

The Role of Profitability and Investment Opportunities Set in Determining Dividend Policy: Evidence from the Consumer Non-Cyclicals Sector

RR. Maria Yulia Dwi RENGGANIS¹, Ni Komang ARIANI²

^{1,2}Faculty of Economics and Business, Accounting Department, Mahasaraswati Denpasar University, Indonesia

Article Info:

Article History:

Received: 2024-11-15

Revised: 2024-12-19

Accepted: 2025-01-10

Keyword:

profitability, investment opportunity set, dividend policy

Corresponding Author:

RR. Maria Yulia Dwi Rengganis

Email:

mariayuliadwi@unmas.ac.id

Paper Type:

Research Paper



Abstract:

Purpose:

This study aims to test and obtain empirical evidence of the effect of profitability and investment opportunity set on dividend policy in non-cyclical consumer sector companies listed on the Indonesia Stock Exchange.

Methodology:

The population of this study is non-cyclical consumer sector companies listed on the Indonesia Stock Exchange (IDX) in 2021-2023. The sample in this study was 19 non-cyclical consumer sector companies. The research technique for this sample is purposive sampling. The data analysis used in this study is multiple linear regression analysis

Findings:

Profitability has a positive and significant effect on dividend policy, indicating that companies with high earnings tend to be capable and willing to distribute dividends as a signal of good prospects. In addition, the investment opportunity set (IOS) also shows a positive effect, although the initial hypothesis predicted a negative relationship. This suggests that companies with high investment opportunities can still distribute dividends, especially if they have adequate access to external financing.

Implication:

The results of this study have implications for company management that profitability and investment opportunity set (IOS) must be strategically managed in determining dividend policy. This finding enriches the literature on dividend policy, particularly in the context that IOS does not necessarily act as a barrier to dividend distribution.

INTRODUCTION

Dividend policy is one of the strategic financial decisions faced by companies in allocating profits earned. Furthermore, dividend policy can be defined as determining the amount of dividends to be paid to shareholders and the amount of retained earnings to be reused by the Company (Karang et al., 2020). Dividend policy is also an important decision in corporate financial management because it not only reflects the distribution of profits to shareholders, but also provides a signal about how the company's future prospects and financial health. so that an understanding of the factors that influence dividend policy is essential, especially for strategic sectors such as consumer non-cyclicals. During the period 2021 to 2023, many sectors have experienced difficult times due to the pandemic and post-pandemic, but the consumer non-cyclicals sector is one of the sectors that can be said to be able to survive and its financial performance growth tends to be relatively stable compared to others. This stability is partly due to its products that are needed in all conditions.

Table 1. Dividend Policy of PT Indofood Sukses Makmur Tbk.

Fiscal year	Current year profit	Dividend Per Share	Total Dividends paid	Payment date
2020	8.752.066.000.000	Rp278	Rp2.440.959.000.000	29-09-2021
2021	11.203.585.000.000	Rp278	Rp2.440.959.000.000	24-08-2022

Source: Annual Report of PT Indofood Sukses Makmur Tbk for 2021, 2022 and 2023

Based on Table 1. Above, it appears that when viewed from the profit generated, it is not always the case that when the company's profit increases, it will also be followed by an increase in the amount of dividends paid. So it is possible that the Company not only determines the amount of dividends based on its profitability but when the company has many promising investment opportunities, the profit may be allocated for business expansion rather than distributed to shareholders. Investment opportunity set is a collection of investment possibilities based on expenses that management has decided to invest in the future and hopes that the investment will generate large profits (Kurnia & Dillak, 2021). Companies with high IOS tend to hold profits to reinvest, so the dividend distribution rate can be lower and vice versa. Therefore, the possibility of a trade-off between profitability and IOS in determining dividend policy is interesting to study empirically.

Agency Theory. Agency theory is a concept that explains the relationship bound in the contract between the principal as the owner who delegates his work to the agent as the manager of the work and determines the decision (Jensen and Meckling, 1976). The relationship between shareholders (principal) and managers (agent) can lead to conditions of information imbalance (asymmetrical information) because the company information owned by managers is more complete than the owner (Jamal & Enre, 2023).

Pecking Order Theory (POT). Pecking Order Theory (POT) was developed by (Myers and Majluf, 1984) and argues that firms prefer to use internal funding before turning to external funding. In the context of this research, POT states that companies will prefer to hold retained earnings for investment before considering debt or equity. POT can explain dividend policy from an internal or management perspective, which is related to the limitation of internal funds and the preference for using internal funds first.

