*Original Article*

# Do Earnings Per Share and Price Book Value Have an Impact Factor on Stock Price for the Banking Sector?

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*Abstract: This research aims to see the influence of Earnings Per Share (EPS) and Price Book Value (PBV) on share prices in banking sector companies listed on the Indonesian Stock Exchange (IDX) for the period 2020 to 2022. The quantitative method with Eviews 13 is a research method that looks at data from the banking company's annual report. The annual reports collected amounted to 129 data from 43 banking companies that met the sample criteria using purposive sampling in the research period. The research results show no influence between EPS and PBV on share prices, with a coefficient for determination level of 0.08%.*

*Keywords:  Earning Per Share, Price Book Value, Stock Price.*

## I. INTRODUCTION

The Indonesian Stock Exchange (IDX) is the centre for trading financial instruments in Indonesia. Data for 2023 shows that the number of registered companies has reached 903. This data represents that IDX is the main source of funding for companies and investment for society. Companies that want to increase their funding sources through IDX will go through a process called going public. Once they have entered IDX, the company is required to submit information through an annual report to potential investors. Investors interested in investing will look at various aspects, for example, through the company's annual report or share prices.

Stock investment is proof of company ownership through investing in securities (Darmadji, 2012:5). Share prices are common for investors to observe because this variable is the key to deciding whether investors are interested in investing capital in the company. Apart from observing share prices, investors' interest in a company arises because the company can show good performance through accounting information in financial reports. For an investor, accounting information from financial reports is the easiest data to obtain and can describe the company's condition at that time (Widyastuti, 2021).

The indicators of accounting information in financial reports that investors often observe are looking at the company's ability to generate profits, such as through financial ratios. Investors can consider several financial ratios, including Earning Per Share (EPS) and Price Book Value (PBV).

EPS can be translated as a profit from each share shareholders own (Dewi et al., 2023). From this understanding, investors will generally look for companies with high EPS. Research on the impact of EPS on share value has been carried out by Widyastuti (2021), who states that EPS positively affects share prices. However, different results were shown in research by Sanjaya (2018), which stated that EPS did not influence share prices.

PBV is the last financial ratio examined in this research. According to Duna Hakim (2020:40), PBV is a comparison of the market value calculated by calculating the book value of a share. Lestari and Susetyo (2020) have examined the impact of PBV on share prices, where there is a significant influence of PBV on share prices. However, different results were shown by Mutiarani et al. (2019), where share prices did not influence PBV.

In this research, researchers will use data on companies in the banking sub-sector for the 2021-2023 period contained in IDX. The various research results that have been carried out make researchers want to perfect this research by updating the latest data on the banking sector and using different statistical tools from previous research, namely EViews.

## II. LITERATURE REVIEW

### A) Agency Theory

Agency theory explains the relationship between principals and agents who run the company separately. Differences regarding the goals of agents and principals cause problems because principals and managers have their own goals for

maximizing their utility (Rafa *et al*., 2023). In this research, it can be concluded that investors are principals and company managers are agents.

### B) Signaling Theory

Signaling theory is a step taken by company management to provide instructions to investors about how the company is managed. Bergh et al. (2014) give meaning to signaling theory as an encouragement for companies to provide exposure in financial reports and information asymmetry.

### C) Earnings Per Share

Investors' interest in a company impacts the company's share price. One thing that is the focus of investors' attention is Earning Per Share (EPS). EPS is the profit from outstanding shares at the end of the year, which is distributed to investors (Ariana, 2016). This research aims to test whether EPS influences share prices.

### D) Price Book Value

The next consideration investors look at in determining which company to choose is the valuation ratio of a share by comparing the share price with its book value or what can be called Price Book Value (Kautsar et al., 2023).

### E) Stock Price

In their research, Wardhani and Mulyati (2021) stated that the stock price measures a company's success. This statement is also supported in the financial management book by Astawinetu et al. (2020), which states that the company environment, dividend distribution policies, and financing carried out by the company are the causes of changes in the share price of a company. If these factors are right on target, investors will look at the company, which will impact increasing share prices.

### F) Conceptual Framework

This research has two independent variables, namely Earning Per Share (EPS) and Price Book Value, and one dependent variable, namely Stock Price. In Widyastuti's research (2021), EPS significantly affects Stock Price. According to research by Lestari and Susetyo (2020), PBV significantly affects stock price.

