The Effect of Net Profit Margin, Book Value, and Company Size on Stock Prices in the Consumption Goods Manufacturing Company Listed on Indonesia Stock Exchange (2015-2017)

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Abstract

This research aimed to analyze the influence of net profit margin, book value, and firm size on the stock price of the manufacturing company sector consumer goods industry listed on the Indonesia Stock Exchange period 2015 to 2017. The dependent variable of this study was the stock price. The independent variables were net profit margin, book value, and firm size. The statistical analysis tool used in this research was SPSS version 25. The samples in this research used the purposive sampling technique to get a sample size of 24 companies, and the number of observations is 72. Results of the research showed that net profit margin gives the effect towards stock price, book value gives the effect towards stock price, and the firm size gives the effect toward stock price. Net profit margin, book value, and firm size influence stock prices.

Keywords
Net profit margin, book value, firm size, and stock price

1. Introduction
The stock price is an important factor that investors must consider when investing. Stock prices that are too low often mean that the company's performance is not good, but if the stock price is too high, it reduces the ability of investors to buy these shares (Tandelilin, 2010). Stock prices in the capital market are volatile. This is influenced by the strength of demand and supply. When the demand for a stock increase, the stock's price will tend to increase. Conversely, when more people sell the stock than people interested in buying it, the stock price will tend to decline. The existence of fluctuations in stock prices often makes stock investors act wrongly. Therefore, investors need sufficient and relevant information to analyze stock price movements. There are two types of stock analysis techniques: technical and fundamental analysis. Technical analysis is a way to analyze stocks by paying attention to price patterns and stock volumes. Fundamental analysis is a way to study stocks by estimating a company's ability to grow and generate profits in the future (Darmadji, 2011).

Previous research shows there are differences in the results of the research conducted. Watung and Ilat's research results (2016) which examined the return on assets, net profit margins, and earnings per share of stock prices, stated that net profit margins affect stock prices. The results of this study differ from the research results of Hutapea, Saerang, and Tulung Subhan (2017), stating that the net profit margin does not affect stock prices. A previous study conducted by Malhotra and Tandon (2013) stated that book value positively affected stock prices. According to Andriyani and Armereo's research (2016), book value had a negative effect on stock prices. Anggraeni and Widjaja's (2017) research states that company size positively affects stock prices. The results of this study differ from the

results of research conducted by Sa'adah and Kadarusman (2014). They state that the company's size does not affect stock prices. Based on previous research, the independent variables of this study are net profit margin, book value, and company size.

The first independent variable of this study is the net profit margin. According to Alexandri (2008), this ratio interprets the level of company efficiency, namely the extent to which the company's ability to reduce operational costs in certain periods. The greater the company's net profit margin means, the better the company's performance will increase investor confidence to invest in the company (Kasmir, 2012).

The second independent variable of this study is book value. According to Jogiyanto (2008), book value or book value per sheet shows the net assets owned by shareholders by owning one share because the net assets are equal to the total shareholders' equity. Therefore, the book value per share is total equity divided by the number of shares outstanding. Book value plays an important role in determining the price of a company's shares because it provides information about the company's value through its net worth. The greater the book value of a company's shares means the company's wealth more and more. This can attract investors to buy the company's shares so that the company's stock price increases. Therefore, book value influences stock price movements.

The second independent variable of this study is company size. According to Kusumawardani (2012), the company's size is a measure used to determine whether the company has more complex operational activities to enable earnings management. Soliha and Taswan in Nurhayati (2013) state that company size influences stock prices because company size is a proxy for asymmetric information between the company and the market, which gives a signal that the larger the company, the more complex its organization and the easier it is to access the capital market.

The research will be conducted on companies manufacturing the consumer goods industry sector, which is one of the primary sectors on the Indonesia Stock Exchange. This industry better reflects the state of the capital market. The consumer goods industry sector is a sector that produces the daily needs of the general public. Many investors want to invest their funds in manufacturing companies in the consumer goods industry because the consumer goods sector is defensive in economic conditions. In addition, this sector is classified as a stable sector because its demand is also stable and always grows with an increasing population. Therefore, this sector has shares with good defence when an economic crisis occurs. The consumer goods industry sector is also predicted to increase due to the Asian Games' momentum, this year's elections, and the momentum of next year's elections. This momentum can provide a positive sentiment for the movement of the index of the consumer goods industry sector due to increased demand and community contributions to this sector. Increased demand for this sector can increase the growth of companies in this sector.

