

The Effect of Free Cash Flow, Investment Opportunity Set, and Size on Firm Value with Institutional Ownership as Moderating Variable

Oleh:

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ABSTRACT

This study aims to determine the effect of Free Cash Flow, the Investment Opportunity Set, and Firm Size on Firm Value, with Institutional Ownership serving as a moderating variable. This is a quantitative study. The population consists of Consumer Non-Cyclical companies listed on the Indonesia Stock Exchange during the 2021–2024 period. The sample was selected using purposive sampling, resulting in a total of 101 companies. The study utilizes secondary data obtained from the official Indonesia Stock Exchange website. Data analysis was conducted using panel data regression with E-Views 13 software. The results indicate that Free Cash Flow has a negative effect on Firm Value and the Investment Opportunity Set has a positive effect on Firm Value, whereas Firm Size has no effect on Firm Value. Institutional Ownership positively moderates the effect of Free Cash Flow on Firm Value. However, Institutional Ownership negatively moderates the effects of the Investment Opportunity Set and Firm Size on Firm Value.

Keywords: Firm Value, Free Cash Flow, Investment Opportunity Set, Firm Size, Institutional Ownership.

ABSTRAK

Tujuan Penelitian ini adalah untuk mengetahui Pengaruh *Free Cash Flow*, *Investment Opportunity Set* dan Ukuran Perusahaan terhadap Nilai Perusahaan dengan Kepemilikan Institusional sebagai variabel moderasi. Jenis penelitian ini adalah penelitian kuantitatif. Populasi dalam penelitian adalah perusahaan *Consumer Non-Cyclicals* yang terdaftar di Bursa Efek Indonesia periode 2021-2024. Sampel dalam penelitian ini diambil dengan menggunakan metode purposive sampling dengan jumlah sampel sebanyak 101 perusahaan. Analisis data yang digunakan dalam penelitian ini adalah data sekunder yang diperoleh dari situs resmi Bursa Efek Indonesia. Teknik analisis yang digunakan adalah regresi data panel dengan menggunakan bantuan *software* E-Views 13. Hasil penelitian ini menunjukkan bahwa *Free Cash Flow* berpengaruh negatif terhadap Nilai Perusahaan, *Investment Opportunity Set* berpengaruh positif terhadap Nilai Perusahaan, sedangkan Ukuran Perusahaan tidak berpengaruh terhadap Nilai Perusahaan. Kepemilikan Institusional mampu mempengaruhi pengaruh *Free Cash Flow* terhadap Nilai Perusahaan secara positif. Namun Kepemilikan Institusional mampu memoderasi pengaruh *Investment Opportunity Set* dan Ukuran Perusahaan terhadap Nilai Perusahaan secara negatif.

Kata kunci: Nilai Perusahaan, *Free Cash Flow*, *Investment Opportunity Set*, Ukuran Perusahaan, Kepemilikan Institusional.

1. INTRODUCTION

1.1 Background of The Research

A high firm value indicates the level of shareholder welfare. The greater the firm value, the greater the prosperity enjoyed by its owners. Investors are usually more interested in investing in companies with high values, as they anticipate substantial dividend distributions. This situation makes it easier for companies to raise the funds needed to run their business operations (Veronica et al., 2022).

The value of a firm can be understood as its selling price, which reflects market expectations of the company's future profits and growth potential. This value can be measured using Tobin's Q ratio, which specifically describes the value of a Firm by highlighting management's performance in managing the firm's assets. This ratio is calculated as the ratio between the market value of the firm and the replacement value of the company's assets, which is the cost required to rebuild the firm from scratch. In addition, the Tobin's Q ratio is useful for investors because it provides a simple indicator for understanding complex business and economic relationships, such as the relationship between corporate investment, technological innovation, and the macroeconomic cycle (Wahyuningtyas & Priyadi, 2023).

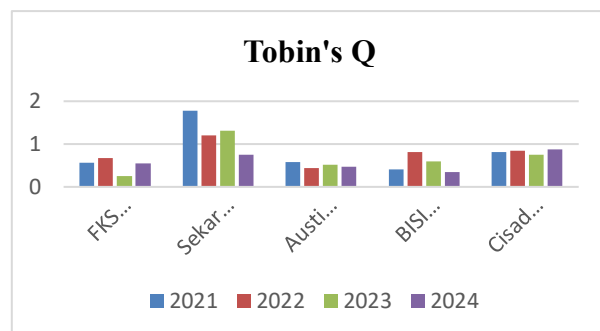


Figure 1. Fluctuations in Tobin's Q for Non-Cyclical Consumer Firm

Source: Data processed by researchers, 2026

Figure 1. illustrates the fluctuations in Tobin's Q values for firms in the non-cyclical consumer sector listed on the Indonesia Stock Exchange during the period 2021 to 2024. For example, FKS Multi Agro Tbk. experienced an increase from 0.5707 in 2021 to 0.6729 in 2022, then experienced a drastic decline to 0.2585 in 2023, before finally rising again to 0.540486 in 2024.

Meanwhile, Sekar Laut Tbk. showed a downward trend from 1.7832 in 2021 to 1.2055 in 2022, followed by an increase to 1.30711 in 2023, and then another decline to 0.756788 in 2024.

Austindo Nusantara Jaya Tbk. also experienced fluctuations in its firm value, with a decline from 0.5755 in 2021 to 0.4367 in 2022. Subsequently, the value increased to 0.5101 in 2023, but fell again to 0.4664 in 2024. Meanwhile, BISI International Tbk. experienced an increase from 0.4044 in 2021 to 0.8114 in 2022, then gradually declined to 0.5920 in 2023 and 0.3498 in 2024. Finally, Cisadane Sawit Raya Tbk. experienced an increase from 0.81427 in 2021 to 0.83809 in 2022, followed by a decline to 0.74423 in 2023, and finally rose again to 0.8775 in 2024.

Fluctuations in Tobin's Q ratio are essentially greatly influenced by the company's own performance. Changes in this ratio reflect the instability of the company's value, which ultimately causes uncertainty regarding the profits that will be obtained by shareholders. This condition can also affect investors' perceptions when making investment decisions, either directly or indirectly. Therefore, companies need to actively pay attention to and analyze various issues related to the decline in firm value in order to prevent a prolonged decline. Information about factors that significantly affect firm value is very important for companies to understand so that they can continue to strive to maximize that value (Rahmawati, 2024).

Free cash flow plays an important role in increasing firm value. This cash flow is important in improving the welfare of shareholders and management through dividend distribution, while also serving as a source of internal funding that can be used for Firm operations, such as share buybacks, acquisitions of other companies, and maintenance of Firm assets. The existence of surplus free cash flow indicates brighter prospects for Firm performance, which ultimately contributes to increased value for shareholders. Therefore, free cash flow deserves serious attention from companies, as it can serve as a means of communicating information to external parties and supporting the strengthening of firm value through new investments, share buybacks, and dividend payments to shareholders (Basuki, 2016).

