| RESEARCH ARTICLE

Determinants of Banking Sector Stock Prices in Indonesia

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| ABSTRACT

This research aimed to analyze the effect of the variables Return On Assets (ROA), Return On Equity (ROE), Prices Earning Ratio (PER), and Earning Per Share (EPS) on stock prices of banking sub-sector companies listed in the Indonesia Stock Exchange (IDX). Secondary data were collected from the IDX websites (www.idx.com) and (www.yahoofinance.com), and panel data regression analysis was used. The Chow, Hausmann, and Lagrange Multiplier (LM) tests were conducted to determine the most suitable model. Furthermore, classical assumption tests such as normality, multicollinearity, heteroscedasticity, autocorrelation, coefficient of determination, F test, and t-test were also performed on the data. The purposive sampling method was used to obtain 21 Indonesian banking companies. The results showed that the ROE variable has a negative effect on stock prices, while ROA and EPS have a positive effect on stock prices.

| KEYWORDS

Earning Per Share**,** Prices to Earning Ratio**,** Return On Assets, Return On Equity, Stock Prices

1. Introduction

Stock represents a significant area of interest to the general public, and share can be defined as a sign of equity participation of a person or party in a company (Zain & Akbar, 2020). Investors anticipate a return on their share and must closely monitor the prices and the generated profit. Stock prices tend to rise with excess demand, which can positively impact the company by increasing the value of its shares. Conversely, a continued decline in stock prices can negatively impact the company by reducing the value of the share, leading many investors to sell. Therefore, a thorough analysis is needed before investors decide to allocate their funds.

Financial ratios compare the numbers in the financial statements by dividing one number by another. Comparisons can be made between different components in a single financial statement or across multiple statements (Kasmir, 2019, p. 92). Investors can use financial ratios to determine the condition and financial performance of a company. The indicators used in this research are described as follows.

Return On Assets (ROA) measures company profits by utilizing all company assets (Tambunan, 2013), and it is measured by dividing net profit by total assets. Furthermore, the metric provides investors with valuable insight into the ability of banking companies to effectively manage their assets and generate profits. Riwayati and Aviliani (2022) found that ROA affects share prices for state-owned banking companies. Return On Equity (ROE) is obtained by dividing net income by total capital (Tambunan, 2013). The metric enables investors to evaluate a company's ability to generate profits from each unit of funds invested in its equity. Prices Earning Ratio **(**PER) is used to compare stock prices with Earning Per Share (EPS) that have been achieved by the company (Tambunan, 2013). It is a useful metric for investors in determining the market prices of a stock and the level of confidence in the stock. A high PER value indicates that stock prices are getting more expensive and investors' confidence in stock is increasing. EPS determines the yield per share obtained from the distribution of net income by the number of outstanding shares (Tambunan,

2013). EPS helps investors see how well the company is achieving returns for shareholders by rewarding stock returns. Riwayati and Aviliani (2022) found that EPS positively affects stock prices for state-owned bank companies.

Banking companies are one of the instruments that attract investors because banking companies are important financial institutions in a country. Banking companies have an important role in the national economy as a supporter of the implementation of development and stability toward increasing the welfare of the Indonesian people. From a behavioral perspective, it is common for individuals to invest their funds in bank savings accounts, either in the form of savings or time deposits. However, individuals seeking to boost productivity and enhance future consumption abilities may choose to invest their funds in the capital market by purchasing a share of banking companies. The following is a chart of banking company stock prices:

Figure 1. Stock Prices Fluctuations for the Period 2017–2021
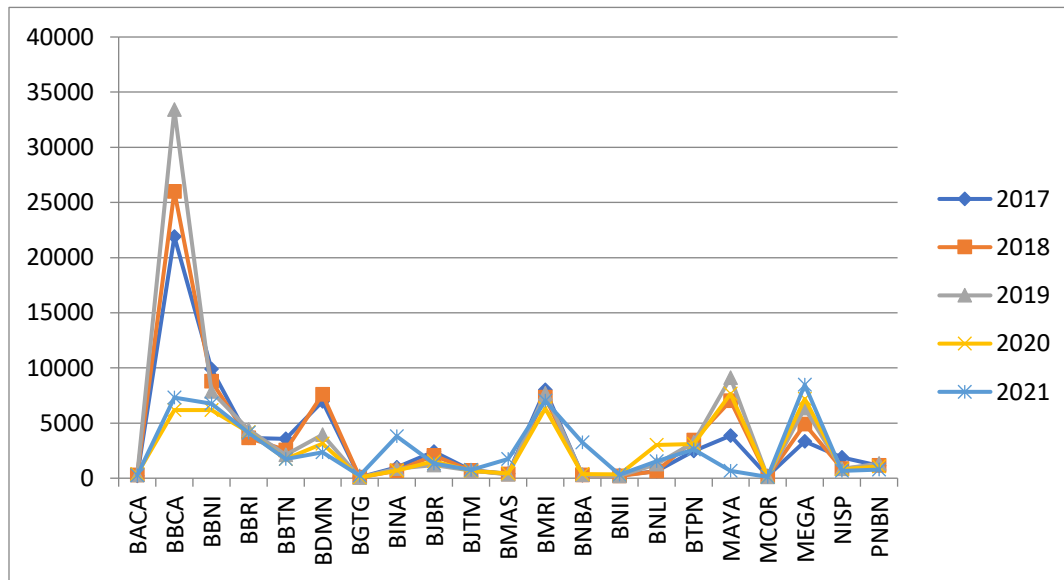
From Figure 1, stock prices of banking companies in the 5 years experienced movements or fluctuations because of daily stock trading activity. The demand and supply of shares cause these fluctuations, which is a concern for investors in making an assessment before investing in the company. Therefore, investors need insight before investing to predict the direction of stock price movements. Therefore, this research was conducted to provide investors with valuable insights and guidance on understanding and analyzing stock prices.

