

Impact of Investment Choices, Dividend Strategy, and Operational Effectiveness on Financial Performance with Capital Structure Serving as a Control Variable

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Abstract

This research endeavors to evaluate the influence of investment decisions, dividend policies, and operational efficiency on the financial performance of manufacturing firms within the food and beverage sector that are publicly traded on the Indonesia Stock Exchange from 2021 to 2023, incorporating capital structure as a control variable. The secondary data utilized are derived from annual financial reports and are analyzed through the Random Effect Model (REM) methodology for panel data regression employing EViews 12 software. The results revealed that investment decisions and dividend policies had a notably adverse effect on financial performance, whereas operational efficiency demonstrated positive yet statistically insignificant effects. Collectively, all variables exhibited a significant impact with a coefficient of determination standing at 66.68%. These findings highlight the critical importance of adept management of investment decisions and dividend policies in sustaining corporate profitability.

Keywords: Investment Determinations, Dividend Strategy, Operational Effectiveness, Fiscal Performance, Capital Configuration

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INTRODUCTION

The advancement of a nation's economy is profoundly influenced by the extent of investment activities undertaken within its borders. As expressed by Nurhayani (2022), economic progression is denoted by a continuous rise in output or production per capita, typically accompanied by transformative structural modifications within the economy. A pivotal sector along this developmental trajectory is the manufacturing industry, which serves as a primary indicator of a nation's economic advancement (ADB, 2019). In the Indonesian context, this sector continues to exhibit positive growth, particularly within the food and beverage subsector, which reflects an enhancement in consumer purchasing power and the robustness of domestic consumption (Sari, 2022). Data from the Central Bureau of Statistics (BPS) indicate that the food and beverage subsector is crucial to Indonesia's gross domestic product (GDP) expansion. The growth rate of the manufacturing sector improved from 3.39%

in 2021 to 4.89% in 2022, despite a slight decline to 4.64% in 2023 (BSPJI, 2021). Throughout this timeframe, the food and beverage sector constituted approximately 6.66% of the overall GDP, encompassed 4.85 million enterprises, and generated revenues amounting to Rp 998.37 trillion (BPS, 2024). These statistics underscore the emergence of this subsector as a significant catalyst for national economic growth, necessitating effective financial performance management to ensure the sustainability of its operations.

Financial performance serves as a vital metric employed to evaluate a company's efficacy in generating profits while ensuring financial stability. Setyowati & Lestari (2023) assert that financial performance can be assessed by a company's capability to efficiently manage resources to yield profits. Habrizons (2023) elaborates that this evaluative process encompasses an examination of liquidity, solvency, profitability, and activity ratios that collectively depict the financial well-being of the organization. Robust financial performance not only enhances shareholder value but also fortifies the organization's competitive stance in an increasingly saturated market (Wahyuni & K.H., 2018).

Investment decisions represent fundamental components that substantially influence financial performance. Such decisions pertain to how a company allocates capital to secure future revenue streams. Sahid & Henny (2023) articulate that investment decisions shape a company's growth trajectory by leveraging assets for value creation. Consequently, Santoso (2019) affirms that judicious investment choices will bolster the financial standing of the company and elevate investor confidence. Therefore, effective investment management emerges as an essential element in sustaining long-term profitability and stability (Oktavia & Susanti, 2024).

In conjunction with investment decisions, dividend policy constitutes another significant factor that conveys signals of assurance to investors. The dividend policy delineates a strategy in which a company allocates its profits between distributions to shareholders and reinvestment into the enterprise (Niswah & Kurniawati, 2025). Hermansyah (2023) posits that well-structured dividend policies can assist companies in resource allocation, risk management, and attracting investors via favorable market perceptions. According to signaling theory, consistent dividend payments are interpreted as a positive signal regarding the company's prospective performance (Pidianti & Murtianingsih, 2023).

