Analysis of the Effect of Net Profit Margin, Cash Conversion Cycle and Free Cash Flow on Company Value with Company Size and Dividend Payout Ratio as Moderation Variables

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Abstract. This study examines the influence of Net Profit Margin (NPM), Cash Conversion Cycle (CCC), and Free Cash Flow (FCF) on Company Value, with Company Size and Dividend Payout Ratio as moderating variables. The research focuses on Fast-Moving Consumer Goods (FMCG) companies listed on the Indonesia Stock Exchange during the period from 2020 to 2023. A purposive sampling method was applied, selecting companies that met the criteria for analysis. Data analysis was conducted using data pooling tests, classical assumption tests, and multiple linear regression, with hypothesis testing performed using SmartPLS 4. The results reveal that NPM and FCF have a significant positive effect on Company Value, while CCC shows no significant effect. Additionally, Company Size moderates the relationships between NPM and CCC with Company Value but does not significantly moderate the relationship between FCF and Company Value. Conversely, Dividend Payout Ratio fails to moderate the effect of NPM, CCC, and FCF on Company Value. These findings provide insights into the financial strategies that FMCG firms can adopt to enhance their market value.

Keywords: Company Value, Net Profit Margin, Cash Conversion Cycle, Free Cash Flow, Company Size.

1 Introduction

1.1 Background

The 2020–2023 timeframe is important for studying firm value because of its distinct economic circumstances. Businesses were negotiating the post-pandemic recovery and changes in customer behaviour at this time, especially in the FMCG industry. For investors to make wise judgments, it is essential to comprehend how these changes affected the company's worth. Even though market participation has increased, little is known about how financial issues affect firm value during such tumultuous times. By concentrating on FMCG businesses registered on the Indonesia Stock Exchange, this study seeks to close that gap.

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FMCG businesses are important to the economy and consumer markets because of their rapid product expiration and high turnover. They are an important topic for research since their value is sometimes interpreted as a reflection of consumer buying trends. Because FMCG firms' financial measures, such as Net Profit Margin (NPM), Cash Conversion Cycle (CCC) and Free Cash Flow (FCF), are more sensitive to market dynamics than those of other industries, this study focuses on them. This makes it possible to examine how market circumstances and financial performance affect company value.

Although studies frequently examine these characteristics separately, the association between Net Profit Margin (NPM), CCC, FCF, and firm value has been well-documented. There is a lack of knowledge regarding their combined impact on business value, especially in the FMCG industry where quick turnover and liquidity are crucial elements. By examining how these financial metrics interact to impact firm value, this study seeks to close that knowledge gap and tackle an issue that has not received enough attention in the context of FMCG companies.

It has been investigated how moderating variables, such as company size and dividend payout ratio, affect investment choices and business success. While dividend policies might serve as a signal of stability to investors, prior research suggests that larger companies typically have higher market capitalizations, which can increase the impact of financial performance on company value. The precise moderating effects in the FMCG industry, particularly from 2020 to 2023, are yet unknown, thus a more thorough investigation of these interactions is required.

This study's goal is to examine how NPM, CCC, and FCF affect a firm's value controlling for company size and dividend payout ratio. The contribution consists of offering factual data unique to the FMCG industry at a time of substantial economic transformation. In a highly competitive and rapidly evolving business, this study will provide managers and investors with insights on how to optimize financial strategies to increase company value.

1.2 Literature Review

Signalling Theory. The notion that investors use specific signals to inform their choices about which companies to invest in is known as signalling theory. This idea explains how businesses use both financial and non-financial reports to enlighten investors. **[1]** emphasized that the existence of asymmetric information between managers and shareholders is demonstrated by signalling theory. It enables management to communicate to investors how they view the company's future. This theory states that organizations that are performing well can be identified from those that are not by purposefully communicating good signals to the market. Strong financial performance is shown by a company's high value, which serves as a positive signal that draws in investors and promotes investment in the business.

Company Value. Company value represents the perception investors have of a company, which is reflected in its stock price. A higher stock price indicates a greater

company value. When the stock price is high, it suggests that shareholders believe not only in the company's current performance but also in its future potential **[2]**. Essentially, company value is a measure of the company's success as perceived by investors and is closely tied to stock price. The calculation of company value is commonly done using Tobin's Q formula:

$$Q_{t+1} = (MVE + Debt) / TA$$

Where:

MVE = Market Value of Equity
Debt = Book Value of Debt
TA = Total Assets.