Several types of research regarding the impact of EPS and PBV on stock prices can be formulated using the conceptual framework below.
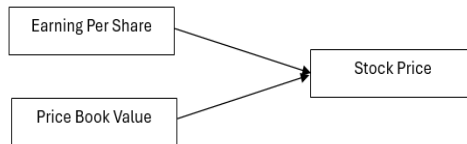


**Figure 1: Conceptual Framework Chart**

Hypothesis Development
Based on Figure 1 and previous research, the following hypothesis can be formulated:
**H1:** Earning Per Share Influences Stock Price
**H2:** Price Book Value influences Stock Price

## III. RESEARCH METHOD

This research is included in quantitative research using statistical tools for data processing. The data obtained came from the Indonesian Stock Exchange (IDX) via the website www.idx.co.id. The data was obtained by reviewing the annual reports of banking sub-sector companies audited for 2020 to 2022 and using EViews version 13 software to process the data.

Data on banking sector companies from 2020 to 2022 has been obtained for further sample selection using the purposive sampling method. Purposive sampling is a sample selection method that establishes population criteria to obtain data to be tested statistically (Rafa *et al*., 2023).

There are three criteria in determining sampling for this research, namely:
1. Banking sub-sector companies listed on IDX for the 2020 to 2022
2. Banking sub-sector companies that submit annual reports for 2020 to 2022.
3. Banking sub-sector companies with complete data for research from 2020 to 2022.

The samples obtained from this research will then be tested for statistical data using the panel data regression method. Panel data regression analysis is a series of data tests that combine time series and cross-section data. The statistical test tool used in this research is EViews 13.

Earnings Per Share (EPS) is a ratio that shows the company's ability to generate profits from one share. EPS can be calculated using the formula below:

$$EPS = \frac{Net\ Profit}{Number\ of\ Shares}$$

Price Book Value (PBV) is a ratio that shows the share price compared to its book value. PBV can be calculated using the formula below.

$$PBV = \frac{Stock\ PriceNet\ Profit}{Book\ Value\ per\ Share}$$

Stock Prices are a condition that investors always monitor. In this research, share prices refer to the closing price in one period.

Panel data regression analysis can be seen through the following equation model:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \ldots + \beta_n X_{nit} + e_{it}$$

## IV. RESULTS AND DISCUSSION

In this research, researchers made observations of banking sector companies listed on IDX from 2020 to 2023. From the results of these observations, researchers obtained 129 data that were ready to be processed using Eviews 13 statistical software. Statistical testing uses panel data regression with several stages, starting from model selection testing, classical assumption testing, and hypothesis testing, to get comprehensive answers to the entire research.

### A) Model Selection Test

Lagrange Multiplier Tests for Random Effects
Null hypotheses: No effects
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives

**Table 1: Model Selection Test**

| | | Test Hypothesis | |
| --- | --- | --- | --- |
| | Cross-section | Time | Both |
| Breusch-Pagan | 5.943063 | 0.200072 | 6.143135 |
| | (0.0148) | (0.6547) | (0.0132) |
| Honda | 2.437840 | -0.447294 | 1.407528 |
| | (0.0074) | (0.6727) | (0.0796) |
| King-Wu | 2.437840 | -0.447294 | 0.082739 |
| | (0.0074) | (0.6727) | (0.4670) |
| Standardized Honda | 2.653222 | -0.041569 | -3.531557 |
| | (0.0040) | (0.5166) | (0.9998) |
| Standardized King-Wu | 2.653222 | -0.041569 | -2.356094 |
| | (0.0040) | (0.5166) | (0.9908) |
| Gourieroux et al. | -- | -- | 5.943063 |
| | | | (0.0202) |

The test results using statistical software in Table 1 regarding model selection show that this research uses the Random Effect Model because the Breusch-Pagan value is <0.05, namely 0.0148.

### B) Panel Data Regression Model

**Table 2: Panel Data Regression Model**

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| --- | --- | --- | --- | --- |
| C | 1501.274 | 349.1446 | 4.299862 | 0.0000 |
| X1 | 1.891162 | 1.664436 | 1.136218 | 0.2580 |
| X2 | 0.421701 | 51.58351 | 0.008175 | 0.9935 |

The statistical test results in Table 2 can create a regression equation model as below:

$$Y = 1501{,}27 + 1.90\ X1 + 0{,}42\ X2$$

sFrom the equation model, it means that if the EPS and PBV variable values are considered zero, then the share value is 1501.27. If the EPS regression coefficient increases by 1 unit, share prices will increase by 1.90. If the PBV regression coefficient increases by 1 unit, share prices will increase by 0.42.
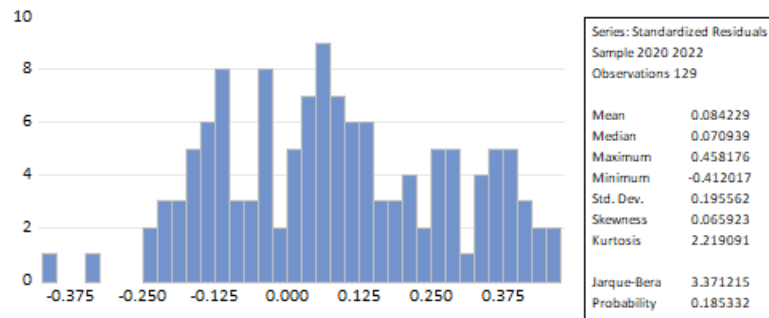
*C) Normality Test*



| | |
|---|---|
| Series: Standardized Residuals | |
| Sample 2020 2022 | |
| Observations 129 | |
| Mean | 0.084229 |
| Median | 0.070939 |
| Maximum | 0.458176 |
| Minimum | -0.412017 |
| Std. Dev. | 0.195562 |
| Skewness | 0.065923 |
| Kurtosis | 2.219091 |
| Jarque-Bera | 3.371215 |
| Probability | 0.185332 |

