

## **The Influence Of Capital Expenditure, Total Debt To Total Assets, Total Debt To Equity And Long Term Debt To Total Equity On Profitability In Manufacturing Companies Listed On The Indonesian Stock Exchange In 2014-2018**

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### **Abstract**

*This study aims to analyze the Effect of Capital Expenditure, Total Debt to Total Assets, Total Debt to Equity and Long Term Debt to Total Equity on Profitability in Manufacturing Companies Listed on the Indonesia Stock Exchange in 2014-2018. This research is an explanatory research that explains the causality relationship using secondary data with the population are all Manufacturing Companies Listed on the Indonesia Stock Exchange in 2014-2018. A sample of 11 companies was selected using the purposive sample method in accordance with predetermined criteria including being listed on the IDX and delivering in full accordance with the information needed, namely Capital Expenditure, Total Debt to Total Assets, Total Debt to Equity and Long Term Debt to Total Equity and profitability measured through ROA during the period 2014 - 2018. The analytical method used is linear regression panel data. The results showed that at 95% confidence level of the four dependent variables studied were: Capital Expenditure, Total Debt to Total Assets, Total Debt to Equity and Long Term Debt to Total Equity, there was one variable that had a significant effect on Profitability in Registered Manufacturing Companies on the Indonesia Stock Exchange in 2014-2018 namely and Long Term Debt to Total Equity. Meanwhile, if tested simultaneously Capital Expenditure, Total Debt to Total Assets, Total Debt to Equity and Long Term Debt to Total Equity have a significant effect on profitability.*

**Keywords : Capital Expenditure, Total Debt to Total Assets, Total Debt to Equity, Long Term Debt to Total Equity and Profitability**

### **INTRODUCTION**

In current business management, small companies and large companies are developing their businesses in order to survive competition, so that every company is required to always produce efficiently if they want to maintain a competitive advantage. A company as an entity that operates by applying economic principles is generally not only oriented towards achieving maximum profits, but also tries to increase the value of the company and the prosperity of its owners (Awat & Muljadi, 1995). Therefore, strategic and tactical plans that are prepared to achieve predetermined goals are needed by the company.

Capital (spending from outside the company) is grouped into two types, namely: debt and equity (own capital). Debt has the following advantages (Brigham and Gapenski, 1997):

1. interest reduces taxes so the cost of debt is low,
2. creditors obtain limited returns so that shareholders do not need to share profits when business conditions are advancing,
3. Creditors do not have voting rights so shareholders can control the company with a small investment.

However, debt also has weaknesses, namely:

1. debts usually have a certain period of time to be paid off on time,

2. A high debt ratio will increase risk which will further increase the cost of capital,

3. If the company is in difficult conditions and its profits cannot meet the interest expense, it is possible that liquidation will be taken.

The source of meeting the company's funding needs will influence dependence on external parties. If the source of most of the funds comes from the company's internal sources, this will greatly reduce dependence on external parties. However, if the company's funding needs have greatly increased due to the large number of needs and due to the company's growth, while all internal funds have been used, then the option used is to use funding sources from outside the company (external).

This funding source can come from either debt (debt financing) or by issuing new shares to be sold to other parties (external equity financing) to meet funding needs. If the company uses more funding sources from debt to fulfill its funding needs, it will increase dependence on external parties and the financial risk will be even greater. Likewise, if the company only emphasizes its source of funding by relying solely on shares, it will result in very expensive costs. Because the most expensive costs come from the use of funds from new shares (cost of new common stock) compared to other sources (Riyanto, 2013).

Increasingly competitive competition makes the financial manager's task increasingly complicated, namely to look for funding alternatives that can minimize capital costs which will enable the company to create a competitive advantage. Therefore, companies in making funding decisions must pay attention to two things: 1) if the company wants to maintain its solvency and liquidity position, it needs adequate own capital, 2) excessive growth of its own capital can reduce the profitability of its own capital and will also increase the cost of its own capital. An increase in DER to a certain level will minimize capital costs, but if the increase is too excessive it will actually result in increased capital costs in the form of interest costs.

