

## Analysis of Financial Statements as Assessing the Financial Performance (Study at the Cement Sub-Sector Manufacturing Period 2016-2018)

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### ABSTRACT

The significant growth of the domestic cement industry has increased competition between companies, thus demanding that companies improve their financial performance. For this reason, this study was conducted on three cement sub-sector companies listed on the IDX in the 2016-2018 periods with quota sampling. Researchers using comparison methods to financial performance using liquidity ratios, solvency, and profitability ratios with industry-standard ratios. The results showed that in terms of the company's liquidity ratio of Current Ratio (CR), Quick Ratio (QR), and Cash Ratio (CsR) of PT. Indocement Tunggul Tbk and PT. Semen Baturaja Tbk shows good financial performance since above the industry average. Meanwhile, PT. Semen Indonesia Tbk shows less financial performance since the CR, QR and CsR are below the industry average. Meanwhile, in terms of the company's solvency ratio by using the Debt to Equity Ratio (DER) of PT. Indocement Tunggul Tbk, PT. Semen Baturaja Tbk and PT. Semen Indonesia Tbk shows good financial performance since the DER is below the industry average, while Debt to Assets Ratio (DAR) of PT. Indocement Tunggul Tbk and PT. Semen Baturaja Tbk shows good financial performance since the DAR is below the industry average, while PT. Semen Indonesia Tbk shows less financial performance because its DAR is above the industry average. Furthermore, in terms of company profitability using Return on Assets (ROA), Return on Equity (ROE), Net Profit Margin (NPM) of PT. Indocement Tunggul Tbk, PT. Semen Baturaja Tbk and PT. Semen Indonesia Tbk shows less financial performance since the ROA, ROE, and NPM are below the industry average, while from Operating Profit Margin (OPM) PT. Indocement Tunggul Tbk, PT. Semen Baturaja Tbk and PT. Semen Indonesia Tbk shows good financial performance because its OPM is above the industry average.

**Keywords:** Liquidity, Solvency, Profitability, Financial Performance

### INTRODUCTION

An increasingly competitive market and consumer awareness of the quality product purchased at a competitive cost, as well as product trends that change according to customer demand have to change the industrial business to be more dynamic (Ko, 2015). Meanwhile, coexisting globalization, competitiveness among the companies is becoming severe (Batchimeg, 2017). Competitiveness is determined by effectiveness and efficiency (Csath, 2007). The competitiveness of a corporation and its performance is judged by comparison with its peers and against the best practice (Manzoni & Sardar, 2007). Therefore, the main purpose of the research is to assess the financial performance by using financial statements among the same core business

manufacturing sub-sector. The definition of performance is used in various disciplines and depends on the field of the organization itself (Jenatbadi, 2015; Hertati, et al., 2019). Performance is a description of the level of achievement of the implementation of activity in realizing the goals, objectives, mission, and vision of the organization as stated in the strategic planning of an organization. Current performance is a global issue due to the demands of society for the need for an excellent and high quality of services. Therefore, the performance of each business unit is required to improve quality and work more effectively and efficiently to get optimal results (Ko, 2015). One of the indicators used by organizations in evaluating financial performance is accounting information in the form of financial reports.

The company's financial statements are of concern to many parties, not only company management, but various interested parties (stakeholders), such as investors, creditors, and other parties. The company's financial stability is an important concern for employees, investors, government, bank owners, and regulatory authorities (Marfungatun, 2016). Analysis of the financial statement of a company is an important means to obtain information about how the company operated in the previous periods. Interpretation of the evolution of financial indicators does not always prove to be easy, requiring multiple calculations and combined approaches, while the knowledge and understanding of the type of business reviewed are essential in the proper interpretation of the results (Ovidiu & Teodor, 2013). Financial reports prepared by managers or organizational leaders must be evaluated whose function is to determine the financial condition of the organization. One of the techniques used to evaluate financial statements is financial ratio analysis techniques.

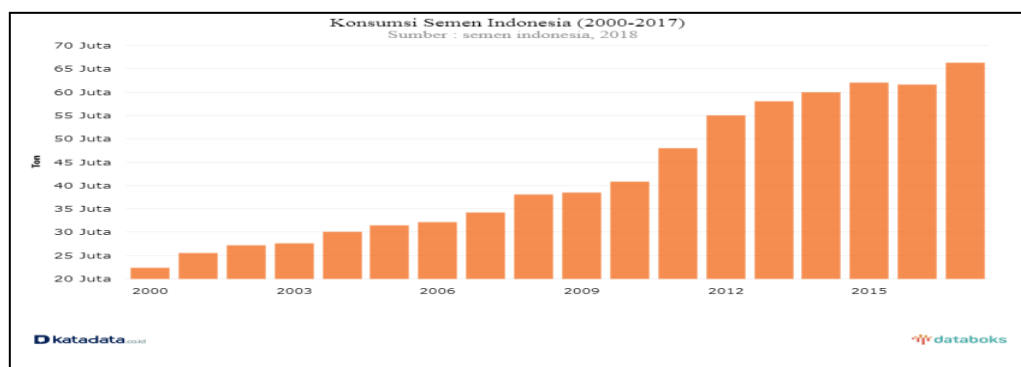
Financial ratio analysis is a company performance analysis instrument that explains various relationships and financial indicators aimed at showing changes in financial conditions or past operating performance and helps to illustrate the trend of these change patterns to then show the risks and opportunities inherent in the company concerned (Pasiakan et al., 2018). Financial ratio analysis aims to help understand what an organization needs to do based on the available information that comes from financial reports. This financial ratio analysis needs to be done by organizations because by doing this analysis, it will be able to find out how the actual financial condition of the organization is.

