The Moderating Role of Probability on The Effect of Capital Structure, Earning Per Share and Environment, Social And Governance on Stock Prices

Angelina Putu Krishna Adinda, Yoosita Aulia*, Nurhayati

University of Dr. Soetomo, Surabaya, Indonesia
**Corresponding author. Email: yoosita.aulia@unitomo.ac.id*

ABSTRACT
This study aims to analyze the moderating role of probability on the effect of capital structure, earning per share and environment, social and governance on stock prices in state-owned banking companies listed on the Indonesian Stock Exchange. The sample selection used saturated sampling technique. The research sample consisted of 4 companies with 8 years of observation so that 32 data were obtained. The method of testing the hypothesis in this study uses a panel data regression model with Fixed Effect Model approach and for testing the moderated variable using the Moderated Regression Analysis (MRA) model. The data analysis of the two models uses Eviews version 12 program. The result of this study show that capilat structure (DER), earning per share (EPS) and environment, social and governance (ESG) don't have a significant effect on stock prices. And probability (ROE) is unable to moderate the effect of capital structure, earning per share and environment, social and governance on stock prices on stock prices of state-owned banking companies listed on the Indonesian Stock Exchange.

Keywords: *Capital Structure, Earning Per Share And Environment, Social And Governance, Stock Prices, Probability, Panel Data, Moderated Regression Analysis, Eviews.*

1. INTRODUCTION

In this modern era, investment has become a common activity among Indonesian people. Many choose to invest through various instruments such as opening a bank account or investing in gold to gain profits. However, one of the most common investment choices is shares, which is often done through the capital market in Indonesia known as the Indonesian Stock Exchange (BEI). The capital market provides opportunities for companies that want to go public and investors who want to invest, offering benefits in the form of capital gains and dividends for investors. State-owned banking companies in particular are the focus of this research because they are the main choice for investors, with their rapid growth and strategic role in supporting the interests of society. The importance of bank performance and health because this affects the company's reputation in the eyes of investors. Bank financial analysis starts from financial report data to provide accurate market information, assist investors in making investment decisions by minimizing risks and gaining profits (Novianti, Saiful and Halimatusyadiah, 2018).

The share price is the main indicator in determining investment, which is determined by investors interest in the shares. The Company continues to strive to improve its performance because the better its performance, the more investor interest it will have, which will have an impact on increasing stock prices. Stock prices are considered reasonable if they are not too high or low. The ideal condition is that share price fluctuations tend to increase over time. Statistical data from the Indonesian Stock Exchange shows that the stock prices of state-owned banking companies fluctuate every year, with inconsistent variations in price changes. Stock price fluctuations are influenced by factors such as demand and supply of shares, as well as internal and external factors. Internal factors include company performance, management, and industrial conditions, while external factors include inflation, interest rates, currency exchange rates, and socio-political conditions.

This research focuses on several factors that influence banking stock prices, including capital structure, earnings per share (EPS), environmental social and governance (ESG), and profitability. Capital structure, measured through the Debt to Equity Ratio (DER), influences a company's investment risk because a higher proportion of debt can reduce investor interest. Earning Per Share (EPS), which reflects net income per share, is attractive to investors because it shows the company's ability to provide income to its shareholders. Environment, Social and Governance (ESG), corporate standards that integrate environmental, social and governance aspects, has become an important factor in investment decision making because of its relationship to share price movements. Profitability, measured through return on equity (ROE), also plays an important role because it shows the effectiveness of the company's performance in seeking profits. Profitability is used as a moderating variable to understand its impact on the relationship between independent and dependent variables, as well as to determine its effect on stock prices.

