

The Critical Factors that Influence Dividend Payout Ratio on Pro-Cyclical and Non-Cyclical Sector Companies

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ABSTRACT

Pro-cyclical and non-cyclical sectors generate markedly different revenue patterns, a distinction that may influence firms' willingness to share profits with investors. This study examines whether ownership structure and key financial variables influence dividend policy in Indonesia's pro-cyclical manufacturing and non-cyclical consumer goods industries. Using a balanced panel of 435 firm-year observations (2015–2019) and fixed-effects panel regression, we examine the impact of family ownership, managerial compensation, leverage, and profitability on the dividend payout ratio. Sector-specific results emerge. In consumer-goods companies, higher managerial compensation significantly increases the dividend payout ratio, whereas greater leverage dampens it; family ownership and profitability are insignificant. In manufacturing firms, family ownership increases the dividend payout ratio, while leverage and profitability decrease it; managerial compensation has no significant impact. The findings help income-oriented investors select suitable sectors, guide regulators in tailoring governance codes, and extend agency and signaling research to contrasting industry characteristics.

Keywords:

Dividend payout ratio, family ownership, leverage, managerial compensation, non-cyclical sector, pro-cyclical sector, profitability.

ABSTRAK

Sektor pro-cyclical and non-cyclical memiliki pola pendapatan yang sangat berbeda, perbedaan yang dapat memengaruhi kesediaan perusahaan untuk berbagi keuntungan dengan investor. Studi ini mengkaji apakah struktur kepemilikan dan variabel keuangan utama memengaruhi kebijakan dividen di industri manufaktur yang pro-cyclical dan barang konsumsi yang non-cyclical di Indonesia. Dengan menggunakan panel balance dari 435 observasi perusahaan-tahun (2015-2019) dan regresi panel efek tetap, kami mengkaji dampak kepemilikan keluarga, kompensasi manajerial, leverage, dan profitabilitas terhadap rasio pembayaran dividen. Hasil sektor-sektor spesifik muncul. Pada perusahaan barang konsumsi, kompensasi manajerial yang lebih tinggi secara signifikan meningkatkan rasio pembayaran dividen, sedangkan leverage yang lebih besar melemahkannya; kepemilikan keluarga dan profitabilitas tidak signifikan. Pada perusahaan manufaktur, kepemilikan keluarga meningkatkan rasio pembayaran dividen, sementara leverage dan profitabilitas menurunkannya; kompensasi manajerial tidak memiliki dampak yang signifikan. Temuan ini membantu investor yang berorientasi pendapatan memilih sektor yang sesuai, memandu regulator dalam menyesuaikan aturan tata kelola, dan memperluas riset agensi dan sinyal ke industri yang berbeda karakteristiknya.

Kata Kunci:

Kepemilikan keluarga, kompensasi manajerial, leverage, non-cyclical sector, pro-cyclical sector, profitabilitas, rasio pembayaran dividen.

INTRODUCTION

Dividends offer investors reliable, periodic cash flows and serve as a favourable signal of firm strength (Ross, 1977). The bird in hand theory argues that shareholders prefer this assured income to uncertain capital gains (Lintner, 1956). In Indonesia, the appeal is growing: only 133 issuers paid dividends in 2010 (average ratio 39.15 %), but 234 did so in 2019 with an average ratio of 48.94 %. Identifying the forces shaping these rising payouts—across pro-cyclical and non-cyclical sectors—is therefore critical for both income-seeking investors and policymakers. Industries can be classified as pro-cyclical or counter-cyclical (Kaminsky *et al.*, 2004). Pro-cyclical sectors closely track economic swings, experiencing revenue and dividend losses during recessions (Zhu *et al.*, 2020). In contrast, non-cyclical industries—such as consumer staples—benefit from demand that persists regardless of the cycle, sustaining cash flows and buttressing the economy when broader activity contracts (Asyik, 2011).

The OECD (2017) classifies manufacturing as pro-cyclical, consistent with Herman (2016) and Eurostat (2019), who highlight its large output, employment capacity, and GDP share. According to the Central Bureau of Statistics Indonesia, the proportion of the manufacturing industry's added value in Indonesia's GDP from 2015 to 2019 contributed to a GDP of 20.5% to 21.54%. By contrast, the consumer-goods sector—our proxy for non-cyclical activity—weathered the 2008 global crisis better than trade and transport because it supplies basic domestic needs (Nugroho & Sinabutar, 2015) and accounted for around 44 % of manufacturing value added in 2013.

There are at least four firm-level drivers that influence dividend policy. First, family ownership, which means the family acts as the controlling shareholder (Santos *et al.*, 2020). Family ownership can depress payouts through the expropriation of minority shareholders (Atmaja, 2016) or raise them to build a reputation (Gomes, 2000). Second, managerial compensation if not properly structured, it may lead to inefficiencies or excessive agency costs, potentially affecting the firm's profitability and its ability to distribute dividends as one implication of the Agency theory pioneered by Jensen and Meckling (1976). Third, leverage usually constrains dividends as cash services debt (Asif *et al.*, 2011; Sari & Sudjarni, 2015), although firms with high debt sometimes boost payouts to placate investors (Parsian & Koloukhi, 2014). Profitability enlarges the pool available for dividends funds (Kristianti & Foeh, 2020), yet pecking-order logic predicts retention of internal (Kaźmierska-Jóźwiak, 2015). On the other hand, a study by (Adityo & Heykal, 2020) concludes that profitability does not affect the dividend payout ratio.

