minuman yang terdaftar di Bursa Efek Indonesia (BEI) periode 2017-2019. Secara simultan laba kotor, laba operasi, laba bersih, arus kas operasi, perubahan piutang usaha, perubahan hutang usaha, perubahan persediaan dan beban penyusutan memiliki pengaruh terhadap prediksi arus kas operasi masa depan pada perusahaan sub sektor makanan dan minuman yang terdaftar di Bursa Efek Indonesia (BEI) periode 2017-2019.

Kata kunci: Laba, Arus Kas Operasi, Perubahan Piutang, , Beban Penyusutan dan Prediksi Arus Kas Operasi

1. Introduction

The success of a company is contingent upon effective management. The numerous challenges impeding corporate development necessitate maximizing the company's sources of

strength. The rapid evolution of the business world has intensified competition on a national, regional, and international scale. Faced with this intense competition, entrepreneurs must find ways to ensure the continuity of their businesses (Noury et al., 2020).

In this era of globalization, every company is susceptible to progress or decline in the future. This uncertainty regarding the future prospects and performance of companies reflects the dynamism of the business environment (Nguyen & Nguyen, 2020). It is conceivable that a company may perform as planned, or unforeseen challenges may lead to adverse outcomes, potentially resulting in bankruptcy (Ball & Nikolaev, 2022).

One measure of a company's success or failure is examining its financial statements at the end of the accounting period (Osisioma et al., 2020). Through these statements, management and investors can analyze management performance, make predictions on future earnings, and make informed decisions. Predicting future cash flow is crucial because the information is valuable for assessing the entity's ability to generate cash and its need to use these cash flows. Additionally, cash flow information is an indicator of a company's real success or achievement, making performance assessment based on this information more meaningful (Sharawi, 2021; Nallareddy et al., 2020).

The primary benefit of presenting cash flows is twofold. Firstly, it assists investors or creditors in predicting cash flows likely to be distributed in the form of dividends in the future (Frankel & Sun, 2018). Secondly, cash flow aids in assessing the risk of future return variability and probability. Cash flow components include operating activities, investing activities, and financing activities. The amount of cash flow from operating activities serves as an indicator to determine whether the cash flow generated from a company's operating activities is sufficient to meet financial obligations, maintain operational capabilities, pay dividends, and make new investments without relying on external funding sources (Nallareddy et al., 2018; Senan, 2019).

National food and beverage sub-sector companies significantly contribute to Indonesia's economic growth. The growth and development of these companies have accelerated the economy and increased consumer demand for products. The rapid growth of these companies serves as a benchmark for the country's economy, as evidenced by the Gross Domestic Product (GDP) indicator.

For three consecutive years from 2017-2019, the food and beverage sub-sector experienced growth surpassing national economic growth. However, in 2020, these companies faced limited growth due to constraints on people's purchasing power and the implementation of Large-Scale Social Restrictions (PSBB) policies in various cities and provinces in Indonesia. The growth of the food and beverage sub-sector in 2020 was only 1.58%. To mitigate the spread of COVID-19, countries implemented social distancing policies, such as airport closures, work-from-home (WFH) policies, and reduced crowds in closed and open spaces. Despite the decline in the value of Indonesia's non-oil and gas exports to USD 154.94 billion, the value of food and beverage exports in 2020 increased to USD 31.17 billion. This indicates that the value of food and beverage exports contributed 20.11% to the value of non-oil and gas exports.

Based on the above description, the main problem addressed in this study is whether gross profit affects future operating cash flow, whether operating profit affects future operating cash flow, whether net income affects future operating cash flow, whether operating cash flow affects future cash flow, whether changes in accounts receivable affect future cash flow, whether changes in accounts payable affect future cash flow, whether changes in inventory affect future cash flow, and whether depreciation expense affects future cash flow.

Despite the acknowledged importance of predicting cash flow, a research gap exists in understanding how specific financial indicators, such as gross profit, operating profit, net income, and changes in accounts receivable, payable, inventory, and depreciation expense, influence future

operating cash flows. While existing literature explores the general importance of cash flow prediction, there is a need for in-depth investigation into the unique dynamics within the context of food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX) during the 2017-2019 period.

The main research gap lies in the absence of comprehensive studies focusing on the interplay between specific financial indicators and future cash flows within the food and beverage sub-sector, a crucial component of Indonesia's economic growth. By addressing this gap, the study aims to contribute novel insights into the predictive power of these financial indicators, offering valuable implications for both theoretical frameworks and practical managerial decision-making.

Considering the significant role of the food and beverage sub-sector in Indonesia's economic landscape, exploring the hypotheses proposed in this study becomes pivotal for advancing our understanding of financial dynamics in a sector that not only drives economic growth but also navigates challenges such as the impact of external shocks, economic policies, and global disruptions, such as the COVID-19 pandemic.

