

FACTORS AFFECTING DIVIDEND PAY OUT RATIO WITH ROE (RETURN ON EQUITY) AS MODERATING VARIABLE

Rini Tri Hastuti^{1*}, Richard Andrew¹

¹Accounting Program, Faculty of Economics and Business, Universitas Tarumanagara, West Jakarta - Indonesia

*Email: rinih@fe.untar.ac.id

Submitted: 11-04-2023, Revised: 16-06-2023, Accepted: 21-07-2023

ABSTRACT

The purpose of this research is to find out whether cash ratio and ATO (asset turnover) have an influence on dividend pay-out ratio by using ROE (return on equity) as a control variable or moderating variable in the manufacturing industry listed on the Indonesia Stock Exchange during the 2018-2020 period. Samples were taken using purposive sampling method, and the data obtained were 39 firms. The data is processed using statistical software applications to analyze into multiple regression equations, namely the EViews program version 12 and Microsoft Excel 2010. This study provides test results that cash ratio and ATO (asset turnover) have an insignificant negative effect on dividend pay-out ratio. ROE (return on equity) cannot moderate cash ratio on dividend pay-out ratio. But ROE (return on equity) can moderate ATO (asset turnover) on dividend pay-out ratio. The conclusion of this study can analyze the factors that influence firm performance in increasing dividend pay-out ratio so that investors are interested in investing.

Keywords: dividend pay out ratio, roe (return on equity) cash ratio, ato (asset turnover)

1. INTRODUCTION

Factors Rapid technological progress has resulted in many new firms causing fierce competition between firms. Every corporate will need funds for the continuity of its business. Large capital is needed by the corporate so that the corporate's operational activities can run smoothly, and the corporate can develop quickly. Some firms will distribute cash dividends to their investors as a sign of appreciation to investors who have put funds in their corporate. In fact, with the distribution of dividends consistently, the majority of investors will be interested in putting their funds in the corporate because investors will get twice the profit, namely from the sale of shares (capital gains) and dividends. The dividend payment made by the corporate has consideration because it will reduce the retained earnings of the corporate, usually known as retained earnings.

The distribution of dividends in a corporate is one way to prosper the shareholders. An increase in dividend distribution will give an indication to investors that the corporate has a good performance, otherwise if the dividend distribution decreases it will reduce the level of investor confidence in the corporate's performance. Dividends given by the corporate to investors can be seen from the percentage of the dividend payout ratio, the larger the percentage indicates the corporate provides large amounts of dividends.

Related Work

Agency Theory

Explaining the relationship between corporate management (agents) and shareholders (principals) is a contractual relationship, so the agent will make a decision on the corporate on

behalf of the principal (Halim & Hastuti, 2019) [1]. However, sometimes agents with principals have different goals. This can trigger a conflict that can occur because the agent can choose an action to prosper himself, this will make the corporate not provide good performance and of course harm the corporate.

Signalling Theory

Giving an indication to the receiver about the condition of a corporate, the signal is sent by the sender (Spence, 1973) [2]. This theory provides information through the corporate's financial statements, which is one of the important things for investors to make decisions in placing their funds in the corporate, in order to find out whether the corporate is in good condition or not.

Cash Ratio

Explaining the ability of a corporate to get cash to pay short-term debt and operational activities of a corporate (Bunker, Cagle, & Harris, 2019) [3]. The cash ratio ratio can be a measuring tool for shareholders and creditors of the corporate to see whether the corporate can meet payments for its short-term debt. So, when the corporate's cash ratio level is high, it indicates that the corporate is doing well, whereas when the corporate's cash ratio level is low, it indicates that a corporate's obligation to pay its short-term debt is not good.

