

PENGARUH LEVERAGE, PERTUMBUHAN PENJUALAN, DAN TOTAL ASSET TURNOVER (TATO) TERHADAP PROFITABILITAS PERUSAHAAN DI SEKTOR BASIC MATERIALS YANG TERDAFTAR DI BEI PERIODE 2017 – 2022

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh leverage, pertumbuhan penjualan, dan total aset turnover (TATO) terhadap profitabilitas pada perusahaan tercatat sektor bahan baku (basic materials) di Bursa Efek Indonesia (BEI). Enam puluh tiga (63) perusahaan sektor bahan baku selama kurun waktu 6 tahun dari tahun 2017 hingga 2022 diambil sebagai sampel secara purposive sampling. Penelitian menemukan bahwa terdapat hubungan positif dan signifikan antara pertumbuhan penjualan dan TATO terhadap profitabilitas. Namun, terdapat hubungan negatif namun tidak signifikan antara leverage dan profitabilitas. Penelitian ini memperlihatkan hubungan variabel-variabel yang ada dengan pecking order theory. Lebih lanjut, penelitian ini juga menekankan pentingnya manajer di sektor bahan baku untuk mengelola aset mereka serta menyusun strategi penjualan untuk meningkatkan peluang kelangsungan hidup perusahaan di masa depan.

Kata Kunci: Leverage; Pertumbuhan Penjualan; Total Asset Turnover; Profitabilitas; Sektor Bahan Baku

THE EFFECT OF LEVERAGE, REVENUE GROWTH, AND TOTAL ASSET TURNOVER ON PROFITABILITY OF LISTED COMPANIES IN THE BASIC MATERIALS SECTOR IN INDOONESIAN STOCK EXCHANGE PERIOD 2017-2022

ABSTRACT

This study aims to determine the effect of leverage, revenue growth, and total asset turnover (TATO) on profitability of listed companies in the basic materials sector in Indonesian Stock Exchange (IDX). Sixty-three (63) firms from the basic materials sector over a period of 6 years from 2017 to 2022 were taken as samples by purposive sampling. The study found that there is a positive and significant relationship between revenue growth and TATO on profitability. However, there is a negative but non-significant relationship between leverage and profitability. This study displays the indirect relations between the variables to the pecking order theory. Furthermore, this study also pushes the importance for managers in the basic materials sector to manage their assets as well as strategizing sales to increase its chances of survival in the future.

Keywords: Leverage; Revenue Growth; TATO; Total Asset Turnover; Profitability; Basic Materials Sector

INTRODUCTION

Indonesia is a country with great number of resources that is waiting to be processed into products which is useful for the industry. In 2022 alone, Indonesia was the third-largest coal producer in the world, right behind India and China, Indonesia had exported a total of 360.28 million tons of coal in the same year, an increase of 4.29% from the previous year (IESR, 2023). Indonesia is also at the top of the list in 2022, being the 3rd largest exporter of copper ores and concentrates in the world trailing behind Chile and Peru. Data from the Indonesia's Central Bureau of Statistics (BPS) shows that there has been a general increasing trend in the production of a few mining products such as coal which increases from 461 million tons in 2017 to 687 million tons in 2022, bauxite which increases from 1 million ton in 2017 to 29 million tons in 2022, copper concentrate which increase 2 million metric tons in 2017 to 3 million metric tons in 2022, and nickel ore which increase from 21 million tons in 2017 to 98 million tons in 2022 (BPS, 2024). The largest increase happens to the production of nickel ore, which is mainly due to the increase in demand in the battery production for the Electronic Vehicle (EV) application. Other than minerals and coals, Indonesia itself has a growing demand for the needs of the precast concrete and concrete production. In 2022, Indonesia consumes 63.02 million metric tons of cement. This is due to the increase in the infrastructure development in the last decade in Indonesia which includes 1900 km of expressways by 2022, the current building of the Nusantara will add to the demand of cement in Indonesia (Siahaan, 2024).

The IDX sectoral index for Basic Materials showed a fluctuation in its value since its inception in January 2021. The highest the IDXBASIC had reached was on the 1st May 2022 with the index of 1401.60. The lowest IDXBASIC had reached was on the 1st May 2023 with the index of 983.56 before bouncing back again. Indonesia being one of the largest producer and exporter of coal and minerals, it is expected that the IDXBASICS is expected to steadily increase over the years, however, the index is fluctuating.