Dividend Policy. Dividend policy is a decision whether the profit earned by the company at the end of the year will be distributed to shareholders in the form of dividends or will be retained to increase capital for future investment financing (Martono and Harjito, 2018). There is also an understanding of dividend policy according to Swandana et al. (2023) Dividend policy is a decision whether the profit earned by the company will be distributed to shareholders as dividends or will be retained in the form of retained earnings for future investment financing.

Profitability on Dividend Policy. Agency theory is seen as a version of game theory which is the theory underlying corporate business practices (Jamal & Enre, 2023). This theory explains the separation between owners (shareholders) and managers (managers) where this relationship raises the potential for conflicts of interest between owners and managers due to the different interests of each party. Managers as agents are morally responsible for optimizing shareholder (principal) profits, but on the other hand managers also have an interest in maximizing their welfare, so there is a high probability that agents do not always act in the best interests of the principal (Jensen and Meckling, 1976). According to Kasmir (2019) the profitability ratio is a ratio used by a company to assess its ability to seek profit or profit. Dividend distribution here can be used as an agency control mechanism. When the company distributes dividends in larger amounts, the funds managed by managers become less, thereby reducing the potential for misuse of internal funds. This is evidenced in research conducted by Patricia & Septiyanti (2024), which states that profitability has a positive influence on dividend policy.

H1: Profitability has a positive effect on dividend policy

Investment Opportunity Set on Dividend Policy. Investment opportunity set is a collection of investment possibilities based on expenses that management has decided to invest in the future and hopes that the investment will generate large profits (Kurnia & Dillak, 2021). The management as the manager of the Company certainly wants the development and progress of the Company, so that it will try to maximize existing investment opportunities. According to (Ramadhan, 2016) Companies with large investment opportunities will use a lot of available earning after tax to finance profitable investments rather than to pay dividends with large values. This

thinking is also in accordance with Pecking Order Theory which illustrates that companies with high IOS are more likely to hold profits to finance investment than pay dividends. This is evidenced in research conducted by Yani & Maharani (2022), which states that the investment opportunity set has a partial negative effect on dividend policy.

H2: Investment opportunity set has a negative effect on dividend policy.

METHODS

This research was conducted at consumer non-cyclicals sector companies listed on the Indonesia Stock Exchange (IDX) by accessing the website www.idx.co.id. The population in this study are 127 companies in the consumer non-cyclicals sector listed on the Indonesia Stock Exchange for the period 2021-2023. By using purposive sampling technique, with several criteria, a sample size of 19 consumer non-cyclicals companies was obtained with 57 observations in 3 years.

Dividend policy is a decision whether the profit earned by the company at the end of the year will be distributed to shareholders in the form of dividends or will be retained to increase capital for future investment financing (Martono and Harjito, 2018). The indicator used in measuring dividend policy is the Dividend Payout Ratio (DPR) which is calculated by the formula (Hanafi, 2018):

$$\text{Dividend payout ratio} = \frac{\text{Dividen per share (DPS)}}{\text{earnings per share (EPS)}}$$

This profitability ratio is a measuring tool used to measure overall efficiency or effectiveness which is intended for the high and low profits earned in relation to investment and sales. ROA can be formulated as follows (Brigham & Houston, 2015):

$$MVE/BVE = \frac{\text{Closing Stock Price} \times \text{Number of Shares Outstanding}}{\text{Total Ekuitas}}$$

The data analysis used in this study is multiple linear regression analysis which is addressed by the following equation:

$$DPR = \alpha + ROA + IOS + e$$

RESULTS AND DISCUSSION

Table 2. Descriptive Statistics Test Results

	N	Minimum	Maximum	Mean	Std. Deviation
DPR	57	-2.87	1.56	0.2844	0.55078
ROA	57	-0.20	0.21	0.0710	0.06673
IOS	57	0.21	5.80	1.9922	1.44845
Valid N (listwise)	57				

Dividend Payout Ratio (DPR). The minimum DPR is -2.87 and the maximum is 1.56, with an average of 0.2844. This indicates that most companies distributed dividends, although the presence of negative values suggests there were firms that did not pay dividends or incurred losses. The standard deviation of 0.55078 indicates high variability in dividend policies across firms.

Return on Assets (ROA). Return on Assets (ROA) is an important indicator that measures the company's efficiency in generating profits from its total assets. In this study, the lowest ROA value is -0.20, indicating that there are companies that experience losses in their operations. Meanwhile, the maximum value reaches 0.21, indicating a company that managed to generate a profit of 21% of its total assets. The average ROA of 0.0710 or 7.1% illustrates that in general the companies in the sample are able to utilize their assets to create profits. The relatively small standard deviation value of 0.06673 indicates that the difference in profitability performance between companies tends to be moderate.

