



# **A STUDY ON FINANCIAL PERFORMANCE OF CEMENT INDUSTRY WITH SPECIAL REFERNCE TO ACC LIMITED**

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## **ABSTRACT**

*Indian cement is the second largest in the world after China. Whereas, ACC Limited is one of India's leading manufacturers of cement and ready mix concrete. The primary objective of this analysis is to study the financial performance and to know the Profitability position, Liquidity position and the changes in working capital of ACC limited for the period of five years (2014-18). The look has been conducted and the analysis has been made with the assist of financial statements acquired from the economic database and the financial position has been revealed as findings, provides suggestions for improving the position of the company and final statement has concluded in this study after ratio analysis and differencing the changes in the working capital of the company of the defined years.*

**KEYWORDS-***ACC limited, Financial performance, Ratio analysis, Liquidity ratio, Profitability ratio, Working capital.*

## **INTRODUCTION**

Finance is a broad time period that describe activities associated with banking, leverage or debt, credit, capital markets, money and investments. Basically, finance represents cash management and the manner of acquiring wished funds. Financial overall performance is a subjective measure of how properly a company can use assets from its primary mode of commercial enterprise and generate measure of a firm's overall monetary fitness over a given period. Financial analysis involves the usage of financial statistics to assess a agency's performance and make tips approximately how it may improve going forward. Financial analysis primarily perform their work in excel, the usage of a spreadsheet to investigate

historical statistics and make projections of ways they think the organization will carry out in the future.

## **STATEMENT OF THE PROBLEM**

The problem of the analysis is to decide the economic ratio evaluation and to earn enough profit to control the proper functioning of ACC limited. The comparative evaluation technique determines the profitability and financial overall performance of a business through comparing economic statements of or extra time periods. The performance of business is measured by using the quantity of profit earned. The more the profit, the more efficient is the business. An attempt has been made to analyze the financial performance of the business of ACC limited.



## SCOPE OF THE STUDY

The scope pertains to the financial performance of the ACC limited. Financial analysis is the process of determining the operating and financial structure of a firm from accounting and financial statements. The look has been conducted with the assist of financial statements acquired from the economic database. The financial statement of the business enterprises are balance sheet and profit and loss account pertaining to 5 years. The purpose of analysis is to determine the efficiency, performance of the business enterprise and management and its profitability reflected in the financial records and reports.

## OBJECTIVES OF THE STUDY

1. To study the financial performance of ACC limited.
2. To know the Profitability and Liquidity position of the concern.
3. To know the changes over working capital for the period of five years (2014-18).

## RESEARCH METHODOLOGY

- **SOURCE OF DATA**  
Secondary data
- **PERIOD OF STUDY**  
For the period of 5 years from 2014-2018
- **TOOLS AND TECHNIQUES**  
**RATIO ANALYSIS**
  - **Liquidity ratio**
    - Current ratio
    - Liquid ratio
    - Absolute liquid ratio
  - **Profitability ratios**
    - Gross profit ratio
    - Net profit ratio
    - Operating profit ratio
    - Operating ratio

## WORKING CAPITAL LIMITATIONS

- The end result of the study are relevant best for ACC cement limited and it can not be used in another company.
- The study has been confined most effective to the period of five years.
- The data used are secondary in nature and any bias in them is reflected in the analysis and conclusion of the study.

## REVIEW OF LITERATURE

**K.T. Gopi (2018)**, “The study on financial performance of cement industry in India” in this study mistreatment Extended Dupont approach of leading cement firms like ACC, Gujarat Ambuja and Ultra tech cement for the period 2006-2015. This approach has stressed on analysis of Return on Equity (ROE). This approach has shown the decline in the profitability of leading cement firms throughout the period and it can be inferred that the monetary performance of all three companies appears to be similar as measured by ROE with minimal deviation among companies.