Decisions in financing (capital structure) are an important aspect in getting maximum profit. Decisions in capital structure are very

important for business organizations, because of the need to maximize profits from the company and because of the impact of these decisions the company can face a competitive environment. Business ventures that are starting a business also require good planning and strategy. With economic growth in Indonesia continuing to grow, new businesses will continue to emerge.

According to Kartadinata (2008) capital structure describes the overall composition of the credit side of the balance sheet which consists of short-term debts, long-term debts, share capital and reinvested profits. Modigliani & Miller (1958) concluded that capital structure is irrelevant and financial leverage does not affect the company's market value. This theory is based on very limited assumptions which make this theory unacceptable, because financial leverage can actually affect the company's market value. According to Amarjil, Nahum, & Neil (2011), these assumptions include perfect capital markets, no taxes, and no transaction costs. The presence of bankruptcy costs, financial distress and favorable tax treatment of interest payments led to the notion of an optimal capital structure, which maximizes the value of the firm or minimizes the total cost of capital, respectively.

Myers & Majluf (1984) developed the concept of optimal capital structure based on the idea of asymmetric information. The existence of asymmetric information between companies and financial providers tends to cause the relative costs of finance to vary between different sources of financing. For example, an internal source of finance where the fund provider is a company will have more information about the company than new shareholders, thus, new shareholders will expect a higher rate of return on their investment. This will incur greater costs for the company to issue new equity shares rather than using internal funds. The same argument can be given between internal finance and new shareholders, thus it can be concluded that there is a hierarchy of corporate preferences with regard to investment financing.

Pecking order theory suggests that firms initially rely on internal funds (e.g., retained earnings) where there is no information asymmetry. Companies then turn to debt if additional funds are needed and eventually they

issue capital to cover remaining capital requirements. The pecking order hypothesis shows that companies are willing to sell shares when the market is overvalued, this is based on the assumption that managers act in support of the interests of existing shareholders.

Research regarding the influence of capital structure on company performance has been studied from year to year to see the influence between the two. Like research conducted by Salim and Yadav (2012) which analyzed the relationship between capital structure and company performance, with a sample of 237 companies listed on the Malaysia Stock Exchange in the period 1995 - 2011. The independent variable in this journal is capital structure, which is proxied by long term debt, short term debt, total debt ratios and growth while the dependent variable in this journal is company performance, which is proxied by ROA, ROE, Tobin's Q and EPS. The research results show that company performance, as measured by ROA, ROE, and EPS, has a negative influence with short term debt, long term debt, total debt, as independent variables. However, there is also a positive influence between growth and performance. It was also reported in this research that total debt has a significant negative influence on company performance.

The next research was conducted by Ahmad, Abdullah, and Roslan (2012). This research analyzes the relationship between capital structure and company performance, with a sample of 58 industrial and consumer sector companies in Malaysia in the period 2005 - 2010. The dependent variable used in this journal is company performance which is proxied by ROA and ROE, while the independent variable is structure. capital, which is proxied by long term debt, short term debt and total debt. This research shows that only short term debt and total debt have a significant relationship with ROA, while ROE has a significant relationship with all capital structure indicators.

The next research was conducted by Pouraghajan and Malekian (2012). This research took a sample of 80 manufacturing companies from 12 industrial sectors listed on the Tehran Stock Exchange for the period 2006 - 2010. This research was conducted with the aim of analyzing the impact of capital structure on company financial performance. The results of

this research are that there is a strong and significant negative relationship between debt ratio and company performance (ROA and ROE). There is also a significant positive relationship between variables such as asset turnover ratio, firm size, assets tangibility and growth opportunities and company financial performance (ROA and ROE). Finally, there is no significant relationship between firm age (activity history) and the company's financial performance.

Another important aspect for maximizing profits and increasing company value and providing benefits for company owners apart from capital structure is capital expenditure, which is a form of expenditure allocated to adding, repairing or improving the quality of assets that produce long-term benefits. The definition of assets that have a long-term useful life is compatible with the definition of fixed assets according to SAK. SAK (2009) states that fixed assets are tangible assets obtained in ready-to-use form or built in advance, which are used in the company's operations, are not intended to be sold within the framework of the company's normal activities and have a useful life of more than one year.

