Fairness

e-ISSN: 3108-950X
Vol 01 (2) 2025 p. 149-161

Corresponding author:
Ernest Alang Wung
Email :
alangernestwung@gmail.com

Received 24 December 2025;
Accepted 9 January 2026;
Published 12 January 2026.

Conflict of interest statement:
Author(s) reported no conflict of interest

DOI: http://doi.org/10.70764/gdpu-fr.2025.1(2)-05

THE EFFECT OF OPERATING EXPENSES, BUSINESS INCOME, RECEIVABLES TURNOVER, AND TOTAL DEBT ON NET PROFIT IN FOOD AND BEVERAGE COMPANIES

Tsalsa Dyna Shofwatin[1], Ernest Alang Wung[2]

[1] *Universitas Islam Nahdlatul Ulama Jepara, Indonesia*
[2] *University of Dschang, Cameroon*

ABSTRACT

Objective: This study aims to empirically examine the effect of operating expenses, operating income, accounts receivable turnover, and total debt on net income in manufacturing companies listed on the Food & Beverage sub-sector of the Indonesia Stock Exchange for the period 2020–2024.

Research Design & Methods: Using a descriptive quantitative approach, this study employs a panel data regression model that combines time series observations (2020–2024) and cross-sectional observations of 10 companies, then tests the best model from the panel regression.

Findings: Based on the test results, the best model found was the FEM model. The analysis shows that business income and total debt have a positive and significant effect on net profit. Conversely, operating expenses and accounts receivable turnover were not found to have a statistically significant effect on profit margin.

Implications & Recommendations: These results confirm that F&B companies need to prioritize revenue growth and prudent debt management, while maintaining cost efficiency and accounts receivable management. Further research is recommended to include variables such as company size, age, innovation, and macroeconomic factors, using a broader approach and analysis period.

Contribution & Value Added: This study provides empirical evidence on the effect of operating expenses, operating income, accounts receivable turnover, and total debt on net income in Indonesia's F&B manufacturing sector and offers strategic insights for managers and investors in making more effective business decisions.

Keywords: Operational Cost, Business Income, Receivables Turnover, Total Debt, Net Profit.

JEL codes: M41, L66, C33
Article type: research paper

INTRODUCTION

The manufacturing sector, especially the food and beverage (F&B) sub-sector, plays a fundamental and strategic role in Indonesia's economic structure (Syahrulli, 2024). The stability of the F&B industry, driven by non-cyclical basic consumption needs, enables companies within it to survive and demonstrate relatively stable performance even amid fluctuating global economic conditions (Iqbal, 2015). The financial performance of companies listed on the Indonesia Stock Exchange reflects management's ability to manage resources and make strategic decisions amid

market competition. The ability to maximize net profit is one of the main indicators of a company's success. Net profit shows the company's remaining income after all costs, both operational and non-operational, are deducted from total revenue (Oktapianus and Muʼarif, 2022).

Analysis of the factors determining net profit is very important for investors, creditors, and management, because it reveals the extent to which business income has been successfully converted into net profit and the extent to which operational expenses have eroded it. Increased business income provides greater opportunities for higher net profit, while high or uncontrolled operational expenses reduce the potential for profit growth (Syahrulli, 2024). The results of research conducted by Wulandari and Ompusunggu (2021) show that revenue from sales has a significant effect on net profit. This means that any change in sales will directly affect the amount of profit earned by the company.

Theoretically, the relationship between operating expenses and net profit shows contradictory results. In general, an increase in operating expenses will reduce net profit because it adds to the company's costs (Mutiara, 2022). However, in the competitive F&B industry, some operating expenses such as marketing and distribution costs can serve as strategic investments to increase sales and market share. When the returns from these activities exceed their costs, operating expenses can actually have a positive impact on net profit (Harahap, 2024).

In addition, accounts receivable turnover reflects the company's efficiency in converting credit sales into cash. The faster the accounts receivable turnover, the better the liquidity and potential for increased profits (Mutiara, 2022; Santoso and Rachmawaty, 2024). Accounts receivable is the amount to be collected from customers as a result of the sale of goods or services on credit. However, in the F&B industry, which has a complex distribution chain and relies on credit systems for large distributors, slow accounts receivable turnover is often a business strategy to maintain long-term relationships and sales volume. The results of research conducted by Wulandari and Ompusunggu (2021) show that accounts receivable turnover has a significant effect on net profit. This means that the faster the accounts receivable turnover, the greater its contribution to increasing company profits. Meanwhile, according to Luvita (2019) accounts receivable turnover does not affect net profit.

The next factor is total debt or the company's debt ratio. Debt is a company's obligation that comes from external funding sources, such as bank loans, leasing, and bond issuance (Oktapianus and Muʼarif, 2022). Company debt is divided into two types: short-term debt, which is used for operational needs, and long-term debt, which is generally allocated for investment. These two types of debt together form the total debt. Optimal debt management can expand production capacity and drive business growth, but excessive debt can potentially lead to high interest expenses that squeeze profits, especially during times of economic instability. Previous studies have also shown that total debt affects net income because funds from debt can be used to increase a company's revenue and profitability (Oktapianus and Muʼarif, 2022). Meanwhile, according to Wulandari and Ompusunggu (2021), total debt has no effect on net profit.

