



Analysis of the Company's Financial Performance Using the Du Pont System in the Building Construction Sub-Sector on the Indonesia Stock Exchange

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ABSTRACT

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This study aims to determine the analysis of the financial performance of building sub-construction companies listed on the Indonesia Stock Exchange for the 2016-2020 period using the Du Pont System method. The Du Pont System includes the calculation of Net Profit Margin (NPM), Total Asset Turnover (TATO), Return On Investment (ROI), Equity Multiplier (EM) and Return On Equity (ROE). The research method used is a quantitative method with a descriptive approach and the data collection technique used is the company's annual report documentation technique. Based on the analysis and discussion, it can be seen that the Du Pont System analysis of building construction sub-sector companies listed on the Indonesia Stock Exchange for the 2016-2020 period shows a fairly good ROE performance, this is based on a comparison of industry standards. PT. Total Bangun Persada Tbk and PT. Wijaya Karya Bangunan Gedung Tbk is the company with the largest ROE, namely 18.37% and 17.18%, when compared to industry standards, these two companies are in very good condition. This indicates that the company is able to provide a very good return on the capital invested by the shareholders. The results of the research show that the average NPM ratio is in good condition which reflects the company can reduce costs so as to produce maximum profit. The average ratio of TATO and ROI shows a bad company condition that reflects the company's inefficient management of assets for sales and inefficient investment of assets. The results of the average EM show that the company's condition is quite good which reflects the company's efficiency in using its own capital to finance assets.

INTRODUCTION

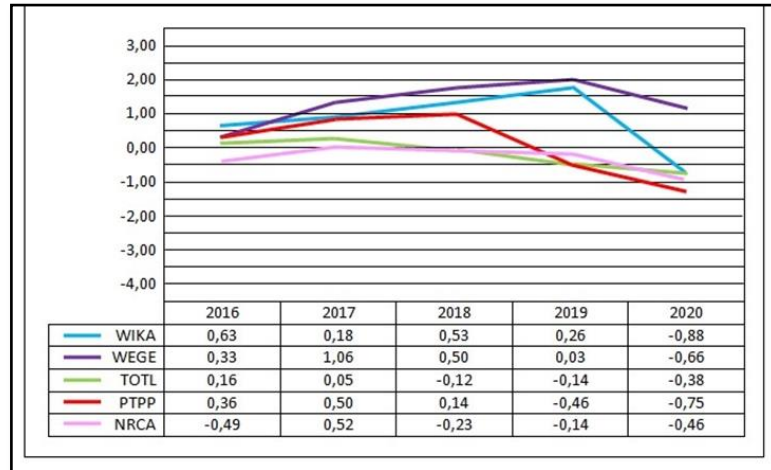
Indonesia is one of the developing countries that is accelerating infrastructure development to improve the national economy. Infrastructure is supported by the construction sector, both state-owned and private so the construction sector is in great demand by investors. However, in recent years, net profit in the construction sector has decreased and fluctuated quite high so the stock price was undervalued. This condition occurred due to 2 factors, namely the United States Central Bank (Federal Reserve System) raising its benchmark interest rate globally to the range of 0.25% - 0.5%, this resulted in an increase in the price of imported goods and an increase in interest rates when looking for sources. funding through credit or refinancing. The second factor is the increase in Covid-19 cases so that large-scale social restrictions (PPKM) are applied, this results in project delays so that they cannot collect receivables from clients while bank debt and bond interest continue (Faqr, 2021).

The company was established with the aim of making a profit and being able to maintain its survival and be able to compete with local and international companies. Companies need management who can understand financial performance and conduct analysis to evaluate and predict profitability in order to strengthen the company's position in market competition. According to Rudianto (2013), financial performance is the achievement of company management to be able to effectively control existing resources in the company during a certain period.

The measurement of the company's financial performance requires financial statements that become the basis for a comparative analysis of the company's financial condition every year so that the financial statements can be the basis for decision making. In general, financial statement analysis is carried out so that interested parties know the actual condition of the company and can find out the strengths and weaknesses of the company's performance so that they can evaluate past performance and be considered in the future. One of the analyzes used to measure financial performance is the Du Pont System analysis (Dharma, 2018; Sunardi, 2018).

Du Pont System analysis is used so that companies know which factors affect the ups and downs of financial performance. According to Hani (2014) "The Du Pont System analysis is an analysis used to determine the level of profit on company assets through the combination of the net profit margin ratio and the total asset turnover ratio". From the understanding of the Du Pont System above, it can be seen which factors have the greatest influence between Total Assets Turnover and Net Profit Margin on Return On Investment. Return On Investment is a ratio that measures the

company's ability to manage investment capital into assets to generate net profit from sales. Du Pont System analysis is also used to show the rate of return on invested capital. Return On Equity is influenced by Return On Investment and Equity Multiplier, Equity Multiplier shows how companies can manage their capital. Return On Investment with a high predicate indicates that the company has the ability to manage assets to generate profits through sales activities, increased sales will affect Return On Equity which also increases and this condition is good for shareholders.



Source: Data processed, 2022

Fig .1 Graph of Net Profit 2016-2020

The building construction sub-sector companies listed on the Indonesia Stock Exchange are the companies that are the object of this research, the construction sector was chosen for several reasons, including a decline in net income which tends to occur in 2020. Several construction sector companies experienced a decline in net profit, namely PT. Nusa Raya Cipta Tbk experienced the largest decrease in profit in 2016 by -0.49% and experienced the largest increase in profit in 2017 by 0.52% and experienced a decrease in profit in the following year by -0.23% in 2018, -0.14 % in 2019, and -0.46% in 2020, the decrease in profit occurred due to the increase in liabilities and expenses but relatively low-income growth (Kayo, 2020).

PT. Pembangunan Perumahan Tbk had good net profit conditions in 2016 and 2017 of 0.36% and 0.50% but experienced a low increase in profit in 2018 of 0.14% and profits in 2019 and 2020 decreased by - 0.46% and -0.75%, this happens because the company's income is relatively decreasing every year. PT. Total Bangun Persada Tbk in 2016 saw an increase in profit of 0.16%, but in 2017 the profit increased slightly by 0.05% from the previous year, and in 2018, 2019, and 2020 experienced a significant decrease in profit, which was -0.12 %, -0.14% and -0.38%, the decrease in profit occurred because the company's revenue continued to decline throughout 2018 to 2020 (Kayo, 2020).

PT. Wijaya Karya Bangunan Gedung Tbk saw an increase in profit in 2016 and 2017 of 0.33% and 1.06%, but in 2018 and 2019 it experienced a low-profit increase of 0.50% and 0.03%, and the largest decrease in profit occurred in 2020 which was -0.66% due to the company's net income decreased by -0.38% from the previous year's revenue. The last company, namely PT. Wijaya Karya Tbk in 2016 there was an increase in profit of 0.63% from the previous year, but in 2017 there was a low increase in profit of 0.18%. In 2018 and 2019 there was an increase in profit of 0.53% and 0.26% from the previous year. The biggest profit decline of PT. Wijaya Karya Tbk occurred in 2020 which was -0.88% this happened because liabilities and expenses increased while net income decreased by -0.39% (Kayo, 2020).

Through the Du Pont System analysis, various financial components that affect financial performance can be more detailed, so that financial management can find out the strengths and weaknesses of the company's financial components as a whole. In Sunardi's research (2018) about the Du Pont System analysis with a time series approach (TSA) and a cross-sectional approach (CSA) in assessing the financial performance of companies (study on the construction industry (BUMN) in Indonesia listed on the IDX in 2013-2017). The results of the study stated that the time series approach showed declining company performance while the cross-sectional approach showed good company performance.

Based on the discussion and previous research that has been described, the authors are interested in conducting research with the title "Analysis of Corporate Financial Performance with the Du Pont System in the Building Construction Sub-Sector on the Indonesia Stock Exchange for the 2016-2020 Period".

LITERATURE REVIEW

Signaling Theory

Signaling theory or better known as signal theory was first put forward by Ross (1976) which states that the stock price of a company can increase if the company has good financial information so as to encourage providing information to

potential investors. The signal theory according to Brigham & Houston (2014) is the opportunity expected by shareholders through the company's financial information obtained from the company. Signaling theory focuses on how information is useful for decision-making for shareholders, information is considered important because it describes various activities that occur in several periods that are useful as an analytical tool in decision making.

Information from management (agent) can be used as a signal by stakeholders (principal). When information is received by market participants, the information will be interpreted and analyzed as a good signal or a bad signal. If there is information about the reported earnings of a company increasing then the information can be said to be a good signal, this certainly implies investors name their capital in the company. On the other hand, if there is information about declining profits, the information can be said to be a bad signal. Information that can be used as a signal by interested parties can be found in the annual report. For this reason, the information contained in the annual report should be as it is and can explain information that should be known by report users. With the quality of financial reporting, of course, this can be a signal for various parties and can indicate that management has good performance.

Understanding Financial Statements

According to Suteja (2018), financial reports are various financial-related data obtained from final accounting results based on generally accepted accounting principles and used by interested parties. In line with this, according to Heppy et al (2021), the financial statements consist of various reports that describe the company's financial condition such as assets and liabilities contained in the balance sheet and company income contained in the income statement. It is known that the financial statements are various financial information which includes two important things, namely the balance sheet and the income statement where this financial information is important to determine the company's performance.

Purpose of Financial Statements

The purpose of financial reports according to Hans et al (2016) financial statements has a purpose for investors as an analytical tool used to make important decisions through information on the financial position, cash flow, and financial performance. Financial statements also have a goal for management as an assessment of the performance that has been achieved. According to Kasmir (2019) financial statements have several objectives, namely:

1. Financial statements can inform the value and changes to the balance sheet and income statement.
2. Financial reports can inform the achievement of the performance of the management.
3. Financial statements can inform various other financial information.