**Figure 2: Normality Test**

The normality test was carried out in the test because it used a random effect model, and based on figure x, it showed that the probability value was $0.185332 > 0.05$, so it could be concluded that the residual value was normally distributed. This value is obtained after carrying out data transformation on the dependent variable.

*D) Multicollinearity Test*

**Table 3: Multicollinearity Test**

| | X1 | X2 |
|---|---|---|
| X1 | 1.000000 | -0.069740 |
| X2 | -0.069740 | 1.000000 |

Based on the table above, the multicollinearity test results are 0.069 below 0.80, which means that there are no symptoms of multicollinearity in the test results in the research carried out or can be called appropriate because they are in the correlation value range of 80 percent or 0.80.

*E) Heteroscedasticity Test*

**Table 4: Heteroscedasticity Test**

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 1501.274 | 349.1446 | 4.299862 | 0.0000 |
| X1 | 1.891162 | 1.664436 | 1.136218 | 0.2580 |
| X2 | 0.421701 | 51.58351 | 0.008175 | 0.9935 |

The heteroscedasticity test is used to reconfirm that there are no deviations in the classical assumption test to see if residual values are unequal for the entire regression model. Based on the table above, it can be seen that the probability value for X1 is 0.25 and X2 is 0.99, where the value is greater than 0.05, so it can be concluded that there are no symptoms of heteroscedasticity in this research.

*F) Determination Test (R2)*

**Table 5: Determination Test**

| Weighted Statistics | | | |
|---|---|---|---|
| R-squared | 0.084156 | Mean dependent var | 2.503263 |
| Adjusted R-squared | 0.069619 | S.D. dependent var | 0.715117 |
| S.E. of regression | 0.689775 | Sum squared resid | 59.94949 |
| F-statistic | 5.789045 | Durbin-Watson stat | 1.732122 |
| Prob(F-statistic) | 0.003933 | | |

The coefficient of determination (R2) is a process to see how much the independent variable contributes to the dependent variable. From the table above, the r-squared value is 0.084 or 0.8%. These results show that there are still 99.2% other variables that can influence the dependent variable, or it can be concluded that other factors influence share prices outside of EPS and PBV.

*G) Hypothesis Test (t-testing)*
Dependent Variable: ABS(RESID)
Method: Panel EGLS (Cross-section random effects)
Date: 03/19/24   Time: 22:19
Sample: 2020 2022

Periods included: 3
Cross-sections included: 43
Total panel (balanced) observations: 129
Swamy and Arora estimator of component variances

**Table 6: Hypothesis Test**

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|-------|
| C | 841.3039 | 307.0471 | 2.739984 | 0.0070 |
| X1 | 1.354051 | 1.480701 | 0.914466 | 0.3622 |
| X2 | 8.882167 | 47.78638 | 0.185872 | 0.8528 |

Hypothesis testing (t-test) is carried out to see the level of significance between the independent variable and the dependent variable. Based on the table above, the values of H1 are 0.3622 and H2 0.8528 > 0.05, which means that EPS and PBV do not influence share value, so H1 and H2 are rejected.

### a. Hypothesis Discussion

i) The effect of EPS on share prices in banking sector companies on IDX for the 2020-2022 periods.

The probability value of the EPS variable is 0.3622>0.05, which means that EPS does not influence share prices. This means that earnings per share are not the main factor for investors when looking at the condition of a company and deciding to invest in that company.

ii) The influence of PBV on share prices in banking sector companies on IDX for the 2020-2022 periods.

The probability value of the PBV variable is 0.8528 > 0.05, which means there is no influence of PBV on share prices. The book value of shares is not a benchmark for the rise and fall of share prices. Good companies maintain their financial stability, with the main target being profited to provide dividends for investors.

## IV. CONCLUSION

The conclusion that can be drawn from this research is that there is no influence between Earnings per Share (EPS) and Price Book Value (PBV) on share prices in banking sector companies for the 2020-2022 period. The coefficient of determination ($R^2$) of 0.08% indicates no significant variation in the causes of the rise and fall in share prices, which the EPS and PBV variables can explain.

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