ATO (Asset Turnover)

Shows to see the effectiveness of assets in a corporate (Setyaningsih & Yuliana, 2020) [4]. With the ATO (asset turnover) indicator, investors can see how efficient the corporate is in using its assets to generate revenue, a low TATO value will indicate the corporate is not making a profit so that it has an impact on dividend distribution to investors (Firdaus & Handayani, 2019) [5]. Firms that have high asset turnover can reflect that the corporate is efficient in using its assets and is able to get maximum profit. Thus, when the corporate has a high asset turnover, the corporate will distribute large dividends, whereas when the corporate has a low asset turnover, it makes the corporate distribute small dividends.

ROE (Return on Equity)

ROE is a ratio that is able to measure the corporate's performance in gaining profits in a period (Nurchaqiqi & Suryarini, 2018)[6]. The high value of a corporate's ROE (return on equity) indicates that the corporate has high profits, so that the corporate can distribute dividends to shareholders (Ginting, 2018)[7]. The corporate's external parties will pay attention to net income in a financial statement, so that when the net profit value is high, investors will be interested in putting their funds in the corporate. It can be concluded, the ROE (return on equity) ratio increases, it has a positive impact on investors, on the contrary when the ROE (return on equity) value decreases, it will have a negative impact on investors.

Dividend Pay-Out Ratio

It is a decision to reinvest profits from the corporate's operating results to shareholders or investors (Wahjudi, 2018) [8]. Halim & Hastuti (2019) [1] in their research stated that dividend pay-out ratio is the most important policy, because prospective corporate shareholders pay attention to this policy to put their funds. The existence of dividend distribution will restrain the corporate's management from making unnecessary expenses.

Cash ratio with Dividend Pay-Out Ratio

High cash ratio can provide a positive signal for investors, because it can reflect the corporate's ability to pay off its short-term debt. According to Winarko's research (2017) [9] which states that cash ratio has a significant and significant effect on dividend pay-out ratio. Meanwhile, according to Tita & Susanti (2020) [10] stated that cash ratio has no effect on dividend pay-out ratio.

ATO (Asset Turnover) with Dividend Pay-Out Ratio

A high ATO (asset turnover) will indicate the corporate is using its assets efficiently to get profit, so this will have an impact on increasing the amount of dividends that will be distributed by the corporate. This explanation is in line with research conducted by Purnami & Artini (2016) [11] which states that ATO (asset turnover) has a significant effect on dividend pay-out ratio, while according to Setyaningsih & Yuliana (2020) [12] ATO (asset turnover) has no significant effect on dividend pay-out ratio.

Cash ratio with Dividend Pay-Out Ratio with ROE (return on equity) as a moderating variable

Firms that have high profits, it can be said that the corporate has large funds to pay off its short-term debt, so the corporate has large cash that can be distributed as dividends or reinvested.

ATO (asset turnover) with Dividend Pay-Out Ratio with ROE (return on equity) as a moderating variable

A high ATO (asset turnover) will give a positive signal to shareholders, because with a high turnover the corporate benefits from the results of good asset management, so that it has an impact on the amount of dividends that will be distributed to shareholders.

Hypothesis

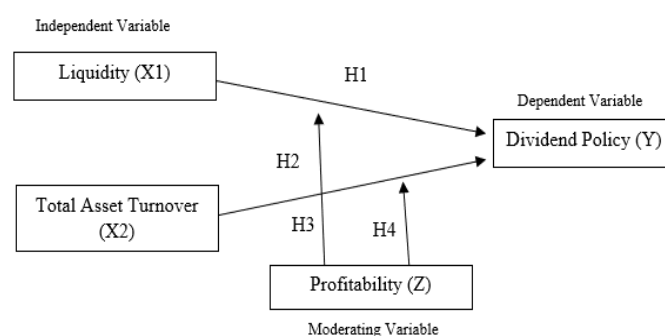


Figure 1. Research Framework

The hypothesis of this research is formulated as follows:

H1: Cash ratio has a significant positive effect on Dividend Pay-Out Ratio.

