

# IMPLICATIONS OF DEBT TO ASSET RATIO, RETURN ON EQUITY AND PRICE TO BOOK VALUE ON STOCK PRICES (Study In The Consumer Goods Industry Sector Listed On The Idx For The Period 2017 – 2021)

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## ARTICLEINFO

## ABSTRACT

### Keywords:

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Price to Book Value,  
Stock Prices

This research aims to investigate the correlates Price to Book Value to Stock Prices, Return on Equity, and Debt to Asset Ratio in manufacturing firms in Indonesia's consumer products manufacturing sector. The Composite Stock Price Index (IHSG) decreased constantly for 5 (five) sequential years as a result of the phenomenon of manufacturing businesses in the consumer products industry sector. By performing out descriptive investigations, confirming in describing the status of manufacturing firms in the consumer products industry sector, and examining research factors, this kind of study aims to confirm the comparability between theoretical and empiric. The sample assessed was comprised of 25 firms listed using a purposive judgment selection technique from either the research population of 53 manufacturing companies in the consumer products industry sector listed on the Indonesia Stock Exchange in 2017–2021, according to the following criteria: In 2017–2021, manufacturing businesses in the consumer durables industry sector registered on the Indonesia Stock Exchange, undertook an IPO before 2017, published financial reports during 2017–2021, and never reported a loss. Panel regression is the analytical method employed, the t-statistic test is used for partial hypothesis testing, and the F-statistic test used for simultaneous hypothesis testing. The study's results indicate that while Price to Book Value and Return on Equity both significantly affect stock prices, the Debt to Asset Ratio has no effect on stock prices.

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## 1. INTRODUCTION

The effectiveness of the company is reflected in the share price. Stock prices will decline if the company's performance has been degrading persistently. These stock prices are subject to ups and downturns. Since there is a strong supply (supply) and demand (demand) for these shares, share prices are developed. The ten sectors into which companies listed on the Indonesia Stock Exchange are divided include a manufacturing company. Manufacturing businesses are firms that acquire raw materials, transform them into completed goods that are ready for use, and then market those goods to clients who need them. One of the main industries on the IDX is manufacturing, which helps this sector better reflect the state of the capital market [1]–[3].

As an outcome of the food and beverage post sector's to have a generally high turnover rate and rapid capital turnover, many investors prefer to place their money in manufacturing industry businesses. Many investors are drawn to investing in this sector because it has promising futures in the form of attractive profits and rising share values. Data, however, indicates a sharp decrease in share prices from 2017 to 2021. The Consumer Goods Industry sector's corporation index for the years 2017 to 2021 shows a decrease

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, which confirms this.

The purpose of this study was to determine the effect of leverage ratios, profitability ratios and market ratios on stock prices by using a purposive sampling judgment technique. The indicators for each ratio used in this study are the Debt to Asset Ratio (DAR), Return on Equity (ROE) and Price To Book Value (PBV) to stock prices. Data processing is done by calculating the ratios obtained using the Microsoft Excel program, processed Eviews, analysis of classical assumptions and hypothesis testing. From the data processing that will be carried out later, it will be followed by observing the relationship between the independent variables and stock prices in the observation period beforehand, especially in the post-pandemic period so that it can be seen how the condition of the relationship between the DAR variable and stock prices is, what is the relationship between ROE and stock prices. and the relationship between PBV variable and stock price.

The findings of this study are expected to benefit a number of different of parties. The benefit for practitioners is that the results of this study are expected to provide useful input in viewing stock price information as a basis for decision making from a variety of independent variables that affect the stock price, namely DAR, ROE, and PBV. Academics profit from the ability to add insight into thinking and knowledge for academics and other parties, and also to compare research hypotheses with empirical reality.

The manufacturing sector is one of ten sectors listed on the Indonesia Stock Exchange. Some of the criteria of manufacturing companies are including raw materials, a goods information system that is processed, and finished products. Because the manufacturing industry is one of the key sectors on the Indonesia Stock Exchange, many investors are interested in investing in manufacturing industry companies, particularly in the food and beverage sub-sector, because it has profitable prospects and share prices have increased over the years [4]. However, based upon the data, stock prices for manufacturing companies in the Consumer Goods industrial sector on the Indonesia Stock Exchange had already decreased for the 2017 - 2021 period as follows:

#### List of Prices for Declining Share Prices in the Consumer Goods Industry sector

Table 1. List of Declining Share Prices in the Consumer Goods Industry Sector

COMPANY NAME	STOCK CODE	2021	2020	2019	2018	2017	Decreasing Average of Stock Price (2017 - 2021)
PT. Wilmar Cahaya Indonesia Tbk	CEKA	615	1.125	1.050	1.375	1.290	13,81%
PT. Campina Ice Cream Industry	CAMP	278	250	390	346	1.185	20,70%
PT. FKS Food Sejahtera	AISA	175	240	168	168	476	12,23%
PT. Chitose International Tbk	CINT	222	220	270	284	334	9,38%
PT. Gudang Garam Tbk	GGRM	30.625	37.725	55.775	83.650	81.050	20,32%
PT. Hanjaya Mandala Samporna Tbk	HMSP	945	1.310	2.070	3.830	4.900	33,09%
PT. Inti Agri Resources Tbk	IIKP	50	50	50	232	330	27,04%
PT. Merck Tbk	MERK	3.760	3.230	4.270	4.300	8.500	14,51%
PT. Magna Investama Mandiri Tbk	MGNA	50	50	50	50	77	8,77%
PT. Bentoel Internasional Investama Tbk	RMBA	306	286	300	328	360	3,77%
PT. Mandom Indonesia Tbk	TCID	5.100	6.450	9.800	16.750	18.150	26,08%
PT. Unilever Indonesia Tbk (UNVR.Jk)	UNVR	4.030	6.925	7.950	10.000	10.880	20,82%
PT. Tempo Scan Pacific Tbk	TSPC	1.500	1.370	1.295	1.525	1.660	1,98%

The decline in share value in the Consumer Goods industry sector was not approximately equal to the fundamental conditions of several companies that produced quite good performance, including: PT. Nippon Indosari Corpindo Tbk, which managed to record growth in net profit, sales, and company assets for five years. Profit increased for three successive years, namely in 2021 by 18.9% from IDR 281,341,473

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million to IDR 334,558,215 million, and the 2020 period experienced a profit growth from 2019 of 30.8%, of profit earned net in 2019 of IDR 215,050,740 million, increasing to IDR 281,341,473 million in 2020. Moreover, PT HM Sampoerna Tbk's share price has dropped for 5 years in a row, despite an increase in profits over that same time period. It managed to record a profit of 13.5 billion in 2018, close from 12.4 billion the previous year, and increased again in 2019 to 13.7 billion, while a company's total assets grew 7.43% in 2018 but also 8.45% in 2019. ([www.yahoofinance.com](http://www.yahoofinance.com)).

Based on the evidence presented above, there is a mismatch between the facts and the theory of stock prices, which needs to hold that stock prices are influenced by the company's fundamental conditions, which are directly related to company performance. The better the company's performance, the more impact it has on rising stock prices, whereas the stock price has decreased even though the company's performance is continuing to improve. The financial ratio analysis approach can demonstrate the company's good and bad financial conditions [5].

Financial ratio analysis is an analytical approach to assessing the relationship of specific items in the balance sheet or income statement, either independently or in combination. Financial ratio analysis is broken down into three categories: leverage ratios, profitability ratios, and market ratios. Market ratios are used to assess a company's performance in maximizing firm value, whereas profitability and solvency ratios are used to assess a company's performance in getting the maximum firm value. Return on Equity (ROE) from profitability ratios, Debt to Equity Ratio (DER) from solvency ratios, and Price to Book Value (PBV) from market ratios are frequently used by investors in analyzing company financial.

The effect of the three types of ratios is as follows: first, the Debt to Asset Ratio (DAR) to changes in stock prices. This ratio is used to determine how much of a company's assets are funded by loans. The fairly low the company's DAR, the healthier the corporation's performance. The second ratio is Equity Return (ROE) to stock prices, which demonstrates a company's ability to manage funds from stock investors in order to generate profits. The third ratio is the effect of Price to Book Value (PBV) on stock prices, which is derived by comparing the stock price to the book price.

## 2. LITERATURE REVIEW

### The Stock price

The share price reflects the the company's performance. The rise and fall of a company's stock price reveals the supply and demand for the company's shares.

### Stock Price Varieties

Share prices are separated into three categories [6], [7] a. Nominal Price Each share of inventory items issued by the company is valued. The nominal share price is the price written on the shares, and it will be used for accounting purposes, especially to record fully funded capital.