Based on the above description, this study aims to analyze the effect of operating expenses, operating income, accounts receivable turnover, and total debt on the net profit of manufacturing companies in the Food and Beverage sub-sector listed on the Indonesia Stock Exchange, both partially and simultaneously. Through this analysis, it is hoped that a deeper understanding of the factors that influence profitability performance in the F&B industry will be obtained. Theoretically, this study is expected to enrich accounting and finance literature by providing empirical evidence on the determinants of net profit, particularly regarding the role of operating expenses and accounts receivable turnover, which still show varying research results. Meanwhile, in practical terms, the results of this study are expected to serve as a reference for management in formulating cost efficiency strategies, working capital management, and optimal capital structure policies, as well as providing additional information for investors in assessing the performance and investment risks in the food and beverage manufacturing sector in Indonesia.

LITERATURE REVIEW

Net Profit

Net income is the primary profitability metric that measures management's effectiveness in generating profits after considering all operating and non-operating expenses, interest, and taxes (Oktapianus and Mu'arif, 2022). Profit is defined as the excess of revenue after deducting all expenses related to the acquisition of that revenue (Syahrulli, 2024). Profit is the main objective of every business entity because without profit, a company cannot run its operations effectively.

Operational Costs

Operating expenses refer to the economic sacrifices made by a company to support its operational activities, such as marketing, distribution, and general administration expenses (Harahap, 2024). Controlling operating expenses is crucial. If the increase in expenses is not offset by commensurate revenue growth, net profit will tend to decline (Safriani, 2024). Operating expenses are expenditures necessary to support the company's revenue-generating activities. Operating expenses refer to costs incurred by the company in relation to operational activities to obtain primary income (Siregar and Sari, 2025). There is a relationship between operating costs and profits, whereby if the costs incurred are higher, the company will suffer losses (low operating profits), which can lead to insufficient funds to cover other expenses (Attaullah et al., 2025). Conversely, if the company is able to minimize operational costs, it will be able to increase profits.

Business Income

Revenue is the result of operational activities that are the main factors in increasing profits and ensuring the company's sustainability (Jaenab et al., 2021). High revenue is a prerequisite for high profits. Revenue is an inflow that increases a company's assets through core activities such as the sale of goods and services, so determining the right source of revenue is important to ensure the accuracy of its recognition and measurement (Kartini, 2017). Business income is the result of sales of goods and services charged to customers or recipients. Income variables refer to the value of income from sales listed in the comprehensive income statement and explained in the notes to the financial statements.

Accounts Receivable Turnover

Accounts receivable turnover is an activity ratio that measures the speed at which a company collects receivables arising from credit sales and converts them back into cash (Oktapianus and Mu'arif, 2022). Accounts receivable turnover is a ratio that shows how quickly a company converts accounts receivable into cash by comparing net credit sales to the average balance of accounts receivable. Accounts receivable turnover describes the length of time it takes a company to convert accounts receivable into cash that can be used again in operational activities, such as purchasing inventory and selling on credit (Salsabila and Sinaga, 2024). Efficiency in accounts receivable turnover reflects a company's ability to minimize uncollectible accounts and avoid bad debt, because if the collection process is not optimal, it can hamper cash flow and reduce the company's net profit (Wahyuniati and Adi, 2021). Research by Lubis (2021) shows that Accounts Receivable Turnover has an 87.9% effect on Net Profit.

Total Debt

Total debt or leverage is a company's financial obligations that come from external funding, such as bank loans or bonds (Oktapianus and Mu'arif, 2022). Debt is an obligation that must be fulfilled by a company to another party (external party). Debt can be divided into two types, namely Short-Term Debt and Long-Term Debt. Debt is a transaction that occurred in the past, resulting in an obligation that must be paid by the company to another party, whether it is short-term debt or long-term debt (Rudianto, 2012). A company that is able to meet its obligations and has a good asset position is in a healthy state. If a company's assets are less than its liabilities, it will potentially go bankrupt as a result of having to pay large amounts of interest and principal (Sumarani et al., 2024).

METHODS

This study uses a quantitative descriptive method that aims to understand and analyze the effect of operational expenses, revenue, accounts receivable turnover, and total debt on net profit in manufacturing companies in the Food and Beverage sub-sector listed on the Indonesia Stock Exchange. This approach was chosen because it is able to describe the relationship between variables through numerical data analysis and systematic presentation of results (Arikunto, 2019; Sugiyono, 2019).

The research population includes 95 manufacturing companies in the Food and Beverage sub-sector listed on the IDX during the period 2020–2024. Sample selection was carried out using purposive sampling, which is selection based on specific criteria in line with the research objectives. These criteria included companies that published complete financial reports for the period 2020–2024, had profit and loss data, did not experience a decline or negative net profit, and had been operating for more than 10 years since their IPO. Based on these criteria, 10 sample companies were obtained and observed for five years, resulting in a total of 50 observations used in the analysis.

