



The Influence of Profitability and Solvency on Stock Prices with Dividend Policy as a Moderating Variable in Food and Beverage Sector Companies on the Indonesian Stock Exchange 2020-2022

Jose Andrian Tandry; Denny Wahyudi Nasution; Novandi Nasty Sandya; Immanuel Makarios Juliala, Jenni Citra Kartika; Kartika Alvianty Aziz; Namira Ufrida Rahmi

Universitas Prima Indonesia, Medan, Indonesia

E-mail: namiraufridarahmi@unprimdn.ac.id

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Abstract

This research aims to analyze the influence of profitability and solvency on share prices with the dividend policy variable as a moderating variable in Food and Beverage sector companies listed on the Indonesia Stock Exchange during the 2020-2022 period. Currently, unstable economic conditions have changed the behavior of investors, who have become more careful in allocating their capital. Share prices are considered a reflection of company value and are a major concern for investors. The food and beverage sector in Indonesia offers attractive investment potential due to increasing demand and products that compete in the global market. Data analysis in this research involves food and beverage companies listed on the IDX during the 2020-2022 period. PLS analysis technique- Structural Equation Modeling (SEM) with the help of the SmartPLS 3 application. Research findings show that profitability, as measured by Return on Assets (ROA), and solvency, as measured by the Debt to Equity Ratio (DER), do not have a significant influence on price changes share. Apart from that, dividend policy also does not have a significant impact on share prices. Furthermore, it was found that dividend policy did not significantly influence the relationship between ROA and share prices, but there was limited moderation in the relationship between DER and share prices.

Keywords: *Profitability; Solvency; Devidend Policy; Share Prices*

Introduction

Changes in the current economic situation have had a significant impact on the business world, including investors who are more careful in allocating capital to companies that have gone public. The instability of economic conditions causes investors to consider that investing in the stock market carries higher risks. This also has an impact on companies listed on the Indonesian Stock Exchange.

Share prices reflect the value of a company. Assessing share prices is very important for investors before investing because shares are a type of investment that benefits investors. Share price movements cannot be separated from the strength of demand and supply for these shares. If demand is greater than supply, it will cause share prices to rise, and vice versa if supply is greater than demand, it will cause share prices to fall. For investors, share value has an important role as an accurate indicator for evaluating company performance and providing valuable insight before deciding to invest in a business entity (Habsari & Akhmadi, 2018).

The potential for the food and beverage sector in Indonesia has the potential to become superior, because of its abundant supply and consumers. A variety of food and beverage products from Indonesia have succeeded in building a competitive reputation in the global market, thanks to the wide variety they offer. Fierce competition exists between various companies operating in the food and beverage industry sector, all vying to push their business forward. This condition has a positive impact on potential investors, who can consider these companies as investment options on the stock exchange. Currently, the capital market is one of the best options for allocating funds productively, apart from through the banking sector.

Factors that influence changes in stock prices consist of external factors and internal factors. External factors include risks that are beyond management's control, such as a country's macroeconomic policies. On the other hand, internal factors include microeconomic aspects contained within the company itself. Movements that occur in the value of company shares can be investigated by utilizing fundamental analysis methods through evaluating financial reports (Fathihani, 2020). Fundamental factors focus on keywords in financial reports to calculate whether share prices have been appreciated accurately. One of the fundamental analyzes that fundamental analysts often use in selecting shares is the net profit ratio. The higher the level of company profitability, the higher the value of the company's share price (Surgawati et al., 2019). If return on assets (ROA) increases, then share prices will also increase (Zakaria, 2021). However, researchers Ardiyanto et al., (2020) stated that Return On Assets (ROA) has no effect on stock prices.

Solvency reflects the extent to which a company uses funding through debt. Kasmir (2018:157) Debt to Equity Ratio (DER) is a ratio used to assess debt versus equity. When a company can manage debt effectively to expand its operations, so that the profits generated exceed interest costs and principal obligations, the company can achieve significant profits. This has the potential to influence the increase in the value of the company's shares. Researcher Kartikasari (2019) stated that DER or changes in debt will influence changes in share prices. However, researchers (Aryanti & Jayanti, 2020) stated that the higher the debt to equity ratio, the lower the company's share price.

Apart from analyzing fundamental factors through financial ratios, investors also often consider the dividend policy of the company they are considering. This is because apart from seeking an optimal rate of return through capital gains, investors' main goal in investing in the capital market is to obtain dividends from the company in which they invest their capital. Dividend policy provides an overview of a company's performance and performance, so each company has a unique approach when it comes to paying their dividends. Dividend policy is related to determining the size of the dividend payout ratio.