Based on the phenomenon of dividend distribution in companies listed on the Indonesia Stock Exchange, researchers have found that research related to the factors affecting the level of dividend distribution in companies with varying ownership structures has already been conducted. Despite extensive research on dividend policies, several gaps remain in the literature. First, limited studies have specifically compared cyclical versus non-cyclical industries within the same market context, particularly in emerging economies like Indonesia. Second, most existing research treats industries

homogeneously without considering their cyclical characteristics. Third, the role of agency theory in explaining differential dividend behaviors across industry types requires further investigation. In addition, previous studies have also had mixed results due to differences in the research period, country characteristics, data types, and research methods. Therefore, researchers are interested in conducting a study titled *The Critical Factors Influencing Dividend Payout Ratio on Pro-cyclical and Non-cyclical Sector Companies*

This study aims to analyze the factors that influence dividend payout ratios across pro-cyclical and non-cyclical sectors in Indonesia, such as family ownership, managerial compensation, leverage, and profitability. Specifically, we examine how agency theory mechanisms operate differently across these sectoral contexts and provide insights for corporate finance theory and practice. This study contributes to the literature by providing a comprehensive comparison of dividend determinants between pro-cyclical (manufacturing) and non-cyclical (consumer goods) sectors in Indonesia. The research novelty lies in demonstrating how industry characteristics moderate traditional dividend determinants, particularly through the lens of agency theory. By examining these sectors separately, we reveal distinct patterns that would be obscured in cross-industry analyses.

Consumer Goods and Manufacturing Industry

The role of the consumer goods industry in the Indonesian economy is notable, with an average contribution to GDP from 2014 to 2016 of 5.63% (Saraswati & Khusaini, 2018). Business processes in this industry encompass all activities related to selling consumer products used by end-users. The Indonesia Stock Exchange classifies the consumer goods sector into several sub-sectors (Kayo, 2021), including: Food and Beverages, Cigarettes, Pharmaceuticals, Cosmetics, Household Goods, and Household Appliances. The manufacturing industry is one of the industries that drive a country's economic growth (Chakravarty & Mitra, 2009; Dasgupta & Singh, 2006; Jeon, 2006). The manufacturing industry can be a driver of the country's economy because the manufacturing industry has a high output and can provide large jobs (Herman, 2016). According to the Central Bureau of Statistics Indonesia, the manufacturing industry contributed 20-21% of Indonesia's GDP from 2015-2019.

Dividend Payout Ratio

The dividend-payout ratio helps investors match portfolios to their goals. Growth-oriented buyers prefer firms with low ratios, trusting retained earnings to boost future share prices, while income seekers favour high ratios for steady cash flows. A high ratio signals profits are paid out instead of reinvested; a low ratio implies earnings are being ploughed back into the business.

The dividend payout ratio is calculated by: $\frac{\text{Dividends}}{\text{Net Income}}$ Or $\frac{\text{Dividend per Share}}{\text{Earnings per Share}}$

The Agency Theory and the Bird-in-hand Theory

Agency theory (Jensen & Meckling 1976) frames the conflicts that emerge when shareholders (principals) delegate control to managers (agents), creating information asymmetry and differing risk appetites (Eisenhardt, 1989). Panda & Leepsa (2017) identify three dividend-relevant tensions:

1. Principal–agent – In stable sectors (e.g., consumer goods), managers may smooth or divert cash through compensation instead of maximising shareholder wealth.
2. Principal–principal – Controlling families in volatile, capital-intensive industries (e.g., manufacturing) can expropriate minorities; dividends serve as a signalling device to counter this risk.
3. Principal–creditor – Shareholders may back risky projects or excessive payouts that weaken debt-service capacity, a conflict that intensifies with leverage.

Bird-in-hand theory (Lintner, 1956; Gordon, 1963) complements this view, positing that investors prefer certain dividends to uncertain capital gains, though an exclusive focus on payouts can forgo long-run appreciation. Combined, the two theories cast dividends as dual signals: disciplining insiders by limiting free cash flow and reassuring outside investors of corporate health under high information asymmetry.

The extant Indonesian literature reports divergent associations between firm attributes and dividend policy. Studies on family ownership which are grounded in agency theory yield conflicting results. Atmaja (2016), Mulyani *et al.* (2016), and Santos *et al.* (2020) document a negative relationship between family control and the dividend-payout ratio, suggesting that entrenched owners conserve cash and heighten expropriation risk. By contrast, Ayu & Viverita (2020) and Setianto & Sari (2017) find a positive association, positing that higher dividends function as a reputation-building signal to minority investors.

Empirical evidence on managerial compensation is also mixed. Bhattacharyya *et al.* (2008) and Anderson *et al.* (2018) report that generous pay packages absorb free cash flow and depress the DPR. Conversely, Subramaniam *et al.* (2020), analysing Malaysian data, observe a positive link, arguing that well-designed compensation aligns managerial and shareholder interests while preserving political goodwill. Debt are found to either constrain or facilitate dividend payments. Puspita (2017) confirms the disciplinary view, showing that servicing obligations crowd out dividends. In contrast, Nurcaqiqi & Suryarini (2018) find that creditor monitoring mitigates agency costs, enabling higher payouts.