The purpose of a company is for the maximization of a shareholder's wealth. Shareholders as the owners of a corporation buy the stocks with the expectations that they will earn a good return on their investment without too much risk. Therefore, it is important for the managers to continually think about ways to increase the shareholders' value (Koh et al., 2016). One of the ways to increase this value is by making sure that the profitability of a company is always good. To understand a company's conditions, there is a need for a way to measure it, and one of the ways is by using ratios. Ratios compare one post of a financial report to another post in a financial report that has a significant relationship. Such ratios are known as financial ratios.

There are several factors that can affect the profitability of a company. In this research, the researcher will be focusing on leverage, revenue growth and total asset turnover as the variables that could influence the profitability of a company. The purpose of this study is to analyze the effect of leverage, revenue growth, and total asset turnover on profitability basic materials sector.

LITERATURE REVIEW

Pecking Order Theory

Pecking order theory was first introduced by Myers & Majluf (1984), they suggested that companies have an order of preference to fund their operations and investments. The order of priority goes in the following rank (from most preferred): (i) internal financing, (ii) debt financing, and (iii) equity financing.

Internal financing is the most preferred method of funding where firms use internal fundings like retained earnings and internal resources to fund investments and projects. This preference is good because it does not involve the need to pay interest, unlike debt financing. The next preference falls to debt financing, in the case of lack of internal fundings, firms prefer to take up debt to finance their investments or projects. Debts can be raised by issuing bonds, loans, or other debt instruments. The theory suggests this preference over issuing equities because issuing equities can result in dilution of ownership but, debt financing comes with its own risk which is the borrowing costs. Equity financing is the least preferred option of funding because of dilution of ownership when new shares are issued (Myers & Majluf, 1984).

The Effect of Leverage on Profitability

The pecking order theory was proposed by Myers & Majluf (1984), it explains that there is an order of preference (or the so-called "pecking order") when a company wants to finance their investments and operations. The order goes in the order of (from the most preferred to the least preferred) internal funding, debt funding, then equity funding. The emphasis on the preference of the use of internal funding and the reluctance of company to issue equity results in the debt being issued preferentially when internal funding is not enough. Consequentially, the issuance of debt results in the need to pay the interest due, therefore reducing the profitability of a company.

Research done by Alarussi & Alhaderi (2018) on 120 non-financial companies in Bursa Malaysia from 2012 to 2014 found that there is a negative and significant relationship between leverage and profitability. A slightly different result was shown by Harisa et al. (2019) who studied 29 Islamic commercial banks in Indonesia and Malaysia, the researchers found that leverage has a negative and non-significant result. Result of another research done by Mohammed et al. (2020) done on 22 listed oil and gas firms in Malaysia over a period of 10 years shows that leverage has a negative and significant effect on profitability. Furthermore, a study done by Susilo

et al. (2020) on 350 manufacturing firms in Indonesia from the period of 2010-2017 shows that capital structure has a negative and significant effect on profitability.

H₁: Leverage has a negative effect on profitability.

The Effect of Revenue Growth on Profitability

According to pecking order theory, when a company wants to finance its growth, it will preferentially tap into its internal source of funding first as it provides a lower cost of capital. However, if this is not enough, the company will venture into the next best source, which is an external source of funding of debt, then followed by equity. To increase its revenue, the company also requires an increasingly higher investment into its resources like inventory, infrastructure and marketing which sometime requires funding from debt. However, if a company can use its own resources and manage its debt properly, it will be able to maximize profits. The management of revenue growth requires a company to balance its financing choices to achieve its strategic goals. This will then force managers to think of ways to increase sales to service debt or to have more retained earnings.

A research done by Susilo et al. (2020) on 350 manufacturing firms in Indonesia found that firm growth which was proxied by sales growth has a positive and significant effect on profitability. Research done by Angelia et al. (2021) on 59 listed manufacturing companies in IDX suggest that there is a positive and significant relationship between revenue growth and profitability. On the contrary, the result of the research done by Aryantini & Jumono (2021) on found that there is a negative and significant relationship.

H₂: Revenue growth has a positive effect on profitability.