Data analysis in this study uses panel data regression with the help of Eviews software. This method combines time series data (2020–2024 period) and cross section data (10 companies) to produce more accurate and efficient estimates than conventional regression methods. The regression model equation used is as follows,

$$NPMY=C + X1(BOP) + X2(LN\_INCOME) + X3(ART) + X4(DEBT) + \varepsilon$$

Description :

NPM = Net Profit Margin

BOP = Operating Expenses

LN_INCOME = Natural Logarithm of Business Income

ART = Accounts Receivable Turnover

DEBT = Total Debt

ε = error term

The selection of the best model was conducted through three stages of testing, namely the Chow Test, the Hausman Test, and the Lagrange Multiplier (LM) Test, to determine whether the Common Effect, Fixed Effect, or Random Effect model was most appropriate for the research data. After obtaining the best model, hypothesis testing was conducted using the F-test to determine the simultaneous effect of all independent variables on net profit. The t-test was used to assess the partial effect of each independent variable, and the coefficient of determination (R^2) was used to see how well the independent variables were able to explain the variation in net profit. The results of this analysis are expected to show the extent to which factors such as operating expenses, business income, accounts receivable turnover, and funding structure affect the profitability of companies in the Food and Beverage sub-sector.

Table 1. Operational Definition of Variables

Variable	Variable Definition	Indicator	Scale
Operating Expenses	Operating expenses are defined as the total of interest, transactions, provisions for write-offs of productive assets, marketing, general administrative expenses, and others (Panggabean et al., 2024).	Operating Expenses = Marketing Expenses + Administrative and General Expenses	RASIO

Variable	Variable Definition	Indicator	Scale
Business Income	Income refers to entries or increases in a company's assets or debt obligations resulting from the production of goods, provision of services, and other activities (Siallagan and Si, 2020).	Business Revenue = Net Sales	RASIO
Accounts Receivable Turnover	Accounts receivable turnover describes a company's efficiency in collecting receivables or converting receivables into cash within a certain period (Anggadini, 2019).	Accounts Receivable Turnover = total sales / average accounts receivable balance during the period under review.	RASIO
Total Debt	Total debt or leverage is a company's financial obligations that come from external funding, such as bank loans or bonds (Oktapianus and Muʼarif, 2022).	Total debt = Short-term debt + Long-term debt	RASIO
Net Profit	Net income is defined as the result of a company's operating profits after deducting interest and taxes (Suhaemi, 2021).	Net profit = profit before tax – income tax	RASIO

RESULT

Descriptive statistical analysis

The descriptive analysis results show that each variable has 50 observations with quite diverse data characteristics. The mean value of net profit margin (NPM) is 1,448,958 with a standard deviation of 2,167,039, indicating a fairly high variation between companies in generating profits. Operating costs (BOP) have an average of 55,492,960 and a standard deviation of 97,850,212, indicating a very wide distribution of data, possibly due to differences in the scale of operations between food and beverage companies in Indonesia.

Business income (INCOME) recorded the highest average value, namely 164,466,840 with a standard deviation of 283,223,454, indicating that some companies have incomes that are far above average, resulting in an uneven distribution of data. Meanwhile, accounts receivable turnover (ATR) had an average value of 9.86 and a standard deviation of 10.70, which means that the efficiency of accounts receivable management varies considerably between companies. The total debt ratio (DEBT) has an average of 11,728,977 with a standard deviation of 26,023,472, indicating significant differences in the funding structure between companies.

Table 2. Research Data Summary

	NPM	BOP	INCOME	ATR	DEBT
Mean	1448958.	5549296.	16446684	9.862917	11728977
Median	744386.0	809056.5	4945747.	7.126533	2070095.
Maximum	8641612.	35926065	1.16E+08	53.13250	92722030
Minimum	9595.000	130564.0	673364.0	0.878220	168245.0
Std. Dev.	2167039.	9785021.	28232454	10.70895	26023472
Sum	72447910	2.77E+08	8.22E+08	493.1459	5.86E+08
Sum Sq. Dev.	2.30E+14	4.69E+15	3.91E+16	5619.395	3.32E+16
Observations	50	50	50	50	50

Data Analysis

Based on the Chow test results in Table 3, a probability value (Prob.) of 0.0000 was obtained, which is smaller than the significance level of 0.05. Therefore, it can be concluded that the most appropriate model to use in this study is the Fixed Effect Model (FEM) because there are significant differences between individuals or companies in the Food and Beverage sub-sector.