The research aims to analyze the effect of ROA, ROE, PER, and EPS on stock prices in banking companies listed on the Indonesia Stock Exchange (IDX) for 2017–2021. Furthermore, it develops research conducted by Aisyah (2022) using different analytical methods. The panel data regression analysis was applied because the use has advantages, such as the combination of two-time series data and cross sections. Consequently, this approach will yield more flexibility and effectively resolve problems, particularly when variable elimination is required (Widarjono, 2007). The decision to commence the research in 2017 is attributable to Indonesia's improved economic growth, which increased to 5.07%, surpassing the previous achievement of 5.03%. The benefits and contributions are adding and enriching research models that analyze the effect of financial performance on stock prices, especially in banking sector stock.

2. Theoretical Framework and Related Article
The following describes the factors influencing stock prices, previous studies, and hypotheses.

2.1 Factors that affect stock prices
The factors that affect stock prices include (Hayat, Noch, Hamdani, Rumaskun, Rasyid, Nasution, 2018, p. 264) (1) **Internal factors**, (a) Announcements about marketing, production, sales such as advertising, details contracts, prices changes, new product recalls, production reports, product safety reports, and sales reports, (b) Financial announcements related to equity and debt, (c) Announcements of the management board of directors, such as changes and replacements of directors, management and organizational structure (d) Diversification takeover announcements, such as merger reports, equity investments, take over reports by acquirers and acquired, (e) Investment announcements, such as factory expansion, research development, and other business closures. Meanwhile, the in-text citations should follow the APA style, and the name of the author(s) must be provided. All work

cited should be included in the reference, (f) Labor announcements, such as new negotiations, new contracts, strikes, and others, (g) Announcement of the company's financial statements, such as forecasting profits before and after the end of the fiscal year (2) **External factors**, (a) Government announcements such as changes in savings and time deposit rates, foreign exchange rates, inflation, and various economic regulations and deregulations issued by the government, (b) Legal announcements, such as employees' claims against the company or its managers, (c) Securities announcements, such as annual meeting reports, insider trading, trading volume or stock prices, trading restrictions, (d) Domestic political turmoil and exchange rate fluctuations are also factors with a significant influence on stock prices fluctuation on a country's stock exchange, and (e) Different domestic and foreign issues can also contribute.

Sharma, Bharwadj, and Kishore (2022) concluded that EPS, ROE, CAR, and NIM have an incremental impact on the prices of banking stock, while CR and NPAs have a detrimental impact. Riwayati and Aviliani (2022) found that ROA and EPS significantly affect stock prices, while ROE does not affect the variable for state-owned banking companies. Wibowo, Utami, and Dewanti (2022) concluded that ROE and EPS do not affect stock prices, while Net Profit Margin has a significant effect on this variable. According to Fitriano and Herfianti (2021), ROA does not affect stock prices, while ROE and NPM have a significant effect. Sari (2021) showed that ROA and EPS affect stock prices, while ROE does not affect the variables. Choiriya, Fatimah, Agustina, and Ulfa (2020) found that ROA, OPM, and NPM do not affect stock prices, unlike ROE and EPS. Purwanti (2020) analyzed ROA, ROE, and NIM on stock prices, and the results showed that the three variables have effects on stock prices. Furthermore, Rarindra and Saputra (2020) used multiple linear regression data analysis to show the effects of PER, EPS, ROA, and DER on stock prices. Edison, Winarso, Edisan, and Nuryani (2019) analyzed the effect of ROA, NPM, and EPS on stock prices at conventional banks listed on the IDX. The results showed that ROA does not affect stock prices, while the NPM and EPS variables have significant effects. Mukhlis (2019) and Aufa and Wahyuni (2019) stated that ROA and ROE affect stock prices, while EPS and PER do not affect the variable. According to Romadhan and Satrio (2019), ROE negatively affects stock prices, while another research by Bahar, Nurhayati, and Prasetyowati (2018) found that EPS and ROA affect the variable. Nurfadilah, Samidi, and Suharto (2017) investigated EPS, net income, dividends, and sharia compliance affecting stock market volatility in Malaysia. A sample of 53 companies has been selected from FBM KLCI for 2014, when the oil prices decline was over 55% and led to a lower share of prices. Meanwhile, multiple regression methods have been applied to the data, where EPS and dividends have a strong significant relationship, while net income and Shari'ah compliance are not significant towards stock price volatility. Hurschler, Figeac, Lipchev, & Dietrich (2017) examined determinants for stock prices of the 10 largest commercial European banks regarding assets, with descriptive statistics and multiple regression analysis, from 2007 to 2016. These results showed that these banks' stock prices are mainly explained by (1) bank-specific characteristics, including Return on Average Equity and Equity/Assets Ratio, (2) industry-specific factors like the Herfindahl Index, and (3) macroeconomic-specific factors, including Gross Domestic Products, household disposal income, and labor and industry productivity. Narayan, Narayan, and Singh (2014) found evidence of panel cointegration among stock prices, economic activity, interest rates, and exchange rates for 13 banks. The findings of this research indicate that economic activity and currency depreciation are positively correlated with an increase in share prices. However, an increase in the interest rate is negatively associated with bank share prices, and only economic activity Granger causes this variable in the long run. Ghauri (2014) stated that "size" has a significant positive relationship with share prices, while profitability, dividend, and asset growth have an insignificant relationship.

