

THE INFLUENCE OF PROFITABILITY, LEVERAGE, AND COLLATERALIZABLE ASSETS ON DIVIDEND POLICY IN FOOD AND BEVERAGE SUBSECTOR MANUFACTURING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE FOR THE PERIOD 2018-2024

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Abstract

This research aims to analyze the effect of profitability, leverage, and collateralizable assets on dividend policy in manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange (IDX) during the period of 2018-2024. Using purposive sampling, which resulted in 10 companies as samples with a total of 70 data points. Data analysis was conducted using panel data regression with Eviews 13, to identify the relationship between independent variables and dividend policy. The results of the study indicate that profitability has a negative and significant effect on dividend policy, indicating that companies with high profitability levels tend to retain earnings for investment purposes rather than distributing them in the form of dividends. On the other hand, leverage has a positive and significant influence on dividend policy, indicating that companies with high debt levels strive to provide positive signals to investors through dividend payments. Meanwhile, collateralizable assets do not show a significant influence on dividend policy. These findings have implications for company management and investors in decision making regarding dividend distribution.

Keywords: Profitability, Leverage, Collateralizable Asset, and Dividend Policy

Introduction

The development of investment plays a crucial role in a country's economy, as it significantly influences not only investors but also the business sector and the government. According to the Fiscal Policy Agency (BKF), current global challenges can be categorized into three major issues: geopolitical conflicts, political leadership transitions in many countries, and weak global economic projections, including those of major world economies. Despite these challenges, Indonesia has remained resilient amidst rising global uncertainties. The Indonesian economy is largely driven by increased household consumption, and the food and beverage industry has experienced rapid growth, leading to higher sales and success as a global exporter.

Investment is a commitment of funds or other resources made in the present with the aim of generating future returns. Generally, investments can be divided into two types: real assets and financial assets. Real asset investments include the purchase of tangible assets such as gold, land, and buildings. Financial asset investments, on the other hand, can be made through money markets or capital markets. The capital market serves as one of the alternative channels for investors to invest in financial assets. It is a market for various long-term financial instruments with maturities exceeding one year, including stocks, bonds, mutual funds, and derivative instruments of securities.

Public awareness of investing has increased annually. This trend is evident from the growth in the number of investors, as shown by the Single Investor Identification (SID) registered with the Indonesian Central Securities Depository (KSEI). This upward trend demonstrates that Indonesia's capital market has become an attractive avenue for investors to allocate their funds.



Figure 1

The growth of capital market investor 2018-2024

As the number of capital market investors grew from 2018 to 2024, public companies gained more opportunities to raise capital from society through stock offerings. In return, investors benefit from dividends and stock price appreciation (capital gains), fostering a mutual relationship between investors and companies.

Dividends represent the return earned by investors from the company's profits. Dividend payments reassure shareholders of receiving tangible benefits, increasing their interest and trust in investing further in the company.

Companies, however, need to balance retaining earnings for growth and investment purposes while maintaining shareholder satisfaction through sufficient dividend distributions. Dividend policy is largely influenced by profitability levels. Profitability serves as a key indicator of managerial success and, from the investor's perspective, as a motivating factor to invest in the company.

Leverage reflects a company's ability to meet its obligations. When determining dividend policy, firms must consider business continuity, ensuring that profits are not solely distributed as dividends but also allocated for investment or debt repayment.

Collateralizable assets refer to the portion of a company's assets that can be pledged as collateral for loans. Higher levels of collateralizable assets reduce conflicts of interest between shareholders and creditors, enabling firms to distribute larger dividends. Conversely, lower levels of collateralizable assets may heighten shareholder-creditor conflicts, as creditors may oppose substantial dividend payments to protect their claims.

Methods

This research is a quantitative study with an associative and causal approach. Associative-causal research aims to determine cause-and-effect relationships between two or more variables (Sugiyono, 2019).

a) Independent variables

1. Profitability : $return\ on\ assets = \frac{earning\ after\ tax}{total\ assets}$
2. Leverage : $debt\ to\ equity\ ratio = \frac{total\ debt}{total\ equity}$
3. Collateralizable assets : $collas = \frac{total\ fixed\ asset}{total\ asset}$

b) Dependent variable

$$Dividend\ policy : dividend\ payout\ ratio = \frac{dividen\ per\ share}{earning\ per\ share}$$

This study employs a quantitative approach within a descriptive research framework, utilizing secondary data from the financial statements of food and beverage manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2018–2024 period. The sample consists of ten companies selected through purposive sampling based on specific criteria: being listed on the IDX during 2018–2024, consistently publishing financial reports, generating consecutive profits, and distributing dividends. Data were collected

through documentation studies, literature reviews, and observations of company websites. Data analysis was performed using the EViews 13 software. The analytical methods include descriptive statistics, various panel data regression models (Common Effect, Fixed Effect, and Random Effect), model selection using Chow and Hausman tests, classical assumption testing (normality, multicollinearity, heteroskedasticity, and autocorrelation), and panel data regression to examine the influence of Return on Assets (ROA), Return on Equity (ROE), and Collateralizable Assets (COLLAS) on dividend policy. The analysis concludes with t-tests, F-tests, and determination of the coefficient of determination (R^2).