In the manufacturing industry, efforts to increase revenue which ultimately increases profits must be accompanied by increasing production capacity. In other words, adding equipment and machines to increase production is a necessity. Every company, especially large established companies, always allocates capex in its budget. From this simple understanding, you can imagine how important capex is for company development and growth. For large companies that always record high performance growth, it is almost impossible not to allocate capex in their budget. Companies that do not allocate capex, whatever the cause, can be sure that their performance will gradually decline.

A manufacturing company is a company that produces materials from raw materials to finished materials by producing goods. Manufacturing companies require large investments, large investments include machines, premises, etc. in carrying out the process of making goods. So manufacturing companies need large amounts of funding for these investments, thus capital structure and

capital expenditure policies are important for manufacturing companies. Compared to other industries such as services and finance, large investment requirements are needed by companies operating in the manufacturing industry.

As an illustration, for example PT XYZ, a company operating in the automotive production sector. In order for its financial performance to be stable and even grow, the company must maintain the quality of its assets in the form of vehicle production machines. Therefore, companies like this are always required to allocate capex. It is impossible for him to eliminate capex in his annual budget. If the company does not budget for capex, it means there will be no rejuvenation, repair or maintenance of production equipment. If conditions are like this, it is almost certain that the company's performance will decline from year to year.

From this illustration, it can be ascertained that allocating capex is an obligation and a company's need to maintain its financial performance. So don't be surprised if the profits generated by the company or issuer are not spent to be distributed as dividends to shareholders. Company profits are accumulated into retained earnings which are used at any time for capex needs. The dividend distribution policy always considers the company's liquidity or cash for capex needs.

Capital expenditure management also influences the views of investors and potential investors in concluding whether the investment capital costs of a company have an effect on the income earned by the company in the same period of time, and the analogy is that the existence of a certain amount of the company's investment capital costs results in a decrease in the company's income in one year. walk. In forming an investment budget, investors must of course take into account whether the investment is included in the feasible category, namely by assessing whether the investment capital costs that will be budgeted by the company will affect the company's ability to generate income.

Callen, Livnat and Ryan (1996) state that companies that have a large CAPEX ratio will enjoy positive abnormal returns in the future. Boquest's (1998) research states that an

important factor that differentiates winning and losing companies is the quality of investment which refers to the company's CAPEX decisions. Chung et al's (1998) research on 425 companies' CAPEX data reported by the Wall Street Journal and Lexis Nexis in G14 countries concluded that empirical evidence strongly supports the investment opportunity quality hypothesis which determines the market price (value) of companies that react more to CAPEX decisions than affiliates. industry. So it is necessary to review several studies and theories that link CAPEX with profit levels.

Research by Sudiyatno and Puspitasari (2010) on 116 manufacturing companies in Indonesia, there is a relationship where Return on Assets (ROA) is closely related to the level of profit which is proxied by company value. Meanwhile, Fitri's (2013) research on 118 manufacturing companies in Indonesia shows that there is a significant relationship between increasing CAPEX and increasing company ROA. Likewise, research conducted by Jiang et al (2006) on 357 manufacturing companies listed on the Taiwan Stocks Exchange for company performance. According to McConnell and Muscarella (1985), if CAPEX is linked to company performance, then the maximum CAPEX level will maximize company performance and more broadly will have a positive effect on the country's industrial growth.

Seeing the important role of capital structure and capital expenditure on company performance in generating profits based on the research results as described above, researchers want to see whether there is still suitability for current conditions. Considering that current economic conditions are different from the past along with technological developments, growth in prosperity, consumer tastes, and so on. "For this reason, this research is intended to measure the influence of Capital Expenditure, Total Debt to Total Assets, Total Debt to Equity and Long Term Debt to Total Equity on Profitability in Manufacturing Companies Listed on the Indonesian Stock Exchange in 2014-2018."