2 Methods

2.1 Hypothesis Development

In order to lessen the information asymmetry between managers and shareholders, signaling theory describes how businesses use financial data to communicate their performance and prospects to investors. **[1]** highlighted that in order to set themselves apart from less successful companies, high-performing companies frequently put out positive signals. A company's efficiency and profitability are shown by metrics like Net Profit Margin (NPM), Cash Conversion Cycle (CCC), and Free Cash Flow (FCF), which have a significant impact on investor views and firm value.

In the first hypothesis (H1), NPM raises company value. **[2]** and **[4]** discovered that great operational performance draws investors to better profitability, which is shown by NPM. Similarly, since longer CCCs are indicative of inefficiency, H2 suggests that CCC has a negative impact on company value. This supports the findings of **[5]** and **[6]**, who demonstrated that shorter CCCs enhance cash flow management and raise business value. in the third hypothesis (H3), FCF increases company value. According to research by **[7]** and **[8]**, companies with higher FCF communicate favorably to the market, increasing investor confidence by demonstrating their financial flexibility.

Moderating variables such as the Dividend Payout Ratio (DPR) are also significant. H4 and H6 imply that DPR increases the effect of NPM and FCF on Company Value since larger dividends signify financial stability to investors, as shown in **[9]** and **[7]**. As mentioned by **[9]**, H5 suggests that DPR may not significantly affect the relationship between CCC and corporate value due to its weaker connection to operational efficiency. H8 concludes that company size supports the beneficial impact of a shorter CCC on firm value, as **[10]** highlights that larger organizations are generally more effective in managing working capital. Meanwhile, Company Size is hypothesized to strengthen the relationship between NPM and FCF with Company Value (H7 and H9), as larger firms typically have better market positioning and resource management, as noted by **[11]** and **[12]**.

Based on hypothesis above, the framework of this research is in figure 1.

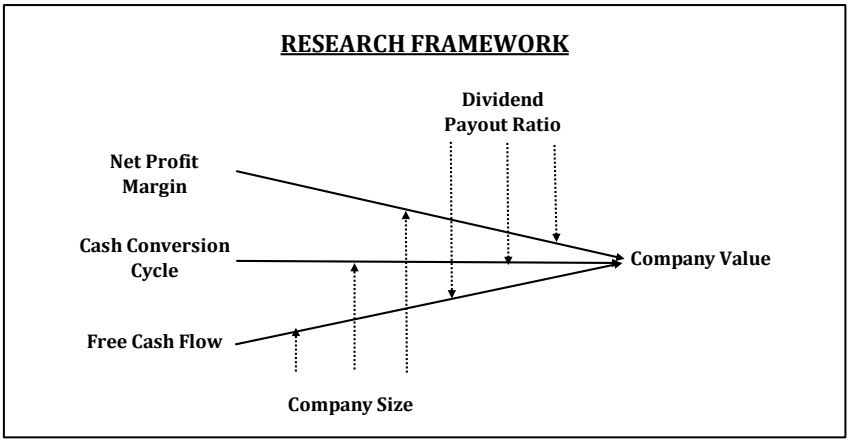

Fig. 1. Research Framework

2.2 Methods

Sample Population. This study was conducted on companies included in the Fast-Moving Consumer Goods industry sector listed on the Indonesia Stock Exchange. The sampling technique used was a non-probability sampling technique with purposive sampling restrictions. The criteria for sampling are: (1) Companies included in the Non-Primary Consumer Goods industry sector listed on the Indonesia Stock Exchange during the 2020-2023 period; (2) Companies in the Non-Primary Consumer Goods Sector that publish complete financial reports consecutively during the 2020-2023 period; (3) Companies in the Non-Primary Consumer Goods Sector with sub-industries of Alcoholic Beverages, Soft Drinks, Dairy Products, Processed Foods, Tobacco and Care Products. Based on these criteria, 40 companies were selected as research samples.

