

VALUE RELEVANCE OF FINANCIAL INFORMATION: EMPIRICAL EVIDENCE FROM INDONESIA

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ABSTRACT

This research aims to analyze the factors that influence stock prices. The independent variables in this research are book value per share, dividends per share, earnings per share, operating cash flow per share, and return on assets, while the dependent variable is the stock price. The research sample used 45 (forty-five) consumer cyclical industry companies that were listed on the Indonesia Stock Exchange for the 2020-2022 period. The sampling technique used purposive sampling and the analytical method panel data regression. The results of the research explain that operating cash flow per share has a book value per share, dividends per share, and operating cash flow per share have a significant effect on stock prices, but earnings per share and return on assets have no effect on stock prices. The implication of the research that has been done is to provide direction for financial managers regarding the value relevance of financial information which can be seen from the book value per share, dividends per share, earnings per share, operating cash flow, and return on assets on stock prices. This research result is useful in the process of deciding on policies and assessing company performance. Meanwhile, the investors provide information that there is a strong relationship between financial information and stock prices.

Keywords: *value relevance, book value per share, dividends per share, earning per share, return on assets*

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INTRODUCTION

Every company must have an obligation to publish financial reports that provide information to stakeholders, especially investors, to help them make investment decisions. The information must be useful in the decision-making process, and the information obtained must have two important components, namely relevance and reliability. According to Astutik et al. (2021) the stock market is an integral part of the economy of every country because of its function as a means of providing capital and a tool that illustrates economic health through fluctuations in stock prices. An increase in the company's stock price is an important indicator in assessing the company's performance. If the company's stock price always increases, it will encourage investors to invest in the company (Bris et al., 2021).

The increase in stock prices is important information for investors. Unstable stock prices on the stock exchange will require investors to analyze and make effective investment decisions (Nurainun Bangun, 2022). Fundamental analysis is an approach to assessing financial statements that is useful for predicting the future of the company. To determine the value of the stock price, it is necessary to calculate the estimation of fundamental factors through financial ratio analysis where the data is obtained from the company's financial reports Astutik et al. (2021). The fundamental analysis carried out in this study is book value per share, dividends per share (DPS), earnings per share (EPS), operating cash flow, and return on assets (ROA).

The relevance of the value of financial information presented in financial reports affects the stock price of a company (Hung et al., 2018). Financial information using financial ratio analysis in determining stock prices. Hidayat et al. (2019) explain that financial information is relevant for investors in making investment decisions. In addition, the company's reputation also influences investors' decisions.

Book value per share is described as the amount of Rupiah issued to buy shares as company capital. Book value per share is reflected in the amount paid to shareholders at the time of the company's liquidation if the company's assets can be sold at their book value. Book value per share describes the total assets divided by the equity owned by the company and determines whether or not the stock price is fair in the market (Murniati, 2016).

Investors in investing have the goal of obtaining profits from the shares purchased, in the form of dividends and capital gains. Dividends come from company profits which are distributed to investors, while capital gains are the difference in share prices when selling and buying these shares. The Dividend per Share (DPS) ratio reflects the company's ability to distribute dividends per share. If the DPS is high, it indicates that the company has good performance prospects and attracts investors. DPS has a linear relationship with stock prices. If the DPS value increases, the stock price is expected to increase (Murniati, 2016).

Earning per Share (EPS) or income per share is a distribution of profits given to shareholders from each share owned. EPS shows the most important indicator that investors use in buying shares. If the EPS value is high, then investors are interested in buying these shares so that it will increase the share price (Rahmadewi & Abundanti, 2018).

Operating cash flow, abbreviated as OCF, is an indicator used to determine a company's ability to generate cash to pay off loans, pay dividends and make new investments using internal funding. Investors assess the company's ability to pay dividends based on this cash flow information (Santoso & Manaf, 2019).

Return On Assets (ROA) shows the company's ability to gain profits by using assets. ROA has a goal to measure the return on invested capital by using all the assets owned by the company (Wartono, 2020). The higher the ROA value, the more effective it is in providing returns to investors. In other words, the higher the ROA value, the more profit the company generates. If the ROA value decreases, the company will suffer losses (Wijaya, 2019).

Considering the above, investigating the value relevance of financial information can assist stakeholders in making decisions, especially if the company's financial statements provide valuable and reliable financial information. For developing countries, research on the relevance of the value of financial information is very important because of the high investment risk with a limited supply of capital (Outa et al., 2017).

Previous research (Ahmadi & Bouri, 2018) has investigated the importance of financial information in financial statements in general, such as company earnings, book value, dividends distributed, and cash flows from operations, and their effect on stock prices. As a result, the market value of the companies in the study has increased. However, there appears to be a dearth of research in this area in the Middle East and North Africa (MENA). Based on the explanation of the background and phenomena above, a study was conducted entitled "The Relevance of Value of Financial Information: Empirical Evidence from Indonesia".