## METHOD

The type of research used in this research is verification research, namely research that aims to test the truth of a hypothesis which is carried

out through data collection in the field. The research method used is explanatory research or explanatory research because it is explanatory, namely explaining the influence of the independent variable on the dependent variable

The data used is secondary data by quoting data based on financial reports that have been published by the Indonesia Stock Exchange for the period 2014 - 2018. The data used is quantitative data, namely data that is measured on a scale (numbers). The data used in this research is secondary data obtained indirectly or through intermediaries (recorded and processed by other parties), in the form of financial reports of manufacturing companies on the Indonesian Stock Exchange (BEI) via the official BEI website ([www.idx.co.id](http://www.idx.co.id))

The population in this study is as many as the population in this study are all manufacturing companies listed on the Indonesia Stock Exchange for the period 2014 to 2018 and published financial reports as of December 31 for the 2014 - 2018 financial year. The sampling technique is from the population to obtain a representative and representative sample. , then sampling is based on the purposive sampling method. Sugiyono (2009) states that "purposive sampling" is a sampling technique with certain considerations. From this population, some companies will be used as research samples with the following criteria:

Manufacturing companies that are consistently listed on the Indonesia Stock Exchange during the 2014 – 2018 period.

1. Shares of manufacturing companies that were actively traded in the 2014 – 2018 period on the Indonesian Stock Exchange.

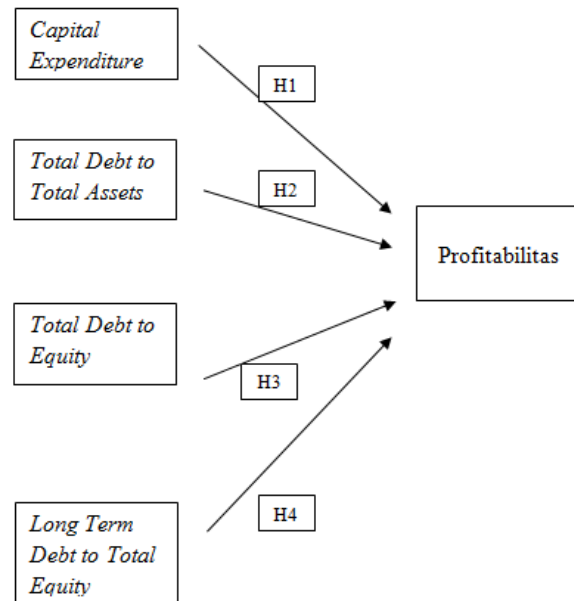
2. Financial data obtained in financial reports during the research period 2014 – 2018

3. Made capital expenditures and had long-term debt during the 2014-2018 reporting year

Based on the considerations outlined above, from the existing population, the number of manufacturing companies registered on the

IDX that were registered in the period 2014 to 2018 that were used as samples was 11 companies.

In this research, the author used two types of analysis, namely descriptive analysis and inferential analysis to answer the problems in this research. The inferential analysis used is panel data regression with the help of Eviews version 9 software.



**Figure 1 Research Design**

The independent variables in this research are Capital Expenditure to Total Asset Ratio, Debt to Assets Ratio, Long Term Debt to Assets ratio, and Debt to Equity Ratio. Meanwhile, the dependent variable is the profitability of manufacturing companies listed on the Indonesia Stock Exchange in the 2014 - 2018 financial reporting period.

The research hypothesis proposed in this study is as follows:

H1: Capital Expenditure has a significant effect on the profitability of manufacturing companies listed on the Indonesian Stock Exchange.

H2: Total Debt to Total Assets has a significant effect on the profitability of manufacturing companies listed on the Indonesian Stock Exchange.

H3: Total Debt to Equity has a significant effect on the profitability of manufacturing companies listed on the Indonesian Stock Exchange.

H4: Long Term Debt to Equity has a significant effect on the profitability of manufacturing companies listed on the Indonesian Stock Exchange.

H1: At a 95% confidence level, Capital Expenditure has no significant effect on the profitability of manufacturing companies listed on the Indonesian Stock Exchange. This can be seen from the significance value of 0.0585 which is greater than the value  $\alpha = 0.05$ .

H2: At the 95% confidence level, Total Debt to Total Assets has no significant effect on the profitability of manufacturing companies listed on the Indonesian Stock Exchange. This can be seen from the significance value of 0.7604 which is greater than the value  $\alpha = 0.05$ .

H3: At the 95% confidence level, Total Debt to Equity has no significant effect on the profitability of manufacturing companies listed on the Indonesian Stock Exchange. This can be seen from the significance value of 0.6776 which is greater than the value  $\alpha = 0.05$ .