This research was conducted to determine whether the results of previous studies have the same results as now if the study used a different period, namely the period 2015-2017. The existence of different research results and is still a contradiction makes this research interesting to study.

Several problems will be identified in this study, namely:
1. Does the net profit margin affect the price of shares in the manufacturing companies in the consumer goods industry sector, which are listed on the Indonesia Stock Exchange for the 2015-2017 period?
2. Does the book value affect the share prices of the manufacturing companies in the consumer goods industry sector, which are listed on the Indonesia Stock Exchange for 2015-2017?
3. Does the company's size affect the price of shares in manufacturing companies in the consumer goods industry sector listed on the Indonesia Stock Exchange for 2015-2017?

The purpose was done of this research to:
1. To determine the effect of net profit margins on share prices in the manufacturing companies in the consumer goods industry sector listed on the Indonesia Stock Exchange for 2015-2017.
2. To determine the effect of book value on stock prices in the manufacturing companies in the consumer goods industry sector listed on the Indonesia Stock Exchange for 2015-2017.
3. To determine the effect of company size on stock prices in the manufacturing companies in the consumer goods industry sector, which are listed on the Indonesia Stock Exchange for the 2015-2017 period.

2. Research Methods

The type of data used in this study is secondary data type because this study uses data from the company's financial statements obtained from the Indonesia Stock Exchange and uses website data from each company. The data source used in this study is the annual report data (annual report) and the financial statements of manufacturing companies in the consumer goods industry sector for three periods starting from 2015 to 2017. Research data processing uses descriptive statistical analysis, the classical assumption test, and hypothesis testing using multiple regression analysis. This study uses a purposive sampling method with the following criteria:

1. Manufacturing companies in the consumer goods industry sector have consistently been listed and active on the Indonesia Stock Exchange from 2015 to 2017.
2. Manufacturing companies in the consumer goods industry sector published audited financial statements annually from 2015 to 2017.
3. Manufacturing companies in the consumer goods industry did not experience a loss from 2015 to 2017.
4. Manufacturing companies in the consumer goods industry sector with positive equity values during the 2015 to 2017 period.
5. Manufacturing companies in the consumer goods industry sector whose stock prices were recorded in Yahoo finance for 2015 to 2017.

The dependent variable (dependent) in this study is According to Sugiyono (2016: 39), the dependent variable or often also referred to as the dependent variable, is the variable that is affected, or which is due to the independent variables. The dependent variable used in this study is the stock price (Y). The share price used in this study is the closing price at the end of each year. Stock price data is taken from the official website of Yahoo Finance.

The independent variables in this study are net profit margin, book value, and company size.

2.1 Net Porfit Margin (X_1)

Net profit margin is one of the profitability ratios used to measure the net profit generated by each sale. This ratio also shows the level of company efficiency. The greater this ratio means, the better the ability of a company to generate profits. According to Watung and Ilat (2016), systematically, the net profit margin can be measured using the following formula:

$$\text{Net Profit Margin} = \frac{\text{Net Profit (Earning After Tax)}}{\text{Sales}}$$

2.2 Book Value (X_2)

The book value used in this study is the book value per share. Book value is the total value of assets after deducting the company's liabilities which shows the net assets owned by shareholders by owning one share. Net assets are equal to total shareholder equity, so the book value per share is total equity divided by the number of shares outstanding. This ratio is one of the benchmarks for calculating the fair price of issuers' shares, where each share is obtained from a large number of shares issued by the issuer. According to Wardiyah (2017), the book value per share can be measured systematically by the formula:

$$\text{Book value} = \frac{\text{Total Equity}}{\text{Number of Shares Outstanding}}$$

2.3 Liquidity (X_3)

Company size is the total wealth of a company and has a value that can be measured. Company size is measured using the natural logarithm ratio of total assets. The size of the asset is measured as the logarithm of the total assets. Logarithms are used to refine assets because the value is very large compared to other financial variables. Total assets are used as a proxy for company size, considering that the company's total assets are more stable compared to the number of sales and market capitalization.

