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## FUNDAMENTAL IMPACT ON SHARE PRICES: EVIDENCE FROM INDONESIA

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### ABSTRACT

This paper aims to evaluate the fundamental impact on share price of banking sector companies listed on the Indonesian Stock Exchange. This paper uses a quantitative approach with the process of finding knowledge using data in the form of numbers as a generalizable tool to prove a hypothesis. Variable data to measure fundamentals as measured by Return on Assets, Return on Equity and Net Profit Margin are taken from the company's financial statements and the Indonesia Stock Exchange website at [www.idx.co.id](http://www.idx.co.id), [www.ojk.go.id](http://www.ojk.go.id), [www.bi.go.id](http://www.bi.go.id) and [www.yahoofinance.com](http://www.yahoofinance.com).

The results of this study indicate that Return on Assets and Net Profit Margin have a positive and significant effect on share prices, so that these findings can be used by investors in conducting fundamental analysis that has relevant information. Meanwhile, Return on Equity has no effect on stock prices, meaning that the Return on Equity tends not to have value relevance to the price of banking shares listed on the Indonesia Stock Exchange. The research results are recommended for banking customers to increase the effectiveness and efficiency of banking performance and to contribute to the banking literature.

### 1 Introduction

Factors that have an influence on stock prices can be divided into two factors consisting of internal factors and external factors. Internal factors are factors that are influenced from within the company which can be controlled by company management. While external factors are factors that are influenced by outside the company (Cao, Qin, & Zhu, 2019; Chae, Nakano, & Fujitani, 2020; Elhadj & Brahim, 2020; Moeljadi, Titisari, Supriyati, & Yuniarsa, 2020; Srinivasan & Lakshmi, 2019). Financial performance as a decision-making tool for corporate management, business people and government. The information

contained in the financial statements includes statements of financial position (balance sheet), income statements, changes in equity and cash flow reports that can be used as a basis for management decision making, financial statement information shows the company's achievements in a certain period (Abuoliem, Nor, Lola, & Matar, 2019; Baroroh & Mahardhika, 2018; Güler & Tepecik, 2019; Jayave, Rathore, & Sadhasivam, 2018; H. Wang, Peng, & Lv, 2018). Stock exchanges are the choice for companies to get funds for investment activities in terms of activities to link supply and demand (Elsharnouby & Elbanna, 2021; Lambrechts & Sinha, 2021; Nigussie et al., 2021; Singh & Henge, 2021; Yang & Dai, 2021). The share price is the value of shares that can be used as a buying and selling offer on the stock exchange as the selling price of one investor to another. Share prices fall if there are many offers on the stock exchange, but stock prices rise if there is a lot of demand in the capital market (Dasia Julianti, Emmy Ermawati, 1383; Raharjo & Muid, 2013; Baihaqi, Marota, Ilmiyono, & Firmansyah, 2017).

Fundamental analysis is a procedure for evaluating stocks based on a company's fundamental health condition (Gyorgy, 2021; Rey-Boué, Guerrero-Rodríguez, Stöckl, & Strasser, 2021; Shi et al., 2021; Venil, Lakshmi, Balachandran, Narayana, & Salian, 2021; Wu et al., 2021). Fundamental analysis is carried out by investors using company financial statement data, calculating the value of shares in financial statements as important information to describe the company's quantitative fundamental analysis (Au, Brownjohn, Li, & Raby, 2021; Iqbal, Choudhary, & Yousuf, 2021; J Liu, Zhang, Du, Wang, & Yang, 2021; Suerz et al., 2021; L. Wang et al., 2021). Fundamental factors are financial performance factors that provide an overview of the company's financial capabilities through ratio analysis (Au et al., 2021; B. Gao et al., 2021; Mazinani, Shakiba, Pourshahbaz, & Vahedi, 2021; Park, Park, & Kim, 2021; Zamzam, Liu, & Bernstein, 2021).

Based on phenomena and the results of previous research are inconsistent, so this study evaluates and analyzes fundamental variables on the stock prices of banking companies listed on the stock exchange, so that the formulation of the problem is whether the fundamental variables have an influence on the stock prices of banking companies on the Indonesian stock exchange. can be used by investors as a decision-making tool (Ika Nur Wahyuni, Ronny Malavia Mardani, 2017; Agustina, 2019). This study aims to evaluate and analyze the fundamental variables that have an influence on the stock prices of banking companies listed on the Indonesia Stock Exchange.

This research is expected to provide knowledge to the public and investors regarding the fundamental factors that affect the company's stock price. This research is expected to be used as input for the progress of the company and can be used as a comparison, especially in assessing the fundamental factors that can affect the company's share price (Sari, 2018; Endri, Dermawan, Abidin, & Riyanto, 2019; Herawati & Putra, 2018; Nautiyal & Kavidayal, 2018; Sartorius, Sartorius, & Zuccollo, 2018; Subing, Mulyati, Gusni, & Mariana, 2019).