2. Metods

Type and Source of Data

The data used in this This research is quantitative data. Quantitative data is data in the form of numbers or numbers. The data used is secondary data. Secondary data is data obtained and stored by other people which is usually past or historical data. The secondary data used in this study are in the form of financial statements of food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX). The data used is data obtained from the Indonesia Stock Exchange (IDX) directory by accessing its website at www.idx.org.

Population and Sample

Population is an object / subject in generalisation area that has certain characteristics according to the criteria set by the researcher to be used to draw conclusions. The population of this study were all food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX). The method in selecting the sample used is purposive sampling, namely the criteria set for this study. the samples in this study were 17 companies.

Data analysis

a. Validity test

Pearson correlation is this test using the method of scoring each question item with the total score of each construct to calculate the correlation between.

b. Reliability test

To see an instrument that is reliable if it has a reliability or alpha coefficient of (a) < 0.6 , not reliable, (b) $0.6-0.7$ acceptable, (c) $0.7-0.8$ good and (d) > 0.8 is very good

Hypothesis

The hypotheses proposed in this study are:

H1 : Gross profit affects future cash flow

H2 : Operating profit affects future cash flow

H3 : Net income affects future cash flow

H4 : Operating cash flow affects future cash flow

- H5 : Changes in accounts receivable affect future cash flow
 H6 : Changes in accounts payable affect future cash flow
 H7 : Changes in inventory affect future cash flow
 H8 : Depreciation expense affects future cash flow

Correlation Coefficient (R)

Used to measure how strong the correlation coefficient between motivational variables and performance variables with a certain scale with a distance of 0 to 1. Where the positive correlation coefficient = 1 and the largest negative = -1, while the smallest is 0. If the relationship of two or more variables has a correlation coefficient = 1 or -1, then the relationship is perfect.

t test

The t test is used to test whether the variable has a significant effect on the dependent variable or not. The formula used is as follows (Sugiyono, 2008: 244):

- If $t_{count} > t_{table}$, then H_0 is rejected and H_a is accepted, meaning that there is a significant influence between work motivation on employee performance.
- If $t_{count} < t_{table}$, then H_0 is accepted and H_a is rejected, meaning that there is no significant effect between work motivation on employee performance

3. Results and Discussion

Panel Data Regression Model Selection

a. Chow Test

The Chow test is used to choose between the common effect method and the fixed effect method, with the following decision-making conditions:

H_0 : Common Effect Method

H_1 : Fixed Effect Method

Table 1. Chow Test

Effects Tes	Statistic	d.f	Prob
Cross-Section F	3.718692	(16,26)	0,0015
Cross-Section Chi-Squaer	60.710858	16	0.0000

Based on the criteria with the chow test where the resulting cross-section F value is 0.0015 < 0.05, the data used is a fixed model.

b. Hausman Test

The Hausman test is used to determine whether the Random Effect method with the following decision-making conditions:

H_0 : Random Effect method

H_1 : Fixed Effect Method

Table 2. Hausman Test

Test Summary	Chi-Sq Statistic	Shi-Sq d.f	Prob
Cross-section	9.623194	8	0,2925
Random			

The resulting random cross-section probability value is $0.2925 > 0.05$, so the random effect is better used in this study.

c. LM test

The resulting LM test value is $58.12404 > 27.58711$ from the chi square value, so Random effect is better used in this study.

Analysis of Panel Data Regression

Table 2. Panel data Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.368551	3.597772	0.102439	0.9189
Gross Profit	0.605706	0.174534	3.470423	0.0012
Operating Profit	-0.577687	0.172522	-3.348480	0.0017
Net Profit	0.673068	0.154735	4.349810	0.0001
Cash Flow	0.248163	0.125060	1.984345	0.0538
Changes Receivables	-0.218987	0.071259	-3.073117	0.0037
Change in Accounts Payable	0.107878	0.080220	1.344789	0.1859
Change in Inventory Expenses	0.145260	0.077573	1.872553	0.0681
Depreciation	0.001104	0.179437	0.006150	0.9951

The results of the data above, where the multiple linear regression equation produced in this study is :

$$Y = 0,368551 + 0.605706X_1 - 0.577687X_2 + 0.673068X_3 + 0,248163X_4 - 0.218987X_5 + 0.107878X_6 + 0.145260X_7 + 0.001104X_8$$

Effect of Gross Profit in Predicting Future Operating Cash Flow:

The study's results reveal that the t-value (3.470423) exceeds the t-table value (2.01808) with a probability value ($0.0012 < 0.05$). With H_a accepted and H_o rejected, it indicates a positive and significant effect of gross profit on predicting future operating cash flow in food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2019 period. The quality of gross profit is influenced by management actions in controlling resource utilization, closely tied to operating cash flow creation, and controlling the cost of goods sold. This aligns with Boujelben et al.'s (2020) research, supporting gross profit's role in predicting future operating cash flow, while Hussain et al.'s (2020) study suggests no such effect.