According to Anggraeni and Widjaja (2017), company size can be calculated using the formula:

$$\text{Company Size} = \textit{ln of Total Asset}$$

3. Results and Discussion

The data used in this study are the financial statements and annual reports of manufacturing companies listed on the Indonesia Stock Exchange (IDX) in the 2015-2017 period that has gone through an audit process. This data was obtained from www.idx.co.id. The population of manufacturing companies listed on the IDX is 24 companies. Based on the established criteria, a total sample of 24 companies was obtained, with a total sample of 72 within three years (24 companies x 3 years).

3.1 Multiple Linear Regression Analysis

Multiple regression analysis is used in this study to determine whether or not the influence of independent variables on the dependent variable (Table 1).

Table 1. Results of Multiple Linear Regression Analysis

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-4,060	2,161		-1,878	,065
	Net Profit Margin	7,271	1,367	,388	5,318	,000
	Book Value	,001	,001	,424	5,197	,000
	Company Size	,372	,076	,401	4,911	,000
a. Dependent Variable: price_ stock _ln						

Source: SPSS Output Data Processed

1.   The constant value (a) is -4.06, which means that if the net profit margin, book value, and company size are zero (0) and there is no change, then the share price will be -4,060.
2.   The regression coefficient value of the net profit margin variable (b1) has a positive value of 7.271, which means that each increase in net profit margin by one unit will increase the disclosure of stock prices by 7.271.
3.   The value of the regression coefficient variable book value (b2) is positive at 0.001, it can be interpreted that each increase in book value by one unit will increase the stock price of 0.001.
4.   The regression coefficient of firm size variable (b3) has a positive value of 0.372, which means that each increase in company size by one unit will increase the disclosure of stock prices by 0.372.

3.2 Hypothesis Testing

Simultaneous Hypothesis Test (F-Test)

A simultaneous test or f-test is used to determine whether the independent variables (foreign share ownership, public share ownership, liquidity, profitability, and company size) simultaneously affect the dependent variable (risk management). Basic decision making is done by looking at the value of sig. in the table. If sig <0.05, all independent variables affect the dependent variable (Table 2).

Table 2. Simultaneous Test (F)

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	100,368	3	33,456	40,468	,000[b]
	Residual	56,218	68	,827		
	Total	156,586	71			
a. Dependent Variable: price stock ln						
b. Predictors: (Constant), Net Profit Margin, Book Value, Company Size						

Source: SPSS Output Data Processed

Probability value (significant) is 0.000 <0.05, so there is a significant effect. ANOVA test results above can be concluded that the calculated F = 40.468. df 1 (number of data groups-1) = 3 - 1 = 2, df 2 = (72 - 3) = 69. The results obtained for the F table are 3,130. Therefore, it can be concluded that all independent variables, namely net profit margin (X1), book value (X2), and company size (X3), jointly influence the dependent variable of stock prices significantly.

3.3 Partial Hypothesis Test (t-Test)

The t-test statistic shows whether the independent variables partially affect the dependent variable. The basis for decision making in the t-test, i.e.:

a. If the sig value> 0.05, then Ho is accepted

b. If the sig value <0.05, then Ho is rejected

Table 3. Table Partial Test (t)

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-4,060	2,161		-1,878	,065
	Net Profit Margin	7,271	1,367	,388	5,318	,000
	Book Value	,001	,001	,424	5,197	,000
	Company Size	,372	,076	,401	4,911	,000
a. Dependent Variable: price_stock_ln						

Source: SPSS Output Data Processed

Based on the table, net profit margin (X1) has a sig value of 0,000> 0.05, then Ho is rejected, and Ha is accepted (table 3), which means net profit margin affects the stock price (Y), book value (X2) has a sig value of 0,000 <0.05 then Ho is rejected, and Ha is accepted, which means book value affects the stock price (Y), company size (X3) has a sig value of 0,000> 0.05 then Ho is rejected, and Ha is accepted, which means company size (X3) affects the stock price (Y).