2.2 Research Hypothesis
H1: ROA Influences Stock Prices
The first variable in this research is the ROA metric. ROA is a commonly used ratio to measure a company's ability to generate profits by analyzing past performance and projecting future potential (Hayat, Noch, Hamdani, Rumaskun, Rasyid, Nasution, 2019). A higher ROA indicates a more profitable company, while a lower ratio suggests lower profitability. This assertion is supported by several prior studies, including Sari (2021), Purwanti (2020), Mukhlis (2019), Bahar, Nurhayati, and Prasetyowati (2018), where ROA variable affects stock prices.

H2: ROE Influences Stock Prices

In this research, the second variable under consideration is ROE, which refers to the ratio used for assessing net profit after tax with respect to own capital. A higher value of this ratio indicates a more favorable result. It can be inferred that the position of the company owner is strengthened accordingly, whereas the opposite holds (Kasmir, 2018). This assertion receives backing from several sources, including Fitriano and Herfianti (2021), Sari (2021), Choiriya et al. (2020), Purwanti (2020), and Aufa and Wahyuni (2019), where ROE variable exerts an impact on stock prices.

H3: PER Influences Stock Prices

The third variable considered in this research is PER, which indicates the degree investors are willing to pay for each unit of reported profits in rupiah. Typically, companies with high growth rate opportunities exhibit a higher PER. This notion receives support from Rarindra and Saputra's (2020) research, where PER influences stock prices.

H4: EPS Influences Stock Prices

EPS measures the success of management in achieving profits for shareholders. A high ratio value indicates increased shareholder welfare, and this idea is supported by Sari (2021), Choiriya et al. (2020), Edison, Winarso, Edisan, Nuryani (2019), Aufa and Wahyuni (2019), and Bahar, Nurhayati, Prasetyowati (2018), where EPS affects stock prices.

3. Research Method

This research investigates the relationship between ROA, ROE, PER, and EPS, with share prices (Y) as the dependent variable. The secondary data comprises written reports obtained from banking companies registered with the IDX. These reports are in the form of financial statements published by the IDX on its official website at www.idx.co.id. Furthermore, the financial statements include a Balance Sheet and a Profit and Loss Report covering 2017 to 2021. Banking companies listed on the IDX were considered in selecting the criteria. The following conditions were applied: (1) the companies must belong to the banking sub-sector and be listed on the IDX between 2017 to 2021, (2) the companies must have published financial reports during the same period, (3) the companies must have generated positive profits during the research period. Additionally, the selected banking sub-sector must possess complete data related to the variables analyzed between 2017 to 2021. To analyze the data, panel data regression analysis was employed, and the procedure is further elaborated in Figure 2.

Figure 2. Panel Data Regression Analysis Procedures (Adapted from Zulfikar, 2018)
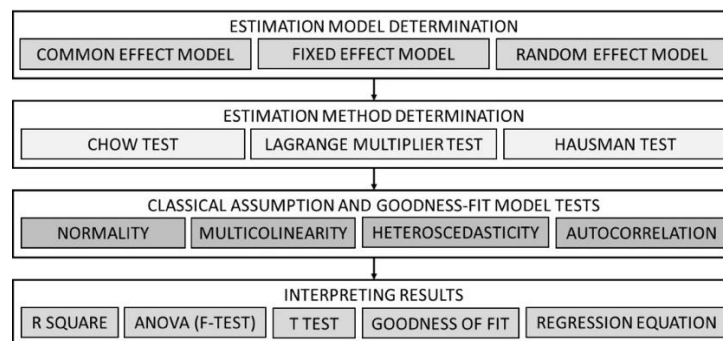
The initial step of the panel data regression analysis involves generating common, fixed, and random effect models. The subsequent step is to execute the Chow Test to determine the most appropriate effect model between the common and fixed effects. The Hausman test should be conducted to determine the most appropriate models when the fixed effect model is deemed suitable. Meanwhile, the Langrange Multiplier Test must be performed to ascertain the most suitable effect model when the common effect model is selected. The following step is to perform the classical assumption test, encompassing normality, multicollinearity, heteroscedasticity, and autocorrelation. This test is performed to confirm the validity of the Classical Linear Regression Model (CLRM). Finally, the resulting common, fixed, or random effect models should be interpreted.