The Investment Opportunity Set plays an important role in encouraging companies to achieve sustainable growth and development. Companies that have strong potential to develop their Investment Opportunity Set tend to gain greater trust from investors, as they are considered capable of generating significant profits in the future. The broader and higher quality a company's Investment Opportunity Set portfolio is, the higher its future profit prospects will be. This situation not only increases the overall value of the Firm but also ensures that the profit reports submitted truly reflect its actual financial performance, thereby providing stakeholders with an accurate and transparent picture of the company's condition (Hasanuddin et al., 2021).

Firm size plays an important role in increasing firm value by building resilience and flexibility amid increasingly complex market dynamics. Large companies are generally equipped with more structured management and adequate resources to manage risk and adapt to changing business conditions. This enables these companies to maintain stable and sustainable performance, making them more attractive to investors seeking investment options with more manageable risk levels. In addition, firm size not only shapes market perception but also strengthens the company's financial and operational position in the long term (Meifari, 2023).

This study focuses on companies in the Consumer Non-Cyclicals sector listed on the Indonesia Stock Exchange. This sector is generally known as a defensive industry, given that its products show a relatively stable level of demand, without being significantly affected by prevailing economic conditions. This stability in demand provides an interesting opportunity to explore the influence of internal Firm factors, such as Free Cash Flow, Investment Opportunity Set, and Firm size, on the overall increase in firm value. This situation creates significant research opportunities, because even though this sector is considered low risk, its sector index still experiences fluctuations. This shows that internal Firm factors still play a crucial role in determining the overall value of a Firm (Khayati et al., 2022).

Several previous studies have shown varying and inconsistent results between one study and another. Previous research conducted by Bertasari et al. (2024) on The Effect of Free Cash Flow and Good Corporate Governance on Firm Value shows that Free Cash Flow has a significant positive effect

on firm value. However, different results were found in a study by Fahira et al. (2025) on the influence of Capital Structure, Firm Growth, Free Cash Flow, and Investment Opportunity Set on Firm value, where Free Cash Flow had a significant negative impact on firm value. Meanwhile, research by Sugiharto & Hendratno (2022) on the effect of Firm Growth, Free Cash Flow, and Investment Opportunity Set on Firm value concluded that Free Cash Flow has no impact on firm value.

Research by Wahasusmiah & Arshintia (2022) on the effect of Firm size, Investment Opportunity Set, and GCG on Firm value with Financial Performance as an Intervening Variable proves that Investment Opportunity Set has a significant positive effect on firm value. Conversely, research by Arifin & Sudiyatno (2023), which analyzed the effect of Investment Opportunity Set, Institutional Ownership, and Free Cash Flow on Firm value with Capital Structure as a mediating variable, shows that Investment Opportunity Set has a significant negative effect on firm value. There is also research by Mutmainah et al. (2024) on the Influence of Investment Opportunity Set and Growth Opportunities on Firm value, which found that Investment Opportunity Set has no effect on firm value.

The findings of Putri et al. (2025) study on the effect of Investment Opportunity Set, firm size, and capital intensity on firm value show that firm size has a positive effect on firm value. However, different results emerge from Safaruddin et al. (2023) study on the effect of capital structure and firm size on firm value, which states that firm size has a negative effect on firm value. Conversely, the study by Wahasusmiah & Arshintia (2022) on the effect of firm size, Investment Opportunity Set, and GCG on firm value with financial performance as an intermediary variable shows that firm size has no effect on firm value.

The inconsistency of results from previous studies has prompted researchers to conduct more in-depth studies on the impact of Free Cash Flow, Investment Opportunity Set, and firm size on overall firm value. Interest in these variables stems not only from differences in previous research findings or real-world phenomena, but also because they were selected based on careful and relevant considerations. These three elements are closely interrelated and have a significant influence in determining and shaping firm value, making a more comprehensive understanding of

their impact crucial in efforts to increase firm value.

This study aims to address existing inconsistencies by including institutional ownership as a moderating variable. Institutional ownership is considered the most effective governance mechanism in reducing agency risk, especially that arising from excessive free cash flow. This is in line with the views of Shleifer and Vishny (1997) in their in-depth study of corporate governance, which supports the use of institutional ownership as a moderator due to its function in controlling abuse by managers and ensuring the efficient allocation of free cash flow. Previous research by Karpavicius & Yu (2017) found that institutional ownership can moderate the impact of free cash flow on firm value. Permana (2021) also provides strong empirical evidence that the interaction between institutional ownership and the Investment Opportunity Set significantly strengthens or moderates firm value positively. Meanwhile, Latif et al. (2023) found that institutional ownership can moderate the influence of firm size on firm value. With an increase in institutional ownership, all Firm activities are considered more effective in monitoring managers' actions, which ensures the welfare of shareholders and their role as important investment supervisors in the capital market, both in terms of the Investment Opportunity Set and firm size stability.

1.2 Problem Statement

Based on the background of the problem described above, the research questions in this study are as follows:

1. Does free cash flow affect the value of companies in the non-cyclical consumer sector listed on the Indonesia Stock Exchange?
2. Does the investment opportunity set affect the value of companies in the non-cyclical consumer sector listed on the Indonesia Stock Exchange?
3. Does company size affect company value in the consumer non-cyclicals sector listed on the Indonesia Stock Exchange?
4. Does institutional ownership moderate the effect of free cash flow on company value in the consumer non-cyclicals sector listed on the Indonesia Stock Exchange?
5. Does institutional ownership moderate the effect of investment opportunity set on

company value in the consumer non-cyclicals sector listed on the Indonesia Stock Exchange?

6. Does institutional ownership moderate the effect of company size on company value in the consumer non-cyclicals sector listed on the Indonesia Stock Exchange?

1.3 Research Objectives

Based on the above problem formulation, the objectives to be achieved in this study are as follows:

1. To analyze the effect of free cash flow on company value.
2. To analyze the effect of investment opportunity set on company value.
3. To analyze the effect of company size on company value.
4. To analyze the effect of institutional ownership in moderating free cash flow on company value.
5. To analyze the effect of institutional ownership in moderating the investment opportunity set on company value.
6. To analyze the effect of institutional ownership in moderating company size on company value.

2. LITERATURE REVIEW AND HYPOTESIS DEVELOPMENT

2.1 Signaling Theory

Signaling theory, first introduced by Michael Spence in 1973, explains that Firm management attempts to provide relevant information to investors through certain signals. This theory emphasizes the importance of Firm information for stakeholders in assessing firm value. In this study, signaling theory describes how companies can increase their market value by providing transparent and accurate financial reports to external parties. This information serves as a positive signal that allows investors and other stakeholders to understand the company's future performance prospects (Putri et al., 2025).

2.2 Agency Theory

Agency Theory, first introduced by Michael C. Jensen and William H. Meckling in 1976, explains the relationship between principals and agents in the context of corporate management. Principals refer to shareholders, while agents are managers who are authorized to manage the company's operations. This relationship is formed when owners grant managers the authority to make strategic and operational decisions.