Results and Discussions

Table 1 Descriptive Statistical Analysis Results

	ROA	DER	COLLAS	DPR
Mean	0.096286	0.584857	0.328000	0.629286
Median	0.090000	0.560000	0.270000	0.390000
Maximum	0.220000	1.270000	2.970000	2.660000
Minimum	0.030000	0.110000	0.020000	0.070000
Std. Dev.	0.042908	0.360912	0.359390	0.522001
Skewness	0.814000	0.200196	5.770761	1.731434
Kurtosis	3.264869	1.702704	43.03587	5.668784
Jarque-Bera	7.934912	5.376259	5063.559	55.74875
Probability	0.018922	0.068008	0.000000	0.000000
Sum	6.740000	40.94000	22.96000	44.05000
Sum Sq. Dev.	0.127034	8.987749	8.912120	18.80146
Observations	70	70	70	70

Source : Data processing result Eviews 13, 2025

The table above can be described as follows :

1. The independent variable, Profitability (ROA), consists of 70 samples. The minimum value of 0.030000 was recorded by PT Nippon Indosari Corpindo Tbk (ROTI) in 2018, indicating that the company was less efficient in utilizing its assets to generate profits. The maximum value of 0.220000 was achieved by PT Delta Djakarta Tbk (DLTA) in 2019, suggesting that the company effectively utilized its assets to generate profits. The mean value was 0.096286 or 9.6%, which can be considered good as it exceeds the industry standard of 5.98% for financial performance based on profitability ratios. The standard deviation was 0.042908, indicating a moderate variation in profitability across the sampled companies.
2. The independent variable, Leverage (DER), consists of 70 samples. The minimum value of 0.110000 was recorded by PT Wilmar Cahaya Indonesia Tbk (CEKA) in 2022, indicating that the company had sufficient equity to cover its total liabilities. The maximum value of 1.270000 was recorded by PT Garudafood Putra Putri Jaya Tbk (GOOD) in 2020, suggesting that the company's equity was insufficient to cover its total liabilities. The mean value was 0.584857 or 58%, which is considered healthy as it is below 90%, in accordance with the industry standard for financial performance based on leverage ratios. The standard deviation was 0.360912, reflecting a relatively high variation in leverage levels across the sampled companies.
3. The independent variable, Collateralizable Assets (COLLAS), consists of 70 samples. The minimum value of 0.020000 was recorded by PT Sekar Laut Tbk (SKLT), while the maximum value of 2.970000 was recorded by PT Nippon Indosari Corpindo Tbk (ROTI) in 2019. The mean value was

0.328000 or 32%. Companies with high collateralizable assets tend to reduce potential conflicts with stakeholders, particularly shareholders, because creditors have collateral in the form of company assets. This minimizes the risk of the company violating its obligations and failing to repay debts to creditors. The standard deviation was 0.359390, indicating a moderate level of variation in collateralizable assets among the sampled companies.

4. The descriptive statistics for the dependent variable, Dividend Payout Ratio (DPR), show an average (mean) value of 0.629286. This indicates that the dividend policy, proxied by the Dividend Payout Ratio, has an average payout of 62.9%, which is classified as high as it falls within the range of 55%–75% according to the standard criteria for the Dividend Payout Ratio. The maximum value of 2.660000 was recorded by PT Garudafood Putra Putri Jaya Tbk (GOOD) in 2024, while the minimum value of 0.070000 was observed in PT Sekar Laut Tbk (SKLT) in 2023. This shows that the dividend payout policies among the sampled companies ranged from 0.070000 to 2.660000. The standard deviation for this variable is 0.278829. A high DPR suggests that the company tends to distribute most of its net income as dividends to shareholders. This could indicate that the company is aiming to attract dividend-oriented investors or may not have many profitable internal investment opportunities.

Table 2 Chow Test

Redundant Fixed Effects Tests			
Equation: Chow			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	9.842506	(9,57)	0.0000
Cross-section Chi-square	65.638442	9	0.0000

Source : Data processing result reviews 13, 2025

The probability value of the Cross-section Chi-Square of 0.0000 indicates that the Chi-Square probability is lower than the 5% significance level ($0.0000 < 0.05$).

Table 3 Hausman test

Correlated Random Effects - Hausman Test			
Equation: Hausman			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	2.949874	3	0.0399

Source : Data processing result reviews 13, 2025

The probability value of the Cross-section Random is 0.0399, which is lower than the 5% significance level ($0.0399 < 0.05$).

The panel data regression equation in this study was estimated using the Fixed Effect Model (FEM) method. The selection of the Fixed Effect Model as the analytical method for panel data was determined based on the results of the Chow Test and the Hausman Test conducted in the previous analysis. The outcomes of both tests indicate that the Fixed Effect Model is the most appropriate model to be used in this study. Therefore, a summary of the panel data regression analysis results is presented in the table below.