Data Collection Techniques. This study will use observation techniques, namely by collecting secondary data that is relevant to the research topic. The secondary data that will be used in this study are in the form of financial reports issued by companies in the consumer goods industry sector listed on the Indonesia Stock Exchange from 2020-2023. Summary all formula of each independent variables is in Table 1.

Table 1. Formula of Variables

Variable	Definition	Formula	Scale	Reference
Net Profit Margin (NPM)	Measures profitability of the firm	NPM = (EBIT / Net Revenue) x 100	Ratio	**[13]**
Cash Conversion Cycle (CCC)	Measures efficiency of working capital management	CCC = DIO + DSO – DPO	Days	**[6]**
Free Cash Flow (FCF)	Remaining cash after investments	FCF = NOPAT – Net Investment in Operating Capital	Ratio	**[9]**

Company Size	Scale of the company	Total Assets	Total Value	**[10]**
Dividend Payout Ratio (DPR)	Percentage of earnings distributed as dividends	DPR = (Dividends / Net Income) x 100	Percentage	**[12]**

Data Analysis Techniques. In this study, the data analysis methods include data pooling, classical assumption tests, and multiple linear regression analysis. Data pooling is performed because the research utilizes both cross-sectional and time series data. This process is conducted using the SmartPLS 4 program. Classical assumption tests, such as autocorrelation, heteroscedasticity, and multicollinearity tests, are also performed using SmartPLS 4. Additionally, the inner model test and hypothesis testing are conducted with SmartPLS 4. The outer model test is not required as the variables are observable. The equation model used in this research is as follows:

$$\textbf{Company value} = \beta 1 + \beta 2 + \beta 3 + \beta 4.\ \beta 1 + \beta 4.\ \beta 2 + \beta 4.\ \beta 3 + \beta 5.\ \beta 1 + \beta 5.\ \beta 2 + \beta 5.\ \beta 3 + \varepsilon$$

Explanation:

β1 = Net Profit Margin
β2 = Cash Conversion Cycle
β3 = Free Cash Flow
β4 = Dividend Payout Ratio
β5 = Company Size.

The inner model test is evaluated by examining the R-Square (R^2) value, path coefficient estimates, and f-Square (f^2) value. Hypothesis testing in this research uses a 5% alpha level and a t-table value of 1.645. To assess the hypotheses, the parameter coefficient values and the significance of the t-statistics are reviewed.

3 Results and Discussion

3.1 Statistics Descriptive

Table 2. Statistic Descriptive Analysis

Statistics							
		NP	NPM	CCC	FCFR	CS	DPR
N	Valid	145	145	145	145	145	145
	Missing	0	0	0	0	0	0
Mean		2,33	10,37	165,15	1,13E+12	1,75E+13	47,97
Median		1,73	8,62	166,46	1,07E+11	3,85E+12	25,68
Std. Deviation		2,05	14,8	46,87	2,78E+12	3,62E+13	98,57
Skewness		2,72	0,12	0,45	3,24	3,17	6,87
Std. Error of Skewness		0,2	0,2	0,2	0,2	0,2	0,2
Kurtosis		10,18	6,44	-0,04	11,51	10,08	61,83

Statistics						
Std. Error of Kurtosis	0,4	0,4	0,4	0,4	0,4	0,4
Minimum	0,61	-59,55	69,29	-3,1E+12	5,1E+10	0
Maximum	14,41	78,58	296,23	1,5E+13	1,87E+14	1000

The data show very large variations in some variables, especially in terms of distribution and exposure to extreme values. Variables such as FCFR, UP, and DPR have highly skewed distributions with heavy tails, indicating that these data may contain outliers or extreme values that affect the results of the analysis. Variables with high kurtosis and high skewness must be explained further to understand their impact on the overall distribution and their influence on the business results or potential analysis performed.

Multicolinearity Test

Table 3. Multicolinearity Test

Variables	Company Value
Cash Conversion Cycle	1.068
Dividend Payout Ratio	1.063
Free Cash Flow	1.319
Net Profit Margin	1.019
Company Value	
Company Size	1.325

From the VIF value above, it is known that the VIF value of all variables is <5 so it can be said that there is no multicollinearity in the model

R Square (R2). The R Square value of the model formed is 0.231, which means that the company value variable can be explained by the CCC, DPR, FCF, NPM, and CS variables by 23.1% and the rest is influenced by other factors outside the model.