4. Results and Discussion

The sampling technique employed in this research is purposive sampling, as depicted in Table 1, which shows the 21 selected banking companies. The sample was selected through purposive sampling, with five years of research observations. Therefore, the final data analyzed comprised 105 observations, and the selection criteria are also provided in Table 1.

The first stage is a descriptive analysis, including minimum, maximum, average values, and standard deviations, as shown in Table 2. This analysis reports data from all variables, such as stock prices, ROA, EPS, PER, and ROE. The following table provides the results of a descriptive analysis of research variables, which include minimum and maximum values, mean, and standard deviation.

Table 1. Sampling Criteria

Description	Amount
Banking companies listed on the IDX in 2017-2021	43
Banking companies that issue financial reports period 2017-2021	(6)
Banking companies that have a positive profit period 2017-2021	(15)
Banking companies that have complete data related to the variables used for the 2017-2021 period	(1)
The number of companies used as research samples	21

Table 2 shows the total data were 105 samples of 21 companies with a 5-year research period. ROA has minimum and maximum values of 0.4 and 3.13 for banks with the MAYA and BBCA codes occurring in the 2021 period.

Table 2. Descriptive Statistical Test Results

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
ROA	105	,04	3,13	1,1893	,80863
ROE	105	,16	20,94	8,0539	5,27768
PER	105	6,10	814,70	60,0609	125,36035
EPS	105	,50	1509,00	201,2908	270,32313
Stock prices	105	66	33425	3316,43	4970,992
Valid N (listwise)	105				

The average value (mean) and the standard deviation of this variable are 1.1893 and .80863. The standard deviation is smaller than the average value; hence, ROA variable data has a small distribution, reflecting good results. Furthermore, ROE has a minimum and maximum value of 0.16 and 20.94 for banks with the READ and MEGA codes for 2021. The average value and standard deviation for this variable are 8.0539 and 5.27768. Since the standard deviation value is smaller than the average value, it can be concluded that the ROE variable has a small distribution. This means that the value of the ROE variable reflects good results.

PER has a minimum value of 6.10 for BMRI companies for the 2017 period and a maximum value of 814.70 for bank companies with the MAYA code for the 2020 period. The average value of this variable is 201.2908, and the standard deviation value is 270.32313. The standard deviation value is greater than the average value. It can be concluded that PER variable has a large distribution. This means that the value of PER variable reflects unfavorable results.

Table 2 shows that the EPS variable has a minimum and maximum value of 0.50 and 1509.00 for banks with the code BGTG and READ for 2018. EPS average and standard deviation values are 201.2908 and 270.32313. It can be concluded that the standard deviation value is greater than the average; hence, EPS variable data has a large distribution, showing unfavorable results.

Share prices have a minimum and maximum value of 66 and 33,425 at the bank with the BGTG and BBCA codes. The average and the standard deviation of stock prices are 3316.4 and 4970.992. It can be concluded that the standard deviation value is greater than the average; hence, stock prices have a large distribution, showing unfavorable results.
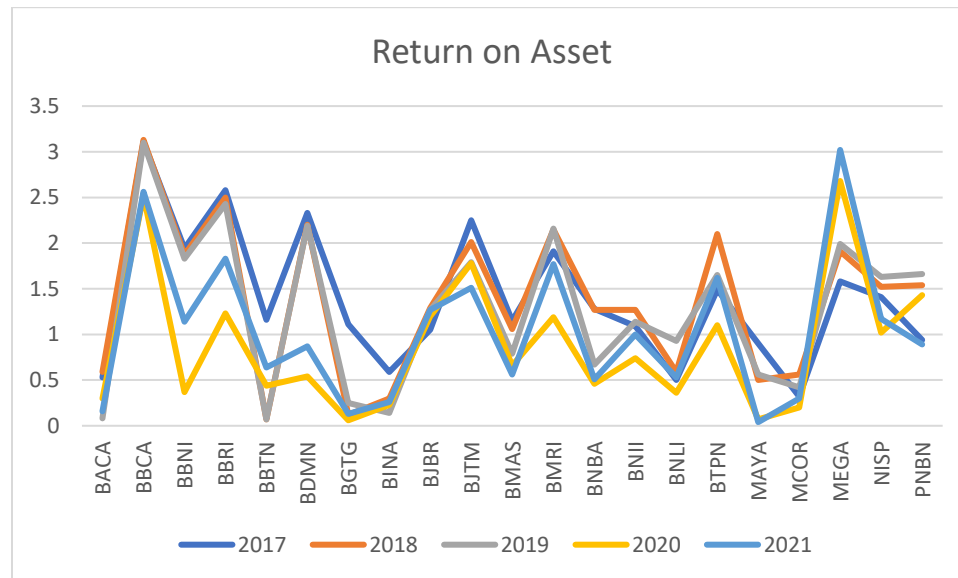
Figure 2. ROA Fluctuations in 21 Banks for the 2017-2021 period