The performance results obtained through this financial ratio analysis can be used as material for evaluating things that need to be done in the future so that management performance can be maintained or improved according to the targets set by the organization or policies that must be taken by the owner of the organization to make changes to people. The performance also important for investors, stakeholders, and the economy at large. For investors, the return on their investment is highly valuable, and a well-performing business can bring high and long-term returns for their investors. Financial profitability also will boost the income for employees, bring better quality products for its customer, and have better environment-friendly production units, also will generate employment opportunities and enhance the income of people (Mirza & Javed, 2013). Financial ratio analysis in this study uses liquidity ratios, solvency ratios, and profitability ratios. The liquidity ratio is a ratio that measures a company's ability to pay its obligations.

The liquidity ratio shows the extent to which current assets cover current liabilities (Harahap, 2015), in this research liquidity is measured by Current Ratio (CR), Quick Ratio (QR), and Cash Ratio (CsR). Meanwhile, the solvency ratio is a ratio that measures the company's ability to pay its long-term obligations or other obligations if the company is liquidated (Sirait, 2017). (Harahap, 2015) explains that solvency can see how far the company is financed by debt or external parties with the company's ability to be described by capital, in this study solvency is measured by Debt to Equity Ratio (DER) and Debt to Assets Ratio (DAR). Furthermore, the profitability ratio

is a ratio that measures the company's ability to earn profits through all available capabilities and resources (Sulindawati, et al., 2017), in this study profitability is measured by Return on Assets (ROA), Return on Equity (ROE), Net Profit Margin. (NPM), and Operating Profit Margin (OPM).

This research was conducted to compare (comparative) the financial performance of manufacturing companies in the cement sub-sector specifically at PT. Indocement Tunggul Prakasa Tbk (INTP), PT. Semen Baturaja Tbk (SMBR), and PT. Semen Indonesia Tbk (SMGR) from 2016 to 2018 in terms of liquidity ratios, solvency ratios, and profitability ratios with industry ratio standards. The cement industry is currently experiencing very rapid development. The rapid development that occurs in the cement industry is marked by the increasing number of companies engaged in the same field starting to emerge in Indonesia. The rapid development of the cement industry is inseparable from infrastructure development carried out by the government and the private sector. Cement is a product that is needed in infrastructure development, therefore good quality cement is needed. This allows producers to produce cement according to consumer wants and needs so that consumers are satisfied. Indonesian cement consumption data from 2000-2017 is shown in Figure 1.



**Figure 1. Growth of Indonesia Cement Consumption from 2000-2017 (Source: Indonesia Cement Association)**

Figure 1 has shown the movement of cement consumption growth in Indonesia from 2000 to 2017 experiencing an average growth of 7%-9% per year. Meanwhile, to find out the financial performance of the cement sub-sector manufacturing company from 2016 to 2018, it is listed in table 1, table 2, and table 3.

**Table 1. Average Liquidity Ratio 2016-2018**

No	Liquidity Ratio	INTP	SMBR	SMGR
1	CR	3,788	2,228	1,597
2	QR	3,277	1,775	1,204
3	CsR	2,420	0,742	0,467

Table 1 showed the average liquidity ratio for 3 years, from 2016-2018 in terms of the Current Ratio (CR) of PT. Indocement Tunggul Prakasa Tbk (INTP) amounting to 3,788, PT. Semen Baturaja Tbk (SMBR) amounting to 2,228, and PT. Semen Indonesia Tbk (SMGR) amounting to 1,597. Meanwhile, in terms of the Quick Ratio (QR) of PT. Indocement Tunggul Prakasa Tbk (INTP) amounting to 3,277, PT. Semen Baturaja Tbk (SMBR) amounting to 1,775, and PT. Semen Indonesia Tbk (SMGR) amounted to 1,204. Furthermore, it is reviewed from the Cash Ratio (CsR) of PT. Indocement Tunggul Prakasa Tbk (INTP) of 2,420, PT. Semen Baturaja Tbk (SMBR) amounting to 0.742, and PT. Semen Indonesia Tbk (SMGR) of 0.467.

**Table 2. Average Solvency Ratio 2016-2018**

No	Solvability Ratio	INTP	SMBR	SMGR
1	DER	17,43%	49,23%	54,75%
2	DAR	14,89%	32,80%	35,22%

Table 2 shows the average solvency ratio for 3 years, from 2016-2018 in terms of the Debt To Equity Ratio (DER) of PT. Indocement Tunggal Prakasa Tbk (INTP) at 17.43%, PT. Semen Baturaja Tbk (SMBR) at 49.23%, and PT. Semen Indonesia Tbk (SMGR) amounted to 54.75%. Meanwhile, viewed from the Debt to Asset Ratio (DAR) of PT. Indocement Tunggal Prakasa Tbk (INTP) at 14.89%, PT. Semen Baturaja Tbk (SMBR) amounted to 32.80%, and PT. Semen Indonesia Tbk (SMGR) amounted to 35.22%.

**Table 3. Average Profitability Ratio 2016-2018**

No	Profitability Ratio	INTP	SMBR	SMGR
1	ROA	9,54%	4,95%	9,92%
2	ROE	7,80%	3,42%	6,55%
3	NPM	15,21%	10,12%	11,11%
4	OPM	14,60%	23,22%	21,52%

Table 3 shows the average profitability ratio for 3 years, from 2016-2018 in terms of Return on Assets (ROA) PT. Indocement Tunggal Prakasa Tbk (INTP) at 9.54%, PT. Semen Baturaja Tbk (SMBR) at 4.95%, and PT. Semen Indonesia Tbk (SMGR) 9.92%. Meanwhile, in terms of the Return on Equity (ROE) of PT. Indocement Tunggal Prakasa Tbk (INTP) at 7.80%, PT. Semen Baturaja Tbk (SMBR) at 3.42%, and PT. Semen Indonesia Tbk (SMGR) at 6.55%. Furthermore, it is reviewed from the Net Profit Margin (NPM) of PT. Indocement Tunggal Prakasa Tbk (INTP) at 15.21%, PT. Semen Baturaja Tbk (SMBR) at 10.12%, and PT. Semen Indonesia Tbk (SMGR) amounted to 11.11%. And in terms of the Operating Profit Margin (OPM) of PT. Indocement Tunggal Prakasa Tbk (INTP) at 14.60%, PT. Semen Baturaja Tbk (SMBR) amounted to 23.22%, and PT. Semen Indonesia Tbk (SMGR) amounted to 21.52%.