Path Coefficient Estimation. Path Coefficient Estimation is adjusted to the hypothesis testing that researchers want to obtain. In this study, the following model is desired:

$$\text{Company value} = \beta 1 + \beta 2 + \beta 3 + \beta 4.\ \beta 1 + \beta 4.\ \beta 2 + \beta 4.\ \beta 3 + \beta 5.\ \beta 1 + \beta 5.\ \beta 2 + \beta 5.\ \beta 3 + \varepsilon$$

Based on testing models, the following result were obtained in table 4:

Table 4. Analyzing Hypotesis

Hypothesis	**T-Statistic**	**P-Value**	**Decision (Accept/Reject Hypothesis)**	**Magnitude of Influence**	**Effect**
NPM → Company Value	5.512	0	Accept Hypothesis	0.408	Significant

Hypothesis	T-Statistic	P-Value	Decision (Accept/Reject Hypothesis)	Magnitude of Influence	Effect
CCC → Company Value	1.042	0.298	Reject Hypothesis	-0.05	Not Significant
FCF → Company Value	3.803	0	Accept Hypothesis	0.419	Significant
NPM * DPR → Company Value	0.145	0.885	Reject Hypothesis	0.003	Not Significant
CCC * DPR → Company Value	0.267	0.79	Reject Hypothesis	-0.003	Not Significant
FCF * DPR → Company Value	0.323	0.746	Reject Hypothesis	0.012	Not Significant
NPM * CS → Company Value	3.278	0.001	Accept Hypothesis	-0.009	Significant
CCC * CS → Company Value	2.448	0.015	Accept Hypothesis	0.064	Significant
FCF * CS → Company Value	0.824	0.41	Reject Hypothesis	-0.144	Not Significant

The results of the hypothesis tests indicate that **Net Profit Margin (NPM)** and **Free Cash Flow (FCF)** have a significant positive effect on **Company Value**, supporting the findings of **[4]** and **[7]**. According to both studies, increased profitability and free cash flow boost firm value by sending investors encouraging signals. These factors have a considerable impact, which is consistent with Signalling Theory, which holds that companies with higher NPM and FCF are seen as more operationally and financially sound, which increases investor confidence and increases their value.

Conversely, **Cash Conversion Cycle (CCC)** was found to have no significant effect on company value, as indicated by the p-value of 0.298. This runs counter to research like **[5]**, which indicates that CCC affects business value, particularly in industries that need effective inventory management. The lack of significance in this study may indicate that working capital management during the investigated period is not as important in determining firm value as other factors, such as external market conditions or sector-specific characteristics.

Regarding the moderating variables, **Company Size** significantly strengthens the relationship between **NPM** and **FCF** with **Company Value**, in line with the findings of **[9]**, who demonstrated that larger firms have better access to resources and stronger market positioning. However, **Dividend Payout Ratio** did not significantly moderate the relationships between financial metrics and company value, contrasting with **[11]**, who suggested that dividend policies signal stability to investors. This divergence may be attributed to differences in sector-specific dividend policies or investor preferences.

4 Conclusion

Based on the results of the study on the effect of net profit margin, cash conversion cycle, and free cash flow on company value in consumer goods companies listed on the Indonesia Stock Exchange, the following conclusions can be drawn:

- Net Profit Margin has a significant positive effect on company value, Cash Conversion Cycle does not affect company value, Free Cash Flow has a significant effect on company value.
- Dividend payout ratio is unable to moderate Net Profit Margin, Cash Conversion Cycle and Free Cash Flow to affect Company Value. Company Size can moderate Net Profit Margin and Cash Conversion Cycle on company value but is unable to moderate Free Cash Flow on company value.

This study's concentration on a particular industry and time period is one of its weaknesses, which could limit how broadly the results can be applied. The study solely looks at FMCG companies in a specific economic environment, which may not fully represent patterns in other sectors or eras. Furthermore, the correlations between financial measures and firm value may be impacted by the incomplete accounting of the influence of external factors including macroeconomic conditions, market volatility, and regulatory changes. To give a more complete picture, future studies should think about extending the scope to encompass other industries and a longer period.

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