This study has a goal and at the same time is a limitation of the problem, including related to the relevance of the value of financial information in 45 (forty-five) consumer cyclical

industrial companies listed on the Indonesia Stock Exchange for the 2020-2022 period, namely analyzing the effect of book value per share, dividends per share (DPS), earnings per share (EPS), operating cash flow per share and return on assets (ROA) on stock prices. So that financial managers can decide policies and assess company performance, and investors are expected to be able to provide information that there is a strong relationship between financial information and stock prices.

METHOD

Variables and Variable Measurement

The variables and measurements used in this study intend to determine the relationship between the independent variables and the dependent variable, each of which is measured as follows:

Table 1. Variable Identification and Measurement

Type Variable	Name Variable	Definition of Operational Variables	Reference
Variabel Dependen	<i>Share Price</i>	<i>Company's share price</i>	(Aletheari & Jati, 2016)
Variabel Independen	<i>Book value per share</i>	$\frac{\text{Total Equity}}{\text{Large Number Shares}}$	(Putri & Lautania, 2016)
	<i>Dividens per share</i>	$\frac{\text{Cash Dividend}}{\text{Number of Outstanding Shares}}$	(Ali et al., 2022)
	<i>Earning per share</i>	$\frac{\text{Net Profit}}{\text{Number of Outstanding Shares}}$	(Cahyaningrum & Antikasari, 2017)
	<i>Operating Cash flow per share</i>	$\frac{\text{Cash Flow} - \text{Cash Dividend}}{\text{Number of Outstanding Shares}}$	(, & Tan, 2017)
	<i>Return On Asset</i>	$\frac{\text{Net Profit}}{\text{Total Assets}}$	(Cahyaningrum & Antikasari, 2017)

Sampling Method

The sampling method used for this research is purposive sampling. Considerations are taken because this research focuses on certain goals, namely companies with certain criteria. The sample in this study are companies listed on the Indonesia Exchange (IDX) during the 2020-2022 period which have complete financial statements totaling 45 companies.

Table 2. Sampling Criteria

Description	Amount
Companies listed on the Indonesia Stock Exchange for the Consumer Cyclicals industry	145
Companies that publish financial reports consecutively from 2020 to 2022.	(46)
Companies whose data are not in accordance with the normality test	(54)
The number of companies that are eligible to be sampled	45

There are stages in testing the panel data regression model in this study which are described as follows:

Chow Test

The results of the chow test have two options that must be determined, namely the common effect or the fixed effect. In this study, the chow test is useful to determine which model is better and more appropriate. The chow test is based on the null hypothesis where there is no individual heterogeneity and the alternative hypothesis where there is heterogeneity in the cross-section.

The hypothesis in the chow test is stated as follows:

H0 : The right model is the common effect

Ha : The right model is a fixed effect

The criteria for making the decision:

If the probability of cross-section of chi-square < 0.05, H0 is rejected

If the probability of cross-section of chi-square > 0.05, H0 is accepted.

Chow test or Chow Test is conducted to determine the best model between Common Effects Model and Fixed Effects Model. The following are the test results from the Chow Test:

Table 3. Chow Test Results

Chow Test				
<i>Effects Test</i>	<i>Model</i>	<i>Prob.</i>	<i>Hypothesis</i>	<i>Conclusion</i>
Cross-Section Chi-Square	Model 1 (Stock price)	0.0000	Ha Accepted	Fixed Effects Model

Source: Data processed using E-views 12

The results show that the value of Prob. Cross-Section Chi-Square model 1 of 0.0000 < 0.05, Ha Accepted. It can be concluded that the best model chosen is the Fixed Effects Model

Hausman Test

The results of the Hausman test have two options that must be determined, namely the random effect or the fixed effect. In this study, the Hausman test is useful for determining which model is better and more appropriate.

The hypothesis in the Hausman test is stated as follows:

H0 : The right model is a random effect

Ha : The right model is a fixed effect

The criteria for making the decision:

If the cross-section probability of random < 0.05 , H0 is rejected

If the cross-section probability of random > 0.05 , H0 is accepted

Hausman Test or Hausman Test is carried out to determine the best model between the Fixed Effects Model and the Random Effects Model. The following are the test results from the Hausman Test:

Table 4. Hausman Test Results

Hausman Test				
<i>Effects Test</i>	<i>Model</i>	<i>Prob.</i>	<i>Hypothesis</i>	<i>Conclusion</i>
Cross-Section Random	Model 1 (Stock price)	0.5972	Ha rejected	Fixed Effects Model

Source: Data processed using E-views 12

The results show that the value of Prob. Cross-Section Random model 1 of $0.5972 > 0.05$, Ha Rejected. It can be concluded that the best model chosen is the Random Effects Model.