However, this relationship often leads to an information imbalance, as managers, as agents, usually have more complete and in-depth access to information about the company's condition than owners or principals (Intia & Azizah, 2021).

2.3 Firm Value

Firm value is a specific condition that has been achieved by a Firm as a reference for investors before investing their capital. One of the main indicators for measuring firm value is its share price. The higher the stock price, the greater the firm value. An increase in stock price indicates greater profit potential for shareholders, thereby attracting investor interest. An increase in demand for shares directly contributes to an increase in firm value (Shania & Kurnia, 2021).

2.4 Free Cash Flow

Free cash flow is cash available after a Firm has met its investment needs in fixed assets, new product development, and working capital necessary to maintain the company's operational continuity (Montoliang & Tjun, 2018). In other words, the greater the amount of free cash flow a Firm has, the better its financial performance. This condition directly contributes to an increase in the company's value in the eyes of investors (Sejati et al., 2020).

2.5 Investment Opportunity Set

The investment opportunity set refers to the collection of investment opportunities available to companies in the future. The value of a Firm is greatly influenced by stock market value indicators, which in turn are influenced by the existence of investment opportunities, both in the form of current assets and fixed assets. These investment opportunities provide positive signals regarding the company's future growth potential, thereby driving up stock prices. As stock prices rise, the company's value automatically increases (Permata & Ginting, 2023).

2.6 Firm Size

Firms size is an important indicator that describes the condition and characteristics of an organization or business entity. This size can be measured through various aspects, such as the number of employees hired to carry out operations, total assets owned, sales volume during a certain period, and the number of shares circulating in the market. Therefore, firm size is the

basis for classifying whether a Firm is large or small (Indriaty et al., 2024).

2.7 Institutional Ownership

Institutional ownership is the ownership of a company's shares by other entities or institutions rather than individuals. Institutional ownership usually involves the management of large amounts of funds and plays an important role in overseeing Firm management. Institutional owners are not only passive investors, but also play an active role in overseeing and influencing Firm management policies with the aim of maximizing firm value. Through effective monitoring, institutional ownership can reduce opportunistic behavior by management and minimize the risk of fraud. This helps create better corporate governance, thereby supporting the sustainability and value of the Firm (Fara & Fidiana, 2020).

2.8 The Effect of Free Cash Flow on Firm Value

Free cash flow is the excess cash flow that a Firm has after meeting all investment needs that provide positive added value. Free cash flow plays an important role in positively influencing firm value because it reflects the company's financial flexibility in funding new investments, paying off debt, and distributing dividends to shareholders (Rengganis et al., 2023).

Previous studies have found that free cash flow has a positive effect on firm value. Companies that are able to generate large amounts of free cash flow usually demonstrate sound and efficient financial performance, so that the company's value in the eyes of investors tends to increase. As a key indicator, free cash flow illustrates a company's ability to manage internal funds to take advantage of profitable investment opportunities. Therefore, a large amount of free cash flow is a strong positive signal for the capital market and contributes significantly to increasing firm value (Jayanti & Iswara, 2023).

2.9 The Effect of Investment Opportunity on Firm Value

In the context of its influence on firm value, the investment opportunity set is a determining factor in investment decision-making and Firm valuation. Various previous studies have been conducted to examine the influence of the investment opportunity set on firm value. For example, research by Wijaya (2024) shows that the investment opportunity set has a significant

positive effect on firm value. In addition to Wijaya (2024), research by Tiara & Muslim (2023), Fahira et al. (2025), and Putri et al. (2025) also shows that the investment opportunity set has a significant positive impact on firm value. The investment opportunity set not only reflects a company's growth potential and investment opportunities, but also serves as an indicator that influences market perception and overall firm value.

2.10 The Effect of Firm Size on Firm Value

Firm size is generally believed to have a positive impact on firm value. This can be explained through the perspective of Signaling Theory, in which large companies send strong and convincing signals to investors. Large companies usually have a more solid organizational structure, a better-maintained reputation, and easier access to external funding sources, especially the capital market. These signals of stability and credibility reduce the perception of risk in the eyes of investors, thereby encouraging an increase in the company's market value (Karimah & Riduwan, 2017).

Large firm size tends to reflect more stable financial and operational conditions. This directly increases investor confidence, which ultimately has a positive impact on firm value. Research conducted by Gz & Lisiantara (2022) proves that there is a positive relationship between firm size and firm value. This is due to higher investor expectations of large companies, especially regarding the potential for larger dividend distributions, which increases demand for Firm shares and drives up share prices in the capital market.

2.11 The Effect of Free Cash Flow on Firm Value with Institutional Ownership as a Moderating Variable

Free cash flow is an important signal in the capital market. High free cash flow indicates that a Firm has adequate liquidity and financial flexibility after financing all liabilities and profitable investments. Based on Signal Theory, the availability of abundant free cash flow is a positive signal that reassures investors about the company's financial health, which should be rewarded with an increase in the company's value. Although free cash flow is a positive signal, high free cash flow can give rise to potential agency conflicts. Managers tend to misuse excess cash for suboptimal investments or personal interests,

which ultimately harms shareholder value (Christanty & Asyik, 2019). Institutional ownership offers a solution to this potential agency conflict. High institutional ownership indicates strong oversight by professional shareholders. Institutional ownership pressures management to allocate free cash flow wisely, either for profitable investments or returns to shareholders, so that free cash flow is not misused. Institutional ownership oversight provides assurance to the market that potential agency conflicts related to free cash flow have been minimized (Lillah & Yuyetta, 2023).

2.12 The Effect of Investment Opportunity Set on Firm Value with Institutional Ownership as a Moderating Variable

Signals of investment opportunities are highly susceptible to information asymmetry because outside investors find it difficult to verify the validity of growth claims made by management. If investors doubt the credibility of these signals, the market response to investment opportunities will be weak. Institutional ownership overcomes this doubt by acting as a validator of the credibility of these signals. Institutional ownership refers to informed investors who have the ability to analyze and verify the feasibility of a company's investment opportunities (Permana, 2021).

The role of institutional ownership as a moderating factor in the relationship between investment opportunity set and firm value is strongly supported by previous research by Mulyani et al. (2022), which shows that institutional ownership has a close correlation with the implementation of more transparent and effective information disclosure practices, which in turn helps reduce the information asymmetry gap between management and investors. Thus, institutional ownership strengthens the positive impact of the investment opportunity set on firm value, as active supervision by institutional shareholders ensures that future investment opportunities are optimally utilized, without the risk of abuse that could damage market confidence.