A determinant influencing the tertiary sector is operational efficiency, which pertains to an organization's capability to effectively utilize its resources in generating revenue. Mehzabin et al. (2023) assert that operational efficiency is paramount for sustaining long-term profitability and competitive viability. Kariuki (2021) underscores that such efficiency reflects management proficiency in minimizing costs and optimizing resources to enhance revenue generation. Handoyo et al. (2023) further elucidate that enhanced operational efficiencies can fortify a company's competitive position in the face of cost challenges and dynamic global market conditions.

Research undertaken by Niswah & Kurniawati (2025) concluded that dividend policies and operational efficiencies do not statistically exert a significant influence on financial performance, while findings from Muamilah & Jannah (2020) present opposing evidence. Additionally, Istiqomah and Mujiyati (2025) determined that

investment decisions in isolation have statistically significant impacts. This inconsistency implies the presence of research gaps that necessitate resolution through the integration of all three variables into a cohesive and comprehensive framework, with the capital structure (DER) employed as a control variable to enhance the analytical examination of the interrelations among the variables.

METHOD

Research Design

This research employs a descriptive quantitative methodology that seeks to elucidate the connections among dependent, independent, and control variables. The selection of a quantitative framework is predicated on the assumption that all utilized data is represented in numerical form and is suitable for statistical methods for the objective evaluation of hypotheses (Sekaran & Bougie, 2019).

Population and Sampels

The sample for this study comprised 95 publicly listed manufacturing firms within the food and beverage subsector of the Indonesia Stock Exchange (BEI) during the timeframe of 2021-2023. The selection of samples was executed utilizing a systematic sampling methodology governed by specific criteria: firms are required to uphold ongoing registration with the BEI throughout the duration of the study, furnish detailed financial disclosures, consistently allocate dividends, report profits within a favorable range, and present financial information in Indonesian rupiah (Sekaran & Bougie, 2019). In accordance with these defined parameters, a total of 29 firms were identified, resulting in 75 observations subsequent to the exclusion of outliers. Secondary data was procured through the documentation method, employing annual reports and audited financial statements, which were obtained from the official BEI website (www.idx.co.id) as well as the corporate websites of each respective firm.

The evaluative framework employed in the present investigation is:

$$ROA_{it} = \alpha + \beta_1 PER_{it} + \beta_2 DPR_{it} + \beta_3 TATO_{it} + \beta_4 DER_{it} + \varepsilon_{it}$$

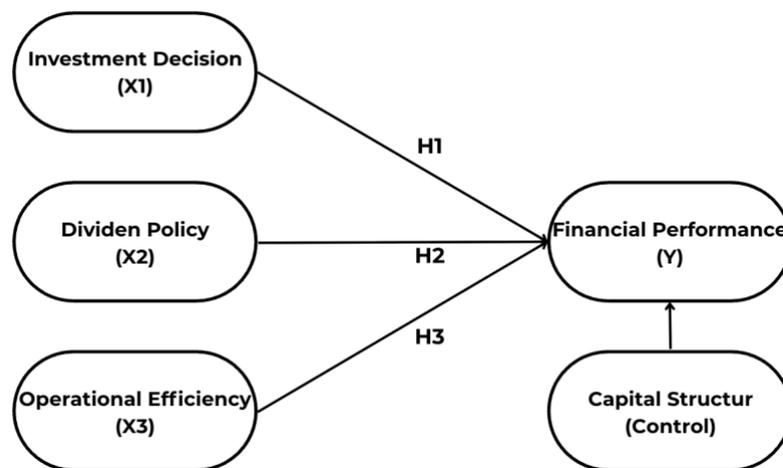
The research employed financial performance dependent variables (ROA) alongside three independent variables, specifically investment decisions (PER), dividend policy (DPR), and operational efficiency (TATO). Furthermore, the modal structure (der,) is utilized as the control variable, with α representing the constant and $\beta^1 - \beta_4$ denoting the coefficients corresponding to each variable within the regression model. Explanation will figure in Table 1.