Taking inspiration from previous phenomena and studies, researchers are interested in proving that one measure of profitability and solvency, namely Return on Assets (ROA) and Debt to Total Equity Ratio (DER), has the ability to influence changes in stock prices. This is also done by considering the company's dividend policy as a variable that has a role in moderating this influence on food and beverage companies listed on the IDX in 2020-2022.

Literature Review

According to Pirmatua Sirait (2017:139), the definition of profitability is as follows: "Profitability or the company's ability to obtain comprehensive profits, converting sales into profits and cash flow." In this research, ROA is used as a probability proxy to see the extent to which the company's assets can generate profits. The higher the return on assets, the higher the share price (Krisna Yudha et al., 2022) (Pramudya et al., 2022) (Dewi & Suwarno, 2022)(Setyaningsih & Alliyah, 2023).

According to Kasmir (2018:151) The solvency ratio refers to the long-term ability to fulfill ongoing debt obligations. This reflects how much debt the company must bear compared to the total value of its equity. This research uses DER as a proxy for solvency. Researcher Kartikasari (2019) stated that DER or changes in debt will influence changes in share prices.

According to Halim (2015: 18) dividends are the distribution of results or profits carried out by a company to shareholders based on the profits obtained by the company. According to Agus Sartono (2010:282), dividend policy includes accessible investment options, the availability and cost of alternative capital, and the tendency of shareholders to receive income either now or in the future. In this research, the Dividend Payout Ratio (DPR) is used as a proxy for dividend policy. A high DPR makes a company's shares more attractive. Many investors are interested in investing in these companies because they expect large dividend income, resulting in an increase in share prices (Levina & Dermawan, 2019).

Return On Assets (ROA) is a profitability indicator that reflects how efficient the company's operations are. The company's operational efficiency has an impact on asset management and the profits from operations are the basis for providing dividends to investors. If the ROA generated is high, then the profits obtained will also be high, which means the company will provide large dividends to investors (Meidawati et al., 2020). A dividend policy that tends to be high will have the potential to increase the rate of return on assets (ROA) and become an attraction for investors to invest.

It is important to remember that paying interest to creditors on a company's borrowed capital must be a top priority before profits can be distributed to shareholders, which is also known as the dividend payout ratio. Because this obligation has a higher priority level than dividend distribution, this may result in a reduction in the amount of dividends available to provide to investors. As part of investment considerations, investors take into account both returns in the form of capital gains and dividends. When a company experiences a decrease in its dividend payout ratio due to a high DER, investors' interest in investing in the company also decreases, which has the potential to result in a decrease in share value. Researchers Yuantoro & Andayani (2021) stated that the Debt to Equity Ratio (DER) was able to moderate the dividend payout ratio (DPR) on share prices.

Methodology

Researchers conducted research by analyzing the subsector industry of food and beverage companies that are listed on the Indonesia Stock Exchange with data observations carried out through the official website of the PT Indonesia Stock Exchange, namely www.idx.co.id. The population in this research is food and beverage sub-sector companies listed on the Indonesia Stock Exchange for the 2020-2022 period. Sampling in research used a purposive sampling method. The purposive sampling method is sampling with certain considerations and criteria, to be used for research purposes or purposes. The criteria used are as follows:

1. Food and beverage sector companies listed on the Indonesia Stock Exchange in the 2020-2022 period.
2. Food and beverage sector companies that publish complete and consecutive financial reports for the 2020-2022 period, sample companies completely attach all the ratios used in this research.
3. Food and beverage sector companies that earn profits and distribute dividends consecutively for the 2020-2022 period.

Based on the sampling criteria as mentioned above, the number of samples used in this research was 11 companies. In this research, the Moderated Regression Analysis (MRA) method was used to analyze the influence of the moderator variable on the relationship between the independent variable and the dependent variable. The Moderated Regression Analysis (MRA) method is a regression model that uses moderator variables. Moderating variables are variables that will strengthen or weaken the relationship between the independent variable and the dependent variable.