Based on the above understanding, it is known that the purpose of financial statements is as a medium of financial information regarding the financial position and its changes and is useful for those who need information related to economic decisions.

Characteristics of Financial Statements

According to the Indonesian Accounting Association (2015) in the Statement of Financial Accounting Standards Number One, there are several characteristics of financial statements, namely: Easy to understand, Relevant, Reliability, and Comparable.

Types of Financial Statements

According to Prastowo (2015) generally, the financial statements used by the company are as follows:

1. Balance
The balance sheet is a financial statement that focuses on changes in assets and liabilities over a certain period.
2. Income statement

The income statement is a financial statement that focuses on income for a certain period.

According to Kasmir (2019), there are several elements or components of financial statements, namely:

1. The balance sheet is a report that shows the position of the company's assets and liabilities.
2. The income statement is a report that shows changes in the company's income.
3. Statement of changes in the capital is a report that shows the company's equity.
4. Cash flow statement is a report that shows changes in cash flows in and out of a company.
5. The notes to the financial statements are other important information contained in the financial statements.

It is known that there are five elements of financial statements, namely balance sheets, income statements, reports of changes in capital, cash flow statements, and notes to financial statements.

Company Financial Performance

Financial performance according to Sujarweni (2017) is the conclusion of an evaluation of management performance and will be compared according to the established criteria, good financial performance needs to be assessed periodically. Financial performance assessment according to Larasati & Hidayat (2018) is the fulfillment of information obligations by management to funders so that they can achieve the goals set, and reflect the company's financial ability which can be seen in the financial statements. Based on the above discussion, it is known that financial

performance is a measurement of the company's financial performance assessment that can show the financial condition of a company.

Definition of Du Pont System

According to Dwiningsih (2018), the Du Pont System analysis shows the conditions that have the most influence on ROI, whether net profit margins or total asset turnover, besides that it can also measure control over expenses and the efficiency of assets turnover on sales. Meanwhile, according to Dewi (2018), the Du Pont System analysis can measure the return on equity (ROE) through a comparison of Net Profit Margin, Total Asset Turnover, and Equity Multiplier. According to Sirait (2017) the Du Pont System analysis specifically measures three things, namely:

1. How the resources in a company are effective in generating profits or profits.
2. How capital assets in a company can generate sales.
3. How businesses can leverage debt capital.

It is known that the Du Pont System analysis measures how the influence of net profit margin and total asset turnover in generating Return On Investment (the company's ability from invested capital into assets to earn net profit from sales). Du Pont System can also measure Return On Equity (the company's ability to return capital) through Return On Investment and Equity Multiplier.

Benefits of Du Pont System

The benefit of the Du Pont System according to Phrase & Ormiston (2018) is to measure financial ratios in generating equity returns. The Du Pont System is not only useful for interested parties in seeing the potential and activities of the company, it is also useful for company management in assessing its performance in several periods. Meanwhile, according to Rudianto (2013) the benefits of the Du Pont System on ROI assessment are as follows:

1. Encourage managers to pay attention to the interaction of income, costs, and investment.
2. Efficiency of costs can be done by managers.
3. Control in investing can be controlled.

Advantages of Du Pont System

Some of the advantages of the Du Pont System analysis according to Munawir in Musdafia & Saputra (2019) are:

1. It is an analytical method that has a comprehensive nature and informs the efficiency of asset use.
2. As a comparison between similar companies related to equity efficiency so as to describe the actual situation.
3. As a measure of the effectiveness of a division's actions by way of allocating expenses and capital to the related divisions.
4. As a measure of profit from the target achieved.
5. As a means of control and planning.

Weaknesses of the Du Pont System

Some of the weaknesses of the Du Pont System analysis according to Munawir in Musdafia & Saputra (2019) are:

1. The variation in accounting applications makes it difficult to compare the ROE between companies.
2. The existence of fluctuations in the value of money (purchasing power).
3. Comparing problems cannot be done using ROE alone.

With the Du Pont System analysis, the root of the depreciation in the return on investment will be known to the target figure.

Du Pont System Formula

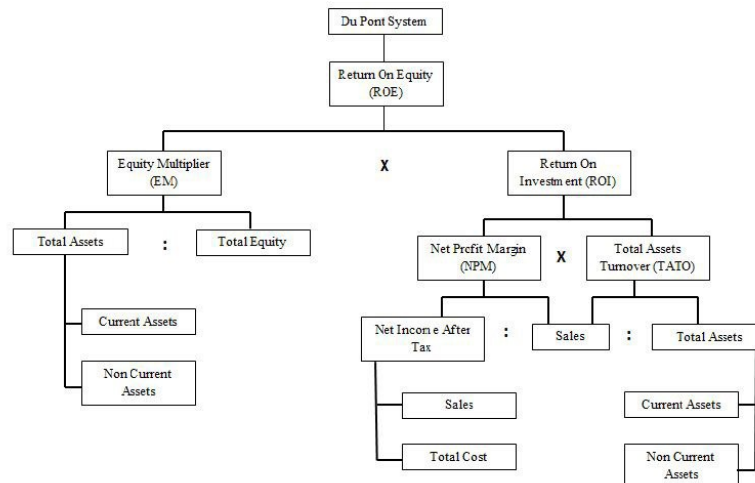
Fraser and Ormiston (2018), it is stated that the Du Pont System formula can be understood as the strengths and weaknesses and can be identified which are the causes of the overall problem. Return On Investment is the return on assets invested through Net Profit Margin (return on sales) and Total Asset Turnover (the ability to generate sales from the use of assets). Meanwhile, Djaja & Maulana (2020) stated that the return on capital comes from the return on investment (the result of multiplying the net profit margin and total asset turnover) multiplied by the Equity Multiplier.

Du Pont's ROE formula sourced from Atmaja (2003) suggests the following ROE formula:

$$ROE = (NPM) \times (TATO) \times (EM)$$

Du Pont System Analysis Chart

In measuring the Du Pont System, the Return On Equity value is strongly influenced by the Return On Investment and Equity Multiplier, this allows the company's management to evaluate the causes of the ups and downs of a ratio and minimize the risks that occur. The relationship between ratios in the Du Pont System can be seen in Figure 1.



Source: Lubis, 2018

Fig.2 Du Pont. System Analysis Chart

Based on the graph above, it can be seen that the constituent elements of Return On Equity are the product of Return On Investment (derived from Net Profit Margin times Total Asset Turnover) and Equity Multiplier (derived from total assets multiplied by total equity). According to Lubis (2018), the Du Pont System analysis looks at the efficiency of total costs to income through NPM and looks at the elements of the balance sheet, both current assets, and non-current assets through TATO.

Steps to Measure Financial Performance Using Du Pont System Analysis

In the Du Pont System analysis, there are several ratios used, including:

1. Activity Ratio

According to Hery (2018), it is stated that the activity ratio is a measure of the level of efficiency related to how companies can utilize existing resources within the company in generating sales. The following activity ratios are used in the Du Pont System analysis, namely:

a. Total Asset Turnover (TATO)

Total asset turnover is a ratio that can measure the company's expertise in controlling assets or investments for sales. According to Werdiningtyas & Sam'ani (2018) states that the total asset turnover ratio shows the use of assets in sales. If the turnover rate is slow, it indicates that the assets are too large which is not worth the selling ability. Measurement of Total Asset Turnover based on the concept of Brigham & Houston (2014) are:

$$\text{Total Asset Turnover} = \frac{\text{Sale}}{\text{Total Asset}}$$

The performance standards used as criteria for measuring the effectiveness of Total Asset Turnover are:

Table .1

Financial Performance Standards Total Asset Turnover	
Total Asset Turnover (times)	Predicate
> 3,5	Very good
2,5 s/d 3,5	good
1,5 s/d 2,5	Fairly Good
1 s/d 1,5	Not good
< 1	Bad

Source: www.bi.go.id, 2022

The industry standard for Total Asset Turnover is 2.5 times, if it is above 2.5 times it indicates good company performance in using assets to generate sales; and vice versa (Lubis, 2018).

2. Profitability Ratio

According to Kasmir (2019), the profitability ratio can show the relationship between profit and sales, and investment. This relationship can show how sales generate profits. The following profitability ratios are used in the Du Pont System analysis, namely:

a. Net Profit Margin (NPM)

Net profit margin is a ratio that measures the level of profit (profit after tax) on sales or income, thus providing an overview of financial performance in terms of profit. According to Dharma (2018), Net Profit Margin is the ability to make sales to earn a profit. If the profit margin is high, it indicates the efficiency of the company's operations.

Measurement of Net Profit Margin based on the concept of Brigham & Houston (2014) are:

$$\text{Net Profit Margin} = \frac{\text{Net Profit After Tax}}{\text{Total Sales}} \times 100$$

The performance standards used as criteria for measuring the effectiveness of Net Profit Margin are:

Table. 2

Financial Performance Standards Net Profit Margin	
Net Profit Margin (%)	Predicate
≥ 10	Very good
5 – 9,99	good
1 – 4,99	Fairly Good
0 – 0,99	Not good
≤ 0	Bad

Source: www.bi.go.id, 2022

The industry standard for Net Profit Margin is 5%, if it is above 5% it indicates good company performance in generating profit from sales and reducing costs in the company; and vice versa (Lubis, 2018).

b. Return On Investment (ROI)

Return on investment is the company's ability to obtain a return on investment on funds in the form of assets for its operational activities. Return On Investment according to Fahmi (2014) is an analysis of the expected rate of return on investment returns on investment. ROI measurements based on the concept of Brigham & Houston (2014) are:

$$ROI = \text{Net Profit Margin} \times \text{Total Asset Turnover}$$

The performance standards used as criteria for measuring the effectiveness of Return On Investment are:

Table. 3

Financial Performance Standards Return On Investment	
Return On Investment (%)	Predicate
≥ 15	Very good
12 – 15	good
8,5 – 11,9	Fairly Good
5 – 8,49	Not good
≤ 0	Bad

Source: www.bi.go.id, 2022

The industry standard for Return On Investment is 12%, if it is above 12% it indicates a good company performance in getting a return on investment on capital in the form of assets in operational activities; and vice versa (Lubis, 2018).

c. Return On Equity (ROE)

Return on capital is the company's ability to obtain a return on the capital used. If the return on capital is high, it indicates the position of the owner of the company is getting better. Return on Equity according to Harahap (2015) is a measurement of the level of income owned by shareholders related to invested capital. ROE measurements based on the concept of Brigham & Houston (2014) are:

$$ROE = (NPM) \times (TATO) \times (EM)$$

The performance standards used as criteria for measuring the effectiveness of Return On Equity are:

Table. 4

Financial Performance Standards Return On Equity	
Return On Equity (%)	Predicate
≥ 15	Very good
12,5 – 15	good
5 – 12,49	Fairly Good
0 – 4,9	Not good
≤ 0	Bad

Source: www.bi.go.id, 2022

The industry standard for Return On Equity is 12.5%, if it is above 12.5% it indicates good company performance in generating returns for every rupiah invested by shareholders and the company is good at managing capital; and vice versa (Lubis, 2018).

