THE INFLUENCE OF PROFITABILITY RATIOS, DER, PBV, AND COVID-19 ON STOCK RETURNS

Albert Lee *1
(2041217.albert@uib.edu)
Yulfiswandi 2
(yulfiswandi@uib.ac.id)

1* Manajemen, Batam International University, Indonesia
2 Manajemen, Batam International University, Indonesia

ABSTRACT

Investment plays a pivotal role in shaping the trajectory of the Indonesian economy. It not only contributes to economic development but also empowers companies to optimize their growth, fostering a positive response from investors. The primary objective of investors is to achieve high return or stock returns. However, the pursuit of high return is accompanied by high risk, given the inherent uncertainty in the rapid and unpredictable fluctuation of stock prices. This research aim to explore the impact of PBV, ROE, NPM, EPS, DER and the influence of the covid pandemic on stock return. Adopting a comparative causal research strategy, the study focuses on companies within the financial sector comprising 106 shares listed in the Composite Stock Proce Index (IHSG). Financial data is sourced from the stock bit application and idx.co.id. The findings reveal that PBV exhibits a positive correlation with stock returns. In contrast, ROE, NPM, EPS, DER, and COVID are identified as having no significant effect on stock returns. It is essential to note that the dynamic nature of the global economy, influenced by factors such as the COVID pandemic, underscores the need for periodic updates to account for evolving market conditions.

Keywords: PBV; ROE; NPM; EPS; DER
INTRODUCTION

Investment plays a crucial role in shaping the trajectory of the Indonesian economy. It not only contributes to economic development but also empowers companies to optimize their growth, eliciting positive responses from investors. According to the Financial Services Authority, investment is the act of allocating capital to a company for short or long-term purposes or acquiring shares and securities with the aim of accumulating wealth and profit. An investor, in this context, is an individual who engages in investing in shares or companies with the intention of realizing a financial gain. Investors have the option to invest in various assets, including shares, gold, real estate, land, and securities (Irawan & Polimpung, 2021).

Shares are a crucial part of investment in the capital market, well-known among various investment options for providing attractive profits or returns (Kohar Mudzakar & Wardanny, 2021). Investment involves providing capital or investing in funds to a company or organization with the aim of obtaining future profits or gains. By investing funds in a company, investors acquire the right to dividends and a share in the company's profits. In addition to receiving dividends, investors also have the right to attend general shareholder meetings and vote in organizational decisions.

In the investment sector of the capital market, investors primarily aim to achieve high stock returns. However, the pursuit of high returns comes with inherent high risks, as the value of shares is uncertain and can fluctuate rapidly and unexpectedly. Sudden shifts in stock prices significantly influence both stock prices and returns, causing them to rise or fall sharply. This volatility can create uncertainty among investors when making decisions to invest in a particular stock (Santoso & Ugut, 2021).

Research conducted by Nadyayani & Suarjaya (2021) and Kasmir (2014: 182) indicates that the Indonesian stock market is currently attracting a growing number of individuals, reflecting the dynamic changes in the investment landscape. This phenomenon underscores Indonesia's rapid growth in the stock market, evident in the heightened activity on the stock trading exchange. The Indonesian stock market serves as a significant investment platform, enticing numerous investors seeking to acquire business shares. To engage in transactions on the Indonesian stock market successfully, investors must possess the necessary skills and analytical abilities to assess the profitability of investing in a company. In the Indonesian capital market, the primary instruments for exchange are shares and bonds.

Shares are proof of securities that reflect ownership of a company, meaning that the person is a shareholder in the corporation and thus has partial ownership. Stock returns can be used as a medium to measure how successful a company is. Investors invest in shares with the aim of obtaining profits which are usually called stock returns. Investors earn stock returns as compensation for risking their money in the company. The price of a share can be influenced by the number of investors who invest their capital. (Tandelilin, 2010: 102) (Nadyayani & Suarjaya, 2021).

During the Covid19 pandemic, shares were one of the things that experienced a decline, reducing company revenues so that this decline could have an impact on share prices. Covid-19 has an impact on various industries, including the financial industry. Banks make money by meeting customer needs, such as collecting funds in the form of savings and distributing them to the public in various forms such as credit, whether micro, macro or other forms of credit.
Banking has an important role in a country's economy because banks act as parties that provide services for financing and lending needs. Due to the inability of debtors to fulfill their commitments due to the COVID-19 epidemic, investors are concerned that the company's economic performance and the health of companies in the banking sector will be affected (Lautania et al., 2021).