Results and Discussion

Data analysis in this research uses the Structural Equation Modeling (SEM) method with the help of the Smart PLS version 3 statistical tool. The analysis method using Partial Least Square (PLS) is intended to confirm the theory, as well as test whether or not there is a relationship between latent variables. The following shows the output of the structural equation path diagram as follows:

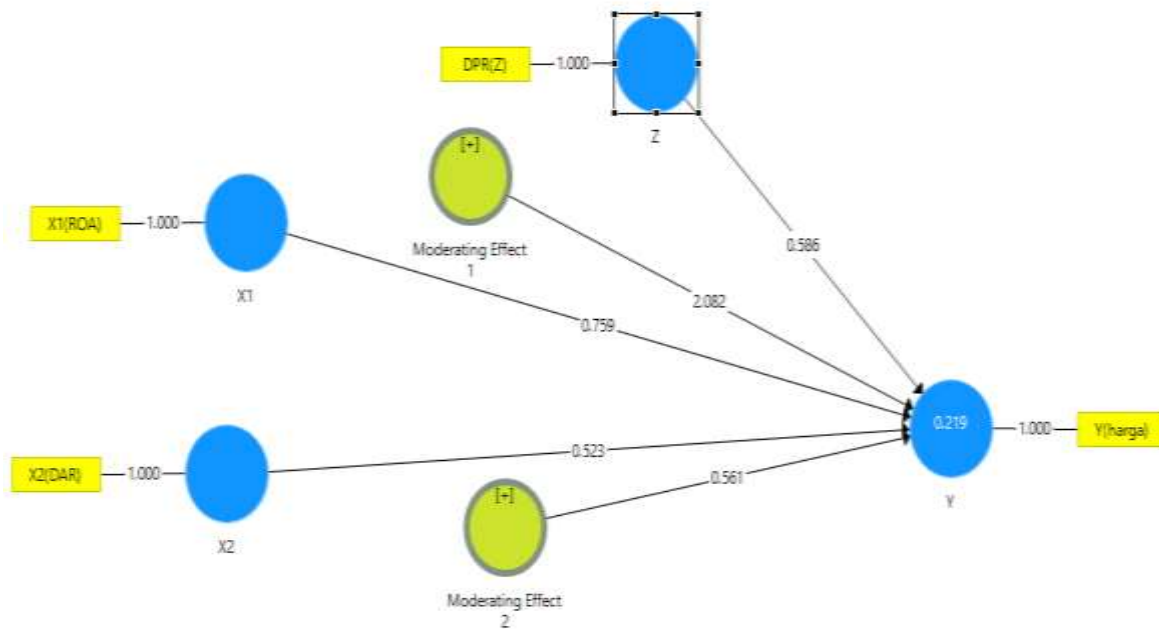


Figure 1. Model Path Diagram

Based on Figure 1 of the Full Model Path Diagram above, it can be seen that all variable indicators have a loading value (λ) $>$ 0.5, this indicates that all variable indicators are valid and significant. The following is presented in detail for each factor loading value in the following table:

Tabel 1. The outer loading

	Moderating Effect 1	Moderating Effect 2	X1	X2	Y	Z_Moderasi
DPR(Z)						1.000
X1 * Z	0.708					
X1(ROA)			1.000			
X2 * Z		1.016				
X2(DAR)				1.000		
Y(harga)					1.000	

Source: output Smartpls, 2023

Based on table 1 above, it shows that the outer loading value of the variables and each proxy is above the loading value (λ) 0.5 (loading value (λ) > 0.5), which means that all variables and their respective indicators have met the requirements which is determined. Next, the Construct Reliability and Validity Test is carried out as in the following table:

Tabel 2. The construct reliability and validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)	Keterangan
Moderating Effect 1	1.000	1.000	1.000	1.000	Reliabel dan Valid
Moderating Effect 2	1.000	1.000	1.000	1.000	Reliabel dan Valid
X1	1.000	1.000	1.000	1.000	Reliabel dan Valid
X2	1.000	1.000	1.000	1.000	Reliabel dan Valid
Y	1.000	1.000	1.000	1.000	Reliabel dan Valid
Z	1.000	1.000	1.000	1.000	Reliabel dan Valid

Source: output Smartpls, 2023

Based on table 2 above, it shows that the construct reliability and validity values of all research variables are > 0.5, so it can be said that all variables are declared valid and reliable. The research hypothesis was tested using the t test with a critical t-value of 2.036. The following is a summary of hypothesis testing through the output of data processing results with the help of the SmartPLS application, namely:

Table 3. Path coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Moderating Effect 1 -> Y	2.082	1.367	2.128	0.978	0.328
Moderating Effect 2 -> Y	0.561	0.555	0.747	0.752	0.453
X1 -> Y	0.759	0.525	0.857	0.886	0.376
X2 -> Y	0.523	0.511	0.337	1.551	0.122
Z -> Y	0.586	0.194	1.062	0.551	0.582