Findings also differ for profitability. Kristianti & Foeh (2020) report a positive profitability–DPR relationship, consistent with a free-cash-flow perspective. Tamrin *et al.* (2018), however, present evidence of a negative relationship, supporting pecking-order reasoning whereby profitable firms retain earnings to finance growth. These incongruent results highlight the necessity of incorporating sectoral

characteristics and agency mechanisms to obtain a more nuanced understanding of dividend determinants in emerging markets.

Hypothesis Development

Family ownership is assumed to influence the dividend payout ratio, with both positive and negative implications (Atmaja, 2016). According to the expropriation hypothesis in agency theory, controlling family owners may divert company resources by managing cash flow to their advantage, leading to lower dividends for minority shareholders (Jensen, 1986). This issue is worsened by weak transparency and suboptimal business practices in family-controlled firms (Tran & Le, 2019), as well as limited managerial expertise. Indonesia’s weak legal protection for minority shareholders further reinforces this concern (Atmaja, 2016), providing the basis for the proposed framework can be seen in Figure 1.

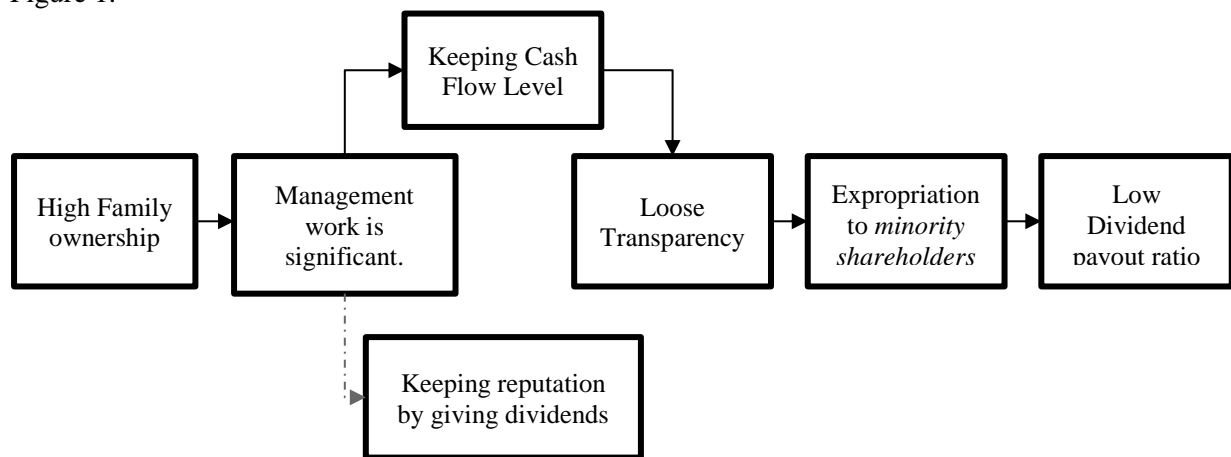


Figure 1. Hypothesis 1 Research Framework
 Source: Authors’ work (2025)

Hypothesis 1 : Family ownership has a negative effect on the dividend payout ratio of public companies in the non-cyclical (consumer goods) and pro-cyclical (manufacturing) sectors.

Management compensation reflects managerial performance and is positively related to the dividend payout ratio (Haugen & Senbet, 1978; Beck & Zorn, 1982). According to Lewellen et al. (1978), compensation packages help reduce first-level agency costs between shareholders and management. Thus, higher compensation should align with increased shareholder wealth (Larcker, 1983). Pan et al. (2018) also find that greater management incentives lead to higher dividend payouts.

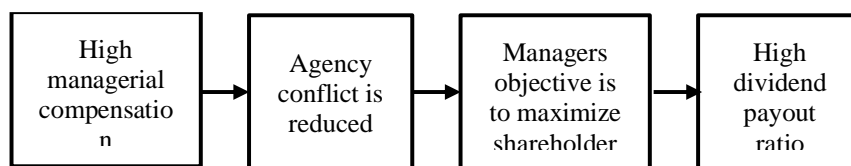


Figure 2. Hypothesis 2 Research Framework
 Source: Authors’ work (2025)

Hypothesis 2 : Management compensation has a positive effect on the dividend payout ratio of public companies in the non-cyclical (consumer goods) and pro-cyclical (manufacturing) sectors

Researchers suspect a negative relationship between leverage and dividend payout, as firms typically use retained earnings—closely tied to capital structure—to fund dividends (Asif *et al.*, 2011). When capital is insufficient, companies rely on debt, increasing default risk and reducing firm valuation due to debt obligations. Therefore, higher dividends reduce retained earnings available for debt repayment.