Table 3. Uji Chow

Effects Test	Statistic	d.f.	Prob.
Cross-section F	17.669753	(9,36)	0.0000
Cross-section Chi-square	84.481153	9	0.0000

The Hausman test results show a probability value of 0.0353, which is smaller than the significance level of 0.05. Based on the decision-making criteria, if the probability value is < 0.05, then the Fixed Effect Model (FEM) is more appropriate to use than the Random Effect Model (REM). Thus, this study uses the FEM approach as the best model to analyze the effect of independent variables on net profit. Since FEM was selected as the best model, classical assumptions were then tested by examining multicollinearity and heteroscedasticity to ensure the validity of the model estimation results

Table 4. Uji Hausman

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	10.322548	4	0.0353

Classical Assumption Test

The results of the multicollinearity test show that all correlation coefficient values between independent variables are below 0.85. This indicates that there is no strong relationship between the independent variables, so the regression model in this study does not exhibit multicollinearity. Thus, each independent variable, namely operating expenses, business income, accounts receivable turnover, and total debt, can function independently in explaining its effect on net income. The absence of multicollinearity indicates that the regression model is stable and suitable for use because there is no redundancy of information between variables. This condition also reinforces the validity of the Fixed Effect Model (FEM) that was selected earlier, because the estimation results obtained can be interpreted accurately without interference from high correlations between independent variables.

Table 5. Multicollinearity test results

	BOP	LN_INCOME	ART	DAR
BOP	1.000000	-0.411094	-0.279541	0.643435
LN_INCOME	-0.411094	1.000000	0.426203	-0.203041
ART	-0.279541	0.426203	1.000000	-0.275609
DEBT	0.643435	-0.203041	-0.275609	1.000000

The results of the heteroscedasticity test using the Panel Least Squares method show that the probability values for all independent variables are Operational Expenses (BOP) at 0.1861, Business Income (LN_INCOME) of 0.2470, Accounts Receivable Turnover (ART) of 0.4869, and Total Debt (DEBT) of 0.3952 are greater than 0.05. Thus, it can be concluded that there are no signs of

heteroscedasticity in the regression model used. This means that the variance of the residuals is constant or homoscedastic, so that the panel regression model used meets the classical assumptions and the estimation results are reliable and efficient.

Table 6. Heteroscedasticity test results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.662950	0.530254	1.250250	0.2193
BOP	-0.004657	0.003455	-1.347958	0.1861
LN_INCOME	-0.020969	0.017818	-1.176849	0.2470
ART	-0.000528	0.000752	-0.702430	0.4869
DEBT	-0.004964	0.005769	-0.860452	0.3952

Panel Data Regression

a. Uji T

Table 7. Model equation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.894101	0.938480	-2.018264	0.0511
BOP?	-0.004588	0.006114	-0.750377	0.4579
LN_INCOME?	0.065936	0.031535	2.090878	0.0437
ART?	-2.65E-05	0.001330	-0.019950	0.9842
DEBT?	0.099144	0.010210	9.710303	0.0000

The regression results show that the dependent variable Net Profit Margin (NPM) or net profit is influenced by several independent variables, namely operating costs (BOP), business income (LN_INCOME), accounts receivable turnover (ART), and total debt (DEBT). The constant (C) has a coefficient of −1.8941 with a probability value of 0.0511, which is slightly above the significance level of 0.05. This indicates that when all independent variables are zero, net profit (NPM) tends to be negative, meaning that without adequate operational and financial activities, the company will experience losses or a decline in profits.

Operating costs (BOP) have a coefficient of −0.004588 with a probability value of 0.4579, which is greater than 0.05. This means that statistically, operating costs do not have a significant effect on net profit. Although the negative coefficient indicates that an increase in operating costs tends to reduce net profit, the effect is not statistically significant. This may occur because companies' operational efficiencies vary, and most companies may still be able to reduce costs or offset expenses with increased revenue.

Business income (LN_INCOME) has a coefficient of 0.065936 with a probability value of 0.0437, which is below 0.05. This means that business income has a positive and significant effect on net profit. Every 1% increase in business income will increase net profit by 0.0659 units. This result is in line with the theory that the higher the business income, the greater the company's ability to generate profits, because income is the main component of profitability.

Accounts receivable turnover (ART) has a coefficient of −0.000265 with a probability value of 0.9842, which is well above 0.05. Thus, accounts receivable turnover does not have a significant effect on net profit. The negative coefficient indicates that an increase in accounts receivable turnover does not necessarily increase profitability. This could be due to overly lenient credit policies or long collection times, meaning that cash turnover efficiency has not been able to directly impact profit growth.

Total debt has a coefficient of 0.099144 with a probability value of 0.0000, which is highly significant at the 1% level. This indicates that total debt has a positive and significant effect on net income. Productive use of debt can increase profits, for example, for business expansion or operational financing that generates more income than interest costs.