3.4 Coefficient of Determination (R^2)

The coefficient of determination shows how much the ability of the independent variable (foreign share ownership, public share ownership, liquidity, profitability, and company size) to explain the variance of the dependent variable, namely the disclosure of risk management.

Table 4. Determination Coefficient Test Results (R^2)

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,801[a]	,641	,625	,90925	2,027
a. Predictors: (Constant), Company Size, Net Profit Margin, Book Value					
b. Dependent Variable: price_stock_ln					

Source: SPSS Output Data Processed

Based on table 4, Adjusted R Square shows the contribution of the influence of the independent variable (independent) to the dependent variable (bound). Adjusted R Square is usually used to measure the contribution of influence if in regression using more than two independent variables. This number is then converted to percent, which means the percentage of contribution of the influence of independent variables on the dependent variable (Priyatno, 2014: 142). Based on the table above, an Adjusted R Square value of 0.625 or 62.5% is obtained. This shows that the influence of independent variables, namely net profit margin, book value, and company size on the

dependent variable is the stock price of 62.5%. The remaining 37.5% is influenced by other factors not included in this regression model.

4. Discussion
4.1 Effect of Net Profit Margin on Stock Price
Based on the results of tests that have been done, it can be concluded that the net profit margin has a positive and significant effect on stock prices in manufacturing companies in the consumer goods industry sector listed on the Indonesia Stock Exchange for 2015-2017. This is indicated by the significance value of the net profit margin, which is less than 0.05, which is 0,000. Therefore, the first hypothesis proposed in this study was accepted.

Net profit margin is one of the profitability ratios. According to Alexandri (2008: 200), the net profit margin is a ratio used to show a company's ability to generate net profits after tax deduction. Besides being used to measure the company's ability to generate profits, net profit margins are also used to determine its level of effectiveness in managing its resources. This ratio can be interpreted as the company's ability to reduce costs (a measure of efficiency) in a certain period. If the ratio of a company's net profit margin is large, it shows good performance. The success of a company in generating large net profits through its sales activities can be used by investors in making decisions about whether to buy the company's shares because the increased net profit affects the interest of investors to invest their funds in the company. The greater the net profit margin, the more efficient its operations. Companies can reduce unnecessary costs so that the company can maximize the net profit obtained. This study indicates that shareholders tend to calculate the size of the net profit margin because the size of the net profit margin is proven to significantly influence changes in stock prices in the capital market.

The results of this study are in line with research conducted by Watung and Ilat (2016: 527), which states that net profit margins have a positive effect on stock prices. According to Watung and Ilat, if the company can generate net profits, investors will be interested in buying the shares, and this will cause the stock price to rise. But the results of this study are not in line with the results of research conducted by Hutapea, Saerang, and Tulung (2017: 549), which says that net profit margins do not affect stock prices.

4.2 Effect of Book Value on Stock Price
Based on the results of tests that have been conducted, it can be concluded that the book value has a positive and significant effect on stock prices in manufacturing companies in the consumer goods industry sector which are listed on the Indonesia Stock Exchange from 2015 to 2017. This is indicated by the significance value of the book value that is smaller than 0.05, which is 0,000. Therefore, the second hypothesis proposed in this study was accepted.
According to Jogiyanto (2008: 120), book value or book value per sheet shows the net assets owned by shareholders by owning one share because the net assets are equal to the total shareholders' equity. Therefore, the book value per share is total equity divided by the number of shares outstanding.

Company value can be increased by reducing asymmetric information and giving signals to outsiders in the form of reliable financial information to reduce uncertainty about the company's growth prospects in the future. In signalling theory, management hopes to provide a signal of prosperity to owners or shareholders in presenting financial information. Book value provides information about the company's value through the company's net worth, which reflects the company's value. If the book value is high, the better the value of the company in the eyes of investors so that investors are interested in buying company shares.