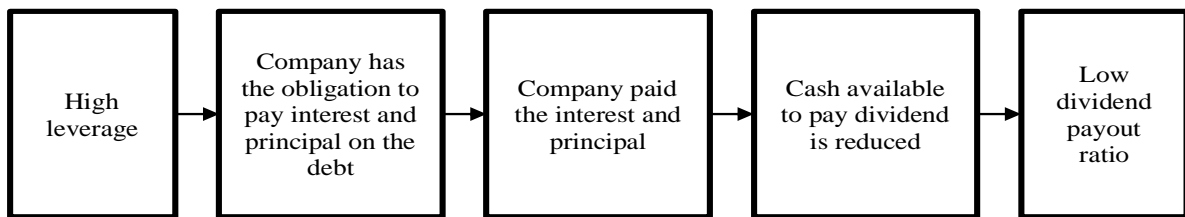


Figure 3. Hypothesis 3 Research Framework
Source: Authors' work (2025)

Hypothesis 3 : Leverage level has a negative effect on the dividend payout ratio of public companies in the Consumer goods and Manufacturing industry in Indonesia

Researchers suspects a positive relationship between profitability and the dividend payout ratio, as supported by Abrar *et al.* (2017). Higher profitability provides more funds for dividends, leading to an increased payout ratio, and vice versa.

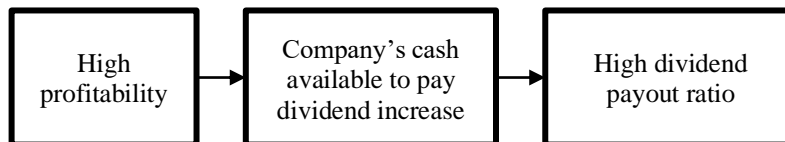


Figure 4 Hypothesis 4 Research Framework
Source: Authors' work (2025)

Hypothesis 4 : Profitability level has a positive effect on the dividend payout ratio of public companies in the consumer goods and manufacturing industry in Indonesia

RESEARCH METHODS

This study employs a quantitative approach using panel data regression analysis to examine dividend determinants across time and sectoral contexts. This panel data regression analysis method following Dewasiri *et al.* (2019), and Tahir *et al.* (2020) . The panel data regression is selected for several advantages: it provides greater sample variability, reduces multicollinearity, offers more degrees of freedom, and enables control for unobserved heterogeneity across firms and time periods.

The study targets all Indonesian firms listed on the Indonesia Stock Exchange in the consumer-goods and manufacturing sectors between 2015 and 2019. These industries were selected because they differ sharply in business-cycle sensitivity: consumer goods is a defensive, demand-stable sector, whereas manufacturing is capital-intensive and highly pro-cyclical. Comparing them enables an investigation of whether macroeconomic cyclicalities moderates the link between internal financial factors and dividend policy, consistent with classifications in Kaminsky *et al.* (2004), OECD (2017) and Asyik (2011).

A purposive sampling strategy required firms to publish complete annual reports, disclose dividend and executive-compensation data in compliance with POJK No. 34/2014, and remain listed throughout the 2015–2019 window. The resulting balanced panel comprises 160 firm-year observations in consumer goods and 275 in manufacturing. Panel estimation—with firm fixed effects—exploits both cross-sectional and temporal variation while controlling for unobserved, time-invariant heterogeneity that could otherwise bias the estimated impact of family ownership, CEO pay, leverage and profitability on dividend payouts.

Operationalization of Variables

The control variable is not the focus of the study. However, it can affect the results of the study. The control variables include the benchmark interest rate (BI Rate) and FCFE (Free Cash Flow to Equity).

Table 1. Variable Operationalization

Variable	Definition	Indicator	Formula	Unit
<i>Dividend Payout Ratio</i> (Dependent Variable)	Percentage of net profit distributed to shareholders	DPR	$\frac{\text{Dividend}}{\text{Net income}} \times 100\%$	%
Family Ownership (Independent Variable)	Companies with a high concentration of family ownership	FAM	Family companies have a share ownership portion, or there are family members who are directors or commissioners	unit
Logarithm of CEO Salary (Independent Variable)	Salaries and benefits received by the President Director	LOG_COMP	$\text{Log}(\text{Cash wage} + \text{Bonus})$	IDR
Leverage (Independent Variable)	Company's Debt to Equity	LVG	$\frac{\text{Debt}}{\text{Equity}} \times 100\%$	%
Profitability (Independent Variable)	The company's ability to earn profits from assets	ROA	$\frac{\text{Net Income}}{\text{Total Asset}} \times 100\%$	%
Control Variable				
<i>BI Rate</i>	Bank Indonesia's interest rate	BI_RATE	Mean BI 7-Days Repo Rate 1 year	%
<i>FCFE (Free Cash Flow to Equity)</i>	The cash flow belongs to shareholders after paying fees, investments, and debt.	FCFE	$\text{EBIT} \times (1 - \text{Tax Rate}) - \text{Interest Exp} \times (1 - \text{Tax Rate}) - (\text{Capital Expenditure} + \text{Depreciation}) - \text{Non-Cash Working Capital} + (\text{Debt Repayment} - \text{New Debt Issued})$	IDR

Source: (Abrar et al., 2017), processed by Authors'

Research Model

This study utilizes a panel data approach to analyze the relationship between family ownership, management compensation, leverage, profitability, and the dividend payout ratio in Indonesian consumer goods and manufacturing companies. The dataset consists of annual observations from 2015 to 2019 across multiple firms, resulting in a balanced panel structure. The use of panel data offers several advantages over cross-sectional or time-series data alone. First, panel data allows for greater degrees of freedom and efficiency in estimation by combining variation across time and entities. Second, it enables the researcher to control for unobservable firm-specific characteristics that are constant over time but may influence the dependent variable, such as corporate culture, ownership legacy, or industry sub-sector effects.