Source: output SmartPls, 2023

Based on table 3 above, it can be explained the influence of the ROA and DER variables on the Stock Price variable, the influence of the Dividend Policy variable in moderating the relationship between the independent variable and the dependent variable. Based on decision making criteria which refer to the

t test, namely comparing the t-count (t-statistics) with the critical t-value with the assumption: If the t-count (t-statistics) > 2.036 or P-Value < 0.05 , then It can be concluded that there is a real (significant) influence between the independent variable and the dependent variable. On the other hand, if t-statistics < 2.036 or P-Value > 0.05 then it can be concluded that there is no real (significant) influence between the independent variable and the dependent variable. Based on the Path Coefficient table, taking into account the decision making criteria mentioned above, the relationship between each variable in this research can be described as follows:

- a. In the path coefficient table above, there is information that the Original Sample value of the relationship between ROA and Share Prices is 0.759 with a t-statistics value of $0.886 < 2.036$ at a p-value level of $0.376 > 0.05$, it can be concluded that ROA does not have a significant effect on share prices in Beverage and Food Sector companies on the Indonesian Stock Exchange
- b. In the path coefficient table above, there is information that the Original Sample value of the relationship between DER and Share Prices is 0.523 with a t-statistics value of $1.551 < 2.036$ at a p-value level of $0.122 > 0.05$, it can be concluded that DER does not have a significant effect on share prices in Beverage and Food Sector companies on the Indonesian Stock Exchange
- c. In the path coefficient table above, there is information that the Original Sample value of the relationship between DPR and Share Prices is 0.586 with a t-statistics value of $0.551 < 2.036$ at a p-value level of $0.582 > 0.05$, it can be concluded that DPR does not have a significant effect on share prices in Beverage and Food Sector companies on the Indonesian Stock Exchange
- d. In the path coefficient table above, there is information that the Original Sample value of the DPR moderation relationship on ROA on Share Prices is 2.082 with a t-statistics value of $0.978 < 2.036$ at a p-value level of $0.328 > 0.05$, this can be It is concluded that DPR strengthens the influence of ROA but is not significant on share prices in Beverage and Food Sector companies on the Indonesian Stock Exchange
- e. In the path coefficient table above, there is information that the Original Sample value of the DPR moderation relationship on DER on Share Prices is 0.561 with a t-statistics value of $0.752 < 2.036$ at a p-value level of $0.453 > 0.05$, this can be It is concluded that DPR strengthens the influence of DER on share prices but is not significant for Beverage and Food Sector companies on the Indonesian Stock Exchange

Based on the results of previous data analysis, information was obtained that ROA has no effect on share prices. The lack of influence of return on assets on stock prices can be explained by several deeper reasons. First of all, return on assets (ROA) is a measure of efficiency in using company assets to generate profits. Although ROA provides important insight into the extent to which a company is able to manage its assets, it does not always influence investors' perceptions of the future prospects and intrinsic value of the stock. Return on Assets only reflects the company's internal capabilities, while share value can be influenced by external variables such as the market situation and inflation rate (Pangaribuan & Suryono, 2019). The results of this research are in line with research conducted by Ardiyanto et al. (2020) which states that Return On Assets (ROA) has no effect on share prices. Meanwhile, the results of this research are different from the results of research conducted by Pramudya et al., (2022) and Imelda et al., (2022) which stated that Return On Assets (ROA) has an effect on stock prices.

Based on the results of the tests that have been carried out, it turns out that DER has no impact on share prices. This can also mean that the DER level, whether high or low, has no influence on share price fluctuations. The results of this test also show that the DER level does not play a significant role in an investor's decision to buy shares. The results of this research are in line with research conducted by (Zakaria, 2021) which states that Debt to Equity (DER) has no effect on stock prices. Meanwhile, the results of this research are different from the results of research conducted by (Kartikasari, 2019) stating that Debt to Equity (DER) has an effect on stock prices.

Based on the results of the tests that have been carried out, it turns out that DPR has no impact on share prices. This could be caused by investors' focus on other factors or different company financial strategies, such as reinvestment for growth or allocation of funds to strategic projects. External factors can also influence stock prices more strongly than dividend policy. This research is in line with researchers Latifah & Suryani (2020) and Levina & Dermawan (2019) who state that dividend policy has no effect on share prices. Meanwhile, the results of this research are different from the results of research conducted by (Samosir et al., 2019) and (Aryanti & Jayanti, 2020) stating that the Dividend Payout Ratio (DPR) has an effect on stock prices.