In previous research conducted by Pasiakan et al, (2018) that there are differences in financial performance between PT. Semen Indonesia Tbk, PT. Indocement Tunggal Prakasa Tbk, and PT Holcim Indonesia for the period 2015-2016. And research conducted by Wulandari (2018) states that there are differences in financial performance between non-multinational and multinational companies for the 2014-2016 period. The objectives of this study are as follows:

1. To compare the financial performance of manufacturing companies in the cement sub-sector in 2016-2018 based on liquidity ratios in terms of Current Ratio, Quick Ratio, and Cash Ratio with industry-standard ratios.
2. To compare the financial performance of manufacturing companies in the cement sub-sector in 2016-2018 based on the solvency ratio in terms of the Debt to Equity Ratio and Debt to Assets Ratio with industry-standard ratios.
3. To compare the financial performance of manufacturing companies in the cement sub-sector in 2016-2018 based on profitability ratios in terms of Return on Assets, Return on Equity, Net Profit Margin, and Operating Profit Margin with industry-standard ratios.

Based on the background description, the problem formulations in this study are:

1. How is the financial performance of manufacturing companies in the cement sub-sector in 2016-2018 based on liquidity ratios in terms of Current Ratio, Quick Ratio, and Cash Ratio compared to industry-standard ratios?
2. How is the financial performance of the cement manufacturing sub-sector in 2016-2018 based on the solvency ratio in terms of the Debt to Equity Ratio and Debt to Assets Ratio compared to the industry standard ratio?
3. How is the financial performance of the cement manufacturing sub-sector companies in 2016-2018 based on profitability ratios in terms of Return on Assets, Return on Equity Net Profit Margin, and Operating Profit Margin compared to industry-standard ratios?

Financial performance is an analysis carried out to see the extent to which a company has implemented proper and correct financial implementation rules such as by making a financial report that meets the standards and provisions in SAK (financial accounting standards) or GAAP (General Accepted Accounting Principle) and others. Financial performance is used to determine the results of actions that have been taken in the past. Besides, this financial measure is complemented by non-financial measures of customer satisfaction, productivity, and cost-effectiveness of business processes and productivity as well as personal commitment to determine the company's financial performance in the future (Fahmi, 2017). Future more, financial performance analysis is the process of determining the operation and financial characteristics of a firm from accounting and financial statements. Through the careful analysis of its financial performance, the organization can identify opportunities to improve performance of the department, unit or organizational level (Pandian & Narendran, 2015).

Financial reports are the result of an accounting process that can be used as a tool to communicate financial data with the activities of a company and parties with an interest in the company's data or activities, which include balance sheets, profit and loss, and report of changes in financial position (Munawir, 2015). The purpose of financial reports is to provide information about the company's financial position, performance, and cash flow that is useful for most users of the report to make economic decisions and show management's responsibility (stewardship) for the use of resources entrusted to them (Ikatan Akuntansi Indonesia, 2015).

Financial statement analysis is an activity of comparing numbers in financial reports by dividing one number by another (Kasmir, 2016). The benefits of using financial statement analysis according to (Fahmi, 2017) namely: (1) Useful to be used as a tool to assess company performance and achievements; (2) Useful for management as a reference for planning; (3) Can be used as a tool to evaluate the condition of a company from a financial perspective; (4) Useful for creditors used to estimate the potential risks that will be faced with the guarantee of continuity of interest payments and loan principal repayments; and (5) Can be used as an assessment for the organization's stakeholders. According to Harahap (2015) In general, financial statement analysis techniques are as follows:

1. **Comparative Method.** This method is used by utilizing financial statement figures and comparing them with other financial statement figures. This comparison can be made through the following comparisons: (1) Comparison of financial statements in several years (horizontal), (2) Comparison of one financial year (vertical) that is compared is the elements contained in the financial statements, (3) Comparison with the best companies, (4) Comparison with the prevailing industrial standard figures (industrial norm). (5) Comparison with the company budget or budget.

2. **Common Size Financial Statement Method (Layout Report).** This method is an analysis method that presents financial statements in the form of a percentage. The percentage is usually associated with an amount that is considered important, for example, assets for the balance sheet.
3. **Time Series Index Method (Time Series Analysis).** This method is an analytical method used to assess and compare the company's financial ratios from year to year. From this method, it will be known the weaknesses and strengths of a company each year, so that it can be easily evaluated the development of the company's financial statements every year and can be used as a basis for planning and making decisions in the future for the progress of the company.
4. **Ratio Analysis Method.** Ratio analysis is a method of financial statement analysis that is most widely used in practice. In using ratio analysis techniques, what needs to be emphasized is the meaning and usefulness of each of these ratio numbers. The financial ratios that are often used are (1) Liquidity Ratio, (2) Solvency Ratio, (3) Rentability Ratio (Profitability). The financial statement analysis technique used in this study is the ratio analysis method because it is the most widely used in financial analysis and has advantages over other analysis techniques because it is easier to read and interpret.
5. **Types of Financial Ratios.** According to Astuti (2017), financial ratios can be divided into three general forms that are used, namely: Liquidity Ratio, Solvency Ratio, and Profitability Ratio. More detailed description of each ratio as follows;
  - a. **Liquidity Ratio.** Liquidity Ratio (Liquidity Ratio) is a ratio used to measure the company's ability to meet short-term financial obligations (short time debt) that must be met immediately. These ratios can be calculated through sources of information on working capital, namely current assets and current liabilities.
  - b. **Current Ratio (CR).** The current ratio is a ratio to measure the company's ability to pay short-term liabilities or debt that is due immediately when collected as a whole (Kasmir, 2016). The higher the CR ratio, the more liquid the condition of the company is, and the higher the company's ability to cover its short-term liabilities with current assets. Conversely, the lower the CR ratio, the less liquid the company's condition will be and the lower the company's ability to cover its short-term liabilities with its current assets.
  - c. **Quick Ratio (QR).** The quick ratio is a ratio that shows the company's ability to meet or pay short-term liabilities or debts with current assets without taking into account the value of the inventory. The higher the QR ratio, the more liquid the condition of the company will be and the higher the company's ability to cover its short-term liabilities with current assets without taking into account the inventory value. Conversely, the lower the QR ratio, the less liquid the company's condition will be and the lower the company's ability to cover its short-term liabilities with current assets without taking into account the value of the inventory.
  - d. **Cash Ratio (CsR).** A cash ratio is a tool used to measure how much cash is available to pay debts. The higher the CsR ratio, the more liquid the condition of the company is, and the higher the company's ability to cover its short-term liabilities from the company's cash. Conversely, the lower the CsR ratio, the less liquid the company's condition will be and the lower the company's ability to cover its short-term liabilities