The Effect of Return on Assets on Stock Returns

Return on assets is a profitability ratio which is a metric used to assess a company's capacity to use the money spent in operational operations effectively to generate income through the utilization of company assets (Febriono, 2016). According to research conducted by Nurunnisak et al. (2018), the probability ratio is a metric that measures the proportion of net profit generated by a company relative to its total assets (Irawan & Polimpung, 2021).

According to researchers (Iqbal & Nastiti, 2022) Return on assets is a ratio that can be used to assess the profitability of a company which is obtained by dividing net profit by the average total assets. Profitability ratios function as metrics that provide an overview of a company's financial performance and achievements, especially in terms of its capacity to generate profits that contribute to overall company value. The return on assets metric evaluates the relationship between a company's net income and its total assets, providing insight into an organization's capacity to generate net income in relation to the valuation of its assets. The observed increase in the Return on Assets metric indicates an increasing increase in the company's profitability. Watung and Illat (2016) explain that stock returns are significantly positively influenced by Return on Assets
H1: Stock returns are significantly positively influenced by Return on Assets

The effect of total asset turnover on stock returns

Total Asset Turnover is a ratio measure that functions to provide an overview of a company optimizing assets to generate profits. If the profit value is greater than total assets, the return received will be high because a large sales level reflects large profits for a company (Kurniawan, 2021)
H2: Stock returns have a significant positive effect on Total Asset Turnover with Covid-19 moderation.

The Effect of Debt to Equity Ratio on Stock Returns

Debt-to-equity ratio (DER) is a popular metric for measuring a company's solvency. Therefore, a company's liquidity is one of the determining factors in whether it is able to generate income and cash flow to meet its operational costs (Santoso et al., 2021)

According to researchers (Junantri & Bowens, 2018) Debt to Equity Ratio (DER) has a large influence on income, making it possible to identify quite large financial problems. If the income generated by the company is not enough to cover its debts and interest obligations, then the company will be in a financially precarious situation that could potentially lead to bankruptcy. As a result, a decline in share prices will have a negative impact on shareholder returns.
H3: Stock returns have a significant positive effect on Debt to equity with Covid-19 moderation.

The Effect of NPM on Stock Returns

According to (Nadyayani & Suarjaya, 2021) NPM, one of the profitability ratios that is often used in financial analysis is NPM, which calculates the net profit from each sales volume. This ratio can be determined by dividing net profit by total sales (Brigham and Houston, 2018:140). NPM is a ratio that can be used to find out how profitable a business is compared to its sales volume (Wagustini, 2014:90).

According to researchers (Lubis, 2021) The profitability ratio represented by NPM is the result of dividing net profit by sales. This ratio states how much money is generated in net profit for each dollar of sales revenue.

H4: Stock returns have a significant positive effect on NPM with Covid-19 moderation.

The Effect of Earnings per Share on Stock Returns

Earnings per share (EPS) is a market metric that represents the profit earnings shareholders receive from their investment in a company for each share they own. EPS is Profit after tax as a percentage of total shares issued is a relevant indicator. Earnings per share (EPS) data measurement is expressed in rupiah units (Junantri & Bowens, 2018).

According to researchers (Iqbal & Nastiti, 2022) Earnings per share (EPS) is a ratio that states how much money is generated after tax in a particular fiscal year as a percentage of the total number of shares. Profits for shareholders and their correlation with EPS are such that an increase in EPS is equal to an increase in the amount of profits distributed to shareholders, making it more attractive for investors to invest. Information about EPS can also provide clues about the company's future earnings prospects, so this causes an increase in demand for shares and subsequently an increase in stock returns. Therefore, if there is an increase in share prices, the rate of return will also increase. The availability of EPS information can prove to be quite valuable for investors when making the right investment choices.

H5: Stock returns have a significant positive effect on EPS with Covid-19 moderation.

RESEARCH METHODS

To find out what factors cause what, this research uses a comparative causal research strategy. Companies in the Financial sector (consisting of 106 shares) which are included in the Composite Stock Price Index (also called IHSG) are the focus of this research. Data is taken from the application (Stockbit), in obtaining financial data that researchers will use (idx.co.id)
Data analysis method

Chow Test

This test is used to find out which model is more appropriate, between the ordinary least squares model (Common Effect) or the fixed effects model (Fixed Effect). This Chow test method determines the probability value requirements. If the figure is above 0.05 then it is recommended to use the Common Effect model which meets the criteria, namely above 0.05 and if the probability value is below the 0.05 criterion then it is necessary to continue using the Hausman test. The Hausman testing method is carried out by comparing the Common Effect model to use a more appropriate model. Therefore, selecting the best model can use both tests.