H2: ATO (Asset Turnover) has a significant positive effect on Dividend Pay-Out Ratio.

H3: ROE (Return on Equity) strengthens the influence of cash ratio on Dividend Pay-Out Ratio.

H4: ROE (Return on Equity) strengthens the effect of ATO (Asset Turnover) on Dividend Pay-Out Ratio.

Paper Structure

This study is a quantitative study that uses secondary data based on financial statements listed on the Indonesia Stock Exchange (IDX). The subjects in this study are manufacturing firms listed on the Indonesia Stock Exchange (IDX) in 2018-2020. Purposive sampling was used as a sample selection technique. The object of this research consists of 2 independent variables, namely cash ratio (X1) and ATO (asset turnover) (X2). The dependent variable is dividend pay out ratio (Y). The moderating variable is ROE (return on equity) (Z). The criteria in this study include: (a) Manufacturing firms listed on the IDX in 2018-2020, (b) Firms that distribute dividends consecutively in 2018-2020, (c) Firms that present financial statements as of December 31 (d)) Firms that present financial statements in IDR currency, (e) Firms that earn consecutive profits in 2018-2020, (f) Firms that do not conduct Initial Public Offering (IPO) during the period 2018-2020.

2. RESEARCH METHOD

In this study using descriptive statistical tests, such as Chow Test, Hausman Test, and t-Test.

The operational variables and measurements used in this study are:

Table 1. Operational and Measurement Variables

Variable	Measurement	Scale
<i>Cash Ratio</i>	$\text{Cash Ratio} = \frac{\text{Cash and Cash Equivalents}}{\text{Current Debt}}$	Ratio
<i>ATO (Asset Turnover)</i>	$\text{Total Asset Turnover} = \frac{\text{Net Sales}}{\text{Total Asset}}$	Ratio
<i>ROE (Return on Equity)</i>	$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Total Equity}}$	Ratio
<i>Dividend Pay-Out Ratio</i>	$\text{Dividend Payout Ratio} = \frac{\text{Dividend per share}}{\text{Earning per share}}$	Ratio

3. RESULTS AND DISCUSSIONS

Descriptive Statistics

The results of the descriptive statistical test show that cash ratio (X1) states the mean value of 1.071592. The median value is 0.554600, max value is 6.635400, minvalue is 0.006400. The STD value is 1.342221. ATO (asset turnover) (X2) has a mean value of 1.054048. The median value is 0.966900 , max value is 3.104800. Min value is 0.300100 STD is 0.500124. ROE (return on equity) (Z) has a mean value of 0.135614. The median value is 0. Maximum value Minvalue in is 0.000600 The STD value is 0.87740. Dividend pay out ratio (Y) has a mean value of 0.544932. The median value is 0.393900. Max value is 3.949600. Min value is 0.0198. The STD value is 0.533126.

Chow Test

The results of the Chow test in this study before and after moderation showed the value of Prob. cross-section Chi-square 0.0000 (< 0.05), which means that H_a is accepted. It is concluded that the most appropriate model to be used in this study is the Fixed Effect Model (FEM).

Hausman Test

Hausman test results in this study before and after moderation showed the value of Prob. random cross-section 0.0000 (< 0.05), which means that H_a is accepted. It is concluded that the most appropriate model to be used in this study is the Fixed Effect Model (FEM).

t- Test Results

The following are the test results using the Fixed Effect Model

Table 2. Fixed Effect Model Test Results (Before Moderation)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.578013	0.311313	5.068893	0.0000
X1_CASH	-0.013562	0.071813	-0.188846	0.8507
X2_TATO	-0.217618	0.277094	-0.785357	0.4347
Z_ROE	-5.819237	1.071434	-5.431259	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.676125	Mean dependent var	0.544932	
Adjusted R-squared	0.499074	S.D. dependent var	0.533126	
S.E. of regression	0.377326	Akaike info criterion	1.161848	
Sum squared resid	10.67811	Schwarz criterion	2.153398	
Log likelihood	-25.96811	Hannan-Quinn criter.	1.564405	
F-statistic	3.818809	Durbin-Watson stat	2.224325	
Prob(F-statistic)	0.000000			