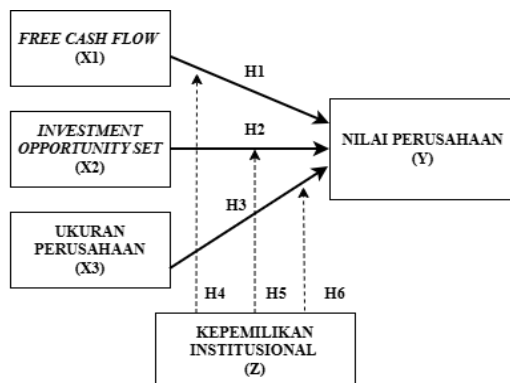
2.13 The Effect of Firm Size on Firm Value with Institutional Ownership as a Moderating Variable

Firm size is an indicator of stability and credibility. Large companies are generally more diverse, more transparent, have easier access to

capital markets, and are better able to withstand economic fluctuations. Therefore, firm size is expected to have a direct positive impact on firm value. Although large companies tend to be stable, they also have highly complex operational and management structures, which increase the potential for oversight challenges. This complexity can distort stability signals if oversight is weak (Latif et al., 2023).

Institutional ownership plays an important role in overseeing this complexity. High institutional ownership ensures that even though companies are large and their operations complex, corporate governance remains effective. Institutional ownership oversight ensures that stability signals derived from firm size are not disrupted by internal inefficiencies. Previous studies show that the effectiveness of institutional ownership governance is more prominent in strengthening the market value of larger companies (Maulida & Gusni, 2025).

2.14 Research Model



Keterangan:

- > Pengaruh Variabel Independen Ke Variabel Dependen
- - - - -> Pengaruh Variabel Moderasi

Figure 2. Research Model

2.15 Research hypothesis

Based on the above description, the hypotheses in this study are:

- H1: Free Cash Flow affects Free Cash Flow.
H2: Investment Opportunity Set affects Company Value.
H3: Firm Size affects Firm Value.
H4: Institutional Ownership moderates the effect of Free Cash Flow on Firm Value.
H5: Institutional Ownership moderates the effect of Investment Opportunity Set on Firm Value.
H6: Institutional Ownership moderates the effect of Firm Size on Firm Value.

3. RESEARCH METHODOLOGY

3.1 Research Approach

This study uses a quantitative approach that aims to examine the effect of Free Cash Flow, Investment Opportunity Set, and Firm size on Firm value with Institutional Ownership as a Moderating Variable. The data used is secondary data obtained from the official website of the Indonesia Stock Exchange (www.idx.co.id) and related Firm documents. The research population includes all companies operating in the Consumer Non-Cyclicals sector on the Indonesia Stock Exchange for the period 2021-2024.

3.2 Types And Sources Of Data

The type of data used in this study is secondary data obtained from Firm documents. Secondary data is data that is already available and not collected directly by the researcher. This data is indirect and obtained from various supporting sources, such as previous studies, scientific articles, journals, official websites, and so on. The secondary data used in this study comes from the annual reports of consumer non-cyclical sector companies listed on the Indonesia Stock Exchange for the period 2021-2024. In addition, supporting information was also collected from various sources such as books, scientific journals, articles, online sources, theses, and laws and regulations relevant to the research topic. Annual reports published officially by companies on the Indonesia Stock Exchange have a high level of reliability because they have undergone an audit process by independent public accountants.

3.3 Population and Sample

A population is the total number of all objects or individual units that have certain characteristics and are the focus of research or measurement. Meanwhile, a sample is a part of the population, namely a subset that is selected to represent the entire population in research analysis. Data obtained from the sample can be used to draw conclusions that apply to the entire population, provided that the sample taken is truly representative and accurately reflects the characteristics of the population (Ghozali, 2016). The population in this study is all consumer non-cyclical sector companies listed on the Indonesia Stock Exchange in 2021-2024, totaling 128 companies. The sampling technique used in this study is purposive sampling. Purposive sampling is a sampling technique in which samples are

selected deliberately based on certain criteria deemed relevant by the researcher (Subhaktiyasa, 2024).

The criteria for selecting the sample to be studied are:

1. Consumer non-cyclical sector companies listed on the Indonesia Stock Exchange in 2021-2024.
2. Consumer Non-Cyclicals Sector companies listed on the Indonesia Stock Exchange that generated positive net income in the 2021-2024 period.
3. Consumer Non-Cyclicals Sector companies listed on the Indonesia Stock Exchange in 2021-2024 with financial reports that contain data related to the variables in this study.

3.4 Research Variable Operations

First, firm value is measured using Tobin's Q. Firm value calculated using Tobin's Q ratio reflects Firm performance and investor perceptions of the company's prospects and condition (Oktary, 2022). Tobin's Q is the ratio between the market value of a company's assets and the book value of its assets. Tobin's Q ratio can be calculated using the following formula:

$$\text{Tobin's Q} = \frac{(\text{MVS} + \text{D})}{\text{TA}}$$

Source: Oktary, 2022.

Second, Free Cash Flow is the remaining cash in the form of cash owned by the Firm after deducting income for growth-oriented investments and acquisitions and paying for operational activities. Free cash flow is used to maintain cash in the company. In previous research by (Jayanti & Iswara, 2023), the free cash flow ratio was calculated using the following formula:

Free Cash Flow = Operating Cash Flow - Investment Cash Flow

$$\text{FCF Ratios} = \frac{\text{FCF}}{\text{Total Asset}}$$

Source: Jayanti & Iswara, 2023.

Third, The Investment Opportunity Set is measured using Market to Book Value of Equity (MBVE), an indicator that reflects a company's growth value based on its ability to obtain and manage capital. IOS provides an overview of future income prospects. This measurement is calculated using the following formula (Gultom & Sitorus, 2023):

$$\text{MBVE} = \frac{\text{List Shared} \times \text{Closing Price}}{\text{Total Equity}}$$

Source: Gultom & Sitorus, 2023.

Fourth, Firm size is measured based on the amount of ownership of the total assets owned by the company. The larger the size of the company, the more adequate its resources are, because the Firm has sufficient assets to finance its operational activities. Firm size is usually estimated using the natural logarithm of total assets (Suryani, 2021).

$$\text{Firm Size} = \text{Ln Total Asset}$$

Source: Suryani, 2021.

Fifth, institutional ownership is the ownership of shares by other institutions, namely companies or other institutions. Institutional ownership has the ability to control management through effective supervision or monitoring processes. A high level of institutional ownership will encourage greater oversight by institutional investors, thereby preventing opportunistic behavior by management and minimizing the level of fraud committed by management, which will reduce the value of the Firm (Maulida & Gusni, 2025).

$$\frac{\text{Shares Owned by Institutional}}{\text{List Share}} \times 100\%$$

Source: Maulida & Gusni, 2025.

3.5 Analysis Method

The data analysis method used in this study employs a quantitative approach with panel data regression techniques. Using panel data regression analysis, the relationships and impacts of certain variables on the collected panel data can be identified. Data processing was performed using E-views version 13.

4. RESULT AND DISCUSSION

4.1 Data Collection Results

The data used in this study is secondary data, which is obtained indirectly from the financial reports of non-cyclical consumer companies listed on the Indonesia Stock Exchange for the period 2021-2024, as contained in www.idx.co.id. The objects of this study are the independent variables (X), namely Free Cash Flow, Investment Opportunity Set, and Firm size, with the dependent variable (Y) being Firm value, and the moderating variable (Z) being Institutional Ownership. The subjects used in this study are non-cyclical consumer companies listed on the

Indonesia Stock Exchange for the period 2021-2024.