from the company's cash, following is a table of industry-standard average liquidity ratios:

**Table 4. Liquidity Industry of Ratio Standard**

No	Ratio	Industrial Standard
1	Current Ratio	2 times
2	Quick Ratio	1,5 times
3	Cash Ratio	50%
4	Cash Turnover	10 %
5	Inventory to Net Working Capital	12

6. **Solvability Ratio.** The solvency ratio (Solvability Ratio) is a tool used to describe a company's ability to pay its long-term obligations or obligations if the company is. The solvency ratio used in this study is:

a. **Debt to Equity Ratio (DER).** The debt to Equity Ratio is a ratio used to assess debt to equity. This ratio shows the extent to which the company is financed by debt and the company's ability to meet its obligations with the equity holders. The higher the DER ratio, the greater the amount of debt, and the lower the company's ability to pay all of its obligations. Conversely, the lower the DER ratio indicates the amount of debt is smaller than the amount of capital and means that the company's ability to pay all its obligations will be higher.

b. **Debt to Asset Ratio (DAR).** Debt to Asset Ratio is a tool used to determine the extent to which debt can be covered by assets. The higher the DAR ratio, the bigger the debt amount than the total assets, and it means the lower the company's ability to pay all of its obligations. Conversely, the lower the DAR ratio indicates the amount of debt is smaller than the total assets and means the higher the company's ability to pay all of its obligations. The following is a table of industry average solvency ratio standards:

**Table 5. Industry Solvency Ratio Standard**

No	Ratio	Industrial Standard
1	Debt to Asset Ratio	35 %
2	Debt to Equity Ratio	90 %
3	LTDtER	10 times
4	Times Interest Earned	10 times
5	Fixed Charge Coverage	10 times

7. **Profitability Ratio.** Profitability is the ability of a company in generating profit within a certain period (Said, M., Ali, 2016). The profitability ratio (Profitability Ratio) is a tool used to measure the company's ability to seek profit, this ratio also provides a measure of the management efficiency level of a company. This is shown by the profit generated from sales and investment income (Kasmir, 2016). The profitability ratios used in this study are:

a. **Return on Assets (ROA).** Return on Assets (ROA) is the ratio used to determine the company's ability to generate profit after tax by using all assets owned. The higher the ROA ratio of a company, the higher the level of profit obtained from the total assets it owns. Conversely, the lower the ROA ratio of a company, the lower the level of profits obtained from the total assets it owns.

b. **Return on Equity (ROE).** Return on Equity (ROE) is the ratio used to determine the company's ability to generate profit after tax using the company's capital. The

higher the ROE ratio of a company, the higher the level of profit obtained from its capital, and the more efficient the use of its capital is carried out by the management of the company. Conversely, the lower the ROE ratio of a company, the lower the level of profits obtained from its capital and the less efficient use of its capital by the management of the company.

- c. **Net Profit Margin (NPM).** Net Profit Margin (NPM) is the ratio used to determine the company's ability to generate profit after tax from sales made by the company. The higher the NPM ratio of a company, the higher the level of profit it gets from its sales. Conversely, the lower the NPM ratio of a company, the lower the level of profit that it gets from its sales.
- d. **Operating Profit Margin (OPM).** Operating Profit Margin (OPM) is a ratio used to determine the company's ability to generate profit before interest and taxes from sales made by the company. The higher the OPM ratio of a company, the higher the level of gross profit obtained from sales and the more efficient the production, personnel, and marketing departments are in generating profit from their sales. Conversely, the lower the OPM ratio of a company, the lower the level of gross profit earned from sales. Here is a table of industry-standard average profitability ratios:

**Table 6. Industry Profitability Ratio Standards**

No.	Ratio	Industrial Standard
1	Net Profit Margin	20 %
2	Return on Assets	30 %
3	Return on Equity	40 %

(Source: Kasmir, 2016)

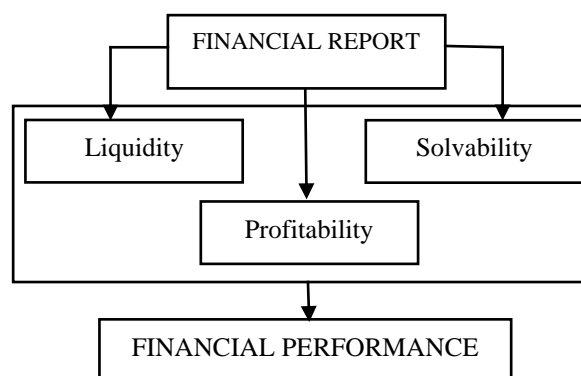
**Table 7. Industry Profitability Ratio Standards**

No.	Ratio	Industrial Standard
1	Gross Profit Margin	24,90 %
2	Operating Profit Margin	10,80 %
3	Net Profit Margin	3,92 %
4	Return on Assets	5,98 %
5	Return on Equity	8,32 %

(Source: Lukviarman, 2016)

## METHOD

Based on the results of a literature study on each of the financial ratios and relationships obtained from previous research, the researcher describes a framework as follows:



**Figure 2. Framework Research**



Based on the framework above, it can be explained that every company has a goal, which is manifested in activities that have been planned, including production, marketing to sales results. All transactions made are recorded in the financial statements. The financial statements are then processed and analyzed in terms of liquidity, solvency, and profitability so that they provide information about the company's financial condition, both ongoing and past, whose purpose is to measure the company's financial performance whether it is on target or below the target.