## **2. Literature Review and Hypothesis Development**

### **2.1 Efficient Market Theory**

Fama, (1970) explains that the efficient market is a condition of the stock market price that takes into account all the information in the capital market. Measurement of efficient market investors must observe the relationship between stock prices and accounting information. (Fama, 1970), (F. Fama, 2013), (Brown, Lo, & Lys, 1999) explain that there are three main forms of efficient market which include: Efficient market is weak form, Efficient market is half strong form, and Strong form efficient market.

## 2.2 Fundamental Factors

Fundamental analysis is a way for investors to evaluate and analyze stocks based on the company's fundamental health condition (Deng et al., 2021; Eder et al., 2021; P. Gao, Zhou, Yang, & Li, 2021; Guo et al., 2021; C. Liu, 2021; Memari, Abdollahi, Khodabakhsh, Rezaei, & Moghbel, 2021; Moro Awelisah, Li, Ijaz, & Lin, 2021; "No Title," nd; Peng et al., 2021; Srinet, Sharma, Kumar, & Anshul, 2021). Fundamental analysis is carried out by investors using company financial statement data in calculating the value of shares in financial reports, important information to describe the company's quantitative fundamental analysis (da Silva, Dutra, Kopperschmidt, Lesnic, & Aykroyd, 2021; Ferretti, Randazzo, Cirrincione, & Pasero, 2021; Lenzi, Dinarelli, Longo, Girasole, & Mussi, 2021; Parrilla et al., 2021; Sujitha et al., 2021). Fundamental factors are financial performance factors that provide an overview of the company's financial capabilities (Suwahyono & Oetomo, 2006; Dasia Julianti, Emmy Ermawati, 1383; Nur Rahma Tri Utami, Dra., 2000). Fundamental analysis is one way to evaluate and analyze share prices using financial reports (Suwahyono & Oetomo, 2006). Financial ratio analysis provides information about the company's financial condition as a measure of the company's financial performance. Fundamental analysis is based on the belief that share prices. Good and positive information is expected to take into account the increase in share prices (Dai, 2021; Hasan et al., 2021; Jana et al., 2021; Vinnakoti & Vasamsetti, 2021; Z. Wang & Wu, 2021; Yu, Zhang, Wu, Li, & Li, 2021). The fundamental ratios used in this study are Return On Assets, Return On Equity and Net Profit Margin.

### 2.3.1 Return On Assets (ROA)

Return on assets is a ratio that explains the company's ability to get net income to see the company's operational activities (Juanamasta et al., 2019; Rusdiyanto, Agustia, Soetedjo, & Septiarini, 2020a; Rusdiyanto, Hidayat, Tjaraka, Septiarini, Fayanni, Utari, Waras, Indrawati, Susanto, Tjahjo, Zainal, et al., 2020) The higher the return on assets, it shows that the company is very effective in using assets in obtaining company profits. The return on company assets is a ratio that describes the assets in getting company profits.

### 2.3.2 Return On Equity (ROE)

Return on equity (ROE) is a ratio to describe the company's effectiveness in generating company profits using company capital. Return on equity describes the success of management in maximizing return on capital to shareholders (Bathia, Bouras, Demirer, & Gupta, 2020; Behera, 2020a, 2020b; IImanen, Chandra, & McQuinn, 2020; Pokharel, Archer, & Featherstone, 2020). The higher the return on equity, the better it is in providing return on capital to shareholders. Information on increasing Return on equity is received as a good signal that can provide positive input for investors in purchasing decisions on company shares.

### 2.3.3 Net Profit Margin (NPM)

Net Profit Margin (NPM) is a ratio that describes the percentage of net profit on net sales (Bani Khaled, 2020; Chatfield, Chatfield, Baloglu, & Poon, 2020; Cooper et al., 2020; Iqbal, Gan, & Nadeem, 2020; Sir, 2020; Rahman, Rodríguez-Serrano, & Lambkin, 2020).