Based on Figure 2, the highest and lowest ROA in 2017 was achieved by BBCA at a value of 3.11 and 0.32, with the MCOR code. In 2018, the highest and lowest values were 3.13 and 0.07, achieved by a bank with the BBCA and BBTN codes, respectively. BBCA and BBTN achieved the highest and lowest ROA values in 2019 at 3.10 and 0.07. In 2020, the values achieved by a bank with the MEGA and BGTG codes were 2.68 and 0.06, while in 2021, 3.02 and 0.04 were obtained with MEGA and MAYA codes.

Based on Figure 3, the highest and lowest ROE value in 2017 was achieved by a bank with the BBCA and BINA codes, with a value of 17.75 and 1.52.
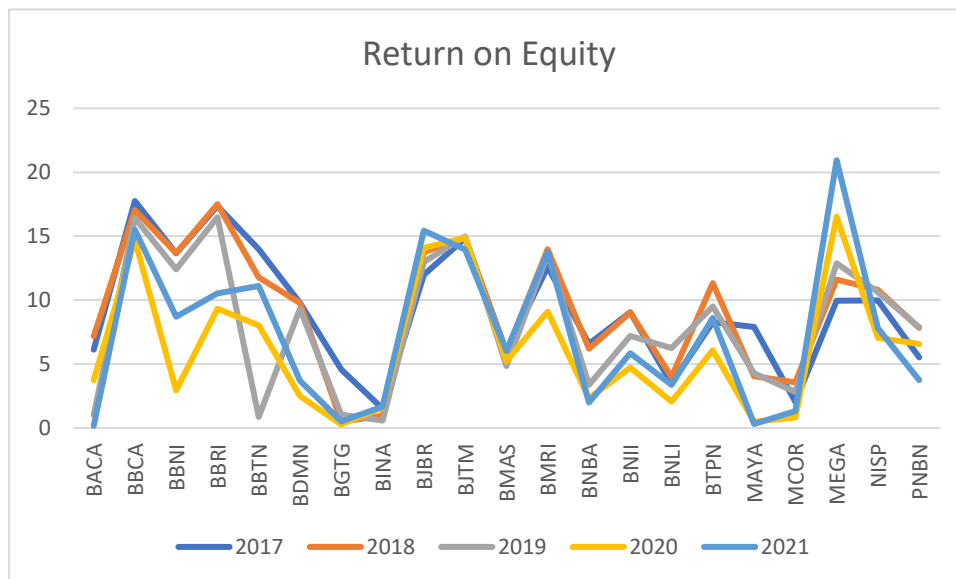

Figure 3. ROE Fluctuations at 21 Banks for the 2017-2021 period

The highest and lowest ROE values in 2018 were 17.50 and 0.50, achieved by a bank with the BBRI and BGTG codes, while in 2019, the values were 16.48 and 0.58, achieved by BBRI of 16.48 and BINA codes. A bank achieved the highest and lowest ROE value in 2020 with the MEGA and BGTG codes of 16.52 and 0.28, while in 2021, the value obtained was 20.94 and 0.16 by MEGA and READ codes.

Figure 4. PER fluctuations at 21 banks for the 2017-2021 period
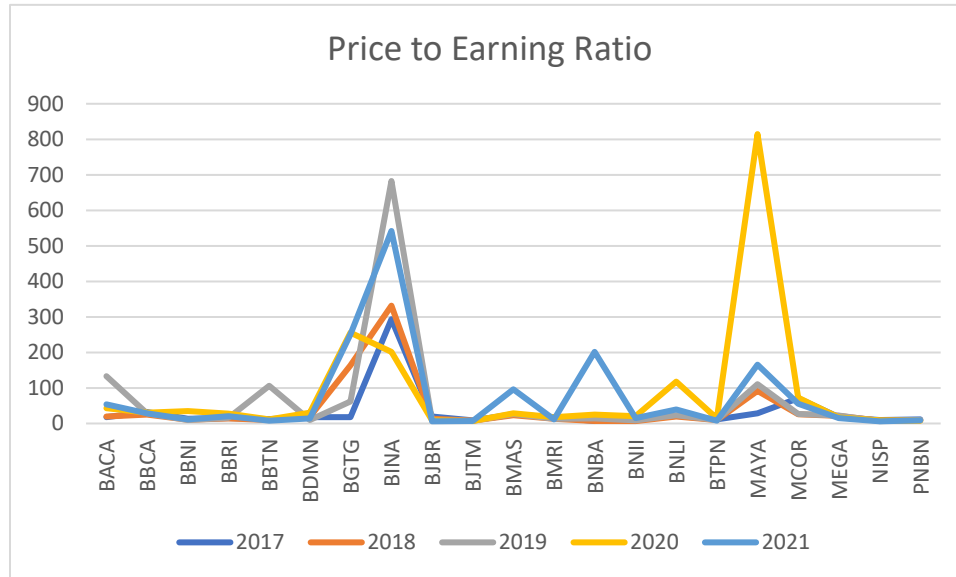
Based on Figure 4, a bank with the BINA code achieved the highest and lowest PER in 2017, with a value of 293.51 and 6.91. The highest PER in 2018 was 331.68, achieved by BINA, while the lowest score was 6.91, achieved by a bank with the BNBA code. In 2019, a bank with the BINA and NISP codes achieved the highest and lowest PER at 682.54 and 6.60. In 2020 the highest and lowest value was achieved by a bank with the MAYA and BJTM codes of 814.70 and 6.86. The highest and lowest PER value of 541.96 and 6.10 in 2021 were achieved by BINA and NISP.