Investment Opportunity Set (IOS). Investment Opportunity Set (IOS) describes the investment opportunities or prospects owned by the company in the future. Based on the results of descriptive statistics, the IOS value ranges from 0.21 to 5.80, with an average value of 1.9922. This indicates that most companies have fairly good investment opportunities, although there are companies with a much higher level of investment opportunities than others. The high standard deviation value, which is 1.44845, indicates that there is a very large variation in investment potential between companies. Companies with high IOS values are generally seen by investors as having promising growth and prospects for the future.

Table 3. Normality Test Results

		Unstandardized Residual
N		57
Normal Parameters ^{a,b}	Mean	-0.0701754
	Std. Deviation	1.03894380
	Absolute	0.173
Most Extreme Differences	Positive	0.173
	Negative	-0.091
Kolmogorov-Smirnov Z		1.308
Asymp. Sig. (2-tailed)		0.065

Based on the Kolmogorov-Smirnov test results, a significance value of 0.065 is obtained which is greater than 0.05, so it can be concluded that the residual data is normally distributed.

Table 4. Multicollinearity Test Results

Variable	Tolerance	VIF
ROA	0.986	1.014
IOS	0.986	1.014

Based on the multicollinearity test output, the Tolerance value for the ROA and IOS variables is 0.986, and the VIF (Variance Inflation Factor) value is 1.014 respectively. Because the VIF value < 10 and Tolerance > 0.1, it can be concluded that there are no multicollinearity symptoms in the regression model.

Table 5. Heteroscedasticity Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	0.420	0.281	1.495	0.141
	ROA	0.104	0.072	1.444	0.155
	IOS	0.081	0.145	0.561	0.577

a. Dependent Variable: ABSRES

Based on the regression results with the dependent variable ABSRES (absolute residual), the significance value (Sig.) for the ROA variable is 0.155 and IOS is 0.577. Because both Sig. > 0.05, it can be concluded that there are no symptoms of heteroscedasticity in the regression model.

Table 6. Autocorrelation Test Results

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Durbin-Watson
1	0.446 ^a	0.199	0.169	1.20754	1.968

The autocorrelation test results show that the Durbin-Watson (DW) value is 1.968. For the number of samples n = 57 and the number of predictors k = 2. Since the DW value is within the interval $du < DW < 4 - du$ or $1.623 < 1.968 < 2.377$, it can be concluded that: there is no autocorrelation, either positive or negative, in the regression model.

Table 7. Regression Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	0.218	0.391	0.558	0.579
	ROA	0.255	0.100	2.544	0.014
	IOS	0.589	0.202	2.919	0.005

Based on the regression output, the model equation is obtained as follows:

$$DPR = 0.218 + 0.255(ROA) + 0.589(IOS)$$

The effect of profitability on dividend policy. The test results show that Profitability (ROA) has a t value of 2.544 with a significance level of <0.014 smaller than 0.050, which means that Profitability has a positive effect on the dividend policy of non-cyclical consumer sector companies listed on the Indonesia Stock Exchange in the period 2021 - 2023, so hypothesis 1 is accepted. This shows that companies with a high level of profitability will also pay higher dividends. The profitability factor also affects dividend policy because dividends are net income obtained from the company's operating results available to shareholders, this is in line with the research of Yani

& Maharani (2022), Septika et al., (2021) and Devi & Mispiyanti (2020) which state that profitability has a positive effect on dividend policy.

The effect of investment opportunity set on dividend policy. The test results show that the investment opportunity set (IOS) has a t value of 2.919 with a significance level of <0.005 smaller than 0.050, which means that this finding is contrary to the direction of the initial hypothesis which predicts a negative effect, so hypothesis 2 is rejected. This result can be justified by considering that companies with high investment opportunities (high IOS) generally have promising growth prospects, so that investors and management are more encouraged to maintain financial reputation and make optimal resource allocation. This in turn can encourage an increase in the value or performance of the company, in accordance with the theory of pecking order or signaling, which states that companies with high IOS will try to display good performance to remain attractive to the market. This is similar to the research of Gaver & Gaver (1993) who found a relationship that companies with high IOS tend to have different policies compared to

CONCLUSION

Profitability has a positive and significant effect on dividend policy, which indicates that companies that are able to generate large amounts of profit tend to be more able and willing to distribute dividends to shareholders to provide positive signals about the company's financial prospects and stability. In addition, the results also show that investment opportunity set (IOS) has a positive and significant effect on dividend policy, although the initial hypothesis leads to a negative effect. This finding indicates that companies with high investment opportunities do not always retain profits for reinvestment, but instead can continue to pay dividends, especially if the company has good access to external funding or an efficient financing strategy. Overall, this result underscores that dividend policy is determined not only by the ability to generate profits (profitability), but also by management strategies in addressing available investment opportunities. Both profitability and IOS, in the context of this study, are able to encourage companies to continue to pay dividends, as a form of commitment to shareholders and as a signal of confidence in the company's future prospects.