Table 1. Define Variable

Variable	Explanation	Scale
Financial Performance	$ROA = \frac{Net\ Profit}{Total\ Assets}$	Ratio

Investment Decision	$PER = \frac{\text{Stock Price}}{\text{Earning per Share}}$	Ratio
Dividend Policy	$DPR = \frac{\text{Dividend per Share}}{\text{Profit per Share}}$	Ratio
Operational Efficacy	$TATO = \frac{\text{Sales}}{\text{Total Assets}}$	Ratio

Conceptual framework



Graph 1. Conceptual Framework

Hyphotesis

- H1. Investment decisions have a significant impact on financial performance.
- H2. Dividend Policy have a significant impact on financial performance.
- H3. Operational Efficiency have a significant impact on financial performance.

Estimation Technique

The methodological framework employed in this study incorporates panel data regression, facilitated by EViews software version 12. Prior to engaging in model estimation, classical assumption testing is conducted to ascertain the consistency of the dataset. Assessments of normality were executed to ascertain compliance with a normal distribution, utilizing the Jarque-Bera probability value criterion with a threshold of > 0.05. An evaluation for multicollinearity was undertaken to verify the nonexistence of substantial correlations among the independent variables, indicated by a correlation coefficient < 0.8. Simultaneously, an analysis of heteroskedasticity was conducted employing the Glejser method to confirm the uniformity of residual variance; the model is deemed free from heteroskedasticity if the probability value exceeds 0.05.

Furthermore, the identification of optimal models in panel data regression was achieved through a tripartite methodology, encompassing the Chow test (to

differentiate between General Effects and Fixed Effects), the Hausman test (to distinguish between Fixed Effects and Random Effects), and the Lagrange Multiplier test (to differentiate General Effects from Random Effects). The model exhibiting the highest probability value was selected as the preferred model. A p-value of < 0.05 denotes statistical significance, whereas a p-value of > 0.05 suggests a lack of significance

RESULT AND DISCUSSION

Result

Table 2. CE/FE/RE Result

Variable	Coefficient		
	CE	FE	RE
Constant	-1.058*	-0.891*	-0.965*
PER	-0.064*	-0.080*	-0.079*
DPR	-0.055	-0.094*	-0.094*
TATO	0.080	0.218	0.149
Control	-0.438*	-0.063	-0.278*

(1) Chow Test

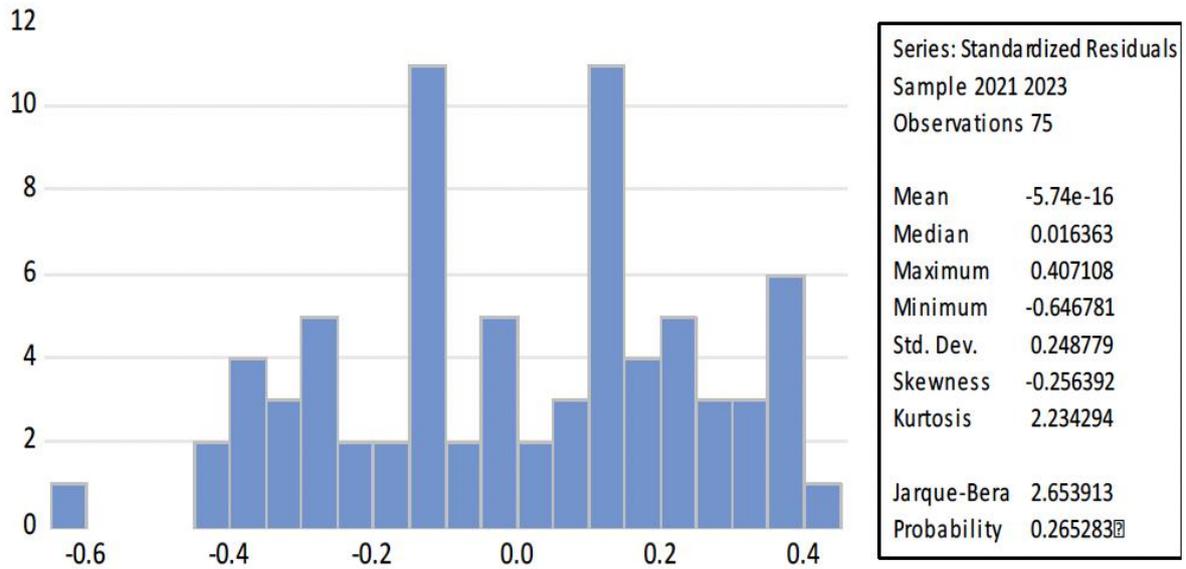
Cross-section $F_{(24,46)} = 14,468$; Prob.F = 0,000