To address potential omitted variable bias due to time-invariant firm-level heterogeneity, this study employs the fixed effects (FE) model. The fixed effects specification assumes that individual-specific effects (e.g., governance practices or dividend culture) may correlate with the independent variables and thus must be accounted for within the model. By de-meaning the variables within each firm over time, the FE model eliminates the influence of all time-invariant factors, allowing for a cleaner estimation of the impact of time-varying variables—such as changes in profitability or leverage—on dividend decisions. The figure below shows the following model:

$$DPR_{it} = \beta_0 + \beta_1 FAM_{it} + \beta_2 LOG_COMP_{it} + \beta_3 LVG_{it} + \beta_4 ROA_{it} \\ + \beta_5 BI_RATE_{it} + \beta_6 FCFE_{it} + \varepsilon$$

By applying the fixed effects model, this research ensures that any unobserved characteristics that do not change over time—such as the firm’s ownership legacy or business model—do not bias the estimated coefficients. This is particularly relevant in studies involving family-owned firms, where unobserved traits related to culture or long-standing governance practices may be persistent but difficult to measure. All estimations are conducted separately for the consumer goods and manufacturing industry subsamples, allowing the model to account for structural differences between pro-cyclical and non-cyclical sectors.

RESULT AND DISCUSSION

Consumer Goods Industry

Table 2 presents the descriptive statistics of all variables used in this study. The dependent variable, dividend payout ratio (DPR), has an average value of 32.30%, with a standard deviation of 33.92%, indicating a high degree of variation across firms. The maximum value reaches 145.33%, significantly above the mean, suggesting the presence of outliers. This is confirmed by the positive skewness (0.89) and kurtosis (2.95), implying a right-skewed distribution with heavier tails than the normal distribution. Notably, one firm in 2015 (MERK) recorded an unusually high dividend payout of 145%, which has been retained in the dataset to preserve data integrity.

Table 2. Descriptive Statistics of the Consumer Goods Industry

	DPR	FAM	COMP	LVG	ROA	BI_RATE	FCFE
<i>Mean</i>	32.3007	2.0063	3.3811	37.9939	9.6214	5.5000	1024359
<i>Median</i>	25.0000	1.0000	3.3600	27.2894	6.4744	5.0000	76129.37
<i>Maximum</i>	145.3289	9.0000	4.2400	156.4906	110.2614	7.5000	19315404
<i>Minimum</i>	0.0000	0.0000	2.4100	0.0000	-15.9771	4.2500	-2631864
<i>Std. Dev</i>	33.9207	2.6858	0.4383	39.3403	14.5523	1.1547	2847104
<i>Skewness</i>	0.8939	1.3766	0.0965	1.1440	2.7068	0.7376	4.0888
<i>Kurtosis</i>	2.9481	3.6847	2.1544	3.7096	16.8548	2.1511	21.6172
<i>Observation</i>	160	160	160	160	160	160	160

Source: Authors' work (2025)

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Family ownership (FAM) has a mean of 2.01 and a median of 1.00, with a maximum of 9.00 and a skewness of 1.38. This indicates that most firms are still dominated by minority family ownership, but a small number have concentrated control. The kurtosis of 3.68 shows a leptokurtic distribution—few firms have disproportionately high family control, which may affect dividend policy. Return on assets (ROA) and leverage (LVG) both show large standard deviations (14.55 and 39.34, respectively), reflecting considerable variation in profitability and capital structure across the sample. ROA also shows a relatively high skewness (2.71), indicating a long tail of firms with exceptionally high profitability.

Manufacturing Industry

Table 3 reveals pronounced heterogeneity within the manufacturing sample. The dividend-payout ratio (DPR) averages 22.5 percent with a standard deviation of 29.4 percent; skewness of 2.62 and kurtosis of 13.87 point to a heavy right tail. The most extreme observation—AMFG in 2018—recorded a DPR of 197.4 percent, financed partly by retained earnings from the previous year, and anchors much of the distribution's leptokurtosis. Family ownership (FAM) is generally moderate (mean = 3.08, median = 2.00) but ranges up to 15.00, producing mild positive skew and moderate kurtosis (0.92 and 3.13, respectively), which indicates a small subset of firms with highly concentrated control. Leverage (LVG) exhibits even starker dispersion: while the mean stands at 217.7, a maximum of 42 237.4 and kurtosis of 272.4 signal a handful of extremely indebted firms. Retaining these outliers preserves the sector's empirical reality and aligns with the study's agency- and signalling-based expectation that dividend behaviour in family-dominated manufacturers simultaneously reflects reputational motives and financial constraints.