2. LITERATURE REVIEW

2.1 Capital Structure

Capital structure is a description of the form of a company's financial proportions, namely between the capital it owns which comes from long-term debt and its own capital which is the source of financing for a company (Fahmi, 2018:184). In this study, capital structure is proxied by the debt to equity ratio (DER) because it can describe the company's funding sources. If the greater the total debt, the company is at risk of facing bankruptcy. The following is the capital structure measurement formula :

$$\text{DER} = \frac{\textbf{Debt}}{\textbf{Capital}}$$

2.2 Earning Per Share

Earnings per share (EPS) is a financial ratio that investors always use to assess a company's capacity to generate profits. Earnings per share (EPS) shows the company's profit compared to the weighted average number of shares outstanding (Hendrata, 2018:27). If the earnings per share (EPS) results are negative then the company is making a loss and investors will not be interested in investing in the company, and vice versa if the earnings per share (EPS) results are positive then the company is profitable. The formulation of measuring earning per share can be described as follows:

$$\text{EPS} = \frac{\textbf{Net Profit After Tax}}{\textbf{Number of Outstanding Share}}$$

2.3 Environment Social and Governance

Environment, social and governance (ESG) is a company's operating standards through 3 main aspects, namely environment, social and governance, so that not only financial factors are considered in making investment decisions. By implementing environment, social and governance (ESG) in the company's operational activities, investors will be interested in investing. This is because investors believe that there is a reciprocal relationship between investment portfolios and the environment, social and governance. The environment, social and governance (ESG) formula is as follows:

$$\text{ESG } \textit{Scores} = \frac{\textbf{ESG Disclosure Value}}{\textbf{Total Maximum Disclosure}}$$

2.4 Profitabilitas

Profitability is the company's ability to make a profit. If the company has a good ability to generate profits for long-term prospects, it can attract investors' interest in buying shares in the company (Kasmir, 2019:196). Profitability in this research is proxied by return on equity (ROE), because it is considered the most appropriate in analyzing stock prices. return on equity (ROE) provides information about the company's ability to generate profits for them, so that return on equity (ROE) becomes an important measure in encouraging company performance from the perspective of investors and stock investors can assess the company's prospects in the future, as well as can see the growth of company profitability. The return on equity formula is as follows:

$$\text{ROE} = \frac{\textbf{Net Profit}}{\textbf{Equity}}$$

3. RESEARCH METHODS

In compiling this thesis, the research methods used were descriptive and verification methods. In this research the independent variables are capital structure, earnings per share and environmental, social and governance. In this research the dependent variable is stock price. This research also uses a moderating variable, namely profitability. The population in this research is the Financial Reports and Sustainability Reports of BUMN Banking Companies listed on the Indonesia Stock Exchange, totaling 4 companies for the period 2015-2022 (8 years) so the population is 4 x 8 = 32 financial reports and sustainability reports. In this research, the sampling technique used was a saturated sampling technique, so that the samples in this research were all state-owned banking companies listed on the Indonesia Stock Exchange for the 2015-2022 period, totaling 4 companies. The type of data used in this research is quantitative data and the data source in this research is secondary data. The data collection technique used is documentation technique. Hypothesis testing and data analysis in this research include descriptive analysis and verification analysis which includes panel data regression models and Moderated Regression Analysis (MRA). In processing this research data, Eviews 12 and Microsoft Excel 2019 software were used.

4. RESULTS AND DISCUSSIONS

4.1 The Effect of Capital Structure (DER) on Stock Prices

The research results show that capital structure does not have a significant effect on stock prices. This means that the higher the value of the company's capital structure, the implication will be a decrease in investors' interest in buying shares. On the other hand, if the value of the company's capital structure is lower, this will have implications for increasing investor interest in buying shares. The results of this research indicate that capital structure, which reflects the company's financial proportion between its own capital and long-term debt, can be measured by the debt to equity ratio (DER). Debt to equity ratio (DER) shows the company's ability to finance its business with loans, where a high debt to equity ratio indicates the company's focus on paying off debt rather than providing profits to shareholders. However, the debt to equity ratio value does not have a significant effect on the company's share price. This is due to the fact that investors' interest in investing in shares is not only determined by the level of debt, but also by the company's ability to manage its debt.