Figure 5. EPS fluctuations at 21 banks for the 2017-2021 period
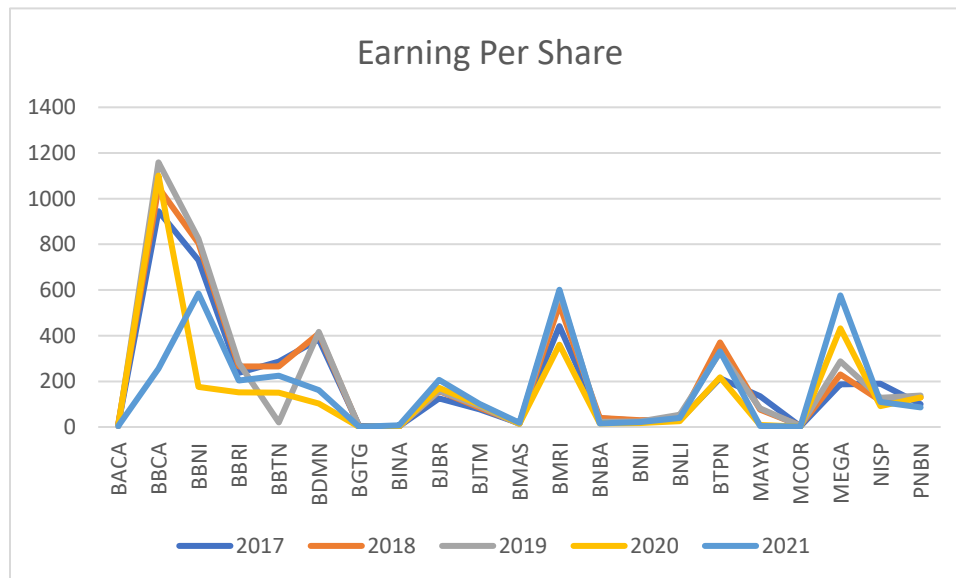
From Figure 5, the highest and lowest EPS in 2017 was achieved by BBCA and MCOR codes, with a value of 945 and 3. In 2018 the values of 805 and 0.50 were achieved by BBNI and BGTG. In 2019 the highest and lowest EPS was achieved by BBNI and BGTG of 825 and 1.06. Furthermore, in 2020 the highest and lowest EPS values of 432 and 0.97 were achieved by MEGA and BGTG. EPS value of 601.06 and 0.97 in 2021 was achieved by BMRI and BGTG codes. The next process is testing to determine the most appropriate between common, fixed, or random effect models.

4.1 Panel Data Regression Analysis
Details of the resulting estimation models, which include common and fixed effect models, are displayed in Tables 3 and 4, followed by their related regression equations:

Table 3. Common Effect Model

Variables	Coefficient	Probability Value
ROA	2,062	0,0303
ROE	-2,812	0,0224
PER	3,226	0,2467
EPS	1,582	0,0000

R Squared=0,749

Stock prices = 2,062ROA – 2,812ROE + 3,226PER + 1,582EPS   (1)

Table 4. Fixed Effect Model

Variables	Coefficient	Probability Value
C	2,715	0,0000
ROA	4,469	0,2332
ROE	-7,843	0,3065
PER	2,020	0,1145
EPS	5,150	0,0358

R Squared=0,772

Stock prices = 2,715+ 4,409ROA -7,843 ROE + 2,020 PER + 5,150EPS   (2)

After estimating common and fixed effects, the next process is to conduct a Chow test to select the most appropriate model, as seen in Tabel 5:

Table 5. Chow Test Result

Effect test	Statistic	df1	Probability
Cross-section F	4.845.721	-12,48	0.0000

The results of the Chow test show that the appropriate model is the fixed effect. Furthermore, the next step needs to be estimated using a random effect model, with the results presented in Table 6 as follows:

Table 6. Random Effect Model

Variables	Coefficient	Probability Value
C	-5,414	0,5858
ROA	2,156	0,0310
ROE	-2,463	0,0876
PER	4,659	0,2257
EPS	1,553	0,0000

R Squared=0,750

Stock prices = -5,414+ 2,156ROA -2,463ROE + 4,659PER + 1,553EPS   (3)