3. Leverage Ratio

Harahap (2015) states that the leverage ratio is a measurement of the amount of financing financed by debt with the amount of company equity. The leverage ratio can see the financial risk of a company. The following activity ratios are used in the Du Pont System analysis, namely: Equity Multiplier (EM)

Equity Multiplier is a ratio that assesses the ratio of capital and total assets or the percentage of assets financed by debt. According to Wahyudiono (2014), the amount of debt affects the amount of the Equity Multiplier. If the debt is high then the Equity Multiplier will be large, this shows that the amount of debt also affects ROE. Measurement of the Equity Multiplier based on the concept of Brigham & Houston (2014) are:

$$\text{Equity Multiplier} = \frac{\text{Total Assets}}{\text{Total Capital}}$$

The performance standards used as criteria for measuring the effectiveness of the Equity Multiplier are:

Tables. 5

Financial Equity Multiplier Financial Performance Standards	
Equity Multiplier (kali)	Predicate
< 1	Very good
1 – 1,99	good
2 – 2,99	Fairly Good
3 – 3,99	Not good
> 4	Bad

Sumber: www.bi.go.id, 2022

The industry standard for the Equity Multiplier is 1 time, if it is below 1 time it indicates good company performance because it reflects the smaller use of debt in financing assets and the company's risk will be small; and vice versa (Lubis, 2018).

METHOD

Quantitative research with a descriptive approach is used as this type of research because this research uses data in the form of numbers as an analytical tool and this study examines the relationship between variables in research, so that it can describe a symptom, event, event without any engineering (Sugiyono, 2018). Quantitative data as a type of data. According to Sugiyono (2018), quantitative data is a research method where numbers are used as research data and will be measured by research problems to be able to provide analysis results. Secondary data as a data source. Secondary data is information that the authors get through other parties, namely in the form of annual reports (Annual Reports) of building construction sub-sector companies on the Indonesia Stock Exchange for the 2016-2020 period, journals, books and previous research used as references.

The population of this study is the building construction sub-sector companies listed on the Indonesia Stock Exchange for the 2016-2020 period, so that a population of 19 companies is obtained. The sample according to Sugiyono (2018) is a component in the population that has certain characteristics. If there are many populations, the researcher can take several samples in the population, making it easier to study. Purposive sampling method was used as a sampling method. According to Sugiyono (2018) purposive sampling is one way of taking samples based on certain benchmarks according to the needs of researchers. The determination of the criteria used to select the sample, among others:

1. Building construction sub-sector companies listed on the Indonesia Stock Exchange from the 2016-2020 period.
2. Building construction sub-sector companies that do not move to other sectors.
3. Building construction sub-sector companies that publish financial reports or components required for research for the 2016-2020 period.
4. Building construction sub-sector companies that are profitable during the 2016-2020 period.

In this study, the authors used descriptive quantitative data analysis techniques with the Du Pont System method. The Du Pont System method itself describes various ratios that affect Return On Equity. The stages of this research are as follows:

1. Calculating Net Profit Margin (NPM)

$$\text{Net Profit Margin} = \frac{\text{Net Profit After Tax}}{\text{Sale}} \times 100$$

2. Calculating Total Asset Turnover (TATO)

$$\text{Total Asset Turnover} = \frac{\text{Sale}}{\text{Total Aset}}$$

3. Calculating Return On Investment (ROI)

$$\text{Return On Investment} = \text{Net Profit Margin} \times \text{Total Asset Turnover}$$

4. Calculating the Equity Multiplier (EM)

$$\text{Equity Multiplier} = \frac{\text{Total Aset}}{\text{Total Capital}}$$

5. Calculating Return On Equity (ROE)

$$\text{Return On Equity} = \text{NPM} \times \text{TATO} \times \text{Equity Multiplier}$$



6. Analyze the company's financial performance

The last stage is to analyze the company's financial statements through the ratio of Net Profit Margin, Total Asset Turnover, Return On Investment, Equity Multiplier, and Return On Equity to be compared with industry standards. Furthermore, it will be interpreted in the form of conclusions and suggestions.

RESULT

1. Net Profit Margin (NPM)

Net Profit Margin is a variable in the research and the data used is obtained from the company's income statement for the 2016-2020 period. The following is the Net Profit Margin data.

Table .6
Net Profit Margin (Percentage %)

Company Code	Years					Average	Description
	2016	2017	2018	2019	2020		
NRCA	4,08	7,09	4,80	3,86	2,64	4,49	Fairly Good
PTPP	7,00	8,02	7,80	4,90	1,68	5,88	Good
TOTL	9,30	7,88	7,34	7,09	4,74	7,27	Good
WEGE	7,42	7,58	7,63	9,99	5,56	7,64	Good
WIKA	7,32	5,18	6,65	9,63	1,95	6,15	Good
Jumlah						6,28	Good

Source: Data processed, 2022

If NPM 10 = Very good

If NPM 5-9.99 = Good

If NPM 1-4.99 = Good enough

If NPM 0-0.99 = Not good

If NPM 0 = Bad

The average Net Profit Margin for the 5 sub construction companies is 6.28% or in good condition, this indicates the efficiency of the company's operations because it can reduce unnecessary costs so as to maximize profits. The company with the highest NPM is held by the WEGE company (PT. Wijaya Karya Bangunan Gedung Tbk) with an average of 7.64%, while the company with the lowest NPM is held by the NRCA company (PT. Nusa Raya Cipta Tbk) with an average of 4.49 %.

2.Total Asset Turnover (TATO)

Total Asset Turnover merupakan variabel di dalam penelitian dan data yang digunakan di peroleh dari laporan neraca dan laporan laba rugi perusahaan pada periode 2016-2020. Berikut merupakan data *Total Asset Turnover*.

Table.7
Total Asset Turnover (Times)

Company Code	Years					Average	Description
	2016	2017	2018	2019	2020		
NRCA	1,16	0,92	1,09	1,06	0,94	1,03	Not good
PTPP	0,53	0,51	0,48	0,42	0,30	0,45	Bad
TOTL	0,81	0,91	0,86	0,84	0,79	0,84	Bad
WEGE	0,95	0,85	0,99	0,74	0,46	0,80	Bad
WIKA	0,50	0,57	0,53	0,44	0,24	0,46	Bad
Jumlah						0,71	Bad

Source: Data processed, 2022

If TATO 3.5 = Very good

If TATO 2.5-3.5 = Good

If TATO 1.5-2.5 = Good enough

If TATO 1-1.5 = Not good

If TATTO 0 < 1 = Bad

The average Total Asset Turnover for the 5 building construction sub-companies is 0.71 times or is in bad condition, this indicates the company's inefficiency in managing assets for sales because the assets owned are too large and not



proportional to the number of sales. The company with the highest tattoo was held by the NRCA company (PT. Nusa Raya Cipta Tbk) with an average of 1.03 times, while the company with the lowest tattoo was held by the TOTL company (PT. Total Bangun Persada Tbk) with an average of 0.84 times.

1. Return On Investment (ROI)

Return On Investment is a variable in the research and the data used is obtained from the balance sheet and income statement of the company in the 2016-2020 period. The following is the Return On Investment data.

Table. 8
Return On Investment (Percentage %)

Company Code	Years					Average	Description
	2016	2017	2018	2019	2020		
NRCA	4,73	6,52	5,23	4,09	2,48	4,61	Bad
PTPP	3,71	4,09	3,74	2,06	0,50	2,82	Bad
TOTL	7,53	7,17	6,31	5,96	3,74	6,14	Not good
WEGE	7,05	6,44	7,55	7,39	2,56	6,20	Not good
WIKA	3,66	2,95	3,52	4,24	0,47	2,97	Bad
Jumlah						4,54	Bad

Source: Data processed, 2022

If ROI 15 = Very good

If ROI 12-15 = Good

If ROI 8.5-11.9 = Good enough

If ROI 5-8.49 = Not good

If ROI 0 = Bad

The average Return On Investment for the 5 building sub construction companies is 4.54% or is in bad condition, this indicates an inefficient investment in assets because the assets used for operations cannot cover the investment capital of these assets so they cannot provide a return on investment. assets. The company with the highest ROI is held by the WEGE company (PT. Wijaya Karya Bangunan Gedung Tbk) with an average of 6.20%, while the company with the lowest ROI is held by the PTPP company (PT. Pembangunan Perumahan Tbk) with an average of 2.82%

1. Equity Multiplier (EM)

Equity Multiplier is a variable in the research and the data used is obtained from the company's balance sheet for the 2016-2020 period. The following is the Equity Multiplier data.