Hausman test

The Hausman test is used to determine the best model after carrying out the Chow test. The best models resulting from the Hausman test are REM and FEM. If the probability is higher than 0.05, then REM is recommended; otherwise, FEM is selected.

F test

Using the F test, we see how much influence each independent variable has on the results. The probability score tends to be lower than the standard of 0.05 so that there is an influence between independent and dependent.

T test

The statistical significance of the impact of the independent variable on the dependent variable can be determined through the use of the at test. An analysis of the probabilities shows that this is indeed the case. A significant relationship between the two variables can be concluded if the calculated probability is smaller than 0.05. However, it can be said that the probability score tends to be lower than the 0.05 standard so that there is an influence between independent and dependent and the probability score tends to be higher than the 0.05 standard so it is found that there is no influence between independent and dependent.
RESULTS AND DISCUSSION

Results

Table 2
Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Means</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock returns</td>
<td>140</td>
<td>-.85686</td>
<td>7.52632</td>
<td>.2565003</td>
<td>1.04289979</td>
</tr>
<tr>
<td>PBV</td>
<td>140</td>
<td>.38205</td>
<td>9.07587</td>
<td>1.6011044</td>
<td>1.26586044</td>
</tr>
<tr>
<td>NPM</td>
<td>140</td>
<td>.00243</td>
<td>.95002</td>
<td>.1727781</td>
<td>.13147592</td>
</tr>
<tr>
<td>EPS</td>
<td>140</td>
<td>.28617</td>
<td>1275.20366</td>
<td>172.9504291</td>
<td>250.47488235</td>
</tr>
<tr>
<td>DEER</td>
<td>140</td>
<td>.00111</td>
<td>.29724</td>
<td>.0813198</td>
<td>.05739553</td>
</tr>
<tr>
<td>DER</td>
<td>140</td>
<td>.35844</td>
<td>16.07858</td>
<td>5.4729056</td>
<td>2.67080598</td>
</tr>
<tr>
<td>COVID 19</td>
<td>140</td>
<td>0.00000</td>
<td>1.00000</td>
<td>0.4000000</td>
<td>.49165701</td>
</tr>
</tbody>
</table>

Source: Secondary data processed (2023)

Based on a total of 140 sample data. Stock returns, EPS, COVID-19 have a standard deviation value that is higher than the average value. This is caused by quite large data variations.

Based on a total of 140 sample data. PBV, NPM, ROE, and DER have standard deviation values lower than the average value. This is caused by the lack of large enough data variations.

Table 3.
T test results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-Statistics</th>
<th>Prob.</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant )</td>
<td>-0.384037</td>
<td>-0.735035</td>
<td>0.4639</td>
<td>Not significant</td>
</tr>
<tr>
<td>DEER</td>
<td>1.777931</td>
<td>0.390922</td>
<td>0.6966</td>
<td>Not significant</td>
</tr>
<tr>
<td>PBV</td>
<td>0.644775</td>
<td>7.139576</td>
<td>0.0000</td>
<td>Significant Positive</td>
</tr>
<tr>
<td>NPM</td>
<td>-0.363068</td>
<td>-0.294565</td>
<td>0.7689</td>
<td>Not significant</td>
</tr>
<tr>
<td>EPS</td>
<td>0.000839</td>
<td>0.613578</td>
<td>0.5408</td>
<td>Not significant</td>
</tr>
<tr>
<td>DER</td>
<td>-0.131580</td>
<td>-1.427354</td>
<td>0.1564</td>
<td>Not significant</td>
</tr>
<tr>
<td>COVID</td>
<td>0.253362</td>
<td>1.510033</td>
<td>0.1340</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

Source: Secondary data processed (2023).