The population in this study were 6 (six) cement sub-sector manufacturing companies listed on the Indonesia Stock Exchange. The sample in this study amounted to 3 (three) companies taken using the Quota Sampling technique, which is taking the number of samples as much as the number determined by the researcher (Sugiyono, 2016). The sample in this study is PT. Indocement Tunggul Prakasa Tbk, PT. Semen Baturaja Tbk, and PT. Semen Indonesia (Persero) Tbk. The type of data used in this study is secondary data obtained indirectly from the financial statements of PT. Indocement Tunggul Prakasa Tbk, PT. Semen Baturaja Tbk, and PT. Semen Indonesia (Persero) Tbk which has been audited for the period 2016-2018 sourced from the website documentation.

The analytical method used to discuss the problems in this research is the descriptive analysis method. The steps in analyzing data are; (1) Collecting and presenting data in the form of financial reports for 3 years (2016-2018), (2) Comparing financial statements, (3) Analyze financial statements using analysis of liquidity, solvency, and profitability, (4) Interpret the analysis process as a combination of the results of the comparison with the prevailing theoretical rules, (5) Determine the company's financial performance based on the results of measurement/analysis of the company's financial statements (Pasiakan et al, 2018).

## RESULTS AND DISCUSSION

### Liquidity Ratio Results

Liquidity Ratio is a ratio used to measure the company's ability to meet short-term financial obligations (short time debt) that must be met immediately. To find out the financial performance of the liquidity ratios of the cement sub-sector manufacturing companies from 2016 to 2018 listed in table 8.

**Table 8. Results of the Average Liquidity Ratio of PT. Indocement Tunggul Prakasa Tbk, PT. Semen Baturaja Tbk, and PT. Semen Indonesia (Persero) Tbk Year 2016-2018**

Liquidity	Indocement Tunggul Tbk	Semen Baturaja Tbk	Semen Indonesia Tbk	Average Industry
<b>CR</b>	378.83%	222.75%	159.73%	253.77%
<b>QR</b>	327.67%	177.51%	120.45%	208.54%
<b>CsR</b>	241.98%	74.23%	46.68%	120.96%

From the table above, it can be described that the financial performance in terms of liquidity ratios is reviewed from the Current Ratio (CR), PT. Indocement Tunggul Prakasa (Persero) Tbk is better than PT. Semen Baturaja (Persero) Tbk and PT. Semen Indonesia (Persero) Tbk. This is because of the average value of the Current Ratio (CR) of PT. Indocement Tunggul Prakasa (Persero) Tbk is above the industry average (378.83% > 253.77%). This indicates that PT. Indocement Tunggul Prakasa (Persero) Tbk is better able to pay short-term liabilities or debts that mature immediately when billed with current assets. According to Kasmir (2016), the industry standard for the Current Ratio (CR) is 2 times (200%). PT. Indocement Tunggul Tbk and PT. Semen Baturaja Tbk shows good financial performance due to above the industry average.

Meanwhile, PT. Semen Indonesia Tbk with a Current Ratio (CR) value of 159.73% shows less financial performance.

The liquidity ratio in terms of the Quick Ratio (QR) of PT. Indocement Tunggal Prakasa (Persero) Tbk is still better than PT. Semen Baturaja (Persero) Tbk and PT. Semen Indonesia (Persero) Tbk. This is because of the average value of the Quick Ratio (CR) of PT. Indocement Tunggal Prakasa (Persero) Tbk is above the industry average ( $327.67% > 208.54%$ ). This indicates that PT. Indocement Tunggal Prakasa (Persero) Tbk is better able to pay short-term liabilities with current assets without taking inventory value into account. According to Kasmir (2016), the industry standard for Quick Ratio (QR) is 1.5 times (150%), therefore PT. Indocement Tunggal Tbk, PT. Semen Baturaja Tbk and PT. Semen Indonesia Tbk shows good financial performance because it is above the industry average. Furthermore, in terms of liquidity ratios in terms of Cash Ratio (CsR), PT. Indocement Tunggal Prakasa (Persero) Tbk is still better than PT. Semen Baturaja (Persero) Tbk and PT. Semen Indonesia (Persero) Tbk. This is because of the average value of the Cash Ratio (CsR) of PT. Indocement Tunggal Prakasa (Persero) Tbk is above the industry average ( $241.98% > 120.96%$ ). This indicates that PT. Indocement Tunggal Prakasa (Persero) Tbk is better able to pay short-term obligations with cash. According to Kasmir (2016: 143), the industry standard for Cash Ratio (CsR) is 50%. PT. Indocement Tunggal Tbk and PT. Semen Baturaja Tbk shows good financial performance because it is above the industry average. Meanwhile, PT. Semen Indonesia Tbk with a Cash Ratio (CsR) value of 46.68% shows less financial performance because it is below the industry average.

### Solvency Ratio Results

Solvability ratio is a tool used to describe the company's ability to pay its long-term obligations or obligations if the company is liquidated. To find out the financial performance of the solvency ratio of the cement sub-sector manufacturing companies from 2016 to 2018 listed in table 9.