Source: Data Processed with EViews 12 Software

Table 3. Common Effect Model Test Results (After Moderation)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.199565	0.379299	5.799025	0.0000
X1_CASH	0.001015	0.096939	0.010469	0.9917
X2_TATO	-0.851898	0.340082	-2.504975	0.0145
Z_ROE	-10.58295	2.103506	-5.031099	0.0000
M1	-0.440274	0.547402	-0.804296	0.4238
M2	4.657358	1.572928	2.960948	0.0041
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.713587	Mean dependent var	0.544932	
Adjusted R-squared	0.544878	S.D. dependent var	0.533126	
S.E. of regression	0.359661	Akaike info criterion	1.073115	
Sum squared resid	9.443014	Schwarz criterion	2.111881	
Log likelihood	-18.77723	Hannan-Quinn criter.	1.494841	
F-statistic	4.229688	Durbin-Watson stat	2.267975	
Prob(F-statistic)	0.000000			

Source: Data Processed with EViews 12 Software

The results of the t-test show the probability value of cash ratio is 0.8507 (> 0.05), so it can be concluded that cash ratio has no significant effect on dividend pay out ratio. The coefficient value of cash ratio is -0.013562, indicating a negative direction, so H1 is rejected. Cash ratio has no significant negative effect on dividend pay out ratio. The results of this study are in line with research conducted by Tita & Susanti (2020) [10] and Apriliani & Natalylova (2017) [13] which state that cash ratio has no effect on dividend pay out ratio. However, this result contradicts the research conducted by Winarko (2017) [9]. and Zaman (2018) [14] which states that cash ratio has a significant effect on dividend pay out ratio.

The results of the t test show the probability value of ATO (asset turnover) is 0.4347 (> 0.05), so this value shows that ATO (Asset Turnover) has no significant effect on dividend pay out ratio. The coefficient value of ATO (Asset Turnover) is -0.217618, which indicates a negative direction, so H2 is rejected. ATO (Asset Turnover) has no significant negative effect on dividend pay out ratio. The results of this study are in line with research conducted by Setyaningsih & Yuliana (2020) [12] which states that ATO (Asset Turnover) has no effect on dividend pay out ratio. However, it is not in line with the research conducted by Purnami & Artini (2016) [11] which states that ATO (Asset Turnover) has a significant effect on dividend pay out ratio.

The results of the t test show the probability value of M1 is 0.4238 (> 0.05), so it shows ROE (return on equity) cannot moderate the effect of cash ratio on dividend pay-out ratio. The coefficient value of M1 is -0.440274 which indicates a negative direction, then H3 is rejected. ROE (return on equity) cannot moderate the relationship between cash ratio and dividend pay-out ratio. The results of this study are not in line with the results of research conducted by Nurchaqqi & Suryarini (2018) [6] which states that the ROE (return on equity) variable moderates the relationship between cash ratio and dividend pay-out ratio.

The results of the t test show the probability value of M2 is 0.0041 (< 0.05), so it indicates that ROE (return on equity) is moderating in the relationship between ATO (asset turnover) and dividend pay out ratio. The coefficient value of M2 is 4.657358 which indicates a positive direction, then H4 is accepted. ROE (Return on Equity) can strengthen the relationship between ATO (Asset Turnover) and dividend pay out ratio. The results of this study are in line with the research conducted by Suharmanto, Widiyanti and Taufik (2019) [15] which states that the ROE (return on equity) variable strengthens the cash ratio relationship in dividend pay out ratio.