Table. 9
Equity Multiplier (Times)

Company Code	Years					Average	Description
	2016	2017	2018	2019	2020		
NRCA	1,87	1,95	1,87	2,02	1,93	1,93	Good
PTPP	2,89	2,93	3,22	3,41	3,82	3,25	Not good
TOTL	3,13	3,21	3,07	2,75	2,54	2,94	Fairly Good
WEGE	3,14	2,67	2,76	2,52	2,77	2,77	Fairly Good
WIKA	2,49	3,12	3,44	3,23	4,09	3,27	Not good
Jumlah						2,83	Fairly Good

Source: Data processed, 2022

If EM < 1 = Very good

If EM 1-1.99 = Good

If EM 2-2.99 = Good enough

If EM 3-3.99 = Not good

If EM 4 = Bad

The average Equity Multiplier for the 5 building construction sub-companies is 2.83 times or is in fairly good condition, this indicates that the company is quite efficient in using its own capital in financing assets, although it still uses funding sources in the form of debt. The company with the highest EM was held by the WIKA company (PT. Wijaya Karya Tbk) with an average of 3.27 times, while the company with the lowest EM was held by the NRCA company (PT. Nusa Raya Cipta Tbk) with an average of 1.93 times.

1. Return On Equity (ROE)

Return On Equity is a variable in the research and the data used is obtained from the balance sheet and income statement of the company in the 2016-2020 period. The following is the Return On Equity data.

Table.10
Return On Equity (Percentage %)

Company Code	Years					Average	Description
	2016	2017	2018	2019	2020		
NRCA	8,85	12,72	9,78	8,27	4,79	8,88	Fairly Good
PTPP	10,72	11,98	12,06	7,02	1,93	8,74	Fairly Good
TOTL	23,58	23,02	19,38	16,38	9,51	18,37	Very good
WEGE	22,13	17,20	20,85	18,63	7,08	17,18	Very good
WIKA	9,11	9,21	12,12	13,69	1,91	9,21	Fairly Good
Jumlah						12,47	Fairly Good

Source: Data processed, 2022

If ROI 15 = Very good

If ROI 12.5-15 = Good

If ROI 5-12.49 = Good enough

If ROI 0-4.9 = Not good

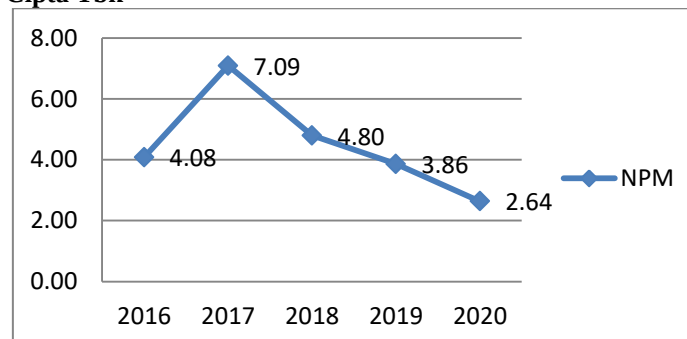
If ROI 0 = Bad

The average Return On Equity for the 5 building construction sub-companies is 12.47% or is in fairly good condition, this indicates that the company is quite efficient at managing investor capital in generating profits so that it can provide a return on investment for shareholders. The company with the highest ROE is held by the TOTL company (PT. Total Bangun Persada Tbk) with an average of 18.37%, while the company with the lowest ROE is held by the PTPP company (PT. Pembangunan Perumahan Tbk) with an average of 8.74%.

DISCUSSION

1. Net Profit Margin (NPM)

a. PT. Nusa Raya Cipta Tbk



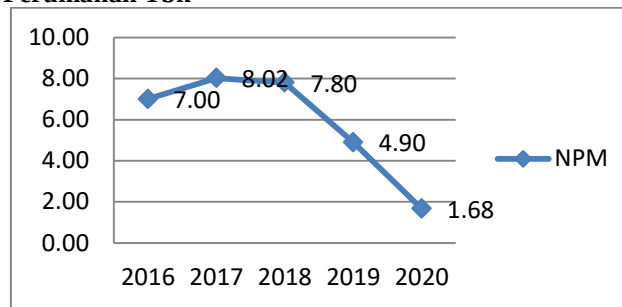
Source: Data processed, 2022

Fig. 3 NPM Graph at PT Nusa Raya Cipta Tbk

Based on the graph above, the value of Net Profit Margin at PT. Nusa Raya Cipta Tbk every year fluctuates (up and down). In 2016 NPM was 4.08% with sales of Rp. 2,476,348,809,009 and net profit of Rp. 101,091,266,970. In 2017 NPM experienced a high increase reaching 7.09%, this was due to a decrease in company expenses and an increase in other income so that net income increased from the previous year of Rp.153,443,549,305.

In 2018, 2019, and 2020 PT. Nusa Raya Cipta Tbk continues to experience a gradual decline in NPM by 4.80%, 3.86%, and 2.64%. In 2018 and 2019 the company recorded sales that continued to increase from 2017 which amounted to Rp2,456,969,219,251 and Rp2,617,754,376,513 but in terms of net income the company recorded a decrease in profit, this was due to an increase in the cost of revenue, general expenses, and administrative expenses, other expenses, financial expenses as well as joint venture accounts that suffered losses. Meanwhile, the decline in NPM in 2020 occurred due to project delays due to the pandemic which caused the company's revenue to decrease and affect net income.

b. PT. Pembangunan Perumahan Tbk



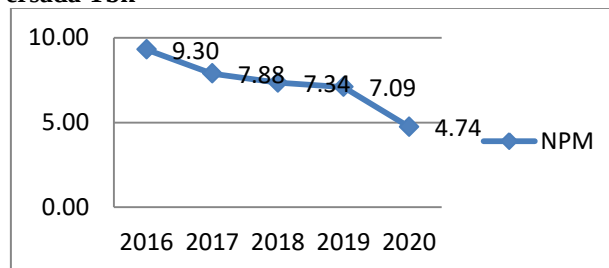
Source: Data processed, 2022

Fig. 4 NPM Graph at PT. Pembangunan Perumahan Tbk

Based on the graph above, the value of Net Profit Margin at PT. Pembangunan Perumahan Tbk every year fluctuates (up and down). In 2016 NPM was 7.00% with sales of Rp16,458,884,219,698 which resulted in a net profit of Rp1,151,431,890,873. In 2017 the company's NPM increased from 2016 so that the NPM became 8.02% but in 2018, 2019, 2020 NPM continued to experience a significant decline.

In 2018 and 2019, PT. Pembangunan Perumahan Tbk experienced a decrease in the value of NPM by 7.80% and 4.90%, this was due to an increase in the cost of income, operating expenses and interest expenses. While in 2020 the company's NPM experienced a decrease in NPM to 1.68%, this was due to a decrease in sales of Rp. 8,828,610,533,110 due to the impact of Covid-19, resulting in project delays and diversion of government budget for handling Covid-19 so that the budget infrastructure fell to 33.59%.

c. PT. Total Bangun Persada Tbk

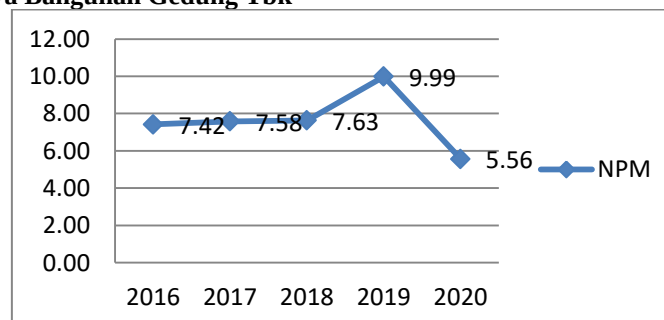


Source: Data processed, 2022

Fig. 5 NPM Graph at PT. Total Bangun Persada Tbk

Based on the graph above, the value of Net Profit Margin at PT. Total Bangun Persada Tbk has decreased every year. In 2016 NPM was 9.30% with sales of Rp2,379,016,258,000 which resulted in a net profit of Rp221,287,384,000. In 2017 the company experienced a decrease in NPM by 7.88% due to an increase in the cost of revenue and general administrative expenses. In 2018 and 2019 NPM decreased by 7.34% and a 7.09% decrease occurred due to sales which also decreased from the previous year and income from joint ventures which also decreased. The largest decrease in NPM occurred in 2020, reaching 4.74%, this was due to project delays as a result of Covid-19 so the company's sales decreased but the company's other expenses increased.

d. PT. Wijaya Karya Bangunan Gedung Tbk



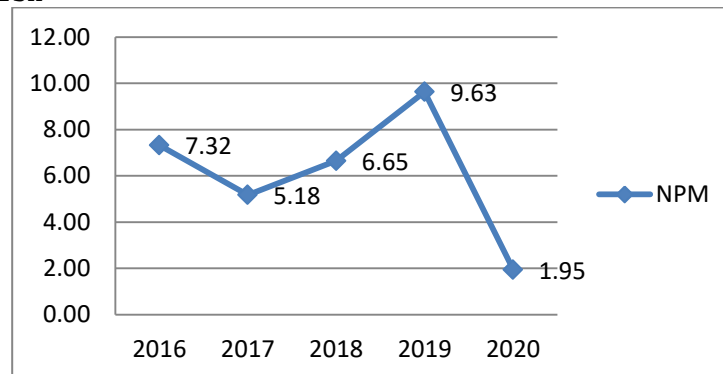
Source: Data processed, 2022

Fig. 6 NPM Graph at PT. Wijaya Karya Bangunan Gedung Tbk

Based on the graph above, the value of Net Profit Margin at PT. Wijaya Karya Bangunan Gedung Tbk fluctuates every year (up and down). In 2016 NPM was 7.42% with sales of Rp1,929,458,132,020 which resulted in a net profit of Rp143. 226,486,832. In 2017 and 2018 the Company's NPM increased to 7.58% and 7.63%, the increase in NPM was influenced by the increase in the company's sales of Rp3,899,286,413,385 and Rp5,822,504,928390.