The research results show that dividend policy does not have a significant impact in moderating the relationship between Return on Assets (ROA) and share prices. These findings suggest that investors are more likely to assess company value from the perspective of growth and operational performance rather than dividend distribution policy alone. This indicates that the company's strategy regarding reinvestment of profits or dividend payments is not always the main determining factor in determining how ROA affects share prices. This is in line with researchers Aryanti & Jayanti (2020) and Yuantoro & Andayani (2021) who state that dividend policy does not moderate profitability on share prices.

The research results show that dividend policy plays a role in moderating the relationship between Debt to Equity Ratio (DER) and stock prices. Although these findings are positive, it is important to remember that the impact is not significant. This indicates that while dividend policy may have an influence in managing DER and result in certain effects on share prices, there are other factors that also contribute. There may be additional variables to consider or there may be market dynamics that play an important role in determining the value of a company's shares. Thus, while understanding the important role of dividend policy, researchers are also reminded to consider and identify other elements that can influence the balance between DER and stock prices in a comprehensive manner. This is in line with researchers (Aryanti & Jayanti, 2020) who stated that the dividend payout ratio is a moderating variable of the influence of the debt to equity ratio on stock prices but is not significant.

Based on the results of the research that has been carried out, it is concluded that profitability and solvency do not have a significant effect on share prices. Dividend policy can moderate, in this case strengthening the influence of profitability and solvency on share prices, but it is not significant. Based on the results of the analysis and research conducted by the author, there are several limitations, namely that many companies do not distribute dividends and experience losses, thereby reducing the research sample. For further research, it is hoped that other research objects will be used to find out the factors that influence share prices other than food and beverage sector companies. For further research, you can also use measurements of other variables from the research model that has been used in this research. For example, the profitability variable uses the Ratio on Equity (ROE), as well as adding other variables such as institutional ownership, corporate social responsibility, GCG, and so on.

References

- Agus Sartono. (2010). *Financial Management Theory and Application*. Edition 4. Yogyakarta: BPFE.
- Ardiyanto, A., Wahdi, N., & Santoso, A. (2020). Pengaruh Return on Assets, Return on Equity, Earning Per Share Dan Price To Book Value Terhadap Harga Saham. *Jurnal Bisnis & Akuntansi Unsuraya*, 5(1), 33–49. <https://doi.org/10.35968/jbau.v5i1.377>.