### High quality Price

The preliminary price is the price alleged to investors who purchase shares during the initial public offering. While it is true that the nominal share price has been set, the initial public offering price to primary market investors may not be exactly the same as the nominal share price. If the initial share price is higher than the nominal price, the difference is known as *agio*. A *disagio* might well occur if the initial cost is lower than the nominal price. Opening Price The opening price is the prevailing share price when the stock market is open that day.

### Market Value

When traded on the share market floor, the market price is the stock price on the stock exchange at that time. The market price is influenced by demand and supply. The movement of the stock market price for stocks of interest to investors is commonly very variable [8]–[10]. Stocks that are of little interest to investors, on the other hand, usually have seen no movement on the stock exchange floor.

### Home Sale

The closing price is the final price of buying and selling stock exchange shares. After opening in the morning, the market or stock market will close at exactly 16.00 WIB in the afternoon.

Stock Price Reducing Or increasing

1) A fundamental situation of such issuer

Fundamental factors are those which are directly related to the performance of the issuer. The larger the impact on rising stock prices, the better the issuer's performance. We might use financial ratio analysis to determine that an issuer is in a good or bad position.

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balance sheet or income statement, either separately or in combination. Market ratios, profitability ratios, and solvency or leverage ratios are the three types of financial ratios analyzed [5], [11].

2) The law of supply and demand

The legal factors of demand and supply occur second after the fundamental factors, because once investors acknowledge a company's fundamental condition, they will make transactions either buying or selling the company's shares. This transaction will have an effect on the present fluctuations in stock prices.

3) Interest rate at Central Bank (SBI)

This interest rate is substantial because stock investors naturally expect higher investment returns. Because almost all publicly traded companies have bank loans, changes in interest rates will have an impact on the company's necessary component.

4) Exchange rates

In today's globalized world economy, almost no country can escape the affect of currency movements, particularly against the US dollar. When the dollar exchange rate rises, investors rush to trade their shares and deposit them in banks in dollars, causing the share price to sink.

5) Exchange of foreign funds

Whenever an stock exchange is controlled by foreign investors, stock transactions tend to be more or less dependent on these foreign investors.

6) Stock price index composite (IHSG)

Genuinely, the composite stock price index reveals more on the overall condition of stock exchange transactions and is an assessment of stock price fluctuation or increase.

7) Conflicting reports and news

Each of the news that circulates in society is entirely composed of news and rumors.

**Debt to Asset Ratio (liabilities ratio)**

Based mostly on company's share of capital, this ratio conveys the capability of a company all of its obligations. The lower a company's DAR, the better its performance [6], [7]. This is because the company's capital has the potential to pay debts while the rest is used to develop the company's operating activities. It also clearly shows how a company's assets are funded despite the loans/leverage [7]. ROA clearly shows a company's ability to generate profits by managing its resources. The higher the ROA, the better the company's performance in generating profits. The increased the company's profits, the more likely it is to distribute dividends to shareholders. Good company performance and the possibility of paying dividends increase the signal for investors to buy shares. An increase in demand for a share will lead to a higher in its price.

**DAR=(Total Debt)/(Total Assets)**

**Return on equity ratio (Investmen returns)**

The second ratio is Cost of Capital (ROE) to stock prices, where it shows a company's ability to manage funds from stock investors in order to generate profits. The higher the ROE, the better the company's performance in terms of profit source. The greater the company's profits, the greater the company's ability to distribute dividends. Good company performance and the possibility of dividend payments strengthen the signal for investors to purchase shares. An increase in share sales will result in an increase in share price.

**ROE represents (Net Income/Equity) x 100%.**

**Price To Book Value ratio (Price/Book Value)**

The third ratio is the effect of the Price to Book Value (PBV) ratio on share prices, which is calculated by comparing the stock price to the book price. The higher the Price to Book Value (PBV), the higher the stock price. According to a different viewpoint, PBV is a ratio that shows whether the market price of a stock is traded above or below the latter's book value, or even if the stock price is overvalued or

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undervalued. The PBV ratio is defined as the ratio of a stock's market value to its own book value. Companies that demonstrate strong performance typically have a Price to Book Value (PBV) ratio greater than any one. The increased the PBV and the greater the company's value, the higher the market price of the stock.