In 2019 was the year with the largest increase in NPM, namely 9.99%, the increase occurred because the company booked investment properties of Rp.66,483,102,949 and the effect of increasing joint venture profits. In 2020 the company experienced a drastic decrease in NPM, namely 5.56% as a result of project delays due to Covid-19, this affected revenue which fell 38.37% from the previous year to Rp2,810,083,762,049.

e. PT. Wijaya Karya Tbk



Source: Data processed, 2022

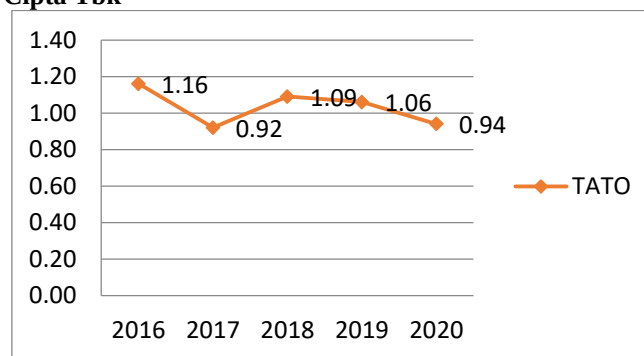
Fig. 7 NPM Graph at PT. Wijaya Karya Tbk

Based on the graph above, the value of Net Profit Margin at PT. Wijaya Karya Tbk every year fluctuates (up and down). In 2016 NPM was 7.32% with sales of Rp. 15,668,832,513,000 which resulted in a net profit of Rp. 1,147,144,922,000. In 2017 NPM decreased by 5.18%, the decrease was due to an increase in the cost of revenue by Rp23,300,168,938. In 2018 the company's NPM increased by 6.65% this was influenced by the increase in sales and other company income.

In 2019 the company's NPM rose to 9.63%, and the company posted sales decreased from the previous year of Rp27,212,914,210,000 but other income and joint venture profit increased so as to increase the value of net income. The largest decline in NPM occurred in 2020, namely 1.95%, this was influenced by Covid-19 so that there were project delays and the company only recorded revenues of 16,536,381,639, the decrease was also caused by the diversion of the government budget for handling Covid-19 so that the infrastructure budget fell to 33.59%.

2. Total Asset Turnover (TATO)

a. PT. Nusa Raya Cipta Tbk



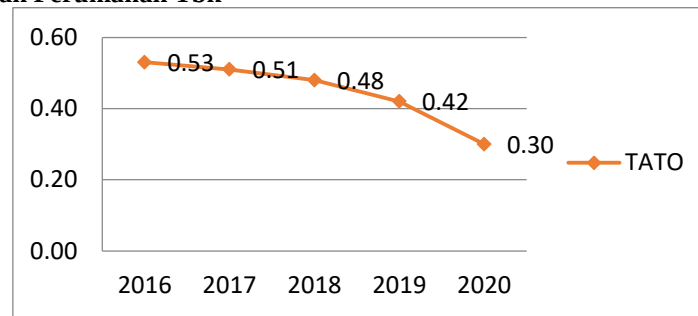
Source: Data processed, 2022

Fig. 8 NPM Graph at PT. Nusa Raya Cipta Tbk

Based on the graph above, the value of Total Asset Turnover at PT. Nusa Raya Cipta Tbk every year fluctuates (up and down). In 2016 the company's TATO was 1.16 times with total assets of IDR 2,134,213,795,106 and sales of IDR 2,476,348,809,009. TATO in 2017 decreased by 0.92 times this was due to the company's assets which increased from the previous year of Rp.2,342,166,843,820 but there was a decrease in sales.

In 2018 TATO increased by 1.00 times due to a decrease in total assets on investment in joint ventures and an increase in company sales by Rp2,456,969,219,251. In 2019 there was a decrease in TATO by 0.03 times from the previous year. In 2020 there was a decrease in TATO by 0.94 times this was due to weak sales as a result of project delays but the reduced total company assets could not cover sales which fell drastically.

b. PT. Pembangunan Perumahan Tbk

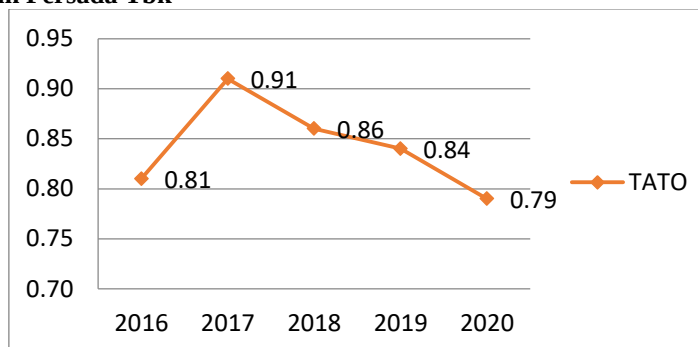


Source: Data processed, 2022

Fig. 9 NPM Graph at PT. Pembangunan Perumahan Tbk

Based on the graph above, the value of Total Asset Turnover at PT. Pembangunan Perumahan Tbk every year has decreased. In 2016 the company's TATO was 0.53 times with total assets of Rp. 31,232,766,567,390 and sales of Rp. 16,458,884,219,698. In 2017 and 2018 there was a decrease in TATO by 0.51 times and 0.48 times, this was due to an increase in the company's total assets due to receivables, joint venture investments, and long-term investments but not accompanied by a relatively low increase in sales. In 2019 the company's TATO decreased 0.42 times due to an increase in total assets but the company's sales actually decreased 0.01% from the previous year to Rp24,659,998,995,266. In 2020, TATO fell again by 0.30 times, although the company's total assets fell, the company's sales also decreased significantly by Rp. 15,831,388,462,166 due to the influence of Covid-19 and the decline in the government budget on the infrastructure budget.

c. PT. Total Bangun Persada Tbk

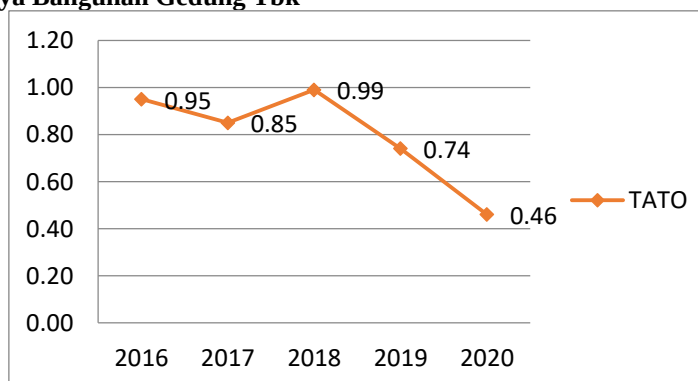


Source: Data processed, 2022

Fig. 10 NPM Graph at PT. Total Bangun Persada Tbk

Based on the graph above, the value of Total Asset Turnover at PT. Total Bangun Persada Tbk fluctuates every year (up and down). In 2016 the company's TATO was 0.81 times with total assets of Rp.2,950,559,912,000 and sales of Rp.2,379,016,258,000. In 2017 TATO increased by 0.91 times, the increase was influenced by the increase in the company's total assets to Rp3,243,093,474,000 accompanied by an increase in sales to Rp2,936,372,440,000. In 2018 and 2019 the company experienced a decrease in TATO by 0.86 times and 0.84 times, this was due to a decrease in company sales even though the company had decreased its assets. In 2020, TATO fell again by 0.79 times as a result of project delays due to Covid-19 which affected the company's sales.

d. PT. Wijaya Karya Bangunan Gedung Tbk

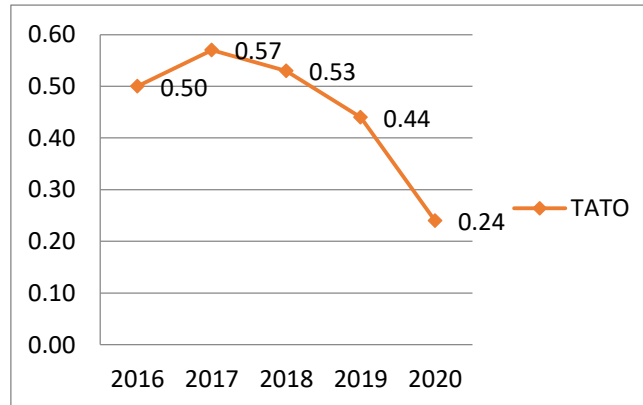


Source: Data processed, 2022

Fig. 11 NPM Graph at PT. Wijaya Karya Bangunan Gedung Tbk

Based on the graph above, the value of Total Asset Turnover at PT. Wijaya Karya Gedung Tbk has fluctuated every year (up and down). In 2016 the company's TATO was 0.95 times with total assets of IDR 2,028,938,000,508 and sales of IDR 1,929,458,132,020. In 2017 TATO decreased by 0.85 times due to an increase in total assets of Rp.4,607,728,182,813 and was not balanced with sales which increased by Rp.3,899,286,413,385. In 2018 and 2019 there was a decrease in TATO by 0.99 times and 0.74 times, the decline occurred because the company was actively investing in property and investing in joint ventures but the company's sales were decreasing. In 2020, TATO fell again by 0.46 times, this happened due to project delays which resulted in a decrease in company sales of Rp. 2,810,083,762,049.

e. PT. Wijaya Karya Tbk



Source: Data processed, 2022

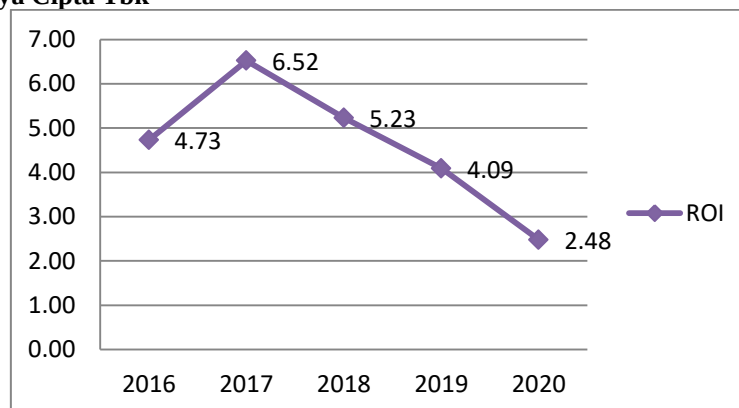
Fig. 12 NPM Graph at PT. Wijaya Karya Tbk

Based on the graph above, the value of Total Asset Turnover at PT. Wijaya Karya Tbk every year fluctuates (up and down). In 2016 the company's TATO was 0.50 times with total assets of Rp. 31,096,539,490,000 and sales of Rp. 15,668,832,513,000. In 2017 TATO increased by 0.57 times due to an increase in total assets of 0.46% and was accompanied by an increase in sales of 0.67% from the previous year.