Based on data obtained from www.idx.co.id there are 128 non-cyclical consumer companies listed on the Indonesia Stock Exchange, and 105 companies will be used as samples in this study. The sample in this study uses unbalanced panel data. Unbalanced panel data is a situation where cross-sectional units have different numbers of time series observations. The total number of observations conducted for the 2021-2024 period is 330 observations. These results were obtained from sample selection using the Purposive Sampling method, which was taken based on certain criteria, which were determined based on considerations set in accordance with the needs of the study.

4.2 Descriptive Statistics Analysis

Table 4.1 Descriptive Statistics Analysis Results

	NP (Y)	FCF	IOS	UK	KI
Mean	1.116 765	1.131 153	2.215 853	28.63 605	0.627 257
Median	0.812 884	0.121 012	1.410 757	28.90 655	0.698 440
Maximum	5.823 494	2.198 356	14.95 200	32.93 787	0.976 566
Minimum	- 0.214 727	- 0.503 350	- 0.053 725	24.82 779	0.006 500
Std. Dev.	1.036 473	0.191 597	2.284 050	1.922 552	0.250 161
Skewness	1.674 082	4.240 488	2.473 888	0.116 993	0.911 095
Kurtosis	6.761 475	45.49 062	10.79 071	2.287 415	2.893 394

Source: Eviews 13 Output (Data processed by researcher, 2026)

4.3 Determination of Panel Data Estimation Models

4.3.1 Chow Test

The Chow test is used to determine the more appropriate model, whether the Common Effect or Fixed Effect model, used in panel data regression (Ghozali & Ratmono, 2017). If the test results show a prob value > 0.05, then the model selected is the common effect model. Conversely, if the prob value < 0.05, then the model selected is the fixed effect model.

Based on Table 4.2, the Chow test results show that the cross-section probability value F < significance value (0.0000 < 0.05). Therefore, the

estimation model based on the Chow test results is the Fixed Effect Model.

Table 4.2 Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.063354	(100,217)	0.0000
Cross-section square	Chi-339.77031 5	100	0.0000

Source: Eviews 13 Output (Data processed by researcher, 2026)

4.3.2 Hausman Test

The Hausman test is used to select the best model between the fixed effect model and the random effect model (Ghozali & Ratmono, 2017). If prob < 0.05, then H0 is rejected and the appropriate model is the Fixed Effect Model, and vice versa. The following are the estimation results from the Hausman test.

Table 4.3 Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
	7.04005		
Cross-section random	0	4	0.1338

Source: Eviews 13 Output (Data processed by researcher, 2026)

Based on Table 4.3, the Hausman test results show that the cross-section prob value > significance value (0.1338 > 0.05). Therefore, the estimation model based on the Hausman test results is the Random Effect Model.

4.3.3 Lagrange Multiplier Test

The Lagrange Multiplier (LM) is a test to determine whether the Random Effect Model or Common Effect Model (OLS) is the most appropriate to use (Ghozali & Ratmono, 2017). If the Breusch-Pagan value is < the significance value, then H0 is rejected. This means that the appropriate estimation for the panel data regression model is the random effect model. Conversely, if the Breusch-Pagan value is > the significance value, then H0 is accepted. This means that the appropriate estimation for the panel data regression model is the common effect model.

Table 4.4 Lagrange Multiplier Test Results

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	84.41261 (0.0000)	0.208887 (0.6476)	84.62150 (0.0000)
Honda	9.187634 (0.0000)	-0.457042 (0.6882)	6.173461 (0.0000)
King-Wu	9.660232 (0.0000)	-0.490637 (0.6882)	1.156189 (0.1238)
Standardized Honda	9.950914 (0.0000)	-0.164460 (0.5653)	-0.064800 (0.5258)
Standardized King-Wu	9.950914 (0.0000)	-0.164460 (0.5653)	-1.446444 (0.9260)
Gourieroux, et al.	--	--	84.41261 (0.0000)

Source: Eviews 13 Output (Data processed by researcher, 2026)

Based on Table 4.6, which shows the results of the Lagrange multiplier test, the Breusch-Pagan value is $<$ the significance value ($0.0000 < 0.05$). Therefore, the estimation model based on the results of the Lagrange multiplier test is the Random Effect Model.

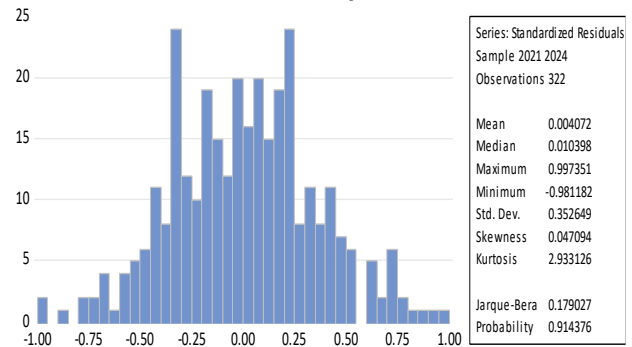
Because the Hausman test and the Lagrange multiplier test selected the random effect model, the random effect model is the best regression model to use.

4.4 Classical assumption test

4.4.1 Normality test

The Normality Test aims to measure whether the dependent and independent variables in the data have a normal distribution or not (Ghozali & Ratmono, 2017). If the probability value is > 0.05 , then it can be stated that the residual is normally distributed or the normality assumption is fulfilled, but if the probability is < 0.05 , then it can be stated that the residual is not normally distributed or the normality assumption is not fulfilled. In this study, the normality test used the Jarque-Berra (J-B) test.

Table 4.5 Normality Test Results



Source: Eviews 13 Output (Data processed by researcher, 2026)

The graph in the table above shows the results of the normality test, indicating that the probability value of $0.914376 > 0.05$, meaning that the residuals are normally distributed or that the normality requirement is met.

4.4.2 Multicollinearity Test

The multicollinearity test aims to determine whether there is correlation between the independent variables in this regression model, namely Free Cash Flow (X1), Investment Opportunity Set (X2), and Firm size (X3). If there is a high correlation between independent variables, generally > 0.90 , then there is an indication of multicollinearity. Conversely, if the correlation value is < 0.90 , then the variables can be declared free from multicollinearity. Based on Table 4.6, the results of the multicollinearity test show that the correlation coefficient values of each variable are < 0.90 , so it can be stated that each independent variable is free from multicollinearity.

Table 4.6 Multicollinearity Test Results

	FCF	IOS	UK
FC	1.000000	0.322340	0.115462
F			
IO	0.322340	1.000000	-0.073189
S			
U	0.115462	-0.073189	1.000000
K			

Source: Eviews 13 Output (Data processed by researcher, 2026)

4.4.3 Autocorrelation Test

An autocorrelation test is conducted to detect the existence of correlation between residuals in a linear regression model between the error terms in period t and period $t-1$ (Ghozali & Ratmono, 2017). The condition in the

autocorrelation test is that if the Durbin-Watson value is between dU and (4-dU), then the coefficient is equal to 0, so it can be stated that it is free from autocorrelation.