**PBV=(Market Price Per Share)/(Book Value Per Share)**

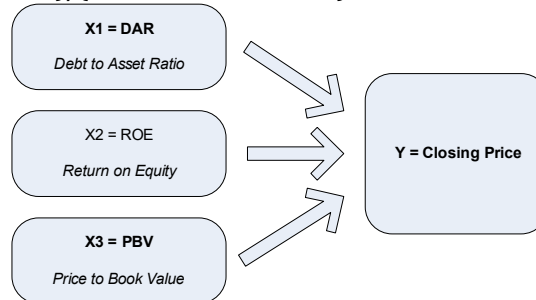


Figure 1. Research Paradigm

### 3. METHOD

The descriptive true fact was used for the research. The verification method is a method for testing mathematical assumptions about the existence of a relationship between variables from the problem being investigated in the hypothesis. Descriptive analysis refers to the process of describing or describing data [12], [13].

### 4. RESULT AND DISCUSSION

Table 2. results of multiple regression analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.316633	0.322593	22.68070	0.0000
DAR	-0,064632	0.066514	-0.971710	0.3337
ROE	0.031523	0.007524	4.189640	0.0001
PBV	0.019469	0.006322	3.079768	0.0027

The panel data regression analysis specified in this study is as follows:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + e_{it}$$

Based on the calculation results of multiple regression analysis, the linear regression equation is obtained as follows:

$$\text{Stock Price} = 7,316633 - 0,064632 (\text{DAR})_{it} + 0,031523 (\text{ROE})_{it} + 0,019469 (\text{PBV})_{it} + 0,322593$$

### DISCUSSIONS

Debt to Asset Ratio (X1), Return on Equity (X2), but also Price to Book Value are all independent variables (X3). The Stock Price is the dependent variable (Y). This article's population consists of all manufacturing companies in the consumer goods industry sector which have been listed on the Indonesia Stock Exchange between 2017 and 2021, a total of 53 companies. Panel conceptual database testing, classical assumption testing, panel data regression analysis, and hypothesis testing which use t-statistical hypothesis testing and F-statistical hypothesis testing with a significance level of 5% were the analytical approaches in this work.

Table 3. The output of F-test

Root MSE	0.190166	R-squared	0.986050
Mean dependent var	7.772727	Adjusted R-squared	0.980746
S.D. dependent var	1.618289	S.E. of regression	0.224554
Akaike info criterion	0.083819	Log likelihood	23.85096
Schwarz criterion	0.817792	F-statistic	185.8790
Hannan-Quinn criter.	0.380786	Prob(F-statistic)	0.000000

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The test's purpose was to see how debt-to-asset ratios, return on equity, and PB impacted company shares. This research focused on the debt-to-asset ratio (CR), return on equity (ROE), and price-to-book value (PTV). This study focuses on the population of the consumer goods industry listed on the Indonesia Exchange (IDX) from 2017 to 2021.

The researcher chose research methodology as the data analysis methodology for this study. Explanatory study examines the causal relationships between research variables and tests successfully developed hypotheses.

Purposive sampling, or the screening of samples based on specific criteria, is used for sample selection. The eligibility guidelines will be used:

- A manufacturer of consumer products company that is listed on the Indonesia Stock Exchange.
- access To a reliable to 2017, manufacturing companies in the consumer goods industry decided to go public.
- Manufacturing companies in the consumer products industry that do not publish financial reports for the fiscal year ended December 31 between 2017 and 2021.

The final samples select were 25 companies as from goods and consumer goods industry sector that had been listed on the Indonesia Stock Exchange BEI). The data used is annual data from 2017 to 2021. So, from 2017 to 2021, 125 quantitative results from 25 different firms were gathered for this study. Panel data model testing, classical assumption testing, panel data regression analysis, and hypothesis testing that use t-statistical hypothesis testing and F-statistical hypothesis testing with a significance level of 5% were all included in this work.

#### **The Effect of Debt to Total Assets ratio (DAR) on Stock Prices**

Depending on the panel regression analysis results, the DAR variable has a negative sign (-) correlation is considered of 0.064632 or an equal value = 0.064632%, which means that if the DAR increases, stock prices will fall by 0.065%. If the DAR falls, it will contribute 0.065% to the increase in stock price. When the DAR hypothesis is investigated on stock prices, the resulting probability value of  $0.3337 > 0.05$  and the resulting tcount value of  $-0.971710$  table value of 1.9850 shows that DAR is significant and has no impact on stock prices.

The actual fact is that the DAR value has no bearing on stock prices, as has been proven by the fact that several companies, including Akasha Wira International Tbk (ADES), Budi Starch & Sweetener Tbk (BUDI), Kino Indonesia Tbk (KINO), Merck Tbk (MERK), Multi Bintang Indonesia Tbk, Pyridam Farma Tbk, Nippon Indosari Corpindo Tbk, and Wismilak Int.