In 2018 and 2019 the company was active in adding inventory, investing, and adding fixed assets, but the company's sales actually experienced a relatively low increase and even decreased, this caused TATO in 2018 and 2019 to decrease by 0.53 times and 0.44 times. . In 2020, TATO fell again by 0.24 times due to a decrease in sales of Rp. 16,536,381,639,000 as a result of project delays and a decrease in the government's budget for infrastructure budget.

3. Return On Investment (ROI)

a. PT. Nusa Raya Cipta Tbk

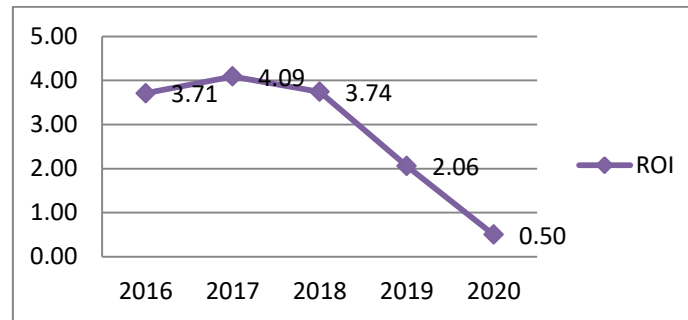


Source: Data processed, 2022

Fig. 13 NPM Graph at PT. Nusa Raya Cipta Tbk

Based on the graph above, the value of Return On Investment at PT. Nusa Raya Cipta Tbk every year fluctuates (up and down). In 2016 the company's ROI was 4.73% and in 2017 it increased by 6.52% with an NPM value of 7.09% and TATO 0.92 times. In 2018, 2019, and 2020 the company's ROI decreased significantly by 5.23%, 4.09%, and 2.48%, the decrease occurred because NPM and TATO also decreased from the previous year caused by NPM through an increase in the cost of revenue and other expenses -others as well as TATOs that show an increase in company assets that is not matched by an increase in sales.

b. PT. Pembangunan Perumahan Tbk

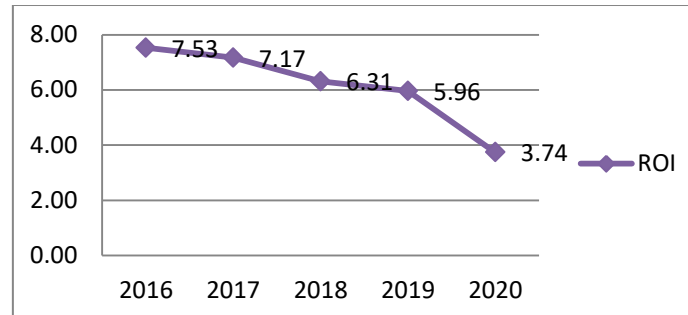


Source: Data processed, 2022

Fig. 14 NPM Graph at PT. Pembangunan Perumahan Tbk

Based on the graph above, the value of Return On Investment at PT. Pembangunan Perumahan Tbk every year fluctuates (up and down). In 2016 the ROI was 3.71% and in 2017 it increased by 4.09% with an NPM value of 8.02% and TATO 0.51 times. In 2018, 2019, and 2020 the company's ROI continued to decline by 3.74%, 2.06% and 0.50%, the decline in ROI was due to the lower NPM as a result of the increase in the cost of goods sold, interest expense, finance expense and the impact of Covid-19 resulting in a decline in sales. The decrease in ROI was also caused by TATO due to the increase in assets which was not accompanied by an increase in sales.

c. PT. Total Bangun Persada Tbk

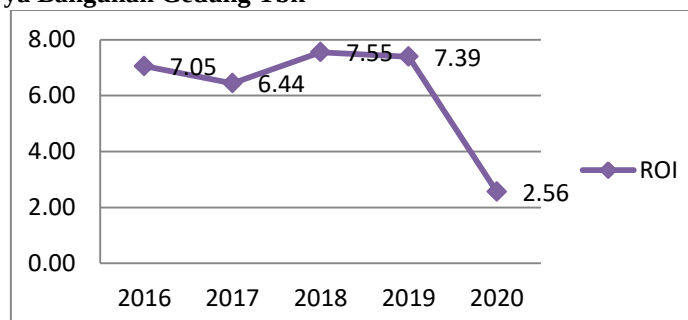


Source: Data processed, 2022

Fig. 15 NPM Graph at PT. Total Bangun Persada Tbk

Based on the graph above, the value of Return On Investment at PT. Total Bangun Persada Tbk has decreased every year. In 2016 the company's ROI was 7.53% and in 2017 it decreased by 7.17% with an NPM of 7.88% as a result of an increase in the cost of goods sold and general administrative expenses but TATO increased 0.91 times due to an increase in assets and sales. In 2018, 2019 and 2020 ROI decreased by 6.31%, 5.96%, and 3.74% due to a decrease in NPM and TATO values as a result of the decline in sales from the previous year and the impact of Covid-19.

d. PT. Wijaya Karya Bangunan Gedung Tbk

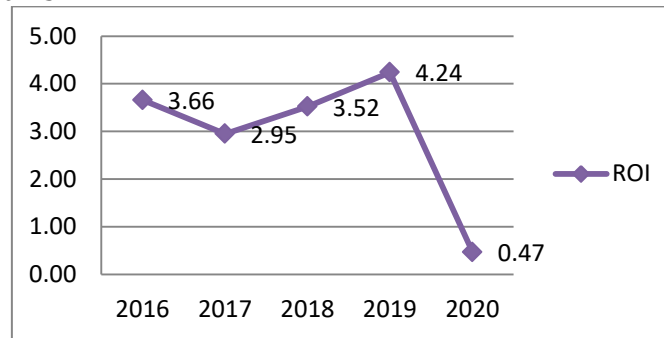


Source: Data processed, 2022

Fig. 16 ROI Graph of PT. Wijaya Karya Building Tbk

Based on the graph above, the value of Return On Investment at PT. Wijaya Karya Gedung Tbk fluctuates every year (up and down). In 2016 the company's ROI was 7.05% and in 2017 it decreased by 6.44% because the NPM value increased by 7.58% due to an increase in company sales and the TATO value decreased 0.85 times due to an increase in assets but relatively low sales. In 2018 ROI rose 7.55% influenced by an increase in NPM 7.63% and TATO 0.99 times. In 2019 and 2020 ROI decreased significantly by 7.39% and 2.56% as a result of project delays that affected sales.

e. PT. Wijaya Karya Tbk



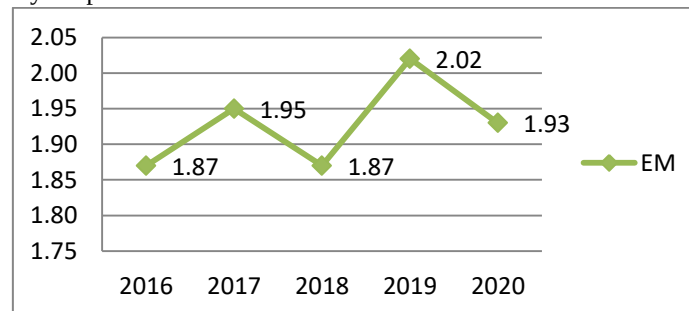
Source: Data processed, 2022

Fig. 17. ROI Graph of PT. Wijaya Karya Tbk

Based on the graph above, the value of Return On Investment at PT. Wijaya Karya Tbk every year fluctuates (up and down). In 2016 the company's ROI was 3.66% and in 2017 it decreased by 2.95% due to an increase in the cost of goods sold so NPM decreased by 5.18% and an increase in assets and sales so that TATO rose 0.57 times. In 2018 and 2019 ROI increased by 3.52% and 4.24% due to an increase in sales and other income so NPM increased by 6.65% and 9.63% as well as decreased TATO by 0.53 times and 0, 44 times. The largest decline in ROI occurred in 2020, which was 0.47%, this was due to project delays and diversion of government infrastructure budgets due to the impact of the Pandemic.