After the estimation of the random effect model, the next process is to carry out the Hausmann test to ascertain the suitability, as shown in Table 7 below:

Table 7. Hausmann Test Result

Test Summary	Chi-Sq. Statistic	Chi-Sq d.f.	Probability
Cross-section random	3.439.886	4	0.4871

The Hausmann test shows that the appropriate model is the random effect. Therefore, it is necessary to conduct a third analysis, namely the Lagrange Multiplier (LM) test. After the estimation, the next step is determining a more suitable model between the common and the random effects using the LM test. Breusch-Pagan developed this random effect significance test, and the method is based on the residual value of the OLS method, where the LM statistical value is calculated according to the formula:

$$LM = \frac{nT}{2(T-1)} \left[\frac{\sum_{i=1}^{n} (T\,\bar{e}_i)^2}{\sum_{i=1}^{n}\sum_{t=1}^{T} \hat{e}_{it}^2} - 1 \right]$$

The right model is a random effect when the calculated LM is greater than the critical value of the chi-squares distribution table with a degree of freedom of 5%, which is 5.999. LM test can also be conducted using E-views software with a Breusch Pagan Random Effect LM Test feature/menu. The probability value in the 'first' column is 0.1005, greater than 0.05. Based on these results, the most appropriate is the common effect model, which is under the first equation:

Stock prices = 2,062ROA – 2,812ROE + 3,226PER + 1,582EPS
R Squared   = 0,749

The research data was tested using the classic assumption test, namely normality, heteroscedasticity, multicollinearity, and autocorrelation. Normality test results obtained Jarque Bera probability value of 0.5900, and when greater than a significant value of 0.05, the data are normally distributed. Furthermore, a white test ensures data is free from heteroscedasticity, and the results show that the data has been freed from the problem. This is indicated in the probability value of 0.305 (greater than 0.05), showing the absence of heteroscedasticity. The general value used to indicate the presence of multicollinearity is a tolerance value ≤0.10 or the same as VIF value ≥10 in the regression model. ROA, ROE, PER, and EPS calculations showed a tolerance value of 0.260, 0.236, 0.689, and 0.689, respectively. These results indicate that each independent variable has a tolerance value of ≥0.10. The VIF calculation shows that ROA, ROE, EPS, and PER have values of 3.840, 4.229, 1.362, and 1.452. Therefore, each independent variable has a VIF value ≤10, and it can be concluded that there is no multicollinearity in this research. The Durbin-Watson Test (D-W) is widely used to determine autocorrelation. The D-W value is 1.098, which fits into the criteria of -2 to +2, showing the absence of autocorrelation between residuals.

4.2 Discussion
4.2.1 Impact of ROA, ROE, PER, and EPS on Stock Prices: Common Effect Model
PER does not affect stock prices in the banking sector. The results do not align with the research by Aisyah (2022) and Rarindra et al. (2020), where EPR affects stock prices.

Table 8. Common Effect Model

Variables	Coefficient	Standard error	t statistic	Probability Value
ROA	2,062	9,299	2,217	0,0303
ROE	-2,812	1,200	-2,342	0,0224
PER	3,226	2,758	1,169	0,2467
EPS	1,582	1,812	8,727	0,0000

R squared=0,749;   Adjusted R squared=0,736

However, the research results align with Aufa and Wahyuni (2019), where PER does not significantly affect stock prices. PER is used to determine the market value of the stock, which is expected to determine the market value of stock in the future and is of great concern to investors. In selecting company shares, investors with high PER values or prices are selected because they indicate a high market value for these shares. The greater PER value, the higher stock's prices are expected to be, and there is an anticipation of a substantial increase in the net profit growth. However, this does not apply to the banking sector, where investors do not pay attention to PER in making investment decisions. This could be due to relatively stable banking conditions or good financial performance.

ROA and EPS affect stock prices, and the values illustrate that the company can profit from its assets. The results are in line with Sari's research (2021), Riwayati and Aviliani (2021), and Bahar et al. (2019), where ROA and EPS affect stock prices. ROA compares net income to total assets owned by banking companies, and investors need to pay attention to this variable before investing. The value is directly proportional to the stock prices of banking companies and in managing assets. Furthermore, EPS measures the company's success in achieving profits for shareholders by rewarding stock returns. As EPS value and stock prices increase, banking companies become more attractive to investors seeking to invest their money.

In 2017, Indonesia's economic conditions exhibited improvement from the previous year, with a recorded economic growth, BI (Bank Indonesia), and inflation rates of 5.07, 4.25, and 3.61 (Bank Indonesia, 2017). Despite the inflation rate being higher than the targeted 3%, the net profit and publicly circulating share increased compared to the preceding year. This signifies sustained

investor interest in purchasing a share of banking companies. Furthermore, EPS value also demonstrated a favorable trend throughout 2017, increasing from 2016.