The results of this t-test show that business income (LN_INCOME) and total debt (DEBT) are variables that significantly affect net profit (NPM), while operating costs (BOP) and accounts receivable turnover (ART) do not show a significant effect. Thus, an increase in company profitability is determined more by the ability to generate income and effective management of the funding structure than by operational efficiency or accounts receivable management alone.

b. Uji F

Table 8. F-Test Results

R-squared	0.937596
Adjusted R-squared	0.915062
S.E. of regression	0.038909
Sum squared resid	0.054500
Log likelihood	99.59230
F-statistic	41.60684
Prob(F-statistic)	0.000000

The F test results show that the F-count value of 41.60684 is greater than the F-table value of 2.578, and the significance value of 0.000000 is much smaller than the significance level of 0.05. This indicates that simultaneously, the variables of operational expenses, business income, accounts receivable turnover, and total debt have a significant effect on net profit in food and beverage manufacturing companies listed on the Indonesia Stock Exchange for the period 2020–2024.

c. Determination Coefficient Test (R2)

The Adjusted R Square value is 0.937596 or 93.7596%. This coefficient of determination value indicates that the independent variables consisting of operating costs, business income, accounts receivable turnover, and total debt are able to explain 93.7596% of the net profit variable of F&B manufacturing companies. The remainder is explained by other variables not included in this research model.

d. Interpretation Model

Table 9. Constants and Variables

Variable	Coefficient
C	-1.894101
BOP?	-0.004588
LN_INCOME?	0.065936
ART?	-2.65E-05
DEBT?	0.099144

$$NPM = -1.894101 - 0.004588(BOP) + 0.065936\,(LN\_INCOME) - 0.0000265(ART) + 0.099144(DEBT)$$

This negative constant value indicates that if all independent variables (BOP, LN_INCOME, ART, DAR) are zero, then the Net Profit Margin (NPM) is estimated to be -1.8941. This means that without operational activities and business income, the company will suffer losses. A negative operational expense coefficient of 1% will reduce net profit (NPM) by 0.004588 units. Furthermore, the Business Income (LN_INCOME) coefficient value of 0.065936 indicates that every 1% increase in business income will increase NPM by 0.0659 units. This means that the higher the income earned, the more significantly the company's ability to generate net profit increases. Accounts Receivable

Turnover (ART) with a coefficient value of -0.0000265 means that changes in the accounts receivable turnover rate have no significant effect on net profit. Finally, Total Debt (DEBT) with a coefficient of 0.099144 indicates that a 1% increase in the debt ratio will increase net profit by 0.0991 units.

Table 10. Individual Effect Estimate Value

Variable	Coefficient
Fixed Effects (Cross)	
_AALI--C	-0.100928
_AKASHA--C	0.292701
_BUDI--C	-0.037289
_CEKA--C	-0.010481
_FISH--C	-0.209397
_INDF--C	-0.241440
_MLBI--C	0.209836
_MYOR--C	-0.107420
_STTP--C	0.137347
_ULTRAJAYA--C	0.067072

The results of individual effect estimates in the panel data regression model show that there are differences in fixed characteristics between companies that affect net income. The company with the highest positive effect is AKASHA (0.2927), which indicates that after considering the variables of operating expenses, operating income, accounts receivable turnover, and total debt, AKASHA's net income performance is above the industry average. Conversely, the company with the largest negative effect is INDF (-0.2414), which indicates a tendency for net profit to be lower than the average of other companies in the Food and Beverage sub-sector. The difference in the effect value is not caused by variations in independent variables such as income or total debt, but rather by fixed internal factors within the company, such as managerial efficiency, cost structure, brand strength, business strategy, and the operational policies of each company. This confirms the importance of internal characteristics in determining the level of profitability of companies in the food and beverage manufacturing sector.

DISCUSSION

The results show that operating expenses (BOP) have a negative coefficient (-0.004588) but a probability value of 0.4579–greater than the threshold of 0.05–suggesting that statistically, BOP does not have a significant effect on net profit margin (NPM) in the sample of manufacturing companies in the F&B sub-sector. Although theoretically increased operating expenses tend to suppress profits due to higher expenditures, empirical evidence in the field shows that companies in this sector may have achieved sufficient efficiency or used expenses as a strategic tool, thereby mitigating the negative effect on profits. This study is supported by Asriany et al. (2024) and Attaullah et al. (2025), which found that operational costs do not have a significant effect on net profit. This contrasts with research conducted by Ananda and Fajriansyah, 2025; Ramadhanti et al., 2025, which shows that operating expenses have a positive and significant effect on net profit.

This relates to the weak correlation between operating costs and net profit, especially when management is able to offset expenses with increased revenue or greater economies of scale. The fact that operating expenses do not significantly affect net profit reinforces that the F&B industry in Indonesia has specific characteristics, such as large scale operations, high efficiency, or a stable cost structure, so that additional operating expenses do not have an immediate visible impact. Conversely, many other studies show that high operating costs significantly reduce profits, especially in companies with rigid cost structures or small scales. Thus, these results reinforce that the correlation between operating expenses and profits is highly dependent on the industry context, cost management strategies, and company capacity, rather than being a universal relationship.

The results show that business income (LN_INCOME) has a positive coefficient of 0.065936 with a probability value of 0.0437, meaning that at a significance level of 5%, business income has a

positive and significant effect on net profit (NPM). In other words, every 1% increase in business income is associated with an increase in net profit of approximately 0.0659 units. This finding is consistent with the theory that business revenue is the largest component in determining a company's profitability. The greater the revenue earned, the greater the profit margin that can be achieved if costs and other expenses are managed properly. As empirical evidence, a study by Wijaya et al. (2021) found that in Indonesian and Malaysian manufacturing companies, statistically strong revenue performance drives profit growth and profitability.