Based on Table 4.7, the Durbin-Watson value (d) is 1.915278 with a sample size of 323 (n=323) and 3 independent variables (K=3), resulting in values of (dL) = 1.80724 and (dU) = 1.83162, as well as 4-(dU) = 2.16838 and 4-(dL) = 2.19276. These results indicate that the Durbin-Watson (d) value lies between dU and 4-dU, namely (1.83162 < 1.915278 < 2.16838). Therefore, this test shows that there is no autocorrelation.

Table 4.7 Autocorrelation Test Results

Mean dependent var	0.185683
S.D. dependent var	0.085323
Sum squared resid	2.303395
Durbin-Watson stat	1.915278

Source: Eviews 13 Output (Data processed by researcher, 2026)

4.4.4 Heteroscedasticity Test

The heteroscedasticity test is used to detect whether there is a difference in variance between residuals from one observation to another in a regression model. If the variance of residuals from one observation to another remains constant, it is called homoscedasticity, and if it differs, it is called heteroscedasticity. The heteroscedasticity test can be detected through the Glejser test. Based on Table 4.8, it is known that the probability value of all variables is greater than 0.05, so it can be stated that there is no heteroscedasticity problem in this regression model.

Table 4.8 Heteroscedasticity Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.212480	0.095118	2.233851	0.0262
FCF	-0.002309	0.009367	-0.246563	0.8054
IOS	0.002448	0.002663	0.919106	0.3587
UK	0.002046	0.003319	0.616380	0.5381
KI	-0.043517	0.025125	-1.732055	0.0842

Source: Eviews 13 Output (Data processed by researcher, 2026)

4.5 Panel Data Regression Analysis

Based on Table 4.9 above, the regression equation values in the table can be seen.

Table 4.9 Panel Data Regression Analysis Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.112400	0.439580	0.260198	0.7949
FCF	-0.264806	0.036259	-2.787532	0.0050
IOS	0.438601	0.010596	41.39225	0.0000
UK	0.003146	0.015379	0.204538	0.6771

Source: Eviews 13 Output (Data processed by researcher, 2026)

The equation is as follows based on the regression equation above, it can be explained that:

$$NP = 0.112400 - 0.2644806(FCF) + 0.438601(IOS) + 0.003146(UK) + \epsilon$$

Based on the regression equation above, it can be explained that the constant value is 0.112400, which means that with the independent variable (X), the Firm value variable (Y) will increase by 0.112400. The β coefficient value of the Free Cash Flow variable is -0.484806. If the values of other variables remain constant and the X1 variable decreases by 1%, the Firm value (Y) variable will decrease by -0.484806. The beta coefficient value of the Investment Opportunity Set variable is 0.438601. If other variables remain constant and variable X2 increases by 1%, then the Firm value variable (Y) will increase by 0.438601. The beta coefficient value of the Firm size variable is 0.003146. If other variables remain constant and variable X3 increases by 1%, then the Firm value (Y) variable will increase by 0.003146.

4.6 Hypothesis Test

4.6.1 Determination Coefficient Test (R Square)

Based on Table 4.10, data processing using E-Views 13 shows that the coefficient of determination (R²) obtained is 0.842477. This indicates that the variation in changes in the Firm value variable during the 2021-2024 period can be well explained by variables such as Free Cash Flow, Investment Opportunity Set, and Firm size, namely

84%, while the rest is influenced by other independent variables not included in the study.

Table 4.10 Determination Coefficient Test (R Square) Results

R-squared	0.843945
Adjusted R-squared	0.842477
S.E. of regression	0.252980
F-statistic	575.0501
Prob(F-statistic)	0.000000

Source: Eviews 13 Output (Data processed by researcher, 2026).

4.6.2 t Statistical Test (Partial Test)

Table 4.11 shows the results of the t-test, which is used to determine the independent variables against the dependent variables individually. If the Prob value is < 0.05 , then variables X1, X2, or X3 have no effect on Y. If the coefficient value is positive, then variables X1, X2, and X3 have a positive relationship with Y and vice versa.

Table 4.11 Statistical t-Test (Partial Test) Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.112400	0.439580	0.260198	0.7949
FCF	-0.264806	0.036259	-2.787532	0.0050
IOS	0.438601	0.010596	41.39225	0.0000
UK	0.003146	0.015379	0.204538	0.6771

Source: Eviews 13 Output (Data processed by researcher, 2026)

From the panel data regression results, the following conclusions can be drawn, First, Free Cash Flow variable (X1) The regression results using E -Views 13 shows that the Free Cash Flow variable has a coefficient of -0.264806 and a t-value of $-2.787532 > 1.967$ t-table with a probability value of $0.0050 < 0.05$, so it can be concluded that Free Cash Flow has a negative effect on Firm value.

Second, The Investment Opportunity Set variable (X2) Regression results using E -Views 13 shows that the Investment Opportunity Set variable has a coefficient of 0.43601 and a t-value of $41.3922 > 1.967$ t-table with a probability of

$0.0000 < 0.05$, so it can be concluded that Investment Opportunity Set has a positive effect on Firm value. Third, Firm size Variable (X3) Regression results using E -Views 13 shows that the Firm size variable has a coefficient of 0.003146 and a t-value of $0.204538 < 1.967$ t-table with a probability of $0.8381 > 0.05$, so it can be concluded that Firm size has no effect on Firm value.

4.6.3 F-Statistic Test Results (Simultaneous Test)

Based on the results of panel data regression using E-Views 13, it can be seen that the F-count value of $575.0501 > 3.024$ F-table with a probability value of $0.000000 < 0.05$, which means that the variables of Free Cash Flow, Investment Opportunity Set, and Firm size together have a significant effect on Firm value.

Table 4.12 F-Statistic Test Results (Simultaneous Test) Results

R-squared	0.843945
Adjusted R-squared	0.842477
S.E. of regression	0.252980
F-statistic	575.0501
Prob(F-statistic)	0.000000

Source: Eviews 13 Output (Data processed by researcher, 2026)

4.6.4 Moderate Regression Analysis (MRA)

Based on the results of Panel Data Moderated Regression using E-Views 13, the following can be concluded:

Table 4.13 Moderate Regression Analysis (MRA) Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.442696	1.061946	-2.300208	0.0221
FCF	-1.157274	0.343546	-3.368614	0.0008
IOS	0.500502	0.026344	18.99892	0.0000
UK	0.091114	0.037656	2.419614	0.0161
KI	4.309844	1.642621	2.623761	0.0091
FCF*KI	1.094243	0.549824	1.990171	0.0474
IOS*KI	-0.105738	0.040604	-2.604130	0.0086
UK*KI	-0.147621	0.058014	-2.544569	0.0114

Source: Source: Eviews 13 Output (Data processed by researcher, 2026)

First, The Institutional Ownership variable (Z) is able to moderate the effect of Free Cash Flow on Firm value. This is evidenced by a coefficient value of 1.094243 and a probability of $0.0474 < 0.05$. Second, The Institutional Ownership variable (Z) can moderate the effect of Investment Opportunity Set on firm value. This is evidenced by a coefficient value of -0.105738 and a probability of $0.0096 < 0.05$. Third, The Institutional Ownership variable (Z) can moderate the effect of Firm size on Firm value. This is evidenced by a coefficient value of -0.147621 and a probability of $0.0114 < 0.05$.