4. Equity Multiplier (EM)

a. PT. Nusa Raya Cipta Tbk

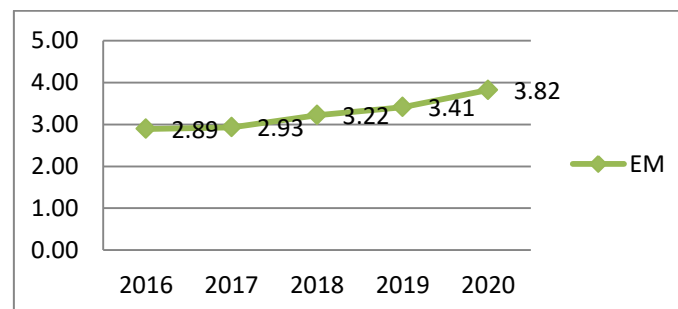


Source: Data processed, 2022

Fig. 18 EM Graph PT. Nusa Raya Cipta Tbk

Based on the graph above, the value of the Equity Multiplier at PT. Nusa Raya Cipta Tbk every year fluctuates (up and down). In 2016 the company's EM was 1.87 times and in 2017 it increased to 1.95 times due to an increase in assets of Rp.2,342,166,843,820 accompanied by an increase in equity of Rp.1,202,856,795,079. In 2018 the company's EM fell again 1.87 times and rose very significantly in 2019 with EM reaching 2.02 times, this was due to an increase in assets of 0.09% from the previous year which was not comparable to the 0.01% increase in equity. In 2020 the company's EM fell 1.93 times due to a decrease in total assets and a decrease in equity.

a. PT. Pembangunan Perumahan Tbk



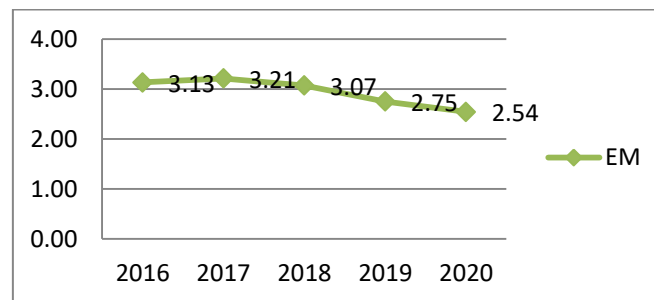
Source: Data processed, 2022

Fig. 19 EM Graph PT. Housing Development Tbk

Based on the graph above, the value of the Equity Multiplier at PT. Pembangunan Perumahan Tbk every year has increased significantly. In 2016 the company's EM was 2.89 times and in 2017 it rose to 2.93 times while in 2018, 2019, and 2020 the increase in EM was quite significant, namely 3.22 times, 3.41 times, and 3.82 times. The cause of the

decline was that the company was active in adding assets through investment activities and adding fixed assets, but the increase in equity was relatively low, so the use of other funding sources could be seen by the increase in total liabilities each year.

b. PT. Total Bangun Persada Tbk

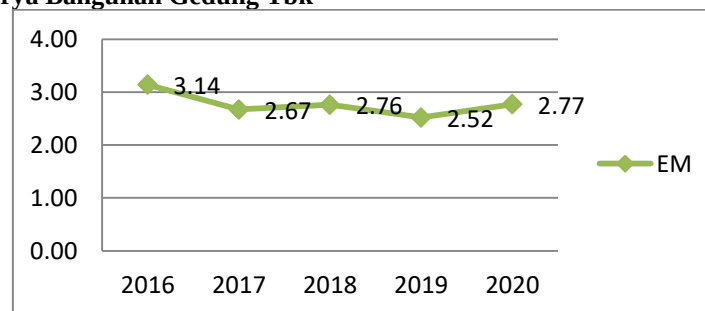


Source: Data processed, 2022

Fig. 20 EM Graph PT. Total Bangun Persada Tbk

Based on the graph above, the value of the Equity Multiplier at PT. Total Bangun Persada Tbk fluctuates every year (up and down). In 2016 the company's EM was 3.13 times and in 2017 it rose to 3.21 times due to an increase in total assets of 0.09% from the previous year and not offset by an increase in equity which rose 0.07%, it can be said that the company is still using liabilities to finance its assets. In 2018, 2019, and 2020 the company used capital efficiently due to a decrease in EM of 3.07 times, 2.75 times, and 2.54 times, this was due to a decrease in the company's total assets even though equity was relatively low.

c. PT. Wijaya Karya Bangunan Gedung Tbk



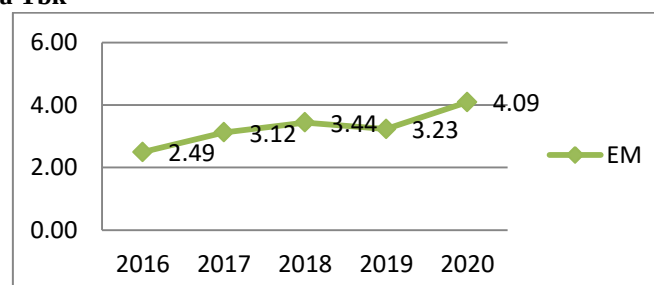
Source: Data processed, 2022

Fig. 21 EM Graph PT. Wijaya Karya Bangunan Gedung Tbk

Based on the graph above, the value of Net Profit Margin at PT. Wijaya Karya Bangunan Gedung Tbk fluctuates every year (up and down). In 2016 NPM was 7.42% with sales of Rp1,929,458,132,020 which resulted in a net profit of Rp143. 226,486,832. In 2017 and 2018 the Company's NPM increased to 7.58% and 7.63%, the increase in NPM was influenced by the increase in the company's sales of Rp3,899,286,413,385 and Rp5,822,504,928390.

2019 was the year with the largest increase in NPM, namely 9.99%, the increase occurred because the company booked investment properties of Rp.66,483,102,949 and the effect of increasing joint venture profits. In 2020 the company experienced a drastic decrease in NPM, namely 5.56% as a result of project delays due to Covid-19, this affected revenue which fell 38.37% from the previous year to Rp2,810,083,762,049.

d. PT. Wijaya Karya Tbk



Source: Data processed, 2022

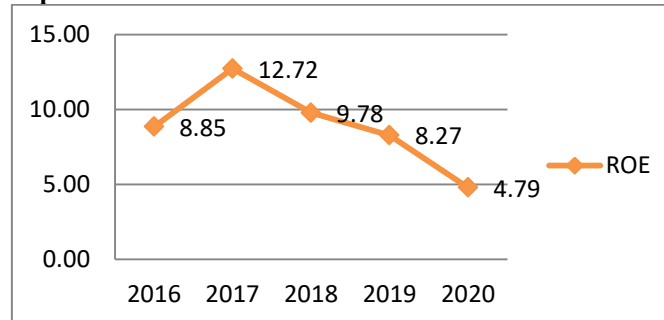
Fig. 22 EM Graph PT. Wijaya Karya Tbk

Based on the graph above, the value of the Equity Multiplier at PT. Wijaya Karya Tbk every year fluctuates (up and down). In 2016 the company's EM was 2.49 times and in 2017, 2018 it rose to 3.12 times and 3.44 times, the increase in 2017 and 2018 was due to an increase in total assets due to the trend of companies adding inventory, investment, and

fixed assets but equity increases so low that the company uses funding sources in the form of liabilities to be able to finance its assets. In 2019 there was a 3.23-fold decrease in EM which was influenced by an increase in assets of 0.04% but the company was effective in using capital due to an increase in capital of 0.11% from the previous year. In 2020 there was an increase in EM of 4.09 times due to the relatively high increase in assets and not offset by the relatively low increase in equity.

5. Return On Equity Analysis (Du Pont System Analysis)

a. PT. Nusa Raya Cipta Tbk



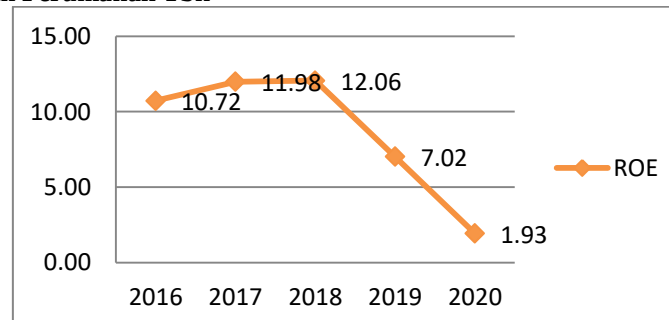
Source: Data processed, 2022

Fig. 23 ROE chart of Du Pont PT. Nusa Raya Cipta Tbk

Based on the graph above, the value of Return On Equity at PT. Nusa Raya Cipta Tbk every year fluctuates (up and down). In 2016 ROE of 8.85% is influenced by NPM 4.08%, TATO 1.16 times, and EM 1.87 based on industry standards, the ROE value is in quite a good condition and it can be seen that the company is able to generate a profit on sales of 4.08%. In 2017 there was an increase in ROE of 12.72% which indicated the company was in good condition because the company was able to generate a profit on sales through NPM of 7.09% even though the asset turnover rate fell to 0.92 times.

From 2018 to 2020 there was a significant decrease in ROE where 2018 ROE fell by 9.78% with an NPM value of 4.80%, TATO 1.09 times, and EM 1.87 times in this condition, the ROE is quite good. In 2019 ROE decreased by 8.27% because the company's ability to generate profits decreased through NPM by 3.86%, TATO decreased by 1.06 times and there was an increase in EM of 2.02 times caused by increased assets but the equity grew very low so the company increased its profitability. In 2020 ROE fell drastically by 4.79%, this was influenced by the decline in the value of NPM by 2.64%, TATO by 0.94 times, and EM by 1.93 times caused by the impact of project delays due to the Pandemic so the company sales decreased.

b. PT. Pembangunan Perumahan Tbk



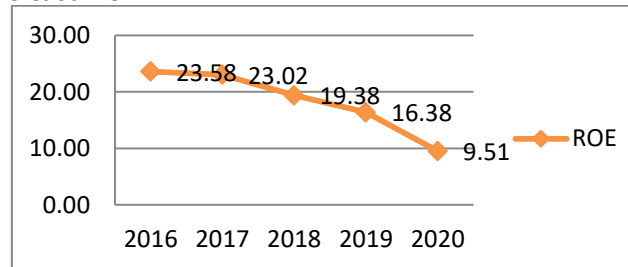
Source: Data processed, 2022

Fig. 24 ROE chart of Du Pont PT. Pembangunan Perumahan Tbk

Based on the graph above, the value of Return On Equity at PT. Pembangunan Perumahan Tbk every year fluctuates (up and down). In 2016 ROE of 10.72% was influenced by NPM 7.00%, TATO 0.53 times, and EM 2.89 times based on industry standards, the ROE value is in quite a good condition and it can be seen that even though the company still uses liabilities to finance assets (EM 2.89 times) but the company was able to generate a profit of 7.00%. In 2017 and 2018 there was an increase in ROE of 11.98% and 12.06% so the company was in quite a good condition, the company was able to generate increased profits but was followed by an increase in EM of 2.93 times and 3.22 times so that the company used liabilities as a source of income. funding and result in an increase in interest expense.