However, there is research that shows different results, namely that even though business revenue grows, it does not always have a significant impact on profitability. For example, a study by Ramdan et al. (2025) found that sales revenue and operating costs had no significant effect on net profit in garment and textile companies listed on the IDX. These differences in results can be explained by the specific conditions of the company. If additional revenue is not accompanied by cost efficiency or increased margins, profitability may remain stagnant. Thus, although this study found a significant relationship between business revenue and net profit, results in other literature remind us that the effectiveness of cost management and operational scale are also very decisive factors.

The results show that accounts receivable turnover (ART) has a coefficient of –0.000265 with a probability value of 0.9842 ($p > 0.05$), which means that statistically, ART does not have a significant effect on net profit margin (NPM) in the F&B sub-sector manufacturing companies studied. The negative coefficient indicates that an increase in accounts receivable turnover is not a guarantee of increased profitability. This may be due to overly lenient credit policies, long collection cycles, or high turnover but low margins, so that even though accounts receivable are turning over quickly, the effect on profits is not yet apparent. These findings are consistent with the research by Sapitri et al., 2024; Yusup and Hariani, 2023 which found that the receivables turnover variable has no significant effect on the profitability of F&B companies in Indonesia.

However, there are studies that show different results from Dwiastari et al., 2024; Wajo, 2021 which report that receivables turnover has a positive and significant effect on profitability in Indonesian manufacturing companies. These differences in results may be due to varying company conditions such as business scale, accounts receivable management efficiency, customer credit structure, or different methodologies. Thus, the results of this study reinforce that accounts receivable turnover efficiency does not automatically translate into increased profits in the F&B industry, but rather depends on the operational context, credit policy, and working capital management efficiency of the company.

The results show that the Total Debt (DEBT) variable has a positive coefficient of 0.099144 with a probability value of 0.0000, which means it has a positive and significant effect at a 1% confidence level. This indicates that if the proportion of debt to total assets increases by 1%, then the average net profit margin (NPM) increases by 0.0991 units, assuming other variables remain constant. This finding reinforces the view that productive use of debt, for example to finance business expansion or operational activities that can generate income exceeding interest costs, can boost profitability. In the context of manufacturing companies in the F&B sub-sector, the results imply that management can utilize leverage as a strategic tool, rather than merely a financial burden, if the debt is directed towards assets or activities that generate higher returns.

These results are supported by research conducted by Ulfah and Nurzianti (2023), which found a positive relationship between debt-to-asset ratio and profit margin in public companies in Indonesia. Conversely, there is research by Rizal et al. (2021) that shows that the debt-to-asset ratio (DEBT) has a significant effect on profitability in the plantation sector, but the effect can be negative or even insignificant depending on the industry and period. Thus, the results of this study emphasize that the effect of debt structure on profit is not universal but rather highly dependent on contextual factors such as how debt is used, the operational efficiency of the company, and the conditions of the F&B industry in Indonesia, which may be better able to utilize leverage effectively.

CONCLUSION

This study aims to empirically examine the effect of operating expenses, operating income, accounts receivable turnover, and total debt on net income in manufacturing companies in the Food & Beverage sub-sector listed on the Indonesia Stock Exchange during the period 2020–2024. The method used is quantitative analysis with a descriptive design and panel data regression that combines time and inter-entity dimensions to obtain more accurate estimates. The results of the study indicate that business income and total debt have a positive and significant effect on net profit, while operating expenses and accounts receivable turnover do not have a significant effect. This shows that business income has a significant effect because an increase in sales volume and scale allows companies to cover fixed costs and utilize operational leverage effectively. Meanwhile, the positive effect of total debt may occur because companies are able to use debt productively for expansion and support additional income that is greater than the expenses incurred. Conversely, the insignificant effect of operating expenses and accounts receivable turnover may be because the F&B companies in the sample have implemented operational efficiency and accounts receivable management well enough that the variability of expenses and accounts receivable is not sufficient to statistically affect net profit.

The implications of this study indicate that F&B company management needs to focus on increasing revenue through product expansion, distribution, and sales digitization, as well as optimizing debt structures to support growth and profitability. Although operating expenses and accounts receivable turnover are not significant, efficiency and control remain important so that they do not become a burden in the future. This research contributes to enriching the accounting and finance literature of the Indonesian F&B sector and provides strategic guidance for managers and investors. It is recommended that companies continue to diversify their revenues and manage debt productively, while further research could add variables such as company size, age, innovation, and macroeconomic factors for a more comprehensive analysis.