4.7 Discussion

In this study, Free Cash Flow has a significant negative effect on Firm value, indicating that a high level of free cash flow available in a Firm tends to lower the market valuation of that entity. Based on the processed data, this phenomenon is clearly evident in MLBI issuers, where in 2021 the Firm had a free cash flow of 0.728184 with a very high firm value of 4.625841. However, when free cash flow jumped dramatically to 0.942824 in 2024, the firm value actually fell to 3.369527. The decline in firm value amid this cash abundance indicates that the market has a negative sentiment towards the accumulation of funds. Investors tend to assume that management is unable to channel the excess cash into profitable investment projects, or are concerned that managers will use the funds for personal gain or inefficient investments. This condition is exacerbated by the data pattern at HMSP, where the stability of free cash flow at around 0.187 is accompanied by a downward trend in firm value from 3.090543 in 2021 to 2.110825 in 2024. Conversely, the market places a higher value on efficient cash management, as seen in AMRT in 2024, which, despite having a free cash flow of 0.381745, is able to maintain a very high firm value of 4.688647.

In the context of agency theory, according to Jensen (1986), almost all excess cash flows that do not have positive investment opportunities will tend to be misused, which ultimately becomes a burden on the market valuation of a company. There is also a conflict of interest between agents who have more information asymmetry and principals who expect to increase firm value through dividends. One form of this conflict is cash allocation policy. Managers may have incentives to hold back free cash flow in order to increase job security or fund projects that are less profitable in

the market. Based on signaling theory, the market responds to this opaque accumulation of cash as a bad signal, reflecting management's inability to provide optimal returns, thereby reducing investor confidence.

In this study, the Investment Opportunity Set has a significant positive effect on Firm value, indicating that the availability of future investment opportunities owned by the Firm is a major determinant in increasing market valuation. Based on the data analysis results, clear evidence can be seen in MLBI issuers, which consistently have investment opportunity set figures and firm values at a very high level compared to the average of other issuers. In 2021, MLBI recorded an exceptionally high investment opportunity set value of 14.9520, which was directly proportional to its Firm value of 5.82349. Although in 2024 the investment opportunity set value declined to 9.759926, the firm value remained strong at 3.369527.

This positive correlation is also reinforced by data on AMRT issuers. In 2021, when AMRT had an investment opportunity set value of 5.357879, its firm value stood at 3.673629. As the company's investment opportunities increased in 2024 to 9.599602, its firm value also rose significantly to reach 4.688647. Unlike free cash flow, which is considered negative when it accumulates, assets that are oriented towards investment growth, as reflected in the high investment opportunity set in ADES, which reached 8.416801 with a firm value of 3.148237, signal that the Firm is in a healthy expansion phase.

Based on Signal Theory, companies with a high investment opportunity set tend to send positive signals to the market that management has the capability to expand the business. In companies with a high investment opportunity set, this will lead to increased expectations of future profits, so that the Firm is likely to attract more investors. Management will be increasingly motivated to identify new investment opportunity sets each year as a form of responsibility to the principal. With an increase in profitable investment options, a company's chances of increasing shareholder prosperity will also be greater, so that the Investment Opportunity Set directly affects Firm value.

In this study, firm size has no effect on firm value, indicating that companies with large assets are not always considered more valuable by investors than companies with small assets. Clear

evidence of this can be seen in the comparison between INDF and AMRT. INDF is listed as the Firm with the largest firm size in the data, reaching 32.93297 in 2024, but its firm value is relatively low at 0.878438. Conversely, AMRT, which has a smaller firm size value of 31.04123, is able to record a much more fantastic firm value of 4.688647. A similar condition can be seen in the issuers AALI and ADES. AALI has a consistently large firm size of 30.9 to 31.0, but its firm value is stagnant and even tends to be low at around 0.665985 in 2024. On the other hand, ADES, with a much smaller firm size of 28.31835, is able to show a higher firm value of 2.1478.

Based on Signal Theory, large companies should send positive signals regarding stability and low risk of bankruptcy. However, if asset growth is not accompanied by adequate transparency and profitability, these signals become ineffective (noise) in the eyes of investors. Investors tend to ignore the signal of firm size if they perceive potential internal problems hidden behind the large scale of the organization. According to Agency Theory, large companies are usually accompanied by complex organizational structures and a wide scope of business activities. This complexity creates greater opportunities for management to act in their own interests due to higher information asymmetry. The management of large companies may have broader access to various non-transparent policies, causing the market to remain skeptical. Even if a Firm has substantial resources, if the principal (shareholder) detects high agency costs due to weak oversight of the large organizational structure, the size of the Firm will not be able to increase Tobin's Q value.

In this study, Institutional Ownership is able to moderate the relationship between Free Cash Flow and Firm value in a positive direction. This condition indicates that the ownership structure by institutional parties is a strong enough supervisory instrument to change the market's negative perception of the amount of free cash flow managed by management. Clear evidence of this phenomenon can be seen in several issuers with strong institutional ownership structures. For example, in 2024, AMRT had a free cash flow of 0.381745 and an interaction variable of free cash flow and institutional ownership of 0.200151, which contributed to the achievement of a very high Firm value of 4.688647. Although high free cash flow is generally responded to negatively, in AMRT, the 52.4% institutional presence reassures

investors that the cash will be used for productive outlet expansion. A similar situation can be seen in ADES in 2024, with institutional ownership reaching 91.5%. The moderating interaction between free cash flow and institutional ownership is able to maintain the Firm value at a premium of 2.1478, even though the cash standard deviation in this industry is quite volatile. Investors see that in companies with high institutional ownership, every rupiah of the mean cash flow of 0.121933 is managed with greater transparency compared to companies with low institutional ownership.

Conversely, in companies with extreme free cash flow values such as STTP, which has a maximum value of 2.198356 (well above the mean), the moderating role of institutional ownership determines whether the company's value will fall or remain stable. Without monitoring from institutional ownership, such free cash flow would be considered a risk of overinvestment. However, with the institutional ownership variable, the market sees this free cash flow as a strategic reserve to strengthen market position.

Based on the agency theory argument according to Shleifer and Vishny (1997), institutional ownership has a strong incentive to closely monitor the use of free cash flow due to the large amount of capital they have invested. Their presence ensures that free cash flow is not misused for empire building or negative NPV projects, but rather directed towards dividend distribution or profitable strategic investments. With reduced agency costs, the market no longer views free cash flow as a "threat," but rather as a safe and productive resource.