**Table 9. Results of the Average Solvency Ratio of PT. Indocement Tunggal Prakasa Tbk, PT. Semen Baturaja Tbk, and PT. Semen Indonesia (Persero) Tbk Year 2016-2018**

Solvability Ratio	Indocement tunggal Tbk	Semen Baturaja Tbk	Semen Indonesia Tbk	Industrial Average
<b>DER</b>	17.43%	49.23%	54.75%	40.47%
<b>DAR</b>	14.89%	32.80%	35.22%	27.63%

From the table above, it can be described that the financial performance in terms of liquidity ratios is reviewed from the Current Ratio (CR), PT. Indocement Tunggal Prakasa (Persero) Tbk is better than PT. Semen Baturaja (Persero) Tbk and PT. Semen Indonesia (Persero) Tbk. Explaining by the average value of the Current Ratio (CR) of PT. Indocement Tunggal Prakasa (Persero) Tbk is above the industry average ( $378.83% > 253.77%$ ). This indicates that PT. Indocement Tunggal Prakasa (persero) Tbk is better able to pay short-term liabilities or debts that mature immediately when billed with current assets.

PT. Indocement Tunggal Tbk and PT. Semen Baturaja Tbk shows good financial performance because it is above the industry average. Meanwhile, PT. Semen Indonesia Tbk with a Current Ratio (CR) value of 159.73% shows less financial performance since below the industry average. Likewise, in terms of the liquidity ratio in terms of the Quick Ratio (QR), PT. Indocement Tunggal Prakasa (Persero) Tbk is still better than PT. Semen Baturaja (Persero) Tbk and PT. Semen Indonesia (Persero) Tbk. Explaining by the average value of the Quick Ratio (CR) of PT.

Indocement Tunggal Prakasa (Persero) Tbk is above the industry average (327.67% > 208.54%). This indicates that PT. Indocement Tunggal Prakasa (Persero) Tbk is better able to pay short-term liabilities with current assets without taking inventory value into account.

PT. Indocement Tunggal Tbk, PT. Semen Baturaja Tbk and PT. Semen Indonesia Tbk shows good financial performance because it is above the industry average. Furthermore, in terms of liquidity ratios in terms of Cash Ratio (CsR), PT. Indocement Tunggal Prakasa (Persero) Tbk is still better than PT. Semen Baturaja (Persero) Tbk and PT. Semen Indonesia (Persero) Tbk. This is because of the average value of the Cash Ratio (CsR) of PT. Indocement Tunggal Prakasa (Persero) Tbk is above the industry average (241.98% > 120.96%). This indicates that PT. Indocement Tunggal Prakasa (Persero) Tbk is better able to pay short-term obligations with cash. According to Kasmir (Kasmir, 2016) the industry standard for Cash Ratio (CsR) is 50%, so PT. Indocement Tunggal Tbk and PT. Semen Baturaja Tbk shows good financial performance since above the industry average. Meanwhile, PT. Semen Indonesia Tbk with a Cash Ratio (CsR) value of 46.68% shows poor financial performance because it is below the industry average.

### Solvency Ratio Results

Solvability ratio is a tool used to describe the company's ability to pay its long-term obligations or obligations if the company is liquidated. To find out the financial performance of the solvency ratio of the cement sub-sector manufacturing companies from 2016 to 2018 listed in table 10.

**Table 10. Results of the Average Solvency Ratio of PT. Indocement Tunggal Prakasa Tbk, PT. Semen Baturaja Tbk, and PT. Semen Indonesia (Persero) Tbk Year 2016-2018**

Solvability Ratio	Indocement tunggal Tbk	Semen Baturaja Tbk	Semen Indonesia Tbk	Industrial Average
<b>DER</b>	17.43%	49.23%	54.75%	40.47%
<b>DAR</b>	14.89%	32.80%	35.22%	27.63%

From the table above, it can be seen that the financial performance in terms of solvency ratio is reviewed from the Debt to Equity Ratio (DER), PT. Indocement Tunggal Prakasa (Persero) Tbk is still better than PT. Semen Baturaja (Persero) Tbk and PT. Semen Indonesia (Persero) Tbk. This is because of the average value of the Debt to Equity Ratio (DER) of PT. Indocement Tunggal Prakasa (Persero) Tbk is below the industry average (17.43% < 40.47%). This indicates that PT. Indocement Tunggal Prakasa (Persero) Tbk is better able to pay its debts to outsiders than the company's capital. According to (Kasmir, 2016) the industry standard for the Debt to Equity Ratio (DER) is 90%, which means PT. Indocement Tunggal Tbk, PT. Semen Baturaja Tbk and PT. Semen Indonesia Tbk shows good financial performance because its DER is below the industry average.

Likewise, in terms of the solvency ratio in terms of the Debt to Assets Ratio (DAR) of PT. Indocement Tunggal Prakasa (Persero) Tbk is still better than PT. Semen Baturaja (Persero) Tbk and PT. Semen Indonesia (Persero) Tbk. This is because of the average Debt to Assets Ratio (DAR) of PT. Indocement Tunggal Prakasa (Persero) Tbk is below the industry average (14.89% < 27.63%). This indicates that PT. Indocement Tunggal Prakasa (Persero) Tbk is better able to pay its debts to outsiders than the total assets owned by the company. According to (Kasmir, 2016) the industry standard for the Debt to Assets Ratio (DAR) is 35%, which means PT. Indocement Tunggal Tbk and PT. Semen Baturaja Tbk shows good financial performance because its DAR is below the industry average. Meanwhile, PT. Semen Indonesia Tbk shows poor financial performance because its DAR is above the industry average.

### Profitability Ratio Results

A profitability ratio is a tool used to measure the company's ability to earn profits through all available capabilities and resources. To find out the financial performance of the profitability ratios of the cement sub-sector manufacturing companies from 2016 to 2018 listed in table 11.