The results of this study are in line with previous studies. Malhotra and Tandon's (2013: 93) research states that book value positively affects stock prices. In assessing the prospects for future performance, investors use book value information. This is because the book value reflects the company's value, and the value of the company is reflected in the value of its economic net worth. As accounting information is used for investment decisions, the subject matter of book value will be reflected in the stock market price. Therefore, a company's book value information used in investment decision making will affect the company's stock price in the capital market. The results of this study are not in line with research conducted by Andriyani and Armereo (2016: 61), where the study results are book values that have a negative and significant effect on stock prices. According to him, an increase in book value indicates that there are additional shares outstanding so that investors will respond positively, which can cause the stock market price to fall.

4.3 Effect of Company Size on Stock Price

Based on the results of tests that have been conducted, it can be concluded that the size of the company has a positive and significant effect on stock prices in manufacturing companies in the consumer goods industry sector which are listed on the Indonesia Stock Exchange for the period 2015-2017. This is indicated by the significance value of the company size, which is smaller than 0.05, which is 0,000. Therefore, the third hypothesis proposed in this study was accepted.

Company size is a proxy for information asymmetry between the company and the market. Larger companies will have more assets. The greater the total assets, the more capital is invested, the more sales, the more money turnover, and the greater the market capitalization, the greater the company is known in the community. Signalling theory reveals how a company can give signals to users of financial statements. The company's management will signal to investors how the management views the company's prospects. Investors will tend to invest in large-sized companies hoping that they will get high profits. In addition, investors assume that large-sized companies will be more stable against changing economic conditions so that the company's prospects in the future are more reliable.

The results of this study are in line with previous studies conducted by Anggraeni & Widjaja (2017: 108), which state that company size has a significant positive effect on stock prices. The company's large size shows that the company is superior in terms of wealth, has good performance, and is experiencing growth so that investors will respond positively, and the company's value will increase. The company's large size shows that the company has developed so that investors will respond positively, and the company's value will increase. This positive response from investors can make a company's stock price increase.

But the results of this study are not in line with research conducted by Sa'adah & Kadarusman (2014: 27), where the results of his research are that company size does not affect stock prices. Sa'adah & Kadarusman (2014: 27) states in their research that larger companies have more assets, so they will tend to operate at the maximum level. Larger companies should have greater opportunities to maintain share prices and even increase their share prices in the market. This insignificant test result shows that company size is not informative enough to measure a company's performance. Investors assume that large companies can not always provide a large rate of return, and vice versa, small companies, do not rule out the possibility of providing high rates of return for their investors.

6. Conclusion and Suggestion

Based on the results of the data analysis and discussion explained in the previous chapter, several conclusions can be drawn as follows:
1. The first hypothesis is accepted that the net profit margin positively affects the stock price.
2. The second hypothesis is accepted that book value positively affects the stock price.
3. The first hypothesis is accepted that company size positively affects the stock price.

Research that has been done has limitations, i.e.:
1. The sample used in this study is limited to manufacturing companies in the consumer goods industry sector.
2. The period used in this study is only three years, namely 2015 to 2017.
3. The independent variables used in this study are only three independent variables, namely net profit margin, book value, and company size.

Based on the conclusions and limitations that have been explained before, then some suggestions can be given, i.e.:
1. Based on tests that have been carried out, net profit margin, book value, and company size have a positive and significant effect on stock prices. In addition, the results of the F test conclude that the net profit margin, book value, and company size together influence the stock price, so investors should pay attention to these three variables when analyzing stocks and making investment decisions.
2. The ability of independent variables to explain the dependent variable is 64.1% and 35.9% explained by factors other than the net profit margin, book value, and company size. Researchers can then use ratios that are likely to affect stock prices and help do fundamental analyses such as price to book value, debt to equity ratio, and earnings per share. Price to book value can provide information to prospective investors about the fair value of stock prices so that potential investors can find out whether the stock price that is currently outstanding is undervalued or overvalued. Earnings per share can help potential investors estimate the profits earned by investors per share they own.
3. The next researcher is expected to use a broader research object and not only use the manufacturing companies in the consumer goods industry sector so that future studies can provide a more accurate picture

of the influence of the three variables used in this study on stock prices. In addition, the next researcher is also expected to be able to extend the observation period so that he can know the company's past conditions as well as a description of the influence of the three variables in this study for the better.

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