The Effect of Total Asset Turnover on Profitability

A company can use its internal source of fundings like retained earnings to fund its operations and investments. The use of internal fundings does not require a company to pay interest, therefore this potentially can increase its operational efficiency compared with taking on debts (the next option in pecking order theory) to finance its operations and investments, which will require managers to think of ways to maintain profitability. However, if a company must take the step of tapping into external sources of funding, company must be able to balance its financial risk with asset turnover so that the company's investment in asset can generate sales with as little risk as possible.

The result of a research done by Alarussi & Alhaderi (2018) on 120 listed companies in Bursa Malaysia from 2012 to 2014 found that asset turnover ratio has a positive and significant relationship with profitability. Another research by Munawar (2018) on 18 manufacturing firms in the IDX over the period of 2012 to 2017 also found a positive and significant relationship between TATO and profitability. Another research by Sinaga et al. (2020) on 56 goods and consumption industry sector in the IDX over the period of 2014 to 2018 found a negative and insignificant effect TATO and profitability.

H₃: TATO has a positive effect on profitability.

RESEARCH METHODOLOGY

Population and Samples

The total samples selected for this research is 63 listed companies in the Indonesian Stock Exchange (IDX) from the year 2017 to 2022. The samples are selected by purposive sampling from the population of all the listed companies in the IDX using the following criteria: (i) the company is in the basic materials sector of the IDX, (ii) the company is listed in the IDX from 2017-2022.

Table 1. Variables and Proxies Used

Variable	Proxies (Variable Measurement)	Source
Leverage	$DER = \frac{Total\ Debt}{Total\ Equity}$	Susilo et al. (2020), Mohammed et al. (2020), Alarussi & Alhaderi, (2018)
Revenue growth (RG)	$RG = \frac{Revenue_t - Revenue_{t-1}}{Revenue_{t-1}}$	Susilo et al. (2020), Angelia et al. (2021)
Total Asset Turnover (TATO)	$TATO = \frac{Sales}{Total\ Asset}$	Koh et al. (2016), Alarussi & Alhaderi (2018)
Profitability	$ROA = \frac{Net\ Income}{Total\ Asset}$	Koh et al. (2016), Alarussi & Alhaderi (2018), Susilo et al. (2020)

Variables

The variables used in this research are made up of 3 independent variables and 1 dependent variable. The independent variables are leverage, revenue growth and total asset turnover (TATO). The dependent variable is profitability. Each of the proxies of the variables are shown in Table 1.

All data was analysed using SMARTPLS 4. The regression equation used in this research is as follows:

$$ROA = \beta_1 Lev + \beta_2 RG + \beta_3 TATO$$

The model for the above regression is given in Figure 1.

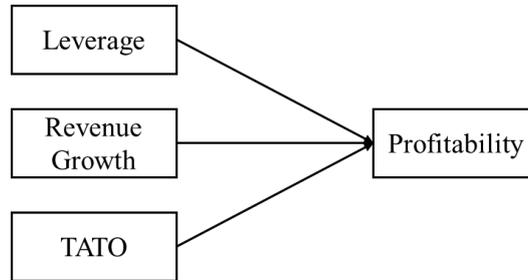


Figure 1. Research Model

RESULTS AND DISCUSSIONS

Descriptive Analysis

Table 2 illustrates the results of the average, minimum and maximum of each variable over the 6 years period from 2017 to 2022.

Table 2. Descriptive Analysis

	Profitability	TATO	Leverage	Revenue Growth
Average	0.0219	0.9827	3.5021	0.1227
Min	-1.0498	0.0017	-231.263	-0.9410
Max	0.6135	6.9494	786.6084	3.7147

Over the 6 years period from 2017 to 2022, basic materials sector has an average profitability value of 0.0219 with minimum at -1.0498 and maximum at 0.6135. The average value for TATO over the same period has a value of 0.9827 with a minimum at 0.0017 and maximum at 6.9494. Furthermore, leverage has an average value of 3.5021 with a minimum value of -231.263 and a maximum at 786.6084. Finally, revenue growth has an average value of 0.1227 with a minimum value of -0.9410 and a maximum value of 3.7147.

Variance Inflation Factors (VIF)

Table 3 illustrates the results of the Variance Inflation Factors (VIF).

Table 3. VIF Results

Variable	VIF
Leverage	1.008
Revenue Growth	1.012
TATO	1.005

The cut off for VIF according to Hair et al. (2019) is close to 3 or lower. The result gave values less than 3 for all variables, this indicates that there are no collinearity issues with the variables.