H4: At a 95% confidence level, Long Term Debt to Equity has a significant effect on the profitability of manufacturing companies listed on the Indonesian Stock Exchange. This can be seen from the significance value of 0.0017 which is smaller than the value  $\alpha = 0.05$ .

The results of the F test were carried out with the aim of testing whether all the independent variables in this case are Capital Expenditure, Total Debt to Total Assets, Total Debt to Equity and Long Term Debt to Equity which are included in the model have a joint influence on the dependent variable, namely Profitability. measured through ROA. The F test results are as follows:

**RESULTS AND DISCUSSION**

Descriptive statistical analysis describes the independent variables and dependent variables in this research, namely the variables Capital Expenditure, Total Debt to Total Assets, Total Debt to Equity, and Long Term Debt to Equity and Profitability. These research variables are interpreted in terms of lowest (minimum) value, highest (maximum) value, average (mean) and standard deviation. The results of the descriptive analysis can be seen in Table 1 below:

Tabel 1. Descriptive Analysis

	Y	X1	X2	X3
Mean	5.619273	0.187280	0.405029	0.770014
Median	5.250000	0.120415	0.391962	0.644635
Maximum	16.24000	0.649621	1.705768	1.973621
Minimum	-0.820000	0.002047	0.073470	0.079296
Std. Dev.	4.167039	0.171416	0.254046	0.548704
Skewness	0.489082	0.909392	2.307851	0.588455
Kurtosis	2.357477	2.984027	13.47039	2.276535
Jarque-Bera	3.138764	7.581365	300.0564	4.373685
Probability	0.208174	0.022580	0.000000	0.112271
Sum	309.0600	10.30042	22.27662	42.35078
Sum Sq. Dev.	937.6678	1.586697	3.485137	16.25812
Observations	55	55	55	55

The partial test is used to determine whether there is an influence between the independent variables on the dependent variable partially (individually). Partial test results are as follows:

Tabel 2. Partial Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	12.10004	1.840257	6.575189	0.0000
X1	11.21986	5.761624	1.947344	0.0585
X2	-0.759714	2.474433	-0.307026	0.7604
X3	-1.489181	3.555304	-0.418862	0.6776
X4	-20.79647	6.172373	-3.369283	0.0017

Table 3. Simultaneous Test

Cross-section fixed (dummy variables)			
R-squared	0.755382	Mean dependent var	5.619273
Adjusted R-squared	0.669765	S.D. dependent var	4.167039
S.E. of regression	2.394633	Akaike info criterion	4.811338
Sum squared resid	229.3706	Schwarz criterion	5.358792
Log likelihood	-117.3118	Hannan-Quinn criter.	5.023043
F-statistic	8.822866	Durbin-Watson stat	1.933058
Prob(F-statistic)	0.000000		

Based on the table above, the Sig value is 0.000000 which when compared with  $\alpha=5%=0.05$ . So the Sig value (0.000000) <  $\alpha$  (0.05) so that H0 is rejected, which means there

is an influence of Capital Expenditure, Total Debt to Total Assets, Total Debt to Equity and Long Term Debt to Total Equity, on ROA or at a confidence level of 95 % Capital Expenditure variables, Total Debt to Total Assets, Total Debt to Equity and Long Term Debt to Total Equity together have a significant effect on the ROA variable

Based on data analysis using the Eviews Version 9 program, it shows that the Adjusted R Square coefficient value is 0.669765. This means that 66.9765% of the profitability variable can be explained by the variables Capital Expenditure, Total Debt to Total Assets, Total Debt to Equity and Long Term Debt to Total Equity. Meanwhile, the remaining 33.0235% is influenced by other variables that are not in this model.

From the results of the tests that have been carried out, the following regression equation model is obtained:

$$y_{ti} = x_{ti}\beta + c_i + \varepsilon_{ti}$$

$$y_{ti} = 12.10004 + 11.21986x_{t1} - 0.759714x_{t2} - 1.489181x_{t3} - 20.79647x_{t4}$$

\*

Where:

$y_{ti}$  : Profitability

$x_{t1}$  : Capital Expenditure

$x_{t2}$  : Total Debt to Total Assets

$x_{t3}$  : Total Debt to Equity

$x_{t4}$  : Long Term Debt to Total Equity

Based on the regression model formed, it can be interpreted as follows:

The Constant Coefficient is 12.10004, meaning that under constant conditions, the Cash Dividend value is 12.10004 assuming the independent variable is ceteris paribus.