The results of this research are in line with the research results of Suarka and Wiagustini (2019), Lestari and Suryantini (2019), Akbar and Djawoto (2021) which state that the debt equity to ratio has no effect on stock prices. Meanwhile, the results of this research are different from the research results of Ardiansyah et al., (2020), Khasanah and Suwarti (2022) which show that the debt equity to ratio has an effect on stock prices.

4.2 The Effect of Earning Per Share (EPS) on Stock Prices

The research results show that earning per share (EPS) does not have a significant effect on stock prices. This means that the higher the value of earnings per share (EPS), the higher the company's ability to provide income to its shareholders and vice versa, the lower the value of earnings per share (EPS), the lower the company's ability to provide income to its shareholders. The research results show that earnings per share (EPS) is one of the financial ratios used by investors to assess a company's ability to generate profits. Earnings per share (EPS) measures a company's profit per share outstanding, and a high earnings per share (EPS) value is attractive to investors because it indicates the company's ability to provide better returns. This may be caused by the net profit generated not being proportional to the number of shares outstanding, thus reducing investors' interest in investing and can cause a decline in stock prices.

The results of this research are in line with the research results of Ginsu et al., (2017), Chandra (2021), Ekawati and Yuniati (2020) which state that earnings per share (EPS) does not have a significant effect on stock prices. Meanwhile, the results of this research are different from the research results of Suwarka and Wiagustini, Sari et al., (2022) which stated that earnings per share (EPS) has an effect on stock prices.

4.3 The Effect of Environment, Social and Governance (ESG) on Stock Prices

The research results show that environment, social and governance (ESG) does not have a significant effect on stock prices. This research shows that investors consider environmental social and governance (ESG) in making investment decisions. The higher the environmental social and governance (ESG) value, the higher the share price. Conversely, the lower the environmental social and governance (ESG) value, the lower the share price. The research results show that environmental, social and governance (ESG) is an important factor in making investment decisions besides financial factors. This is because not all investors pay equal attention to environmental, social and governance (ESG), with some focusing more on short-term financial factors. However, environmental, social and governance (ESG) assessment remains an important factor that investors need to consider when making investment decisions.

The results of this research are in line with the research results of Qodary and Tambun (2021), Aditama (2022), Feng et al., (2021) which stated that environmental, social and governance (ESG) does not have a significant effect on stock prices. While the results of this research are different from the results of research by Zuhratun and Triana (2023), Gao et al., (2022) which states that environmental, social and governance (ESG) influences stock prices.

4.4 Profitability Moderation (ROE) on the Effect of Capital Structure (DER) on Stock Prices

The results of the Moderated Regression Analysis (MRA) test in this study show that return on equity (ROE) can't moderate the influence of debt equity to ratio (DER) on stock prices. This is caused by several factors. First, the level of debt does not always influence investors' interest in investing, because investors are more likely to consider the company's ability to utilize its debt efficiently. Second, return on equity (ROE) as a measure of return on investment for shareholders also does not directly determine the effect of debt equity to ratio (DER) on stock prices. Return on equity (ROE) reflects a company's ability to generate profits for shareholders, but is not always the main indicator for investors. Third, although capital structure and profitability can individually influence stock prices, in certain contexts, profitability is not always able to moderate the influence of capital structure on stock prices. This is because if information about these two factors is reflected in stock prices, the direct impact can be reduced. Apart from that, different investor preferences and goals are also determining factors in assessing company performance.

The results of this research are in line with the research results of Fahrozi and Muin (2020), Negara (2022) which stated that return on equity (ROE) was unable to moderate the influence of capital structure (DER) on stock prices. Meanwhile, the results of this research are different from the results of research by Sulia (2018) which states that return on equity (ROE) is able to moderate the influence of capital structure on stock prices.