## 2.4 Share Price

Share price is the value of shares that can be used as a sale and purchase price from investors to other investors (Cappelli, Cerqueti, D'Urso, & Di Iorio,

2021; Huang, Qiu, & Li, 2021; Islam, Karim, Khatun, & Arefin, 2021; Kumar Chandar, 2021; Sirohi, Jain, Jha, & Vashist, 2021). The more the share price is offered, the share price decreases, but on the contrary, the stock price experiences a lot of demand, the share price will rise. Share prices are prices determined by investors through a meeting of demand and supply (Bardhan & Vaghela, 2021; Chakole, Kolhe, Mahapurush, Yadav, & Kurhekar, 2021; Huang et al., 2021; Islam et al., 2021; Kumar Chandar, 2021; Liao, Kuo, & Chan, 2021; Singh & Henge, 2021; Sirohi et al., 2021; Uma & Naidu, 2021). The share market price is formed through the supply and demand mechanism in the capital market. Share prices change up or down from one time to another (de Castro Filho, da Costa Dias, de Andrade, & Facó, 2021; Kirillova, 2021; Tektaş, Karakul, & Mizrahi, 2021; Tomer, Anand, Shandilya, & Tiwari, 2021; Viswanathan & Stephen, 2021). Stock prices are influenced by the demand and supply of shares on the stock exchange, investors buy shares from companies. One of the factors that influence share prices is company performance (Nataryah, 2000; Dasia Julianti, Emmy Ermawati, 1383) By combining all of the above arguments, so as to formulate the following hypothesis:

H<sub>1</sub>: Return On Assets have a positive influence on the company's share price

H<sub>2</sub>: Return On Equity has a positive effect on the company's share price

H<sub>3</sub>: Net Profit Margin has a positive effect on the company's share price

### 3 Research methods

#### 3.1 Types of Research Approaches

This type of research uses quantitative research, quantitative research is a research method that is based on theory and results of previous research to evaluate a particular population or sample. Data collection uses financial statement data from banking companies listed on the Indonesia Stock Exchange from 2010-2017, with the aim of testing the hypothesis in this study. The research approach used is descriptive research to determine the existence of fundamental variables and share price variables.

#### 3.2 Specification Model of Research Variables

The research variables used in this study consist of fundamental variables which are proxied by Return On Assets, Return On Equity, Net Profit Margin and Stock Price. The operational definition is explained as follows:

#### 3.3 Operational Definition of Variables and Variable Measurement

This study uses four types of variables to produce a regression model to measure the relevance of the company's fundamental value. The variables used in this study, among others:

##### 1) Independent Variable

##### 1. Return On Assets (ROA)

Return on assets (ROA) measures the efficiency level of a company in utilizing its assets in the company's operational activities. (Elviani et al., 2019; Juanamasta et al., 2019; Rusdiyanto, Agustia, Soetedjo, & Septiarini, 2020; Rusdiyanto, Hidayat, et al., 2020). The ROA ratio formula used in this study is:

$$\text{Return on Assets} = \frac{\text{net Profit}}{\text{Total Assets}}$$

##### 2. Return On Equity (ROE)

Return on equity (ROE) is a ratio to measure the effectiveness of a company in generating profits by utilizing company capital. (Bathia et al., 2020; Behera,

2020a, 2020b; Ilmanen et al., 2020; Pokharel et al., 2020). The formula that can be used to calculate the return on equity ratio is as follows:

$$\text{Return on equity} = \frac{\text{net Profit}}{\text{Total Equity}}$$

3. Net Profit Margin (NPM)

Net Profit Margin (NPM) is a ratio to measure the percentage of net profit on net sales (Elviani et al., 2019; Asmirantho, Yang, & Di, 2015; Ayu Mastutik, Ronny Malavia Mardani, 2016). The formula used to calculate NPM is as follows:

$$\text{Net Profit Margin} = \frac{\text{net Profit}}{\text{net sales}}$$

2) Dependent Variable

The dependent variable used in this study is the share price, the share price used in this study is the closing share price (Ayu Mastutik, Ronny Malavia Mardani, 2016; Rusdiyanto & Narsa, 2019).

**3.4 Stages of Estimation**

**3.4.1 Population and Sample**

The population of this research is banking companies listed on the Indonesia Stock Exchange in the period 2010-2017. The research sample is banking companies listed on the Indonesia Stock Exchange in the 2010-2017 period. The sampling technique used was purposive sampling method. Purposive sampling determines certain criteria or considerations that are tailored to the objectives and research problems.

**3.4.2 Data Analysis Techniques and Descriptive Statistical Analysis**

The research analysis method used descriptive statistical data analysis, multiple regression analysis, classical assumption test, and hypothesis testing. Descriptive statistical analysis provides a description of the data seen from the mean, standard deviation, variance, minimum, and maximum values.