REFERENCES

Ananda, F., & Fajriansyah, F. (2025). The Influence of Operating Income and Operating Costs on Net Profit at PT Gudang Garam Indonesia TBK. *International Journal of Economy, Education and Entrepreneurship, 5*(1), 235–246. https://doi.org/10.53067/ije3.v5i1.351

Anggadini, S. D. (2019). The Condition of Receivables Turnover and Firm Size on Profitability (ROA). *Jurnal Ilmu Keuangan Dan Perbankan (JIKA), 7*(2), 1–6. https://doi.org/10.34010/jika.v7i2.1910

Arikunto, S. (2019). Prosedur Penelitian: Suatu Pendekatan Praktik (Edisi Revi). *Rineka Cipta*.

Asriany, Budiandriani, & Imanuddin. (2024). The Influence of Production Costs and Operational Costs on Profitability in Manufacturing Companies. *Journal of Economic Education, 13*(1), 36–44.

Attaullah, D. A. N., Manik, J. L., Chandritike, S. N., & Yuniarti, E. (2025). Revenue, Operating Expenses, and Profitability in Assessing Financial Performance in the Manufacturing Industry. *AJABM : Asian Journal of Applied Business and Management, 4*(2), 465–472. https://doi.org/10.55927/ajabm.v4i2.200

Dwiastari, I. G. A. W., Darmawan, A., & Sugiastusti, R. H. (2024). Receivables Turnover, Leverage, Company Size and Profitability: An Empirical Study on Indonesian Financial Companies. *Profit : Jurnal Administrasi Bisnis, 18*(1), 62–74. https://doi.org/10.21776/ub.profit.2024.018.01.5

Harahap, S. I. S. (2024). Pengaruh Beban Operasional dan Pendapatan Usaha Terhadap Laba Bersihpada Perusahaan Manufaktur Sub Sektor Food and Beverage yang Terdaftar di Bursa Efek Indonesia 2018–2022. *Universitas Medan Area*.

Iqbal, M. (2015). Regresi Data Panel (2) "Tahap Analisis". *Perbanas Institute*.

https://dosen.perbanas.id/regresi-data-panel-2-tahap-analisis/

Jaenab, E. S., Fatimatuzzahro, G., Tsanya, S. G., & Adhianto, R. D. (2021). Pengaruh Pendapatan Operasional Terhadap Laba Bersih pada Bank Muamalat Indonesia Tbk. Periode 2015-2020. *EKSISBANK (Ekonomi Syariah Dan Bisnis Perbankan), 5*(2), 260–272. https://doi.org/10.37726/ee.v5i2.175

Kartini, T. (2017). Pengaruh pendapatan usaha dan biaya opersional terhadap laba bersih. *Jurnal Manajemen Dan Bisnis (Almana), 1*(2), 63–76.

Lubis, I. F. A. (2021). Pengaruh Perputaran Persediaan Dan Perputaran Piutang Terhadap Laba Bersih Pada KUBE Limpapeh Rumah Nan Gadang Bundo Kanduang. *Universitas Islam Negeri Sumatera Utara*.

Luvita, N. S. (2019). Pengaruh Perputaran Modal Kerja, Perputaran Piutang,Perputaran Persediaan Dan Pertumbuhan Penjualan Terhadap Laba Besih Pada PT. Stra Honda Motor Medan Periode 2013 - 2017. *Jurnal Ilmiah Maksitek, Sekolah Tinggi Ilmu Ekonomi ITMI, 4*(2), ISSN. 2655-4399.

Mutiara, P. (2022). Pengaruh Pendapatan dan Biaya Operasional terhadap Laba Bersih. *J-MAS (Jurnal Manajemen Dan Sains), 7*(1), 244–249. https://doi.org/10.33087/jmas.v7i1.396

Oktapianus, & Mu′arif, S. (2022). Pengaruh Modal Kerja, Perputaran Piutang, dan Total Hutang Terhadap Laba Bersih (Studi Empiris Pada Perusahaan Sektor Makanan Dan Minuman Yang Terdaftar Di Bursa Efek Indonesia Tahun 2016-2020). *Bussman Journal : Indonesian Journal of Business and Management, 2*(3), 552–563. https://doi.org/10.53363/buss.v2i3.79

Panggabean, R., Herawati, H., & Arnova, I. (2024). Pengaruh Pendapatan Usaha, Beban Operasional dan Perputaran Total Aset terhadap Laba Bersih. *FINANCIAL: Jurnal Akuntansi, 10*(1), 88–96. https://doi.org/10.37403/financial.v10i1.584

Ramadhanti, S., Aljufri, & Farwitawati, R. (2025). The Impact of Operating Expenses , Total Debt , and Sales on Net Profit in Coal Mining. *International Journal Science of Accounting, Auditing and Taxation, 1*(1), 1–13.

Ramdan, M. F., Fikri, M. H. Al, Fabiano, G. R., Zahra, A., & Khofiyah, N. A. (2025). Impact of Operating Costs and Sales Revenue on Net Profit IDX Garment and Textile Sector. *Neraca Keuangan : Jurnal Ilmiah Akuntansi Dan Keuangan, 20*(2), 367–379. https://doi.org/10.32832/neraca.v20i2.19818

Rizal, H. I., Kasmadi, K., & Helmiati, H. (2021). The Effect of Debt to Total Asset Ratio and Debt to Equity Ratio on Profitability in Plantation Sub-Sector Companies. *Jurnal Riset Manajemen Indonesia, 3*(1), 56–63.