Test Lagrange Multiplier Test

The results of the Lagrange multiplier test have two options that must be determined, namely common effect or random effect. In this study, the lagrange multiplier test is useful to determine which model is better and more appropriate.

The hypothesis in the Lagrange multiplier test is stated as follows:

H0 : The right model is the common effect

Ha : The right model is a random effect

The criteria for making the decision:

If the probability of cross-section < 0.05 , H0 is rejected

If the cross-section probability > 0.05 , H0 is accepted

Table 5. LM Test Results

LM Test				
<i>Effects Test</i>	<i>Model</i>	<i>Prob.</i>	<i>Hypothesis</i>	<i>Conclusion</i>
Cross-Section One-Sided	Model 1 (Stock Price)	0.0000	Ha Accepted	Random Effects Model

Source: Data processed using E-views 12

The results show that the value of Prob. Cross-Section One-Sided model 1 of $0.0000 < 0.05$, H_a Accepted. It can be concluded that the best model chosen is the Random Effects Model.

Data Analysis Method

Goodness of Fit Test (R2)

This test aims to see how much influence the independent variables have in explaining the dependent variable. This analysis test uses the adjusted R2 value because the number of independent variables is more than one. If the adjusted R2 value shows a value close to 1, it means that the independent variable is able to explain the dependent variable. The criteria for making the decision:

- If the value of adjusted R2 is close to 1, the ability of the independent variable to explain the dependent variable is getting higher.
- If the value of adjusted R2 is close to 0, the ability of the independent variable to explain the dependent variable is getting lower.

Table 6. Goodness of Fit Test Results (R2)

Coefficient of Determination		
<i>Testing</i>	<i>Model</i>	<i>Value</i>
Adjusted R-Squared	Model 1 (Stock Price)	0.0654

Source: Data processed using E-views 12

Based on the test results above, the Adjusted R-Squared value in model 1 is 0.0654 or 6.54%. Shows that all independent variables can explain the dependent variable of 6.54%, the remaining 93.46% is explained by other variables outside the model.

Concurrent Test (F-test)

This test was conducted to test whether the independent variables simultaneously have a significant influence on the dependent variable.

The hypothesis in the F test is stated as follows:

$$H_0 : b_1 = b_2 = b_3 = 0$$

This means that together the independent variables do not affect the dependent variable

$$H_a : b_1 \neq b_2 \neq b_3 \neq 0$$

This means that together the independent variables affect the dependent variable

The criteria for making the decision:

If $\text{sig.F} < 0.05$, H_0 is rejected

If $\text{sig.F} > 0.05$, H_0 is accepted

Table 7. Simultaneous Test Results (F-test)

Simultant Test (F-Test)				
<i>Effects Test</i>	<i>Model</i>	<i>Prob.</i>	<i>Hypothesis</i>	<i>Conclusion</i>
Prob. (F-Statistic)	Model 1 (Stock Price)	0.0170	H_a Accepted	Significant Influence

Source: Data processed using E-views 12

Based on the test results, the value of the Prob (F-Statistic) in model 1 is $0.0170 < 0.05$, H_0 Accepted. It can be concluded that simultaneously all independent variables have a significant effect on the dependent variable.

RESULTS AND DISCUSSION

Model Specification Test

This study discusses the effect of book value per share, dividends per share (DPS), earnings per share (EPS), operating cash flow, and return on assets (ROA) on stock prices. The companies used as samples are 45 (forty-five) companies from the Consumer Cyclical industry that are registered on the Indonesia Exchange (IDX) during the 2020-2022 period and have complete financial reports.

Descriptive Statistical Analysis

Descriptive statistical analysis in research is the stage of elaboration and description. The presentation of this data will discuss statistical measures, such as the size of the center, the size of the distribution, and the size of the location of the spread/distribution of data. This analysis aims to summarize the data so that it can provide an easy-to-understand description and information. This analysis was carried out by calculating the variation in the average (mean), median, standard deviation, maximum, and a minimum of each variable, namely stock prices (the dependent variable); book value per share, dividends per share (DPS), earnings per share (EPS), operating cash flow and return on assets (ROA) (independent variables).

Table 8. Results of Descriptive Statistical Analysis

	N	Mean	Median	Maximum	Minimum	Standard Deviation
SP	135	193.6593	137.0000	810.0000	50.00000	156.7402
BVS	135	10749.85	117.7400	517561.1	-6486.862	68079.70
DVS	135	-271.9449	0.000000	0.010000	-22716.55	2277.853
EPS	135	1363.506	-2.803696	70088.86	-12688.11	9890.850
OCFS	135	2408.971	0.832407	259572.8	-1158.840	22736.41
ROA	135	0.078263	-0.018066	14.76739	-4.766992	1.618727

Source: Data processed using E-views 12

Book Value Per Share (BPS) has an average value of 10749.85, a median of 117.7400, a maximum value of 517561.1, a minimum value of -6486.862, and a standard deviation of 68079.70.