**3.4.3 Analysis Model**

The research analysis model examines the effect of fundamental variables on stock price variables using multiple linear regression analysis which is an analysis to express a linear relationship between fundamental variables and stock price variables. The following is an empirical model of the research:

$$NP_t = \alpha + \beta_1 ROA + \beta_2 ROE + \beta_3 NPM + \epsilon \dots \dots \dots (1)$$

**Table 0-I. Variable Description**

Description	=	Explanation
NP <sub>t</sub>	=	Share Price
α	=	Constant
β <sub>1</sub> , β <sub>2</sub> , β <sub>3</sub>	=	The regression coefficient for the variables ROA, ROE, and NPM
ROA	=	Return On Asset (ROA)
ROE	=	Return On Equity (ROE)
NPM	=	Net profit Margin (NPM)
ε	=	Error Standard

**4. Analysis and Discussion**

**4.1 Description of Research Results**

The description of the characteristics of the research data uses descriptive analysis to provide an overview of the fundamental variables and the variable share prices. The following is descriptive statistical data from a sample of share prices, return on assets, return on equity and net profit margin.

**Table 4 I. Descriptive Statistics**

Variable	N	Min	Max	Mean	Std. Dev
Share Prices	128	870	13275	5721.15	3395,397
ROA	128	1	5	2.96	1,083
ROE	128	6	44	22.53	7,851
NPM	128	4	10	6.28	1,463
Valid N (listwise)	128				

From the table above, Net Profit Margin has a higher value than Return On Assets and Return On Equity. Return On Assets is much lower than Net Profit Margin and Return On Equity because Net Profit Margin contains more fair value components of wealth and financial debt than Return On Assets and Return On Equity. The increase in value respectively of Net Profit Margin and Return On Equity shows that it contains information about the relevance of fair value faced by a company in relation to the company's assets and debt. Increasing profit has an influence on the economy which tends to fluctuate in company share prices

#### 4.2 Regression Analysis

This research variable is stated to be stationary at degree 0, so that the fundamental variables and share price variables can be directly analyzed in the regression equation. The following is the regression results of the fundamental variables and share price variables in the study:

**Table 0-I. Regression Analysis**

Variable	Coefficient	t	Sig.t
Constant	1124,245	3,054	0,003
ROA	535,401	5,700	0,000**
ROE	65,197	-1,377	0,171
NPM	263,154	-2,851	0,005**
R	= 0,591		
R Square	= 0,349		
F	= 3,507		
Sig.F	= 0,000**		
Bound Variable: Share price (NB <sub>t</sub> )			

#### 5. Discussion

Return On Assets has a positive and significant effect on stock prices. This result means that the value of Return On Assets has value relevance to stock prices. It can be used for investors to conduct fundamental analysis because it has information that is relevant to share prices. The Return On Assets coefficient shows a value of 535,401 with a  $t_{count}$  of 5,700 with a significance level of 0,000, meaning that Return On Assets has a positive relationship with share prices. The results of the study reinforce the opinion that companies with high return on assets are able to attract investors' attention to buy company shares. The coefficient produced in the test proves that investors are more interested in companies with high Return On Assets values and become the basis for information in making investment decisions.

Return On Equity does not have a positive and significant effect on share prices. The results show that Return On Equity has no value relevance to stock prices. The Return On Equity coefficient shows a value of 65.197 with a  $t_{count}$  of -1.377 with a significance level of 0.171, meaning that Return on Equity has no positive relationship with share prices. So that investors cannot use the Return On Equity information to assess the company's share price. Return On Equity is a general expectation for investors. From the results of this test, investors do not see the effect of Return On Equity on share prices.

Net Profit Margin has a positive and significant effect on stock prices. The results

of the value of the Net Profit Margin have relevance to the value of the share price. Investors can use it to carry out fundamental analysis to have information relevant to share prices. The Net Profit Margin coefficient shows a value of 263.154 with  $t_{count}$  which is -2,851 with a significance level of 0.005, it means that the Net Profit Margin has a positive relationship with share prices. The results of the study corroborate the opinion that companies with high sales values are able to attract investors' attention to buy company shares. The coefficient generated in the test proves that investors are more interested in companies with high Net Profit Margin values and become basic information in making investment decisions.

## 6. Conclusion

The test results show that Return On Assets and Net Profit Margin have a significant effect on share prices, while Return On Equity has no effect on share prices. Based on this conclusion, the results of this study are expected to provide information to investors or potential investors to pay more attention to aspects of Return On Assets and Net Profit Margin as a consideration for investing in share prices. The results of this study are expected to be used as a consideration for banking companies as a basis for making business decisions related to Return On Assets, Return On Equity and Net Profit Margin on share prices. Business decisions focus on how much return on shares is given by banking sector companies and how banking sector companies maintain the company's profit level, so that investors can be interested in the company.

Future research will use a larger sample of companies that are not only in the banking sector. In addition, future research uses a longer time span to identify the relationship between Return On Assets, Return On Equity and Net Profit Margin on share prices. Future research uses audited annual financial report data so that the value of the return on assets is determined. Return on Equity and Net Profit Margin and using a longer period not only for six years, future research examines the relevance of fair value earnings measurement models at each stage of the corporate cycle as in research conducted by Black (1998).

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