(2) Hausman Test

Cross-section random $X^2(4) = 8,098$; Prob $X^2 = 0,0880$

Source: Author, 2025

According to table 2, the findings of the CE FE analysis, specifically the Chow test, indicate that prob F = 0.000; thus, the Fixed Effects Model (FEM) is more appropriate than the Common Effects Model (CEM). Subsequently, the Hausman test is employed to discern the preference between FEM and Random Effects Model (REM). The results reveal that Prob $X^2 = 0.0880$, suggesting that the REM is more suitable than the FEM.



Graph 2. Normality Test

Source: Author, 2025

In the illustration presented above, it is discernible that the Jarque-Bera statistic is assessed at 2.653913, accompanied by a probability value of 0.265283, which exceeds the threshold of 0.05; consequently, it can be inferred that the dataset analyzed in this research adheres to a normal distribution.

Table 3. Heteroscedasticity Test Result

Variable	Coefficient	t-stat	Prob.t
PER	0.225	4.598	0.755
DPR	0.002	0.313	0.702
TATO	0.013	0.384	0.448
Control	0.069	0.764	0.386

Source: Author, 2025

According to the findings of the heteroskedasticity assessment presented in the preceding table, it is evident that the probability value for all variables exceeds 0.05. Consequently, this regression model exhibits no indications of heteroskedasticity.

Table 4. Multicollinearity Test Result

Variable	PER	DPR	TATO	Control
PER	1.000	0.480	0.250	0.010
DPR	0.480	1.000	0.122	-0.128
TATO	0.250	0.122	1.000	0.083
Control	0.010	-0.128	0.083	1.000

Source: Author, 2025

According to the findings derived from the multicollinearity assessment presented in the preceding table, it is evident that no correlations among the independent variables examined in this study exceeded the threshold of 0.8.

Consequently, it can be concluded that this regression model does not exhibit multicollinearity.

Tabel 5. Random Effect Model Result

$ROA_{it} = -0.965 - 0.079PER_{it} - 0.094DPR_{it} + 0.149TATO_{it} + 0.278DER_{it} + \varepsilon_{it}$				
	(0,000)	(0,032)	(0,402)	(0,034)
$R^2 = 0,6847$; Adjusted $R^2 = 0,6667$; $F_{stat} = 38,014$; Prob. $F_{stat} = 0,000$				
<i>Source: Author, 2025</i>				

According to the information presented in Table 5, the R2 value of 0.684 signifies that 68.4% of the variance can be accounted for by the variables PER, DPR, TATO, and DER. Conversely, the remaining 31.6% is subject to the influence of additional factors. Furthermore, the F-statistic of 38.014 along with a Prob F value of 0.000 indicates that ROA is concurrently influenced by the variables PER, DPR, TATO, and DER.

Tabel 6. Hypothesis Result

Variable	Coefficient	Prob.t	Conclusion
PER	-0.079*	0,000	β_1 significant
DPR	-0.094*	0,032	β_2 significant
TATO	0.149	0,402	β_3 insignificant
Control	-0.278*	0,034	β_4 significant

Source: Author, 2025

Based on the data elucidated in table 5, it can be articulated that:

1. PER exerts a markedly adverse influence on ROA. With a coefficient of -0.079 and a probability of $0.000 < (0.05)$, hypothesis H1 is therefore dismissed.
2. DPR significantly detrimentally impacts ROA. With a coefficient of -0.094 and a probability of $0.032 < (0.05)$, hypothesis H2 is consequently rejected.
3. TATO demonstrate no noteworthy effect on ROA. With a coefficient of 0.149 and a probability of $0.402 < (0.05)$, hypothesis H3 is thus negated.
4. DER, functioning as a control variable, manifests a significant negative influence on ROA. With a coefficient of -0.278 and a probability of $0.034 < (0.05)$.