In 2019 and 2020 there was a significant decline in ROE of 7.02 times and 1.93 times so the company was in fairly good and not good condition, this was due to a decrease in NPM so the company was not efficient in generating profit on sales, a decrease in TATO so that asset turnover cannot generate sales and there is an increase in EM so that there is a use of liabilities to finance assets. This happened as a result of the decline in the government's budget and project delays due to the pandemic.

c. PT. Total Bangun Persada Tbk

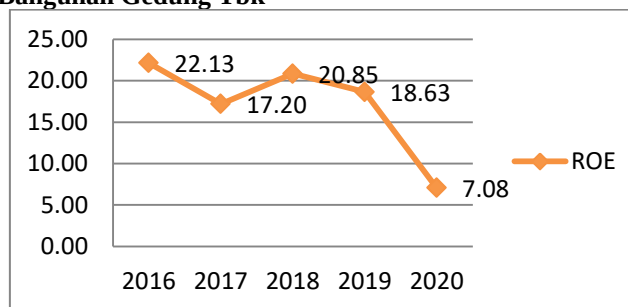


Source: Data processed, 2022

Fig. 25 ROE chart of Du Pont PT. Total Bangun Persada Tbk

Based on the graph above, the value of Return On Equity at PT. Total Bangun Persada Tbk has decreased every year. ROE in 2016 was 23.58% which indicates the company's condition is in very good condition, ROE is influenced by NPM 9.30%, TATO 0.81 times, and EM 3.13 times. In 2017, 2018, and 2019 there was a decrease in ROE from the previous year by 23.02%, 19.38%, and 16.38% but the decline still made the company's ROE in very good condition, the decline was due to the decline in company sales which had an impact on profit. In 2020 there was a decline that made ROE in quite a good condition where the ROE value fell by 9.51% due to a relatively high decline in NPM of 4.74%, this condition was caused by project delays due to the Pandemic which affected sales.

d. PT. Wijaya Karya Bangunan Gedung Tbk

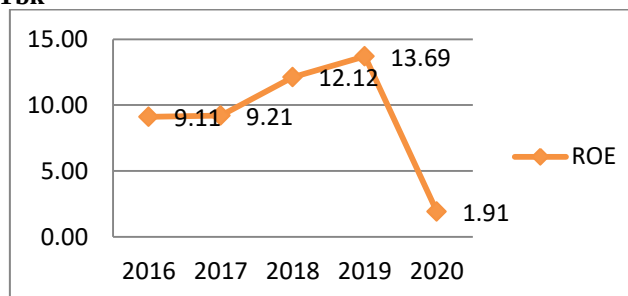


Source: Data processed, 2022

Fig. 26 ROE chart of Du Pont PT. Wijaya Karya Bangunan Gedung Tbk

Based on the graph above, the value of Return On Equity at PT. Wijaya Karya Gedung Tbk has fluctuated every year (up and down). In 2016 ROE was 22.13% with an NPM value of 7.42%, TATO 0.95 times, and EM 3.14 times, this high ROE indicates a very good condition. In 2017 there was a decrease in ROE of 17.20% but still indicates a very good condition. In 2018 there was an increase in ROE of 20.85% with an increase in NPM of 7.63%, TATO 0.99 times, and EM 2.76 times so the company's performance improved which resulted in a very good ROE. In 2019 there was a decrease in ROE of 18.63% but still indicates a very good ROE, even though NPM rose 9.99% but there was a decrease in TATO 0.74 times as a result of the addition of assets accompanied by a decrease in sales. In 2020 the ROE was in quite a good condition with an ROE value of 7.08%, this happened due to a decline in NPM 5.56%, TATO 0.46% but the EM value increased 2.77 times due to projects being delayed due to the impact of Covid-19 which affects the decline in sales.

e. PT. Wijaya Karya Tbk



Source: Data processed, 2022

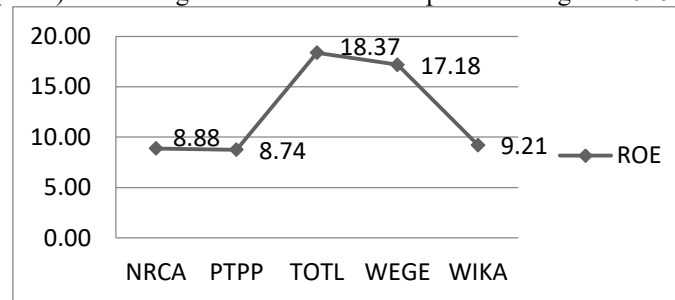
Fig 27. Du Pont ROE Graph PT. Wijaya Karya Tbk

Based on the graph above, the value of Return On Equity at PT. Wijaya Karya Tbk every year fluctuates (up and down). In 2016 ROE was 9.11% with NPM 7.32%, TATO 0.50 times, and EM 2.49 times, thus indicating ROE is in

fairly good condition. In 2017, 2018, and 2019 there was an increase in ROE of 9.21%, 12.12%, and 13.69% so the company's condition rose to a fairly good condition, and the company's efficiency in generating profit on sales made the NPM value increase but EM also increased which indicates The company also finances assets through liabilities. In 2020 there was a decline in ROE of 1.91% which indicated unfavorable conditions, this was due to the relatively high decline in NPM and TATO but EM actually increased due to the decline in the government budget and reduced sales.

6. Comparative Analysis of Return On Equity (Du Pont System Analysis) Building Construction Sub-Sector Companies

Analysis of Return On Equity Du Pont System is used as a tool to determine the share of income ownership of shareholders (common stock and preferred stock) on the capital that has been invested. The following is a graph of the average Return On Equity (ROE) of building sub-construction companies during the 2016-2020 period.



Source: Data processed, 2022

Fig. 28 Graph of Average ROE of Du Pont Building Construction Sub-Sector Company for 2016-2020

Table. 11

Description of Building Construction Company Performance

No	Company Code	Average ROE	Performance
1.	NRCA	8,88%	Fairly Good
2.	PTPP	8,74%	Fairly Good
3.	TOTL	18,37%	Very good
4.	WEGE	17,18%	Very good
5.	WIKI	9,21%	Fairly Good
Rata-rata		12,47%	Fairly Good

Source: Data processed, 2022

The average Return On Equity for the 5 construction sub-construction companies is 12.47% or is in fairly good condition, this indicates that the company is quite efficient but not optimal in managing the capital used to be able to provide returns on investors' capital. The company with the highest Return On Equity value and meeting Du Pont's ROE industry standards is PT. Total Bangun Persada Tbk which provides an ROE of 18.37% and shows the company's performance in providing returns on investment for investors is classified as very good. Although NPM and TATO experienced a decline due to low sales due to the pandemic, the company was able to suppress the value of EM so that the shareholder's ROE portion was higher.

PT. Wijaya Karya Bangunan Gedung Tbk is also the company with the highest average ROE of 17.18% which indicates that the company's ability to pay back investors is very good. Although the turnover rate of TATO and EM tends to fluctuate, the company is able to generate a relatively good return on sales each year so that it can provide a return on capital to investors. PT. Wijaya Karya Tbk is a company with a fairly good average Return On Equity, namely the ROE value of 9.21%, this indicates that the company is quite good at providing returns on capital to investors. The existence of a fluctuating NPM and relatively declining TATO and increasing EM have caused the company's performance in returning capital to be less than optimal, coupled with the government's policy to reduce the infrastructure budget due to Covid-19 causing a decline in sales.

The fourth position is PT. Nusa Raya Cipta Tbk provides investors with a fairly good return on capital although it is not maximized at 8.88%. This is due to a decrease in NPM due to an increase in the cost of goods sold, general and administrative expenses, financial expenses, and volatile TATOs because companies reduce assets but sales also decrease as a result of the pandemic. PT. Housing Development is a state-owned company with the lowest Return On Equity value of 8.74% which indicates that the company is quite good but has not been maximal in providing returns on investors' capital. This is due to a decrease in NPM and TATO turnover while EM continues to grow so that the share of shareholders is getting smaller because the company has to allocate funds to pay interest expenses on asset financing.



The pressures of the pandemic that have caused project delays and the reduction of government allocations for infrastructure have made companies. Housing Development Tbk experienced an ROE condition that is not optimal.

CONCLUSION

Based on the analysis and discussion in the previous chapter, it can be seen that the Du Pont System analysis of building construction sub-sector companies listed on the Indonesia Stock Exchange for the 2016-2020 period shows a fairly good Return On Equity performance, this is based on a comparison of industry standards. PT. Total Bangun Persada Tbk and PT. Wijaya Karya Bangunan Gedung Tbk is the company with the largest Return On Equity, namely 18.37% and 17.18%, when compared to industry standards, these two companies are in very good condition. This indicates that the company is able to provide a very good return on the capital invested by the shareholders. The results of the research show that the average Net Profit Margin ratio is in good condition which reflects the company can reduce costs so as to produce maximum profit. The average ratio of Total Assets Turnover and Return On Investment shows a bad company condition that reflects the company's inefficient management of assets for sales and inefficient investment of assets. The results of the average Equity Multiplier show that the company's condition is quite good which reflects the company's efficiency in using its own capital to finance assets.

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