The multiple determination coefficient test (Adjusted R^2) was tested in order to see how much the independent variable's ability to explain its relationship to the dependent variable was. The results of the multiple determination coefficient test before moderation showed a value of 0.499074. It is concluded that cash ratio, ATO (asset turnover), and ROE (return on equity) have the ability of 49.9074% in explaining their effect on dividend pay-out ratio. Thus, the remaining 50.0926% can be explained by other variables not included in this study. The results of the multiple determination coefficient test after moderation show a value of 0.544878 so that it can be concluded that cash ratio, ATO (asset turnover), and ROE (return on equity) have the ability of 54.4878% in explaining their effect on dividend pay-out ratio. The rest, amounting to 45.5122% can be explained by other variables that are not included in this study.

4. CONCLUSIONS, LIMITATIONS, AND SUGGESTIONS

The conclusions in this study are: 1) Cash ratio and ATO (asset turnover) have an insignificant negative effect on dividend pay-out ratio; 2) ROE (return on equity) cannot moderate cash ratio on dividend pay-out ratio; 3) However, ROE (return on equity) can moderate ATO (asset turnover) on dividend pay-out ratio. This study can also analyze the factors that influence firm performance in increasing dividend pay-out ratio so that investors are interested in investing.

Limitations in this study: (1) The period under study is relatively short, i.e. within 3 years, so that we only know the conditions during that period. (2) The research subjects are limited to manufacturing firms listed on the Indonesia Stock Exchange. (3) The limitation of this study is that the independent variables are limited to 2, namely the cash ratio variable and ATO (asset turnover), the dependent variable is dividend pay out ratio, and the ROE (return on equity) moderating variable. (4) The measuring instrument in this study is limited by certain proxies, namely cash ratio, ATO (asset turnover), dividend payout ratio, and return on equity.

Suggestions that can be conveyed in this study are: (1) Adding a research period so that it is more up to date in order to produce research that shows its current condition. (2) Changing or adding independent variables outside of this study in order to determine the effect of other variables on dividend pay out ratio. (3) Changing the proxy in each variable, so that the research can be more accurate. (4) Expanding research subjects by adding other sectors (such as banking sector, real estate sector, etc.) listed on the Indonesia Stock Exchange.

ACKNOWLEDGEMENT

This study was supported by The Faculty of Economics and Business, Universitas Tarumanagara, Jakarta – Indonesia, and The Indonesia Stock Exchange (IDX).

REFERENCES

- [1] Halim, A., & Hastuti, R. (2019). Faktor-Faktor yang Mempengaruhi Kebijakan Dividen pada Perusahaan Manufaktur Periode 2015-2017. *Jurnal Multiparadigma Akuntansi*, Volume 1 No. 2, 263-272. <https://doi.org/10.24912/jpa.v1i2.4695>
- [2] Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, Vol. 87, No.3 pp. 355-374. <http://links.jstor.org/sici?sici=0033-5533%28197308%2987%3A3%3C355%3AJMS%3E2.0.CO%3B2-3>
- [3] Bunker, R., Cagle, C., & Harris, D. (2019). A Cash ratio Ratio Analysis of Lean vs Not-Lean Operations. *Management Accounting Quaterly*, Vol. 20, No. 2. <https://www.proquest.com/docview/2276832395?pq-origsite=gscholar&fromopenview=true>
- [4] Setyaningsih, I., & Yuliana, I. (2020). ATO (asset turnover) against Dividend Payout Ratio: The Role of Return on Asset Mediation. *Jurnal Manajemen Indonesia*, 20(3), ISSN: 2502-3713, 206-214. <https://doi.org/10.25124/jmi.v20i3.3517>
- [5] Firdaus, I., & Handayani, P. (2019). Pengaruh DER, TATO, dan NPM terhadap Kebijakan Dividen (Studi Kasus Pada Industri Dasar dan Kimia yang Terdaftar di Bursa Efek Indonesia (BEI) Tahun 2012-2016. *JAAF (Journal of Applied Accounting and Finance)*, 3(1), 71-84. <http://dx.doi.org/10.33021/jaaf.v3i1.679>