Discussion

The net income accrued by the organization is predominantly allocated to retained earnings. These retained earnings are subsequently utilized to enhance productivity and foster innovation within the firm. As the magnitude of innovation and enhancement within the organization expands, so too does the interest from potential investors. This correlation has resulted in an increase in share prices, accompanied by a rise in earnings per share (EPS). Nonetheless, to facilitate this growth, the organization must forgo a segment of its net income, as evidenced by the decline in Return on Assets (ROA). This scenario indicates that firms must meticulously evaluate expenses associated with productivity, innovation, and creativity. The allocation of retained earnings necessitates strategic management, even

if it leads to a decline in net profits, as its primary aim is to promote long-term growth and secure a competitive edge for the organization.

In the framework of signaling theory, an augmentation in dividends is typically perceived as a manifestation of robust cash flow and a positive financial prognosis. However, in instances where the company's financial standing does not possess the capacity to sustain substantial dividend distributions, the signals conveyed may be deceptive. An excessive distribution of dividends undermines the efficacy of financial management, particularly concerning asset conservation and growth. Consequently, Return on Assets (ROA) diminishes as resources allocated for investment and enhanced productivity are redirected towards dividend payments. This situation illustrates suboptimal financial management practices and possesses the potential to adversely impact the company's long-term performance. These observations align with research conducted by Alfathan & Manda (2025); Dedyanti & Hwihanus (2024); and Hilsya et al. (2022), which corroborated the significant negative ramifications of dividend policies on financial performance.

This investigation has established that variables pertinent to operational efficiency, as evaluated through Total Asset Turnover (TATO), exert a minimal yet advantageous influence on the financial outcomes of the food and beverage subsector within manufacturing firms, as reported in the Bulletin of Economic Indicators (EIB) from 2021 to 2023. To substantiate this finding, a probability value of 0.4024 was recorded, surpassing the significance threshold of 0.05, thereby indicating that operational efficiency was deemed statistically insignificant. Furthermore, the coefficient of 0.149356 bolsters the conclusion that operational efficiency exerts a positive effect on financial performance.

This phenomenon can be elucidated by the recognition that, in addition to profitable corporate operations, variations in regional markets may give rise to complexities such as segmentation challenges, inventory management difficulties, and constrained consumer access, which ultimately impede the optimization of net profits. The impact of other, more substantial external factors, including outstanding liabilities (such as expenses related to transportation or other associated costs), may diminish net revenues without significantly altering the organization's financial performance.

CONCLUSION

According to the findings derived from the regression analysis conducted by the panel, it was established that the Price-Earnings Ratio (PER) and Dividend Payout Ratio (DPR) exerted a statistically significant negative effect on Return on Assets (ROA). Conversely, the variable TATO displayed positive associations that did not achieve statistical significance. Furthermore, all three independent variables were recognized as having a substantial impact on ROA, evidenced by the coefficient of determination value of 66.68%, with the residual 33.32% attributed to external factors not encompassed within the model. These findings underscore the notion that managerial decisions surrounding investment strategies, dividend distribution, and asset management profoundly influence a firm's profitability and financial health.

The research was constrained by its dependence on solely three independent variables, alongside a limited observational timeframe from 2021 to 2023, and a

narrow emphasis on the food and beverage subsector. Consequently, it is advisable for future research endeavors to incorporate additional variables such as organizational scale, sales expansion, digital transformation, or corporate governance (GCG) to enhance the analytical breadth. Moreover, prolonging the study's duration to encompass a five-year timeframe, as well as diversifying the subjects to include other subsectors such as textiles, automotive, or pharmaceuticals, is anticipated to yield more comprehensive insights and illuminate the long-term dynamics present within Indonesia's manufacturing sector.

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