Theoretically, the larger the DAR value, the lower the stock price will be because the company will generate fewer or no money at all after debt repayment and interest. As a result, many investors will sell their shares to free up their holdings. In contrast, the lower the DAR value, the higher the share price will be since investors will generate more revenue because creditors would receive smaller payments [5][11].

#### **Stock prices and the equity return (ROE)**

The panel regression analysis's study found that the beneficial (+) regression coefficient for the ROE variable is 0.031523. The ROE hypothesis was validated with respect to stock prices, and the results showed that ROE is substantial and affects stock prices. At one industry, PT. H.M shampooerna Tbk (HNSP), the ROE value of 29.05% reduced to 25.96% in 2018-2019, affecting the HMSP share price from IDR 3,710 per share to IDR 2,130 per share. This is supported by information in the field.

When compared with the theory, that the higher the ROE, the stock price will increase, because the profits to be obtained by investors will also increase, so that many investors will buy the company's share. In contradiction to the idea that says the higher the ROE, the higher the stock price will be because many shareholders will buy the company's stock since they will generate more profit. Nonetheless, the lower the ROE, the lower the stock price because investors would obtain less in profit, which prompted many investors to sell the company's stock. The study's results suggest that ROE is employed as an indicator of a primary measure of efficiency, both theoretically and actually by businesses to allocate and manage resources and has an effect on stock on the stock.

#### **Effect of Price To Book Ratio (PBV) on stock prices**

According to the findings of the performed analysis of multiple linear regression, the PBV variable has a regression coefficient with a positive sign

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(+) of 0.019469 or an equal value = 0.019469%, which indicates that if the PER increases, it will contribute 0.0195% to the increase in price. shares, which can also be observed in the PBV hypothesis testing on stock prices, show that PBV is substantial and affects stock prices as shown by the probability value of  $0.0027 > 0.05$  and the tcount value of  $3.079768 > t$ -table value of 1, 9850.

The data from PT. Indofood Sukses Makmur Tbk (INDF) in 2017-2018, had a PBV value of 1.43x which then decreased to 0.68x and had an effect on INDF's share price of Rp. 7,625 per share, decreasing to Rp. 7,450 per share. These facts from the field clearly show that PBV values have a positive effect on stock prices.

As per comparisons, higher PBV values will result in increased stock prices. This is due to the fact that a company's shares continue to sell for more than actual book value. Because of the potential capital gains that can be earned when selling these shares, many investors will be tempted to buy the shares if the stock's market price rises further. The outcomes of the study and the reality on the ground confirm the belief that PBV works to compare stock prices with book prices. A high PBV number is greater than 1, implying that the market price of shares is higher than the company's issued value. The value of stocks will rise the higher the PBV value. This is due to the fact that a company's shares continue to sell for more than their book value. Because of the potential capital gains that can be realized when selling these shares, many investors will be interested in purchasing the shares if the stock's market value rises significantly. The price of a company's equity will rise as demand for its shares increases [9], [14].

The study's findings and the present condition confirm the notion that PBV can be used to compare stock prices with book prices. If the PBV number is high (more than 1), it indicates that the current market value of the shares is greater than the issued value of the corporation. The higher the PBV value, the more valuable stocks will become. This is driven on by the fact that a company's stock continues to trade above its book value. If the stock's market value substantially improves, many investors will be interested in buying the shares due to the possible capital gains that can be achieved upon selling these shares. When compared statistically, the share value will enhance if the ROA and PBV stand out in the market. The stock price will fall if ROA and PBV are valued lower, on the other hand. In contradiction to the DER, the stock price will fall if the DER value rises. On the other hand, if the DER declines, the stock will rise.

The outcomes of the study and the actual situation on the ground support the notion that the fundamental condition of the company, which is generally assessed using DAR, ROE, and PBV, affects the stock price on the Indonesia Stock Exchange. A fall in creditor loans enables the company to improve its sustainable net profit as a percentage of total assets utilised, resulting in a greater net profit after taxes that can be used to extend corporate operations in addition to providing profits to investors.

## 5. CONCLUSION

Stock prices are just not impacted by the debt-to-asset ratio. Stock prices are impacted by return on assets. Stock prices are severely influenced by price to book value. The F probability value of 0.000000  $< 0.05$  and the F-count value of 25.16930  $> F$ table value of 2.74371 show that the Debt to Equity Ratio, asset return on assets, and pricing to book value have an impact on stock prices simultaneously.

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