Economic conditions in 2018 experienced an increase from the previous year, where the growth was 5.17%. However, the BI rate was 6%, and there was a decrease in inflation from the previous year, which was 3.13% (Bank Indonesia, 2018). The economic conditions in 2019 were lower than in 2018, where growth, BI, and inflation rates were 5.02%, 5%, and 2.72%. Despite challenging market conditions throughout 2018-2019, the EPS values of several banking companies, including BBCA, BBRI, BDMN, BMRI, and BNLI, continued to increase compared to the previous year. This trend indicates that these companies have sustained growth in profitability, providing a positive return for their shareholders (Bank Indonesia, 2019).

A pandemic in early 2020 caused the economic condition of Indonesia to decline. The global economy experienced a significant downturn during the first half of 2020, primarily attributed to the impact of the Covid-19 pandemic. However, signs of recovery emerged as the second semester of 2020 commenced (Bank Indonesia, 2020). Economic growth was only 2.07%, with a BI and inflation rates of 3.75% and 1.68%. In 2021, Indonesia's economy was characterized by a BI rate of 3.50. The government has decided to reduce the BI rate to mitigate the negative impact of the Covid-19 pandemic on the people's economy to promote economic recovery. The inflation rate was 1.87%, but economic growth in 2021 increased by 3.69%. In addition, the development of EPS has been unstable due to the prevailing conditions throughout 2020-2021. In 2020, the net profit and the number of outstanding shares experienced a decline compared to 2019, but positive growth was observed in 2021. EPS values in several banking companies with improving economic conditions in 2021, such as BBCA, BBNI, BBRI, and BBTN, showed good results.

ROE examines the extent to which a company uses its sources of funds to provide a return on securities (Fahmi, 2012). The higher this ratio, the better the productivity of the asset in obtaining net profit (Husnan & Pudjiastuti, 2012). However, there was a negative effect of ROE on stock prices caused by inflation that occurred in 2017 from April to June, reaching 4.37%. Inflation can be one of the factors causing a decrease in a company's ROE.

An increase in stock prices can be observed when ROE decreases, which can be attributed to a reduction in the interest or BI Rate. Specifically, in March 2016 and February 2021, the BI Rate decreased to 6.75% and 3.5%, respectively. A decrease in interest rates can prompt investors to purchase company shares, thereby augmenting the stock prices of the concerned company. Moreover, the issuance of Bank Indonesia Circular Letter Number 15/4/DPNP, owing to the enforcement of Bank Indonesia Regulation Number 14/8/PBI/2012 relating to Commercial Bank Share Ownership, can act as another factor driving an increase in stock prices. This regulation imposes a maximum limit on share ownership, governed by financial institutions, non-financial legal institutions, and share ownership by individuals.

According to the regulations set forth by Bank Indonesia, financial and non-financial institutions are permitted to own a maximum and minimum of 40% and 30% share in commercial banks. For public bank shares, the maximum limit for individuals is 20%. The enactment of Bank Indonesia Regulation Number 14/8/PBI/2012, as stated on the official website of Bank Indonesia (www.bi.go.id, 2013), enhances the banking sector's resilience by reinforcing the application of prudential principles and good corporate governance. The regulation calls for restructuring and implementing a maximum share ownership limit to mitigate any negative impact of domination on bank operations. Moreover, the application of the maximum share ownership limit is expected to foster banking consolidation, thereby bolstering the resilience of the national industry.

The findings align with the research conducted by Romadhon and Satrio (2019), where ROE significantly impacts share prices but in a negative direction. This implies that companies may not optimize their capital to generate maximum profits. In light of these findings, companies exercise caution in their capital utilization practices, which can boost profits in line with expectations.

5. Conclusion and Implication

This research aimed to analyze the effect of the variables Return On Assets (ROA), Return On Equity (ROE), Prices Earning Ratio (PER), and Earning Per Share (EPS) on stock prices of banking sub-sector companies listed in the Indonesia Stock Exchange (IDX). The results indicate that ROA and EPS positively influence stock prices. These findings highlight investors' importance in paying attention to the indicator before investing in companies. Furthermore, companies need to optimize assets to maximize the expected profit. Corporate profits increase investor confidence and stock prices in banking companies. ROE is opposite to stock prices, which could be attributed to the main source of funds the company banking uses for its operations. This is the main finding of this study is that ROE has a negative effect on stock prices, where inflation can be one of the factors causing a decrease in ROE.EPS positively affects stock prices and profits in the form of important returns for investors. In addition, investors demonstrate an increasing interest in investment opportunities, leading to increased shares available for banking companies. PER positively impacts stock prices, although not significantly. This may be attributed to the banking sector's sound and stable performance, rendering the factor insignificant for investors when making decisions. Further research can develop by increasing the number of

other variables, such as Net Profit Margin (NPM) and Debt to Equity Ratio (DER). These can affect stock prices in perfecting the model for further research and be used as a guide in investing. The limitation of this research is that in the year of research, which is only 5 years, which cannot fully describe the fluctuations in stock prices, as well as the variables of financial performance.

The results of this study provide benefits and contributions, namely enriching research models that analyze financial performance, especially profitability on stock prices. Suggestions for further research can be added or examined by other variables such as net interest margin and company ownership.

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