- [6] Nurchaqqi, R., & Suryarini, T. (2018). The Effect of Leverage and Cash ratio on Cash Dividend pay out ratio with ROE (return on equity) as Moderator Moderating. *Accounting Analysis Journal* 7(1), 10-16. <https://doi.org/10.15294/aaj.v7i1.18631>
- [7] Ginting, S. (2018). Pengaruh Likuiditas, Profitabilitas dan Leverage terhadap Kebijakan Dividen pada Perusahaan LQ45 yang Terdaftar di Bursa Efek Indonesia Periode 2012-2016. *Jwem Stie Miroskil*, 8(2), 195-204. DOI: <https://doi.org/10.55601/jwem.v8i2.564>
- [8] Wahjudi, E. (2018). Factors Affecting Dividend pay out ratio in Manufacturing Firms in Indonesia Stock Exchange. *Journal of Management Development*, Vol. 39 No. 1, pp. 3-17, DOI 10.1108/JMD-07-2018-0211. <https://doi.org/10.1108/JMD-07-2018-0211>
- [9] Winarko, S. (2017). Pengaruh Cash Ratio, Debt To Equity Ratio, Return On Asset dan Tax Rate terhadap Dividend Payout Ratio pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia. *Jurnal Akuntansi & Ekonomi FE. UN PGRI Kediri*, Vol. 2 No.1, ISSN: 2541-0180. <https://doi.org/10.29407/jae.v2i1.603>
- [10] Tita, & Susanti, M. (2020). Faktor-Faktor yang Mempengaruhi Kebijakan Dividen pada Perusahaan Non Keuangan. *Jurnal Multiparadigma Akuntansi Tarumanagara*, Vol. 2, 1425-1434. <https://doi.org/10.24912/jpa.v2i4.9320>
- [11] Purnami, K., & Artini, L. (2016). Pengaruh Investment Opportunity Set, Total Asset Turn Over dan Sales Growth terhadap Kebijakan Dividen. *E-Jurnal Manajemen Unud*, Vol. 5, No. 2, 1309-1337, ISSN: 2302-8912. <https://media.neliti.com/media/publications/254283-none-9b04f4a0.pdf>
- [12] Setyaningsih, I., & Yuliana, I. (2020). ATO (asset turnover) against Dividend Payout Ratio: The Role of Return on Asset Mediation. *Jurnal Manajemen Indonesia*, 20(3), ISSN: 2502-3713, 206-214. <https://doi.org/10.25124/jmi.v20i3.3517>
- [13] Apriliani, A., & Natalylova, K. (2017). Faktor-Faktor yang Mempengaruhi Kebijakan Dividen pada Perusahaan Manufaktur di Bursa Efek Indonesia. *Jurnal Bisnis Akuntansi*, Vol. 19, No. 1a, Issue 1, 49-57. <https://doi.org/10.34208/jba.v19i1a-1.177>
- [14] Zaman, D. (2018). Effect of Financial Perfomance on Dividend pay out ratio in Manufacturing Firms in Indonesia Stock Exchange. *IJBE: Integrated Journal of Business and Economics*, e-ISSN: 2549-3280. <https://ojs.ijbe-research.com/index.php/IJBE/article/view/58>
- [15] Suharmanto, A., Widiyanti, H., & Taufik, H. (2019). Analysis of Financial Performance and Opportunity of Investment on Dividend pay out ratio with ROE (return on equity) As Moderating Variable in LQ45 Corporate Listed In Indoenesia Stock Exchange. *International Journal of Scientific Research and Engineering Development*, Vol 2 Issue 1. <https://www.semanticscholar.org/paper/Analysis-of-Financial-Performance-and-Opportunity-Suharmanto-Widiyanti/b1e3562f5aad77ae02d2ab498072d9576b481646>