The Capital Expenditure regression coefficient of 11.21986 means that for every one unit increase in Capital Expenditure, it is estimated that it can increase the profitability value by 11.21986 assuming other variables are considered constant.

The Total Debt to Total Assets regression coefficient is - 0.759714, which means that for every one unit increase in Total Debt to Total Assets, it is estimated that it can reduce the profitability value by - 0.759714 assuming other variables are considered constant.

The Total Debt to Equity regression coefficient is - 1.489181, which means that for every one unit decrease in Total Debt to Equity, it is estimated

that it can reduce the profitability value by 1.489181 assuming other variables are considered constant.

The Long Term Debt to Total Equity regression coefficient is -20.7964, which means that for every one unit decrease in Long Term Debt to Total Equity, it is estimated that it can reduce the profitability value by 20.7964 assuming other variables are considered constant.

## CONCLUSIONS AND RECOMMENDATIONS

Based on the results of data analysis and discussions carried out, the conclusions obtained are as follows:

1. There is no significant influence of Capital Expenditure on profitability in manufacturing companies listed on the IDX for the 2014 - 2018 period at a confidence level of 95%. It can be seen from the t test results that the significance value is 0.0585 which is greater than the value  $\alpha = 0.05$ . This explains that the factor of increasing the company's ability to make capital expenditures is not accompanied by an increase in the company's ability to earn higher profits, so it can be concluded that hypothesis 1 is not proven.

2. There is no significant influence of Total Debt to Total Assets on profitability in manufacturing companies listed on the IDX for the 2014 - 2018 period at a 95% confidence level. It can be seen from the results of the t test that the significance value is 0.7604 which is greater than the value  $\alpha = 0.05$ . This explains that high or low debt to asset ratios are not accompanied by an increase in the company's ability to earn higher profits, so it can be concluded that hypothesis 2 is not proven.

3. There is no significant influence of Total Debt to Equity on profitability in manufacturing companies listed on the IDX for the 2014 - 2018 period at a confidence level of 95%. It can be seen from the results of the t test that the significance value is 0.6776 which is greater than the value  $\alpha = 0.05$ . This explains that high or low debt to capital ratios are not accompanied by an increase in the company's ability to earn higher profits, so it can be concluded that hypothesis 3 is not proven.

4. There is a significant influence of Long Term Debt to Equity on profitability in manufacturing companies listed on the IDX for the 2014 - 2018 period at a confidence level of

95%. It can be seen from the significance value of 0.0017 which is smaller than the value  $\alpha = 0.05$ . This explains that high or low long-term debt to capital ratios are accompanied by an increase in the company's ability to earn higher profits, so it can be concluded that hypothesis 4 is proven.

Suggestions that can be given based on research are as follows:

1. For investors

This research shows that the Capital Expenditure Ratio, Total Debt to Total Assets and Total Debt to Equity do not have a significant effect on profitability, so these variables need to be considered for their effectiveness in assessing a company and can be taken into consideration in making investment decisions.

2. For companies

Companies should increase the effectiveness of both capital expenditure and reduce their debt ratios. In this way, it is hoped that it can have a significant influence on increasing the company's ability to earn profits. In addition, it is hoped that companies can provide financial information that is objective, relevant and whose validity can be tested. It is important for investors to be able to see the development and condition of a company listed on the Indonesia Stock Exchange, so that they can convince investors in making decisions about buying company shares.

3. For future researchers

a. It would be better if further research was carried out regarding the factors that influence profitability, then it is hoped that other financial ratios will be added as more varied independent variables, it is very possible for other financial ratios to be included in the research.

b. Future research is expected to increase the research sample, increase the research period or replace the latest research year in order to obtain more accurate results regarding profitability.

c. Future researchers can use sectors other than manufacturing, for example the financial sector and so on

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