Table 3. Descriptive Statistics of the Manufacturing Industry

	DPR	FAM	COMP	LVG	ROA	BI_RATE	FCFE
<i>Mean</i>	22.5036	3.0836	3.2433	217.7210	4.2730	5.5000	592716.8
<i>Median</i>	14.9800	2.0000	3.3400	37.8000	3.3000	5.0000	4094.796
<i>Maximum</i>	197.3900	15.0000	4.5300	42287.37	37.0000	7.5000	28250000
<i>Minimum</i>	0.0000	0.0000	1.0700	0.0000	-16.5800	4.2500	-4892439
<i>Std. Dev</i>	29.4232	3.1467	0.5284	2547.499	6.0856	1.1532	2991944
<i>Skewness</i>	2.6236	0.9163	-0.6666	16.4664	0.8386	0.7376	6.6822
<i>Kurtosis</i>	13.8699	3.1293	4.1758	272.4277	6.6223	2.1511	50.3881
<i>Observation</i>	275	275	275	275	275	275	275

Source: Authors' work (2025)

In testing the hypothesis, the researcher has improved the problem on the classical assumption and obtained the following results.

Manufacturing Sector

The regression analysis for the manufacturing industry yields an adjusted R-squared of 98.08%, indicating that the variation in the dividend payout ratio (DPR) is almost entirely explained by the variation in the independent and control variables included in the model. This strong explanatory power reinforces the robustness of the regression specification and the relevance of the included predictors for dividend policy within capital-intensive sectors.

Table 4. The Manufacturing Industry Regression Result

Dependent Variable: DPR				
Method: Panel Least Squares (Cross-section weights)				
Total panel (balanced) observations: 275				
Variable	Coefficient	Std. Error	t-statistics	Prob.
FAM	2.6254	1.1245	2.3346	0.0233**
LOG_COMP	-0.5516	0.6617	-0.8335	0.4082
LVG	-5.83E-05	1.69E-05	-3.4587	0.0011***
ROA	-0.0938	0.0526	-1.7830	0.0802*
BI_RATE	-0.0801	0.0825	-0.9716	0.3356
FCFE	-2.24E-06	4.00E-07	-5.5990	0.0000***
C	18.3797	3.6273	5.0670	0.0000***
R-Squared	0.9850			
Adjusted R-Squared	0.9808			
F-Statistic	233.7950			
Prob(F-Statistic)	0.0000			

Source: Authors' work (2025)

Family ownership exerts a positive and statistically significant influence on the dividend-payout ratio (DPR) in manufacturing firms ($\beta = 2.63$, $p = 0.023$). This outcome supports the view that controlling families deploy dividends both as a visible means of extracting cash and as a reputational signal that mitigates minority-shareholder expropriation risk—an agency mechanism especially pertinent in pro-cyclical, capital-intensive settings.

Leverage shows the expected negative association with payouts ($\beta = -0.039$, $p = 0.001$), consistent with pecking-order predictions that heavily indebted firms conserve cash to meet fixed obligations rather than distribute it. Profitability (ROA) is weakly negative ($\beta = -0.094$, $p = 0.080$), implying that, in this sector, earnings are more likely channelled into reinvestment or deleveraging than

dividends. Managerial compensation does not significantly affect DPR ($p = 0.408$), suggesting that, compared with capital-structure concerns, executive pay is a secondary consideration in payout decisions.

Regarding controls, the policy rate (BI_RATE) remains insignificant ($p = 0.336$), indicating limited sensitivity of dividend policy to short-term monetary conditions. Free cash flow to equity (FCFE), by contrast, is strongly and negatively related to DPR ($\beta = -2.24 \times 10^{-6}$, $p < 0.001$), reinforcing Jensen's (1986) free-cash-flow argument that excess liquidity, if not paid out, heightens agency costs in family-dominated firms.

Consumer Goods Sector

The regression model for the consumer goods industry shows an adjusted R-squared of 99.64%, indicating that nearly all the variation in the Dividend Payout Ratio can be explained by the included independent and control variables. The high explanatory power of the model confirms the relevance of the selected determinants in influencing dividend policy within this sector.

Table 4. Consumer Goods in Industry Regression Result

Variable	Coefficient	Std. Error	t-statistics	Prob.
FAM	0.5230	1.1370	0.4599	0.6464
LOG_COMP	6.5259	2.6460	2.4664	0.0150**
LVG	-0.0386	0.0160	-2.4142	0.0173**
ROA	-0.1091	0.0671	-1.6255	0.1066
BI_RATE	-0.4498	0.1876	-2.3975	0.0180**
FCFE	-6.10E-07	1.89E-07	-3.2201	0.0016***
C	14.8015	9.1165	-1.6236	0.1070
R-Squared	0.9972			
Adjusted R-Squared	0.9964			
F-Statistic	1190.872			
Prob(F-Statistic)	0.0000			

Source: Authors' work (2025)

In the consumer-goods sector, family ownership is not a significant determinant of the dividend-payout ratio (DPR; $p = 0.646$), implying that enhanced regulatory scrutiny and public attention to consumption-oriented firms (Wolff 2021) may constrain expropriation and render controlling families' influence on dividends negligible. By contrast, CEO compensation exerts a positive and statistically significant effect ($\beta = 6.53$, $p = 0.015$), supporting agency-theory arguments that well-paid managers align more closely with shareholder interests and echoing the findings of Subramaniam et al. (2020). Given the sector's largely income-oriented investor base, executives appear incentivised to maintain higher payouts as a credible signal of commitment.