**Table 11. Calculation Results of the Average Profitability Ratio of PT. Indocement Tunggal Prakasa Tbk, PT. Semen Baturaja Tbk, and PT. Semen Indonesia (Persero) Tbk Year 2016-2018**

Profitability Ratio	Indocement tunggal Tbk	Semen Baturaja Tbk	Semen Indonesia Tbk	Industrial Average
<b>ROA</b>	7.80%	3.42%	6.55%	5.92%
<b>ROE</b>	9.54%	4.95%	9.92%	8.14%
<b>NPM</b>	15.21%	10.12%	11.11%	12.15%
<b>OPM</b>	14.60%	23.22%	21.52%	19.78%

From the table above, it can be seen that the financial performance in terms of profitability ratios is reviewed from the Return on Assets (ROA), PT. Indocement Tunggal Prakasa (Persero) Tbk is better than PT. Semen Baturaja (Persero) Tbk and PT. Semen Indonesia (Persero) Tbk. This is because of the average Return on Assets (ROA) of PT. Indocement Tunggal Prakasa (Persero) Tbk is above the industry average (7.80% > 5.92%). This indicates that PT. Indocement Tunggal Prakasa (Persero) Tbk can use all of its assets to generate net profit from PT. Semen Baturaja (Persero) Tbk and PT. Semen Indonesia (Persero) Tbk. The industry standard for Return on Assets (ROA) is 30%, which means PT. Semen Indonesia Tbk, PT. Indocement Tunggal Tbk and PT. Semen Baturaja Tbk shows less financial performance since the ROA is below the industry average.

In terms of profitability ratios in terms of Return on Equity (ROE), PT. Semen Indonesia (Persero) Tbk is better than PT. Indocement Tunggal Prakasa (Persero) Tbk and PT. Semen Baturaja (Persero) Tbk. This is because of the average Return on Equity (ROE) of PT. Semen Indonesia (Persero) Tbk is above the industry average (9.92% > 8.14%). This indicates that PT. Semen Indonesia (Persero) Tbk can use its capital to generate net profit from PT. Indocement Tunggal Prakasa (Persero) Tbk and PT. Semen Baturaja (Persero) Tbk. According to (Kasmir, 2016) the industry standard for Return on Equity (ROE) is 40%, which means PT. Semen Indonesia Tbk, PT. Indocement Tunggal Tbk and PT. Semen Baturaja Tbk shows less financial performance because its ROE is below the industry average.

Furthermore, in terms of profitability ratios in terms of Net Profit Margin (NPM), PT. Indocement Tunggal Prakasa (Persero) Tbk is better than PT. Semen Baturaja (Persero) Tbk and PT. Semen Indonesia (Persero) Tbk. This is because of the average Net Profit Margin (NPM) of PT. Indocement Tunggal Prakasa (Persero) Tbk is above the industry average (15.21% > 12.15%). This indicates that PT. Indocement Tunggal Prakasa (Persero) Tbk is better able to generate net profit from its sales than PT. Semen Baturaja (Persero) Tbk and PT. Semen Indonesia (Persero) Tbk. According to Kasmir (2016), the industry standard for Net Profit Margin (NPM) is 20%, which means PT. Semen Indonesia Tbk, PT. Indocement Tunggal Tbk and PT. Semen Baturaja Tbk shows less financial performance because its NPM is below the industry average.

Profitability ratios in a review of Operating Profit Margin (OPM), PT. Semen Baturaja (Persero) Tbk is better than PT. Indocement Tunggal Prakasa (Persero) Tbk and PT. Semen Indonesia (Persero) Tbk. This is because of the average Operating Profit Margin (OPM) of PT. Semen Baturaja (Persero) Tbk is above the industry average (23.22% > 19.78%). This indicates that

PT. Semen Baturaja (Persero) Tbk is better able to generate gross profit from its sales than PT. Semen Baturaja (Persero) Tbk and PT. Semen Indonesia (Persero) Tbk. According to Lukviarman (2016), the industry standard for Operating Profit Margin (OPM) is 10.80%, which means PT. Semen Indonesia Tbk, PT. Indocement Tunggul Tbk and PT. Semen Baturaja Tbk shows good financial performance because its OPM is above the industry average.

To help the company, improve company performance and consider it in the future, the researchers hereby provide the following suggestions. Result analysis from the ratio analysis shows that the financial ratios of PT. Indocement Tunggul Tbk, PT. Semen Baturaja Tbk, and PT. Semen Indonesia Tbk for the 2016-2018 period, the company's liquidity and solvency ratios are so good, but there are still ratios that need to be improved, especially the company's profitability ratio. For this reason, the company is expected to maintain ratios that are already above industry ratios. Meanwhile, for ratios that are below the industry ratio, companies are expected to pay attention to the factors causing the decline and improve them. The company management should take advantage of financial ratios to measure the company's financial performance to make decisions in profit planning. The company management can improve performance on the management of total assets so that the company's financial efficiency will be better. The company management in allocating funds is aimed at increasing the level of company profits. The company management increases sales with cost efficiency so that the company can get an increase in profits. The company management can plan and control the number of costs incurred in carrying out production and other company operations wisely so that it is expected that the level of profit obtained is higher.

## CONCLUSION

Based on the results of research on cement sub-sector manufacturing companies listed on the Indonesia Stock Exchange (BEI) 2016-2018 it can be concluded as follows:

1. In terms of the company's liquidity ratio:
  - a. Current Ratio (CR) PT. Indocement Tunggul Tbk (378.83%) and PT. Semen Baturaja Tbk (222.75%) shows good financial performance because it is above the industry average (200%). Meanwhile, PT. Semen Indonesia Tbk (159.73%) shows less financial performance because it is below the industry average (200%).
  - b. Quick Ratio (QR) PT. Indocement Tunggul Tbk (327.67%) and PT. Semen Baturaja Tbk (177.51%) showed good financial performance because it was above the industry average (150%). Meanwhile, PT. Semen Indonesia Tbk (120.45%) shows less financial performance because it is below the industry average (150%).
  - c. Cash Ratio (CsR) PT. Indocement Tunggul Tbk (241.98%) and PT. Semen Baturaja Tbk (74.23%) shows good financial performance because it is above the industry average (50%). Meanwhile, PT. Semen Indonesia Tbk (46.68%) shows less financial performance because it is below the industry average.
2. In terms of the company's solvency ratio:
  - a. Debt to Equity Ratio (DER) PT. Indocement Tunggul Tbk (17.43%), PT. Semen Baturaja Tbk (49.23%) and PT. Semen Indonesia Tbk (54.75%) shows good financial performance because its DER is below the industry average (90%).
  - b. Debt to Assets Ratio (DAR) PT. Indocement Tunggul Tbk (14.89%) and PT. Semen Baturaja Tbk (32.80%) shows good financial performance because its DAR is below the industry average (35%). Meanwhile, PT. Semen Indonesia Tbk (35.22%) shows poor financial performance because its DAR is above the industry average (35%).