4.5 Profitability Moderation (ROE) on the Effect of Earning Per Share (EPS) on Stock Prices

The results of the Moderated Regression Analysis (MRA) test in this study show that return on equity (ROE) cannot moderate the effect of earnings per share (EPS) on stock prices. This is caused by several factors. First, earnings per share (EPS) does not have a significant effect on stock prices based on the previous analysis (hypothesis 2), so return on equity (ROE) will not affect the strength of the relationship between earnings per share (EPS) and stock prices. Second, although return on equity (ROE) is an important indicator in assessing a company's financial performance, it is not always the main determinant in making investment decisions. Third, return on equity (ROE) does not provide complete information regarding earnings per share directly, so its impact on stock prices can be felt differently by investors. In addition, investors tend to consider other factors such as growth prospects, risk and market sentiment in assessing stock prices.

The results of this research are in line with the research results of Apriliya (2022), Sitorus (2020) which stated that return on equity (ROE) was unable to moderate the influence of earnings per share (EPS) on stock prices. Meanwhile, the results of this research are different from the results of research by Fabiola and Hermanto (2023) which states that return on equity (ROE) is able to moderate the influence of earnings per share (EPS) on stock prices.

4.6 Profitability Moderation (ROE) on the Effect of Environment Social and Governance on Stock Prices

The results of the Moderated Regression Analysis (MRA) test in this study show that return on equity (ROE) cannot moderate the effect of environment, social and governance (ESG) on stock prices. This is caused by several factors. First, return on equity (ROE) only considers the company's financial performance without taking into account non-financial factors such as environmental sustainability, corporate social involvement, and good corporate governance, which are the main focus of environment, social and governance (ESG). Second, environment, social and governance (ESG) emphasizes the importance of non-financial factors in analyzing investments because it considers the environmental, social and corporate governance impacts on long-term performance. Third, return on equity (ROE) is often used by investors to evaluate a company's financial performance, but the influence of environment, social and governance (ESG) on stock prices is often influenced by investors' perceptions of risk, growth prospects and the long-term impact of environment, social and governance (ESG) practices, which are not always reflected in return on equity (ROE). Therefore, although return on equity (ROE) provides an overview of the efficiency of a company's use of capital, the influence of environment, social and governance (ESG) on stock prices is more complex and influenced by other factors that cannot be explained by return on equity (ROE).

5. CONCLUSION

Based on the data analysis that has been carried out, it can be concluded as follows :

1. Capital structure (DER) does not have a significant effect on stock prices in state-owned banking companies listed on the Indonesia Stock Exchange for the 2015-2022 period.
2. Earnings per share (EPS) does not have a significant effect on stock prices in state-owned banking companies listed on the Indonesia Stock Exchange for the 2015-2022 period.
3. Environment, social and governance (ESG) does not have a significant effect on stock prices in state-owned banking companies listed on the Indonesia Stock Exchange for the 2015-2022 period.
4. Profitability (ROE) is unable to moderate the influence of capital structure (DER) on stock prices in state-owned banking companies listed on the Indonesia Stock Exchange for the 2015-2022 period.
5. Profitability (ROE) is unable to moderate the influence of earnings per share (EPS) on stock prices in state-owned banking companies listed on the Indonesia Stock Exchange for the 2015-2022 period.
6. Profitability (ROE) is unable to moderate the influence of environment, social and governance (ESG) on stock prices in state-owned banking companies listed on the Indonesia Stock Exchange for the 2015-2022 period.

REFERENCES

Akbar, I., & Djawoto, D. (2021). The Influence of Roa, Der, Current Ratio on Stock prices in Real Estate Companies on the Indonesian Stock Exchange. Journal of Management Science and Research (JIRM), 10 (1).

Apriliya, N.C. (2022). The Influence of Liquidity, Earnings Per Share, and Capital Structure on Stock prices with Profitability as a Moderating Variable in Manufacturing Companies Listed on the Indonesian Stock Exchange in 2020 (Doctoral dissertation, Widya Dharma University).

Ardiansyah, AT, Yusuf, AA, & Martika, LD. (2020). The Influence of Dividend Policy, Profitability and Capital Structure on Stock prices. Journal of Economics, Accounting and Management, 1 (1).