Rudianto. (2012). Pengantar Akuntansi. *Erlangga*.

Safriani, S. (2024). Pengaruh Biaya Produksi dan Biaya Operasional Terhadap Laba Bersih Pada CV. Anato Group Di Kelurahan Data Kec. Duampanua Kab. *Pinrang. IAIN Pare pare*.

Salsabila, H. S., & Sinaga, M. (2024). Faktor-faktor yang Mempengaruhi Laba Bersih (Studi Empiris pada Perusahaan Manufaktur Sub Sektor Aneka Industri yang Terdaftar pada Bursa Efek Indonesia Periode 2019 – 2023). *Menawan: Jurnal Riset Dan Publikasi Ilmu Ekonomi, 2*(5), 341–357. https://doi.org/10.61132/menawan.v2i5.859

Santoso, D. S., & Rachmawaty. (2024). Pengaruh Perputaran Piutang dan Penjualan terhadap Laba Bersih pada Perusahaan Sub Sektor Makanan dan Minuman di BEI Tahun 2017 – 2023. *JEAC : Journal of Economic Academic, 1*(2), 331–341.

Sapitri, N. E., Merwandani, R. P., Hiryani, S., & Haryadi, D. (2024). Cash turnover and receivables

turnover to the profitability of food and beverages sector companies for the 2018-2022 period. *International Journal of Applied Finance and Business Studies, 11*(4), 942–948.

Siallagan, H., & Si, M. (2020). Teori Akuntansi (Pertama). *LPPM UHN Press*.

Siregar, R. A., & Sari, T. N. (2025). Peranan Biaya Operasional dalam Menunjang Efektivitas Pengendalian Biaya Operasional Pada PT. Global Pratama Persada. *Jurnal Manajemen Dan Akuntansi, 7*(2), 459–466. https://doi.org/10.47709/jumansi.v7i2.6272

Sugiyono. (2019). Metode Penelitian Kuantitatif, Kualitatif, dan R&D (Kedua). *Alfabeta*.

Suhaemi, U. (2021). Pengaruh Pendapatan Usaha Dan Biaya Operasional Terhadap Laba Bersih. *Jurnal Akuntansi Dan Keuangan, 5*(2), 35–40. https://doi.org/10.31000/competitive.v5i2.4166

Sumarani, S., Arif, E. M., & Suhikmat. (2024). Pengaruh Persediaan, Total Hutang, Arus Kas Operasi dan Modal Kerja terhadap Laba Bersih. *Jurnal Akuntansi FE-UB, 17*(1), 78–95.

Syahrulli, M. D. (2024). Pengaruh Pendapatan dan Beban Operasional Terhadap Laba Bersih pada Sub Sektor Food and Beverage yang Terdaftar di BEI Periode 2021-2024. *Jurnal Komunikasi Bisnis Dan Manajemen*.

Ulfah, A. K., & Nurzianti, R. (2023). Analysis of Total Debt to Asset Ratio and Profit Margin as A Measure of Company Financial Performance. *J-ISCAN: Journal of Islamic Accounting Research, 5*(2), 79–98. https://doi.org/10.52490/jiscan.v5i2.1951

Wahyuniati, I. G. A. K. S., & Adi, I. K. Y. (2021). Pengaruh pertumbuhan penjualan, perputaran kas, perputaran piutang, dan perputaran persediaan terhadap profitabilitas pada perusahaan subsektor makanan & minuman di Bursa Efek Indonesia. *Journal Research of Accounting, 2*(2), 219–235. https://doi.org/10.51713/jarac.v2i2.39

Wajo, A. R. (2021). Effect of Cash Turnover, Receivable Turnover, Inventory Turnover and Growth Opportunity on Profitability. *Atestasi : Jurnal Ilmiah Akuntansi, 4*(1), 61–69. https://doi.org/10.57178/atestasi.v4i1.165

Wijaya, A., Dorkas, A., Atahau, R., & Wacana, S. (2021). Profitability and Sustainable Growth of Manufacturing Firms : Empirical Evidence from Malaysia and Indonesia. *Jurnal Riset Akuntansi Dan Keuangan, 9*(1), 13–24. https://doi.org/10.17509/jrak.v9i1.26689.Copyright

Wulandari, B., & Ompusunggu, W. A. (2021). Pengaruh Perputaran Piutang, Penjualan, Perputaran Kas, Perputaran Persediaan dan Hutang Terhadap Laba Bersih. *COSTING: Journal of Economic, Business and Accounting, 4*(2), 445–454.

Yusup, W. E., & Hariani, S. (2023). The effect of receivables turnover, inventory turnover and current ratio on profitability. *Jurnal Riset Manajemen Dan Bisnis, 8*(1), 23–32. https://doi.org/10.36407/jrmb.v8i1.987