Dividend Per Share (DPS) has an average value of -271.9449, a median of 0.000000, a maximum value of 0.010000, a minimum value of -22716.55, and a standard deviation of 2277.853.

Earning Per Share (EPS) has an average value of 1363.506, a median of -2.803696, a maximum value of 70088.86, a minimum value of -12688.11, and a standard deviation of 9890.850.

Operating Cash Flow has an average value of 2408.971, a median of 0.832407, a maximum value of 259572.8, a minimum value of -1158.840, and a standard deviation of 22736.41.

Return on Assets (ROA) has an average value of 0.078263, a median of -0.018066, a maximum value of 14.76739, a minimum value of -4.766992, and a standard deviation of 1.618727.

Individual Test (T-test)

The test is carried out whether each independent variable has a significant influence on the dependent variable.

The hypothesis in the T-test is stated as follows:

H0 : there is no effect of the independent variable on the dependent variable

Ha: there is an influence of the independent variable on the dependent variable

The criteria for making the decision:

If sig.t < 0.05, H0 is rejected

If sig.t > 0.05, H0 is accepted

Table 9. Individual Test Results (T-test)

Model 1					
Random Effects Model					
Variabel Dependent: Share Price					
<i>Variables</i>	<i>Coefficient</i>	<i>Prob.</i>	<i>Prob (Two-Tailed)</i>	<i>Hypothesis</i>	<i>Conclusion</i>
C	190.6415	0.0000	0.0000		
Book Value per Share	-0.001070	0.0001	0.0001	Ha Accepted	Significant Influence
Dividends per Share	-0.023986	0.0000	0.0000	Ha Accepted	Significant Influence
Earnings per Share	-0.000360	0.7412	0.3706	Ha Accepted	Not Significant
Operating Cash Flow per Share	0.003446	0.0000	0.0000	Ha Accepted	Significant Influence
Return on Assets	2.414007	0.3761	0.1881	Ha Rejected	Not Significant

Source: Data processed using E-views 12

Book Value per Share has a significant effect on Share Price

Variable Book Value per Share has a prob value. Two-tailed is 0.0001 <0.05, then the Book Value per Share has a significant effect on the Share Price. Ha accepted.

Dividends per Share have a significant effect on the Share Price

Variable Dividends per Share have a prob value. Two-tailed is 0.0000 <0.05, then the Dividends per Share have a significant effect on the Share Price. Ha accepted.

Earnings per Share has no effect on the Share Price

The Earnings per Share variable has a prob value. Two-tailed is $0.3706 > 0.05$, so Earnings per Share has no effect on Share Price. H_a rejected.

Operating Cash Flow per Share has a significant effect on the Share Price

Variable Operating Cash Flow per Share has a prob value. Two-tailed is $0.0000 < 0.05$, so the Operating Cash Flow per Share has a significant effect on the Share Price. H_a accepted.

Return on Assets has no effect on the Share Price

Variable Return on Assets has a prob value. Two-tailed is $0.1881 > 0.05$, so the Return on Assets has no effect on the Share Price. H_a rejected.

Research Regression Model

The panel data regression model previously used by (Osama Abdelrahim Ahmad Khader et al., 2023) can be written as follows:

$$SP = 190.6415 - 0.001070 BVS - 0.023986 DPS - 0.000360 EPS + 0.003446 CFFO + 2.414007 ROA + \epsilon_{it}$$

Information:

- SP_{it} = Market value of the common stock
- BVS_{it} = Book value of the common stock
- EPS_{it} = Earnings per share
- DPS_{it} = Dividend per share
- CFFO_{it} = Cash flow from operations per share
- α_0 = Constant
- α_1 = Constant
- $\alpha_1(BVS)_{it}$ = Coefficient of Book value of the common stock
- $\alpha_2(EPS)_{it}$ = Earnings coefficient per share
- $\alpha_3(CFFO)_{it}$ = Coefficient of cash flow from operations per share
- ϵ_{it} = Error

CONCLUSION

Based on the results of research that has been done to analyze the effect of book value per share, dividends per share (DPS), earnings per share (EPS), operating cash flow and return on assets (ROA) on stock prices, the following conclusions can be drawn is (1) Book value per share has a significant influence on stock prices. (2) Dividends per share (DPS) has a significant influence on stock prices. (3) Earnings per share (EPS) has no effect on stock prices. (4) Operating cash flow has a significant influence on stock prices. (5) Return on assets (ROA) has no effect on stock prices.

The results section describes experiments that were completed before the paper was written. Therefore, the simple past tense is the natural choice when describing the results obtained.

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