Leverage bears the expected negative association with DPR ($\beta = -0.039$, $p = 0.017$), consistent with pecking-order logic; high debt obligations constrain liquidity, prompting firms to conserve cash rather than distribute it (Asif et al. 2011). Profitability, proxied by ROA, is negative but insignificant

($p = 0.107$), a result that can be explained by dividend-stickiness practices whereby firms sustain stable payouts despite earnings variability (Guttman *et al.*, 2010).

Among the control variables, the Bank Indonesia policy rate shows a significant inverse relationship with DPR ($\beta = -0.450$, $p = 0.018$), suggesting that rising borrowing costs elevate the value of internal funds and suppress dividends. Free cash flow to equity (FCFE) is likewise negatively and significantly related to DPR ($\beta = -6.1 \times 10^{-7}$, $p = 0.002$), indicating that excess liquidity is retained for working-capital or expansion needs unless external governance pressures dictate otherwise, in line with Jensen's (1986) free-cash-flow hypothesis.

Discussion

Analysis of the manufacturing sector

The results of the regression analysis for the manufacturing industry indicate that family ownership has a significant positive effect on the dividend payout ratio, confirm the first hypothesis. This finding suggests that as family ownership increases, firms are more likely to distribute dividends. Interestingly, this result contradicts Atmaja's (2016) study, which found a negative relationship between family ownership and dividend payout policies in Indonesia. The divergence in findings may stem from differences in sample period, measurement of family ownership, or industry-specific dynamics. Unlike Atmaja's broader approach, this study focuses specifically on the manufacturing sector, which is often capital-intensive and reliant on external financing—conditions that may encourage higher dividend payouts to signal good governance and build investor confidence. In line with this reasoning, the present finding is consistent with Ayu & Viverita (2020) and Setianto & Sari (2017), who also reported a positive association between family ownership and dividend payout ratio in Indonesian. Their findings support the notion that family-controlled firms may use dividends as a mechanism to mitigate agency conflicts, preserve reputational capital, and assure minority shareholders of fair treatment.

The results of this study indicate a positive relationship between family ownership and dividend payout in the manufacturing sector. This finding directly contributes to the ongoing debate in corporate finance by challenging the predictions of agency theory, particularly the Type II agency problem which posits that controlling shareholders—especially families—may expropriate minority shareholders by withholding dividends and diverting resources for private benefit. Contrary to this, our findings suggest that family-owned manufacturing firms may instead use dividends to mitigate agency concerns and maintain credibility in the eyes of outside investors.

This aligns more closely with the reputation-building theory (Gomes, 2000), which argues that dominant shareholders may choose to pay high dividends as a commitment to good governance in order to maintain access to capital markets. Given the capital-intensive nature of the manufacturing sector, firms in this industry often require substantial external financing. High dividend payouts may thus serve as a signaling mechanism (Bhattacharya, 1979) to convey financial health and reduce perceived risk for

lenders and shareholders. This interpretation is further reinforced by the observed economic context—namely, the capital flight triggered by global uncertainties such as Brexit and the US-China trade war, which intensified competition for capital in emerging markets like Indonesia.

Our results also lend support to Jensen's (1986) Free Cash Flow Hypothesis, which asserts that distributing excess cash through dividends can reduce managerial discretion and the risk of inefficient or self-serving investments. In family firms where agency risks may be particularly acute, dividends act as a discipline-enhancing tool by reducing internal funds available for expropriation.

Second, the management compensation variable is found to have no significant effect on the dividend payout ratio. This finding contrasts with the study by Subramaniam *et al.* (2020), which documented a positive relationship between management compensation and dividend payments. The finding also contrast with the study by Anderson *et al.* (2018) and Bhattacharyya *et al.* (2008) that show the negative influence of management compensation on dividend payments. The discrepancy may be attributed to differences in industry characteristics and the study period. Specifically, the manufacturing industry—which forms the basis of this study—is highly pro-cyclical and closely tied to macroeconomic fluctuations. As such, investors in this sector typically exhibit lower risk aversion, seeking capital gains rather than stable dividend returns. This investment behavior may reduce the relevance of compensation incentives as a mechanism for aligning managerial and shareholder interests in dividend policy decisions.

Third, the leverage variable exhibits a significant negative effect on the dividend payout ratio, confirming the third hypothesis, which hypothesizes a negative influence. This result supports the findings of Puspita (2017), but contradicts Nurchaqiqi & Suryarini (2018), who reported a significant positive relationship. The negative impact of leverage is particularly relevant in the manufacturing industry, which is capital-intensive and relies heavily on external financing to support production expansion and machinery acquisition. Consistent with the Pecking Order Theory (Myers, 1984), firms prefer to finance operations using retained earnings, and turn to debt only when internal resources are insufficient. Since interest payments on debt reduce pre-tax income, highly leveraged firms face a greater financial burden, reducing their capacity to distribute dividends. Furthermore, many Indonesian manufacturers focus on semi-finished goods with relatively low technological complexity, implying a need for further investment in technology and innovation, which may also prompt firms to retain earnings rather than distribute them.