Table 4 panel data regression analysis

Dependent Variable: DPR
Method: Panel Least Squares
Date: 05/25/25 Time: 18:36
Sample: 2018 2024
Periods included: 7
Cross-sections included: 10
Total panel (balanced) observations: 70

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.090650	0.144363	0.627929	0.5326
ROA	-0.012789	0.006057	-2.111314	0.0391
DER	0.480916	0.209748	2.292829	0.0256
COLLAS	0.134340	0.126711	1.060215	0.2935
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.614657	Mean dependent var	-0.317172	
Adjusted R-squared	0.533532	S.D. dependent var	0.309754	
S.E. of regression	0.211557	Akaike info criterion	-0.102661	
Sum squared resid	2.551111	Schwarz criterion	0.314917	
Log likelihood	16.59312	Hannan-Quinn criter.	0.063206	
F-statistic	7.576688	Durbin-Watson stat	1.687411	
Prob(F-statistic)	0.000000			

Source : Data processing result reviews 13, 2025

Based on the table above, the regression equation is obtained as follows:

$$Y = 0.090649 - 0.012788X_1 + 0.480915X_2 + 0.134340X_3 + 0$$

From the panel data regression equation above, it can be interpreted as follows:

1. The constant value (α) is 0.090649, which indicates that if the variables Return on Assets (ROA), Debt to Equity Ratio (DER), and Collateralizable Assets (COLLAS) are assumed to be constant or equal to zero, the dividend policy would be 0.090649 or 9.06%.
2. The regression coefficient value for Return on Assets (ROA) is -0.012788. This indicates that if the ROA increases by 1% (assuming the coefficients of other variables remain constant), the dividend policy will decrease by 0.012788. This negative coefficient suggests that there is an inverse relationship between ROA and dividend policy. In other words, as the company's profitability increases, it tends to retain earnings rather than distribute them as dividends.
3. The regression coefficient value for Debt to Equity Ratio (DER) is 0.480915. This indicates that if DER increases by 1% (assuming the coefficients of other variables remain constant), the dividend policy will increase by 0.480915. This positive coefficient suggests a direct relationship between DER and dividend policy, meaning that a higher DER leads companies to distribute higher dividends. This may reflect the companies' tendency to signal financial strength and maintain investor confidence despite their higher reliance on debt financing.
4. The regression coefficient value for Collateralizable Assets (COLLAS) is 0.134340. This indicates that if COLLAS increases by 1% (assuming the coefficients of other variables remain constant), the dividend policy will increase by 0.134340. This positive coefficient suggests a direct relationship between COLLAS and dividend policy, meaning that companies with higher collateralizable assets tend to distribute more dividends. This could be because these assets provide additional security for creditors, reducing financial constraints and enabling the company to allocate a larger portion of earnings as dividends.

Table 5 Determination Coefficient Test

R-squared	0.614657	Mean dependent var	-0.317172
Adjusted R-squared	0.533532	S.D. dependent var	0.309754
S.E. of regression	0.211557	Akaike info criterion	-0.102661
Sum squared resid	2.551111	Schwarz criterion	0.314917
Log likelihood	16.59312	Hannan-Quinn criter.	0.063206
F-statistic	7.576688	Durbin-Watson stat	1.687411
Prob(F-statistic)	0.000000		

Source : Data processing result Eviews 13, 2025

The Adjusted R-squared value is 0.533532 (53.3%), indicating that the dependent variable (Dividend Policy) can be explained by the three independent variables (Profitability, Leverage, and Collateralizable Assets). Meanwhile, the remaining 46.7% (100% - 53.3%) is influenced by other variables that were not examined in this study.

We can conclude as follows:

1. Profitability (ROA) in food and beverage sub-sector manufacturing companies for the 2018–2024 period has an average return on assets of 9.6%, which can be categorized as good since it exceeds the industry standard of 5.98% for financial performance based on profitability ratios. In addition, the panel data regression analysis revealed Profitability (ROA) has a negative and significant effect on dividend policy, indicating that companies with higher profitability prefer to retain earnings for reinvestment purposes.
2. Leverage (DER) shows an average value of 58%, which is considered healthy because it is below 90% in accordance with the industry standard for financial performance based on leverage ratios. In addition, the panel data regression analysis revealed Leverage (DER) has a positive and significant effect on dividend policy, suggesting that companies with higher leverage tend to distribute more dividends to maintain investor confidence.
3. Collateralizable Assets have an average value of 32%, where companies with higher collateralizable assets tend to reduce potential conflicts with shareholders. This is because creditors have collateral in the form of company assets, which minimizes the risk of companies failing to fulfill their debt obligations. In addition, the panel data regression analysis revealed Collateralizable Assets (COLLAS) have a positive but not significant effect on dividend policy, implying that these assets do not play a dominant role in determining dividend distribution decisions.
4. Dividend Policy (DPR) shows an average value of 62.9%, which falls within the range of 55%–75%, placing it in the high category according to the standard criteria for Dividend Payout Ratio.
5. The Adjusted R-squared value of 53.3% indicates that the independent variables (ROA, DER, and COLLAS) collectively explain 53.3% of the variation in dividend policy, while the remaining 46.7% is influenced by other factors not examined in this study.

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