3. In terms of company profitability:
  - a. Return on Assets (ROA) PT. Indocement Tunggol Tbk (7.80%), PT. Semen Baturaja Tbk (3.42%) and PT. Semen Indonesia Tbk (6.55%) shows poor financial performance because its ROA is below the industry average (30%).
  - b. Return on Equity (ROE) PT. Indocement Tunggol Tbk (9.54%), PT. Semen Baturaja Tbk (4.95%) and PT. Semen Indonesia Tbk (9.92%) shows poor financial performance because its ROE is below the industry average (40%).
  - c. Net Profit Margin (NPM) PT. Indocement Tunggol Tbk (15.21%), PT. Semen Baturaja Tbk (10.12%) and PT. Semen Indonesia Tbk (11.11%) shows poor financial performance because its ROE is below the industry average (20%).
  - d. Operating Profit Margin (OPM) PT. Indocement Tunggol Tbk (14.60%), PT. Semen Baturaja Tbk (23.22%) and PT. Semen Indonesia Tbk (21.52%) shows good financial performance because its OPM is above the industry average (10.80%).

## REFERENCES

- Astuti, D. (2017). *Manajemen Keuangan Perusahaan*. Jakarta. Ghalia Indonesia.
- Batchimeg, B. (2017). Financial Performance Determinants of Organizations: The Case of Mongolian Companies. *Journal of Competitiveness*, 9(3), 22–33.
- Csath, M. (2007). The Competitiveness of Economies: Different Views and Arguments. *Society and Economy Journal*, 29(1), 87–102.
- Fahmi, I. (2017). *Analisis Laporan Keuangan*. Bandung. Alfabeta.
- Harahap, S. S. (2015). *Analisis Kritis atas Laporan Keuangan*. Jakarta. Rajawali Pers.
- Hertati, L., Zarkasyi, W., Suharman, H., Umar, H. (2019). The Effect of Human Resource Ethics on Financial Reporting Implication for Good Government Governance (Survey Related Sub-units in State-owned Enterprise in Sumsel. *International Journal of Economics and Financial Issues*, 9(4), 267–276.
- Ikatan Akuntansi Indonesia. (2015). *Standar Akuntansi Keuangan*. Jakarta. Salemba Empat.
- Jenatbadi, H. S. (2015). An Overview of Organizational Performance Index: Definitions and Measurements. *International Journal of Business and Management*, 8(19), 107–117.
- Kasmir. (2016). *Analisis Laporan Keuangan*. Jakarta. Raja Grafindo Persada.
- Ko, W. H. (2015). Constructing a Professional Competence Scale for Research & Development Employees from an Industry View Point. *International Journal of Hospitality Management*, 49(1), 66–72.
- Lukviarman, N. (2016). *Corporate Governance*. Solo. Raja Grafindo Persada.
- Manzoni, A, Sardar, M. N. I. (2007). *Performance Measurement in Corporate Governance*. Springer.
- Marfungatun, F. (2016). Pengaruh Rasio Profitabilitas, Likuiditas, dan Leverage Terhadap Kondisi Financial Distress (Studi Empiris pada Perusahaan 71 Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2013-2015). *Jurnal Ekonomi Dan Bisnis*, 1(1), 1–12.
- Mirza, A. S., Javed, A. (2013). Determinants of Financial Performance of a Firm: Case of Pakistani Stock Market. *Journal of Economics and International Finance*, 5(2), 43–52.
- Munawir, S. (2015). *Analisa laporan Keuangan*. Liberty.
- Ovidiu, C. T., Teodor, V. D. (2013). Case Study on Analysis of Financial Statements at a Furniture Manufacturer. *Journal of Knowledge Management, Economics and Information Technology*, 3(5), 1–24.
- Pandian, T. M., N. (2015). Impact of Financial Performance Indicators (FPIs) on Profitability. *International Journal of Current Research*, 7(1), 12141–12149.
- Pasiakan M. P. N., Alexander, S. W., Pangerapan, S. (2018). Analisis Laporan Keuangan Sebagai Dasar Penilaian Kinerja Pada Perusahaan Semen Yang Terdaftar Di Bursa Efek Indonesia Periode 2015-2016. *Jurnal Riset Akuntansi Going Concern*, 13(4), 412–419.

- Said, M., Ali, H. (2016). An Analysis on the Factors Affecting Profitability Level of Sharia Banking in Indonesia. *Banks and Banking Systems*, 11(3), 28–36.
- Sirait, H. (2017). Analisis Laporan Keuangan Sebagai Dasar Penilaian Terhadap Kinerja Keuangan Pada PT. Herfinta Farm & Plantation. *Jurnal Ilmiah Methonomi*, 3(2), 16–25.
- Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung. PT. Alfabet.
- Sulindawati, N. G. L. E., Yuniarta, G. A., Purnamawati, I. G. A. (2017). *Manajemen Keuangan: Sebagai Dasar Pengambilan Keputusan Bisnis* (1st ed.). Rajawali Pers.
- Wulandari, S. (2018). Analisis Laporan Keuangan Untuk Menilai Kinerja Keuangan Perusahaan (Studi Kasus Pada Perusahaan Sub Sektor Kimia di Bursa Efek Indonesia Periode 2009-2013 dan 2014-2016). In *Skripsi* (pp. 1–277). Universitas Sanata Dharma.