Fourth, profitability, as measured by Return on Assets (ROA), shows a significant negative relationship with the dividend payout ratio, hence confirmed the fourth hypothesis. This finding aligns with Tamrin *et al.* (2018), who also observed a negative relationship between ROA and dividends in the manufacturing sector. However, it stands in contrast to Kristianti & Foeh (2020), who reported a positive effect of profitability on dividend payments. The negative effect observed in this study may be

explained by the strategic behavior of firms: when profitability declines, firms may choose to signal financial strength and maintain reputation by continuing to pay dividends. Conversely, when firms experience higher profitability, they may prefer to retain earnings for future expansion or reinvestment. This behavior is especially plausible in capital-intensive industries such as manufacturing, where long-term growth and competitiveness depend on reinvestment in production capacity, innovation, and technology upgrades.

Analysis of the consumer goods sector

The regression results for the consumer goods industry reveal that family ownership does not have a significant effect on the dividend payout ratio. This finding contradicts previous studies by Bernstein (2001), Atmaja (2016), Ayu & Viverita (2020), and Madyan *et al.* (2019), which found a positive relationship between family ownership and dividend payout ratio. A possible explanation for this inconsistency lies in the strategic policy environment during the research period. The consumption sector was under special government oversight, as it was a key component of national economic resilience (Wolff, 2021). With such oversight, corporate actions in family-owned firms within the consumer goods sector were likely subject to stricter scrutiny, reducing the possibility of expropriation. This may have led to stronger compliance with corporate governance standards, such as those regulated in OJK Regulation No. 50/POJK.04/2016, thereby neutralizing the role of ownership structure in determining dividend policy.

In contrast, management compensation shows a positive and significant influence on dividend payout ratio, confirm the second hypothesis. This result aligns with findings by White (1996) and Subramaniam *et al.* (2020) on Bursa Malaysia, which suggest that managerial incentives can align with shareholder interests. Although these results contrast with other studies (e.g., Bhattacharya, 1979; Anderson *et al.*, 2018), they can be understood through the lens of agency theory and the bird-in-hand theory. In sectors like consumer goods, where investors tend to be risk-averse and prefer steady returns, high management compensation may increase managerial motivation to meet investor expectations by maintaining or increasing dividend payouts. As noted by Larcker (1983), compensation structures that align managerial behavior with shareholder interests may reduce agency conflicts and promote consistent dividend policies.

Furthermore, the study finds a negative and significant relationship between leverage and dividend payout ratio, supporting the third hypothesis. This result is consistent with the pecking order theory and previous findings (Asif *et al.*, 2011), which suggest that higher debt burdens reduce the capacity for dividend distribution due to increased interest obligations. This phenomenon is particularly relevant in the consumer goods sector, which typically requires stable and timely funding due to high inventory turnover and the need to maintain operational liquidity Pradiana & Yadnya (2019). In line with this, Sidabutar & Widyarti (2017) reported an average debt-to-equity ratio of approximately 80%

in the sector during 2012–2015, underscoring its reliance on debt financing. As a result, firms with higher leverage tend to prioritize debt servicing over dividend payouts.

The regression also indicates that return on assets (ROA) has no significant effect on dividend payout ratio. This outcome diverges from Kristianti and Foeh (2020), who found a positive relationship, and from Tamrin *et al.* (2018), who reported a negative one. The absence of a significant relationship may be explained by investor behavior in the consumer goods industry, where dividend consistency is valued more than profitability fluctuations. This behavior is in line with the dividend stickiness theory (Guttman *et al.*, 2010), which posits that firms are reluctant to change dividend levels regardless of short-term earnings performance. Furthermore, under the bird-in-hand theory, firms in stable industries like consumer goods are incentivized to deliver consistent dividends to satisfy investors who prioritize predictable returns over uncertain capital gains.

CONCLUSION AND RECCOMENDATION

This study investigated how internal factors shape dividend-payout policy in Indonesia's non-cyclical consumer-goods and cyclical manufacturing sectors during 2015–2019. Panel regressions assessed family ownership, CEO compensation, leverage and profitability, controlling for free cash flow to equity and the BI 7-day reverse repo rate.

In manufacturing, family ownership is positively associated with dividend payouts, implying that reputational considerations or income needs induce controlling families to distribute cash. Leverage exerts the expected negative influence, while profitability is likewise negative, evidence that profitable, capital-intensive firms prefer internal retention. Managerial compensation is insignificant. In consumer-goods firms, by contrast, CEO pay increases payouts, supporting agency-theory predictions of incentive alignment; leverage remains negatively related to dividends, whereas family ownership and profitability are not significant.

These results enrich dividend-policy scholarship by demonstrating that ownership structure and financial policy interact differently across sectoral cycles: compensation matters more in stable, non-cyclical industries, while leverage and family control dominate in pro-cyclical, capital-intensive ones. Practically, managers should align pay schemes and capital structures with sector characteristics, and regulators should strengthen governance where family control is pronounced.

Limitations include the focus on two Indonesian industries, reliance on public compensation data, and the absence of moderating variables. Future work could examine additional sectors or countries, incorporate governance or liquidity moderators, employ finer ownership and pay metrics, and apply dynamic-panel estimators to test robustness.

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