Chandra, DS (2021). The Influence of Debt to Asset Ratio, Return on Asset Earning Per Share on Stock prices in Pharmaceutical Companies Listed on the Indonesian Stock Exchange for the 2015-2019 Period. Journal of Contemporary Accounting and Finance (JAKK), 4(1), 99-108.

Ekawati, S., & Yuniati, T. (2020). The influence of ROA, ROE, and EPS on stock prices in transportation companies. Journal of Management Science and Research (JIRM), 9 (3).

Fahmi, I. (2018). Introduction to Portfolio Theory and Investment Analysis. Alphabeta, Jakarta.

Fahrozi, M., & Muin, MR (2020). The Influence of Capital Structure on Stock prices of Consumer Sector Companies on the Indonesian Stock Exchange with Profitability as a Moderating Variable. KIAT Economic Journal, 31 (1), 35-41.

Feng, J., Goodell, J. W., & Shen, D. (2022). ESG ratings and stock price crash risk: Evidence from China. Finance Research Letters, 46, 1–8. https://doi.org/10.1016/j.frl.2021.102476

Gao, J., Chu, D., Zheng, J., & Ye, T. (2022). Environmental, social and governance performance: Can it be a stock price stabilizer? Journal of Cleaner Production, 379, 134705. https://doi.org/10.1016/j.jclepro.2022.134705

Ginsu, FF, Saerang, IS, & Roring, F. (2017). The Effect of Earning Per Share (EPS) and Return on Equity (ROE) on Stock prices. EMBA Journal: Journal of Research in Economics, Management, Business and Accounting, 5 (2).

Hendrata, Adi Surya. (2018). The Effect of Dividend Yield on Stock Returns and the Mediation of Price Earning Ratio and Dividend Payout Ratio on the Effect of Earning Per Share on Stock Returns. (Empirical Study of State-Owned Companies (BUMN) Listed on the IDX in the 2014-2016 Period. Unpublished Thesis, Management Study Program, Faculty of Economics, Sanata Dharma University, Yogyakarta.

Khasanah, U., & Suwarti, T. (2022). Analysis of the Influence of DER, ROA, LDR and TATO on Stock prices in Banking Companies. Fair Value: Scientific Journal of Accounting and Finance, 4 (6), 2649-2667.

Lestari, ISD, & Suryantini, NPS (2019). The influence of CR, DER, ROA, and PER on stock prices in pharmaceutical companies on the IDX (Doctoral Dissertation, Udayana University).

Novianti, M., Saiful, & Halimatusyadiah. (2018). Analysis of Differences in Financial Performance of Sharia Banks and Conventional Banks Using the Camel Ratio Analysis of Differences in Financial Performance of Sharia Banks and Conventional Banks Using the CAMEL Ratio. Master of Accounting Program Thesis, Bengkulu University.

Qodary, HF, & Tambun, S. (2021). The Influence of Environmental, Social, Governance (ESG) and Retention Ratio on Stock Returns with Company Value as a Moderating Variable. Juremi: Journal of Economic Research, 1(2), 159-172.

Sari, L., Esparesya, W., & Septiano, R. (2022). The Influence of Earning Per Share, Debt To Equity Ratio and Return On Equity on Stock prices in Lq45 Companies Listed on the Indonesian Stock Exchange in 2016-2020. Journal of Applied Management Science, 3(5), 479-490.
Sitorus, P. J. (2020). The Influence of Dividend Policy, Liquidity, Solvency and Earnings per Share on Stock prices with Profitability as a Moderating Variable in Food and Beverages Companies Listed on the Indonesian Stock Exchange. Maksitek Scientific Journal. 5(2): 47-61.
Suarka, SW, & Wiagustini, NLP (2019). The Effect of Inflation, Profitability, Capital Structure, and Earnings Per Share on Stock prices of Consumer Goods Companies (Doctoral Dissertation, Udayana University).
Tandelilin, E. (2017). Capital Markets, Portfolio & Investment Management. Yogyakarta: PT. Kanisiun.