Effect of Operating Profit in Predicting Future Operating Cash Flow:

The study results show that the t-value (-3.348480) is less than the t-table value (-2.01808) with a probability value ($0.0017 < 0.05$). H_a is accepted, and H_o is rejected,

indicating a negative and significant effect of operating profit on predicting future operating cash flow. Operating profit, derived from gross profit minus operating expenses, indicates cash spent for future benefits. Dirman's (2020) research supports operating profit's effect on predicting future operating cash flow, while Poerwati et al. (2020) and Le (2019) suggest no such effect.

Effect of Net Income in Predicting Future Operating Cash Flow:

Results show the t-value (4.349810) surpassing the t-table value (2.01808) with a probability value (0.0001) < 0.05. With H_a accepted and H_o rejected, it indicates a positive and significant effect of net income on predicting future operating cash flow. The relationship between net income and operating cash flow reflects in the cash flow statement, where net income influences current and expected future cash flows. Kamaluddin et al.'s (2019) research supports net income's predictive role, while Sitompul & Khadijah (2020) find no such effect.

Effect of Operating Cash Flow in Predicting Future Operating Cash Flow:

The study's results indicate that the t-value (1.984345) is less than the t-table value (2.01808) with a probability value (0.0538) > 0.05. Thus, H_a is rejected, and H_o is accepted, revealing a positive but insignificant effect of operating cash flow on predicting future operating cash flow. Operating cash flow, derived from continuous operating activities, can serve as a predictor of future cash flows. Soboleva et al.'s (2018) research supports operating cash flow's role, suggesting a predictive effect.

Effect of Changes in Accounts Receivable in Predicting Future Operating Cash Flow:

The study's results indicate that the t-value (-3.073117) is less than the t-table value (-2.01808) with a probability value (0.0037) < 0.05. H_a is accepted, and H_o is rejected, indicating a negative and significant effect of changes in accounts receivable on predicting future operating cash flow. Changes in accounts receivable suggest varying future cash flows, impacting operating cash flow. Noury et al. (2020) find that components of changes in trade receivables predict future operating cash flows, while Putri (2021) suggests no such effect.

Effect of Changes in Accounts Payable in Predicting Future Operating Cash Flow:

Results show the t-value (1.344789) is less than the t-table value (2.01808) with a probability value (0.1859) > 0.05. H_a is rejected, and H_o is accepted, indicating no positive and significant effect of changes in accounts payable on predicting future operating cash flow. Changes in debt suggest varying future cash flows, with Nallareddy et al.'s (2020) research supporting their influence on predicting future operating cash flow.

The Effect of Inventory Changes in Predicting Future Operating Cash Flows:

Results indicate that the t-value (1.872553) is less than the t-table value (2.01808) with a probability value (0.0681) < 0.05. H_a is rejected, and H_o is accepted, showing a

positive but insignificant effect of changes in inventory on predicting future operating cash flows. Inventory changes illustrate fluctuations in sales, affecting future cash flows. Finishtya (2019) supports the predictive role of inventory changes, while Nallareddy et al.'s (2020) research suggests no such effect.

Effect of Changes in Depreciation Expense in Predicting Future Operating Cash Flow:

The study's results show that the t-value (0.006150) is less than the t-table value (2.01808) with a probability value ($0.9951 < 0.05$). H_a is rejected, and H_o is accepted, indicating no significant effect of depreciation expense on predicting future operating cash flow. Soboleva et al.'s (2018) research suggests an influence of changes in depreciation expense on predicting future operating cash flow.

4. Conclusion

In conclusion, the findings of this study demonstrate that gross profit exerts a positive and significant influence on predicting future operating cash flows within the food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX) throughout the period of 2017-2019. Conversely, operating profit exhibits a negative and significant impact on the forecast of future operating cash flows for the same companies during the specified timeframe. On the other hand, net profit is identified as having a positive and significant effect on the anticipation of future operating cash flows within the aforementioned sector and timeframe.

However, it is crucial to acknowledge the limitations of this study. The findings are based on data collected from a specific industry (food and beverage sub-sector) and a particular time frame (2017-2019), which may restrict the generalizability of the results to other industries or periods. Additionally, external factors not considered in this study may influence the relationships between financial variables and operating cash flows.

For future research, it is recommended to explore these relationships in different industry sectors or extend the analysis to a broader range of years to enhance the generalizability of the findings. Moreover, investigating the impact of external economic and market conditions on the identified relationships could provide a more comprehensive understanding of the dynamics between financial indicators and future operating cash flows. Further research might also delve into the implications of specific management strategies and external shocks on the predictive power of financial variables for operating cash flows in various business contexts.

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