Table 2 displays the t test findings for the variables mentioned above, which shows the probability values of ROE, NPM, EPS, DER, and the impact of the Covid-19 epidemic. The values of the following variables in this case are as follows: ROE (0.696), NPM (0.7689), EPS (0.1564), DER (0.463), and Covid-19 (0.463), indicating that these five variables do not significant, which means it does not affect the dependent variable. Meanwhile, the book value per share variable has a probability value of 0.000 below 0.5, which means this variable has an effect on the dependent. As a result, we can conclude that book value per share has a significant impact on stock returns, but ROE, NPM, EPS, DER, and Covid-19 do not.
Discussion

H1: Stock returns are significantly positively influenced by ROE

The data provided meticulously indicates that the Return on Equity (ROE) exhibits only a marginal impact on the dependent variable, specifically in the context of share returns. This inference is substantiated by the consistent alignment of both the regression coefficient, measuring at 1.777931, and the significance level, standing at 0.6966. These statistical measures underscore the robustness of the finding.

Recognized as a pivotal metric within the investment landscape, ROE serves as a barometer of a company's proficiency in translating shareholder investments into tangible profits (Sitorus et al., 2021). It encapsulates the efficiency and effectiveness with which a company utilizes its equity to generate returns for its shareholders. The implication of this recognition is vital for investors aiming to assess the financial health and performance potential of a given entity. Consequently, the hypothesis that initially posited a significant influence of ROE on stock returns is contradicted by the empirical evidence. This contradicts the notion that ROE plays a pivotal role in determining the variations in stock returns. The nuanced understanding derived from this analysis suggests that, in the given context, ROE does not wield a substantial influence on the fluctuations observed in stock returns. This nuanced interpretation, grounded in statistical analysis, contributes to a more comprehensive understanding of the intricate dynamics between ROE and stock returns within the examined dataset.

H2: Stock returns are significantly positively influenced by Book Value per share

Based on the research findings, it is evident that the independent variable, stock return, is significantly affected by the book value per share. The observed significance level of 0.0000 indicates an exceptionally strong and meaningful relationship. Additionally, the regression coefficient value of 0.644775 reinforces the assertion that stock returns are indeed significantly influenced by the book value per share.

The utilization of the Price-to-Book Value (PBV) ratio emerges as a valuable tool, potentially contributing to a positive impact on a company's performance. This effect may stem from the positive correlation between the PBV value and stock prices. Specifically, as the PBV value increases, there is a tendency for share prices to rise. Conversely, higher share prices correspond to a lower price-to-book value (PBV). This dynamic is often observed when investors anticipate an increase in the share's intrinsic value. Conversely, a lower value might diminish the likelihood of substantial profits.

Supported by research journals (Nurmayasari et al., 2021), the hypothesis suggesting that stock returns are significantly influenced by PBV is corroborated and accepted. This implies that the Price-to-Book Value ratio serves as a meaningful predictor of stock returns, aligning with the findings of scholarly research. Consequently, it underscores the utility of PBV as a valuable metric for investors and analysts in assessing and predicting the financial performance of a given company.

H3: Stock returns are significantly positively influenced by NPM
Based on the meticulous examination of the test results, it becomes evident that stock returns are not significantly influenced by Net Profit Margin (NPM). This definitive conclusion finds support in a probability value of -0.363068 and a robust regression coefficient of 0.7689. NPM, a crucial metric utilized to gauge a company's efficiency in generating net profit relative to its sales, emerges as a focal point in this analysis. This assertion gains additional weight through insights drawn from a comprehensive study by Kimbonguila et al. (2019), which expounds upon the multifaceted nature of NPM. The financial metric is portrayed not merely as an indicator of a company's ability to manage and control its expenses but also as a pivotal factor contributing to the positive correlation between a company's NPM and its effectiveness in optimizing net profit derived from sales.

The crux of this positive correlation lies in the intrinsic connection between a company's operational efficiency, as reflected in its NPM, and its capacity to extract maximum net profit from sales. This correlation, when established, holds the potential to instill a heightened level of confidence among the public regarding investment prospects. Essentially, a positive relationship between NPM and the efficient optimization of net profit reinforces the perception that the company can strategically manage its costs, signaling a promising avenue for substantial returns. In light of these insights, the hypothesis postulating a significant influence of NPM on stock returns is unequivocally rejected. This nuanced understanding contributes to a more comprehensive comprehension of the intricate dynamics between NPM and stock returns, underscoring the importance of considering various financial metrics when evaluating investment potentials.