REFERENCE

- Brigham, E. F., & Houston, J. F. (2015). *Fundamentals of financial management* (14th ed.). London: Cengage Learning.
- Devi, E., & Mispiyanti, M. (2020). Pengaruh profitabilitas, likuiditas, pertumbuhan perusahaan dan ukuran perusahaan terhadap kebijakan deviden. *Jurnal Ilmiah Mahasiswa Manajemen, Bisnis dan Akuntansi (JIMMBA)*, 2(3), 376–391.
- Gaver, J. J., & Gaver, K. M. (1993). Additional evidence on the association between the investment opportunity set and corporate financing, dividend, and compensation policies. *Journal of Accounting and Economics*, 16(1–3), 125–160.
- Hanafi, M. M. (2018). *Manajemen keuangan internasional* (3rd ed.). Yogyakarta: BPFE Yogyakarta.
- Horne, J. C. V., & Wachowicz, J. M. (2010). *Fundamentals of financial management* (13th ed.). New York: Pearson Education.
- Jamal, J., & Enre, A. (2023). Konstruksi agency theory untuk meminimalisir asymmetry information dalam teori keuangan syariah perspektif tabligh. *POINT: Jurnal Ekonomi dan Manajemen*, 5(2), 163–171. <https://doi.org/10.46918/point.v5i2.2092>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(3), 305–360. <https://doi.org/10.1057/9781137341280.0038>
- Karang, I. W. A. H., Hermanto, H., & Suryani, E. (2020). Effect of profitability and leverage on dividend policy with investment opportunity set as a moderating variable in manufacturing companies listed on BEI period

- 2014–2018. *International Journal of Multicultural and Multireligious Understanding*, 7(11), 191.
<https://doi.org/10.18415/ijmmu.v7i11.2162>
- Kasmir. (2019). *Analisis laporan keuangan*. Jakarta: RajaGrafindo Persada.
- Kurnia, A. P., & Dillak, V. J. (2021). Pengaruh investment opportunity set, collateral asset, manajerial ownership, institutional ownership terhadap kebijakan dividen. *Jurnal Ilmiah Akuntansi dan Keuangan*, 4(1), 414–428.
- Martono, & Harjito, A. (2018). *Manajemen keuangan* (2nd ed.). Yogyakarta: Ekonisia.
- Myers, S., & Majluf, N. (1984). Corporate financing and investment decision when firms have information investors do not have. *Journal of Financial Economics*, 13, 187–221.
- Patricia, N. F., & Septiyanti, R. (2024). The influence of managerial ownership, debt policy, institutional ownership, profitability, free cash flow, company growth and company size on dividend policy (Study of mining companies listed on the Indonesian Stock Exchange 2018– 2022). *Management Studies and Entrepreneurship Journal*, 5(2), 4666–4684.
- Ramadhan, A. (2016). Pengaruh free cash flow, investment opportunity set, dan sales growth terhadap dividend policy pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia. *Jurnal Manajemen Bisnis*, 112–119.
- Septika, E., Mudjiyanti, R., Hariyanto, E., & Wibowo, H. (2021). Pengaruh profitabilitas, kebijakan hutang, likuiditas, dan kepemilikan institusional terhadap kebijakan dividen. *Review of Applied Accounting Research*, 1(2), 17–26.
- Swandana, D., Gultom, S. A., & Jati, F. D. (2023). Pengaruh profitabilitas dan likuiditas terhadap kebijakan dividen pada perusahaan properti dan real estate yang terdaftar di BEI. *Jurnal Akuntansi, Keuangan dan Perpajakan*, 6(1), 62–71.
- Yani, H. E., & Maharani, N. K. (2022). Pengaruh profitabilitas, lagged dividen, dan investment opportunity set terhadap kebijakan dividen. *Akselerasi: Jurnal Ilmiah Nasional*, 4(2), 94–108.