- Aryanti, & Jayanti, S. D. (2020). the influence of profitability and leverage on stock prices with dividend policy as a moderating variable in manufacturing companies listed on the Indonesian sharia stock index in 2014-2018. *I-FINANCE: A Research Journal on Islamic Finance*, 06(02), 148–167.
- Dewi, N. S., & Suwarno, A. E. (2022). THE INFLUENCE OF ROA, ROE, EPS AND DER ON COMPANY STOCK PRICES (Empirical Study of LQ45 Companies Listed on the Indonesia Stock Exchange 2016-2020). *National Tourism and Entrepreneurship Seminar (SNPK)*, 1, 472–482. <https://doi.org/10.36441/snpk.vol1.2022.77>.
- Fathihani. (2020). EFFECT OF NPM, EPS, ROE, AND PBV ON STOCK PRICES. *Dinasti International Journal of Management Science*, 1(6), 893–902. <https://doi.org/10.31933/DIJMS>.
- Habsari, A., & Akhmadi. (2018). Company Size, Profitability and Company Value. *Tirtayasa Ekonomi*, 13(2), 300–319.
- Halim. (2015). *Business Financial Management*. Bogor: Ghalia Indonesia.
- Imelda, A., Angelica Cindiyasari Sihono, S., & Riski Anggarini, D. (2022). The Influence of Liquidity, Profitability and Market Ratios on Share Prices (Case Study of Lq45 Index Companies Listed on the Indonesian Stock Exchange for the 2017-2021 Period). *Journal of Economic and Business Research*, 2(2), 17–25. <http://jurnal.teknokrat.ac.id/index.php/JEB>.
- Kartikasari, U. (2019). The Influence of Debt To Equity Ratio, Current Ratio and Return on Assets on Share Prices of Infrastructure Companies Listed on the Indonesian Stock Exchange for the 2008-2017 Period. *MANNERS*, II(1), 41–50.
- Krisna Yudha, C., I Gusti Ayu Ratih Permata Dewi, & I Gusti Agung Ayu Kartika Dewi. (2022). The Influence of ROA on Share Prices with Price To Book Value as a Mediating Variable for LQ45 Index Companies on the IDX. *Artha Satya Dharma*, 15(1), 84–90. <https://doi.org/10.55822/asd.v15i1.243>.
- Latifah, H. C., & Suryani, A. W. (2020). The influence of dividend policy, debt policy, profitability and liquidity on stock prices. *Jurnal Akuntansi Aktual*, 7(1), 31–44. <https://doi.org/10.17977/um004v7i12020p31>.
- Levina, S., & Dermawan, E. S. (2019). Pengaruh Profitabilitas, Likuiditas, Solvabilitas, Aktivitas, Dan Kebijakan Dividen Terhadap Harga Saham. *Jurnal Paradigma Akuntansi*, 1(2), 381. <https://doi.org/10.24912/jpa.v1i2.5100>.
- Meidawati, N., Nurfauziya, A., & Chasanah, U. (2020). Analisis Faktor – Faktor Yang Mempengaruhi Kebijakan Dividen. *Nominal: Barometer Riset Akuntansi Dan Manajemen*, 9(2), 310–327. <https://doi.org/10.52160/ejmm.v3i11.294>.
- Pangaribuan, A. A., & Suryono, B. (2019). Pengaruh ROA, ROE, dan EPS Terhadap Harga Saham Perusahaan Transporasi di BEI. *Jurnal Ilmu Dan Riset Akuntansi*, 8(5), 1–15.
- Pramudya, W. H., Herutono, S., & Kapti, A. S. M. K. (2022). Profitabilitas, Harga Saham dan Ukuran Perusahaan Sebagai Variabel Moderasi. *E-Jurnal Akuntansi*, 32(7), 1853. <https://doi.org/10.24843/eja.2022.v32.i07.p14>.

- Samosir, H., Simorangkir, E. N., Stephanus, A., Ginting, K., Banjarnahor, Y., & Sitepu, M. (2019). Pengaruh Current Ratio (CR), Net Profit Margin (NPM), dan Kebijakan Dividen terhadap Harga Saham pada Perusahaan Consumer Goods Yang Terdaftar Di Bursa Efek Indonesia (BEI) Pada Periode 2013-2017. *Owner*, 3(2), 30. <https://doi.org/10.33395/owner.v3i2.120>.
- Setyaningsih, A. N., & Alliyah, S. (2023). Pengaruh Struktur Modal , Profitabilitas dan Ukuran Perusahaan Pendahuluan Kajian Teori. *Jurnal Akuntansi Dan Keuangan Kontemporer (JAKK)*, 6(1), 87–94.
- Surgawati, I., Munawar, A. H., & Rahmani, D. A. (2019). FIRM SIZE MEMODERASI PENGARUH RETURN ON EQUITY TERHADAP HARGA SAHAM (Survey pada Sektor Food and Beverage yang Listing di Bursa Efek Indonesia). *Jurnal Ekonomi Manajemen*, 5(1), 41–50. <https://doi.org/10.37058/jem.v5i1.854>.
- Yuantoro, A., & Andayani, S. (2021). PENGARUH EPS, ROE, DER TERHADAP HARGA SAHAM DENGAN DPR SEBAGAI VARIABEL MODERASI Ardika. *Jurnal Riset Terapan Akuntansi*, 5(2), 10–21. <https://jurnal.polsri.ac.id/index.php/jrtap/article/view/3366>.
- Yuliana, & Hastuti, R. T. (2020). Pengaruh Der, Roe, Roa, Npm, Dan Eps Terhadap Harga Saham Perusahaan Manufaktur. *Jurnal Paradigma Akuntansi*, 2(4), 1568–1577. <https://doi.org/10.24912/jpa.v2i4.9334>.
- Zakaria, M. (2021). Analisis Pengaruh Debt to Equity Ratio (DER), Return On Asset (ROA) dan Earning Per Share (EPS) terhadap Harga Saham melalui Kebijakan Dividen sebagai Variabel Intervening (Studi pada Perusahaan Manufaktur Sektor Industri Barang Konsumsi yang Terdaftar di. *Business Management Analysis Journal (BMAJ)*, 4(1), 75–96. <https://doi.org/10.24176/bmaj.v4i1.5828>.

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