H4: Stock returns are significantly positively influenced by EPS

The statistical analysis of the data reveals that the independent variable 'Earnings per Share' (EPS) is not significantly associated with the dependent variable 'share returns.' This conclusion, supported by a significance level of 0.5408 and an estimated regression coefficient of 0.000839, prompts further consideration of the role of EPS in financial assessments. In exploring the significance of EPS, despite its acknowledged importance in providing a comprehensive evaluation of a company's financial performance, determining market valuation, and influencing dividend distribution, the study underscores that it does not exhibit a significant relationship with share returns in this particular context.

EPS plays a pivotal role in providing insights into a company's financial performance, share market value, and dividend considerations. However, the study, supported by Erzad and Erzad's (2017) journal, emphasizes that investors should not rely solely on EPS when making investment decisions in the capital market. A comprehensive approach is necessary, considering various factors such as market conditions, overall company performance, management policies, and other potential influencers of investment outcomes. In light of these considerations, the hypothesis positing a significant influence of EPS on stock returns is refuted. This nuanced perspective underscores the multifaceted nature of investment decisions and advocates for a holistic assessment, recognizing the influence of diverse factors beyond EPS alone.
H5: Stock returns are significantly positively influenced by DER

Based on the outcomes derived from the conducted research, the examination results reveal that the variable denoting Debt-to-Equity Ratio (DER) does not yield a statistically significant influence on the dependent variable, which is stock returns. This deduction is fortified by a p-value of 0.1564 and a regression coefficient value of -0.131580. In financial analysis, DER serves as a crucial metric utilized to assess the proportion of debt a company employs concerning its owner's equity or capital.

Numerous studies, including those supported by scientific articles (Kimbonguila et al., 2019), expound on DER as a ratio providing insights into a company's capability to meet its long-term debt obligations. A higher DER may potentially introduce risks associated with fulfilling obligations linked to long-term debt, thereby affecting a company's ability to optimize returns for investors. Consequently, companies must exercise meticulous consideration in managing the utilization of long-term debt within their capital structure to effectively mitigate these risks. As a result, it becomes evident that companies, in light of these considerations, need to conduct thorough evaluations and regulate the use of long-term debt. This strategic approach is crucial not only to minimize potential risks but also to optimize returns for investors. Considering these factors underscores the multifaceted nature of financial decision-making and advocates for a comprehensive assessment that acknowledges the influence of various factors beyond DER alone.

H6: Stock returns are significantly positively influenced by Covid-19

Based on the research conclusions, it is evident that the Covid-19 pandemic does not significantly influence stock returns (p-value = 0.1340, regression coefficient = 0.253362). Specifically, understanding the impact of the Covid-19 pandemic on stock returns is crucial in assessing the broader economic landscape. The pandemic, known to increase credit risk and adversely affect asset portfolio performance, has implications for the stock returns of various banks.

In light of these findings, it becomes imperative for investors, particularly those considering investments in the banking sector, to conduct thorough fundamental and risk analyses. Such analyses should encompass financial risk assessments and consider market dynamics during the COVID-19 pandemic. This strategic approach, as highlighted in the journal by Alisyah and Susilowati (2022), ensures that investors make informed decisions in navigating the challenges posed by the ongoing pandemic.

CONCLUSION

Conclusion

Based on the findings of this research, it can be concluded that the Debt to Equity Ratio (DER) variable does not have a significant impact on stock performance. This conclusion is supported by a significance level of 0.1564 and a regression coefficient value of -0.131580. DER, as a financial metric measuring how much a company uses debt relative to its equity or owner's capital, does not substantially influence stock performance.
Furthermore, the research emphasizes the importance of corporate management in carefully considering the risks associated with the use of long-term debt. Companies with a high DER tend to face risks related to obligations that must be fulfilled due to long-term debt, impacting the company's opportunities to achieve maximum returns for investors.

Recommendations

Companies should carefully consider the use of long-term debt in their capital structure. Management decisions regarding debt should take into account both risks and opportunities that may arise. Proactively, companies can conduct a more in-depth risk analysis related to their debt structure. This helps identify potential risks and take necessary preventive measures. Stakeholders, including investors and financial analysts, should be provided with educational information about the significance of DER and its impact on stock performance. This can help manage expectations and understand company policies. Companies can enhance engagement with investors to further explain debt management strategies and how the company manages associated risks.

BIBLIOGRAPHY


The Influence of Profitability Ratios, DER, PBV, and Covid-19 on Stock Returns

Albert Lee, Yulfiswandi

The Influence of Profitability Ratios, DER, PBV, and Covid-19 on Stock Returns