Adjusted R²

The result of the adjusted R² for the experiment is 0.107 or 10.7%, this indicates that the independent variables only explain 10.7% of the dependent variable. The remaining 89.3% is explained by other factors not covered in this research.

Hypothesis Tests

Figure 2 illustrates the resulting coefficients and significance of the coefficients.

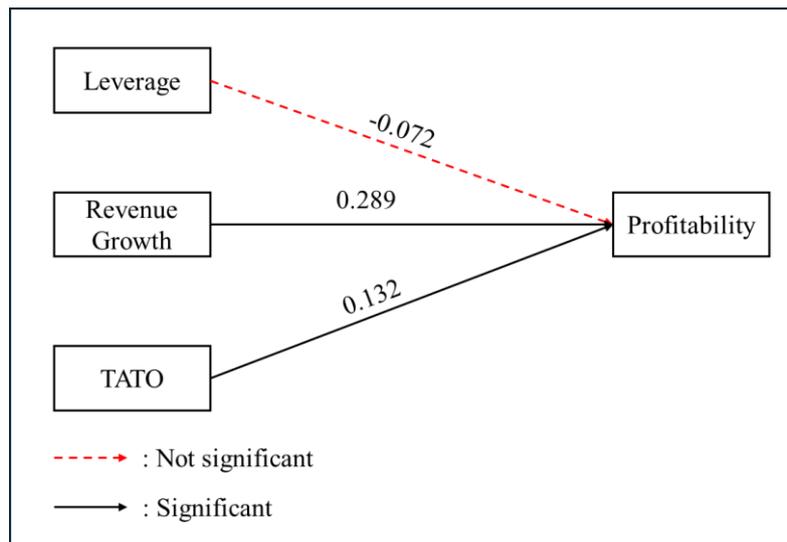


Figure 2. Results of Analysis

Figure 2 illustrates the models together with the coefficients and the significance level of the relationship between the independent variables and the dependent variable. The relationship of leverage on profitability has a negative coefficient and it is not significant. The negative relationship between leverage and profitability is in line with the pecking order theory, as companies took on more debt in the observation years, it resulted in the reduction of their profitability. The lack of significance in the relationship explains that in the basic materials sector, leverage has very minimal impact on the profitability of the companies. This means that an increase in debt does not always result in a drop in profitability in the basic materials sector, thus, leverage is not a determinant of the profitability of a company in the basic materials sector listed in IDX. This result is in line with the research done by Harisa et al. (2019) but not in line with Alarussi & Alhaderi, (2018), Mohammed et al. (2020) and Susilo et al. (2020).

Figure 2 also illustrates that revenue growth has a positive and significant relationship with profitability. This supports the explanation given in the literature review that good management of debt and the use of internal funding can help in increasing profitability. The growing number of infrastructure development in the recent years could have contributed to the growth in sales (Rohim, 2024), and this is a good signal of a better revenue growth in the basic materials sector in the coming years. If profitability is properly managed in the coming years, the basic materials sector will continue to be more promising in the coming years. The result of this research is in line with the research done by Susilo et al. (2020) and Angelia et al. (2021).

The result of the relationship between TATO on Profitability shows that there is a positive and significant relationship. This indicates that the basic materials sector's company can use its assets efficiently to generate profit, this can be achieved when the revenue generated by using the company's resources is higher than the associated costs. Furthermore, this also shows that the companies in the basic materials sector can quickly transform their inventories of in-process (work-in-progress) into its final product, thereby reducing its inventories which are part of total assets. This result is in line with the research done by Alarussi & Alhaderi (2018) and Munawar (2018) but not in line with Sinaga et al. (2020).

CONCLUSIONS

The study's initial aims were to determine the effects of leverage, revenue growth, and TATO on profitability in 63 basic materials sector listed in IDX. The result shows that both revenue growth and TATO have a positive and significant effect on profitability but leverage, though having a negative effect on profitability, is not significant. This result is consistent with pecking order theory, but due to the lack of significance, it cannot be said that the pecking order theory applies in basic materials sector. However, the positive and significant effect of revenue growth and TATO on profitability displays the indirect relationship to the pecking order theory.

The result will help managers to zoom in on revenue growth and TATO to increase its profitability. Managers will need to think of new and innovative strategies to increase its sales and manage its assets, so that these assets can be used to ensure the continuous survival of the firm through the increase in sales.

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