When viewed from Signal Theory, external investors tend to be skeptical of companies that accumulate cash if management does not have a track record of transparency. However, when a Firm has strong institutional ownership, the market picks up on positive signals that free cash flow is under professional supervision. Validation from institutions changes investors' perceptions from fear of waste to belief in efficiency. As a result, each unit of free cash flow owned by the Firm actually increases the company's value because investors are confident that these funds will provide optimal returns in the future.

In this study, Institutional Ownership was able to moderate the influence of Investment Opportunity Set on Firm value in a negative direction. This finding indicates that when a Firm

has a large investment opportunity set but is dominated by very high institutional ownership, the market tends to view it as an overly aggressive expansion risk or a concern that the institution supports inefficient management policies (empire building). Statistically, the interaction between institutional ownership and investment opportunity set shows that the attractiveness of the investment opportunity set actually decreases in the eyes of public investors if institutions are considered to be overly controlling the direction of the investment.

Based on empirical evidence from the processed data, MLBI issuers, where in 2021 the Firm had a very high investment opportunity set of 14.9520, but due to being controlled by large institutional ownership (Z) of 0.817822, the interaction variable between the investment opportunity set and institutional ownership reached 12.22808. This high interaction was followed by a decline in Firm value in the following period in 2024 to 3.369527, indicating that the market tends to be skeptical of expansion that is overly controlled by majority institutions. A similar condition occurred at HMSP with an institutional ownership level of 0.925001 (92.5%), where even though the investment opportunity set was at 3.341113, the interaction variable between the investment opportunity set and massive institutional ownership was unable to stem the decline in Firm value from 3.090543 to 2.110825.

This evidence of negative moderation is also reinforced by data from ICBP, where when the interaction between investment opportunity set and institutional ownership decreased from 2.198571 to 1.385184, the Firm value also decreased to 1.104448. Similarly, in MYOR, where institutional ownership was 0.590744, the decline in the investment opportunity set, followed by a decline in the interaction between the investment opportunity set and institutional ownership, was directly proportional to the decline in Firm value to 2.1478. Even for issuers such as GGRM, the institutional share of 0.755459 interacting with a very low investment opportunity set (0.10) resulted in a decline in Firm value to 0.10531.

Ditinjau dari Teori Agensi, institusi yang memiliki pengaruh besar cenderung bersifat konservatif dan menghindari risiko tinggi. Ketika perusahaan memiliki investment opportunity set yang tinggi, institusi mungkin memberikan tekanan untuk membatasi pengeluaran modal guna mengamankan dividen atau likuiditas jangka

pendek. Dalam teori sinyal, intervensi institusi yang membatasi fleksibilitas manajer dalam mengambil peluang pertumbuhan mengirimkan sinyal negatif bahwa perusahaan akan kehilangan momentum pertumbuhannya. Akibatnya, potensi kenaikan nilai perusahaan dari sisi investment opportunity set menjadi terhambat oleh kehadiran struktur kepemilikan institusional tersebut.

In this study, Institutional Ownership was able to moderate the influence of Firm size on Firm value in a negative direction. This finding indicates that Institutional Ownership weakens the relationship between Firm size and firm value. INDF issuers have the largest firm size in the sample, namely 32.93297, but with very high institutional ownership at 0.805307, the interaction variable between firm size and institutional ownership reaches 26.52115. This high interaction is inversely proportional to the low firm value of 0.878438, indicating that the market responds negatively to the combination of giant assets and dominant institutional control because it is considered to limit the company's flexibility in innovating. A similar phenomenon was found in GGRM, where large firm size at the level of 32.04455 interacted with institutional ownership of 0.755459 to produce an interaction value of 24.20834. Along with a slight decrease in the interaction value to 24.19574 in 2024, the Firm value actually fell to 0.10531, proving that institutions are unable to prevent a decline in value when large companies begin to lose their efficiency.

This negative moderating effect is also confirmed by a comparison of data on AALI and CPIN. At AALI, a stable firm size of 30.9 with institutional ownership of 0.796847 resulted in a high interaction between firm size and institutional ownership in the range of 24.6, but the Firm value remained depressed at 0.665985. The market sees that in large commodity sector companies, strong institutional control is often interpreted as overly conservative policy. Conversely, in CPIN, despite its large firm size of 31.3, low institutional ownership of 0.059 results in a very small interaction value between firm size and institutional ownership of 1.85.

In Agency Theory, large companies have a high level of organizational complexity. The presence of institutional ownership adds another layer of bureaucracy and rigidity to decision-making. Rather than mitigating risk, institutional ownership often gets caught up in agency

problems between majority and minority shareholders. According to signaling theory, the market sees that in large companies, high institutional ownership does not guarantee efficiency, but often causes operational rigidity. Investors perceive that institutional oversight on a large asset scale actually increases coordination costs, so that signals of stability from firm size are ineffective in increasing Tobin's Q.

5. CONCLUSION

The purpose of this study is to examine the effect of Free Cash Flow, Investment Opportunity Set, and Firm size on Firm value with Institutional Ownership as a moderating variable in non-cyclical consumer companies listed on the Indonesia Stock Exchange (IDX) from 2021 to 2024. The sample size used in this study was 101 companies with 322 Firm observations. The data analysis used was panel data analysis using E-Views 13 software. Based on these tests, the results can be summarized that Free Cash Flow has a negative effect on the Value of Non-Cyclical Consumer Companies listed on the Indonesia Stock Exchange for the period 2021-2024. This indicates that the availability of abundant funds does not automatically become a positive signal, but can be seen as a potential inefficiency in capital management.

Investment Opportunity Set has a positive effect on the Value of Consumer Non-Cyclicals Companies listed on the Indonesia Stock Exchange for the period 2021-2024. This shows that companies consider aspects of growth prospects and future profit potential in maximizing the value generated, which leads to increased investor confidence in these entities. Firm size has no effect on the value of non-cyclical consumer companies listed on the Indonesia Stock Exchange for the period 2021-2024. This indicates that the market does not only view the quantity of physical assets as an indicator of success, but rather focuses on how those assets are managed to generate profits.

Institutional ownership is able to moderate the influence of Free Cash Flow on the Value of Consumer Non-Cyclicals listed on the Indonesia Stock Exchange for the period 2021-2024 in a positive direction. This condition suggests that the ownership structure by institutional parties is a strong enough supervisory instrument to change the market's negative perception of the amount of free cash flow managed by management. Institutional ownership can moderate the negative

impact of the Investment Opportunity Set on the Value of Consumer Non-Cyclicals Companies listed on the Indonesia Stock Exchange for the 2021-2024 period. This finding indicates that when a Firm has a large investment opportunity set but is dominated by very high institutional ownership, the market tends to view it as an overly aggressive expansion risk or a concern that the institution supports inefficient management policies (empire building). Institutional ownership can moderate the influence of firm size on the value of non-cyclical consumer companies listed on the Indonesia Stock Exchange for the period 2021-2024 in a negative direction. This finding indicates that the presence of institutional ownership actually adds layers of bureaucracy and rigidity to decision-making. Instead of mitigating risk, institutions often get caught up in agency problems between majority and minority shareholders. Companies should be managed with principles of transparency and professionalism, thereby increasing market confidence.

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