**Er. Suhaib Firdous and Er. Anzar Hamid (2017)**, “Workability of concrete” on his experiment by the use of various sorts of water cement ratio, the form of aggregate influence workability angular and rough aggregate reduce workability. Small size aggregate provide outstanding surface areas than huge size aggregate and provide more quantity of water for lubrication. Whereas, the temperature on which the concrete mix is prepared affect its workability the slump of concrete blend decreases whilst temperature increases and determine that the proper quantity of water ought to be mixed according to the form and size of aggregate.

**P. Devika Sabarirajan (2017)**, “A study on financial performance of cement industry with special reference to ACC limited” the assignment monitor that the liquidity is satisfactory and can meet its short term liabilities and they can also fulfill the long term liabilities as the company have strong solvency ratio. The overall performance of the company is green and ACC cement limited should focus on profitability through modernizing production over retaining good supply chain management strategy.

## DATA ANALYSIS AND INTERPRETATION RATIO ANALYSIS

Ratio analysis is the comparison of line items in the financial statements of a business. Ratio analysis is used to evaluate a number of issues with an entity, such as its liquidity, efficiency of operations, and profitability. Ratio analysis is less useful to corporate insiders, who have better access to more detailed operational information about the organization.

**LIQUIDITY RATIO**

Liquidity ratios are an important class of financial metrics used to determine a debtor's ability to pay off current debt obligations without raising external capital. Liquidity ratios measure a company's ability to pay debt obligations and its margin of safety through the calculation of metrics including the current ratio, liquid ratio, and absolute liquid ratio.

- Current ratio
- Liquid ratio

- Absolute liquid ratio

**CURRENT RATIO**

The current ratio measures a company's ability to pay off its current liabilities (payable within one year) with its current assets such as cash, accounts receivable and inventories. The higher the ratio, the better the company's liquidity position.

$$\text{Current Ratio} = \text{Current Asset} / \text{Current Liabilities}$$

**TABLE 1****TABLE SHOWING CURRENT RATIO****(Rupees in crores)**

YEAR	CURRENT ASSETS	CURRENT LIABILITIES	CURRENT RATIO
2014	1,976.76	3,407.81	0.58
2015	1,767.89	3,616.98	0.49
2016	1,969.38	4,003.49	0.49
2017	4,799.30	5,293.03	0.91
2018	6,416.31	5,330.56	1.20

*(Source: 5 years annual report of ACC limited)***INTERPRETATION**

The above table 1 shows that the current ratio in the year 2014 was 0.58 and then it moves downwards to 0.49 in the year 2015 and it remains constant in the year 2016 and it moves upwards to 0.91 in 2017 and finally in the year 2018 it raised to 1.20. The normal current ratio is 2:1. The above table shows current ratio

lower than 2 in all financial year. This shows that the company is not enjoying credit worthiness.

**LIQUID RATIO**

The quick ratio measures a company's ability to meet its short-term obligations with its most liquid assets and therefore excludes inventories from its current assets. It is also known as the "acid-test ratio"

$$\text{Liquid Ratio} = \text{Liquid Assets} / \text{Current Liabilities}$$

**TABLE 2****TABLE SHOWING LIQUID RATIO****(Rupees in crores)**

YEAR	LIQUID ASSETS	CURRENT LIABILITIES	LIQUID RATIO
2014	720.38	3,407.81	0.21
2015	578.46	3,616.98	0.16
2016	744.75	4,003.49	0.19
2017	3,394.52	5,293.03	0.64
2018	5,274.38	5,330.56	0.99

*(Source: 5 years annual report of ACC limited)***INTERPRETATION**

The above table 2 shows that the liquid ratio of ACC limited in 2014 is 0.21 and it reduces to 0.16 during the year 2015 and increased year by year to 0.19 in 2016, 0.64 in 2017 and 0.99 in 2018. The normal liquid ratio is 1:1.

**ABSOLUTE LIQUID RATIO**

Absolute liquid ratio extends the logic further and eliminates accounts receivable (sundry debtors and bills receivables) also. Though receivables are more liquid as comparable to inventory but still there may be



doubts considering their time and amount of realization. Therefore, absolute liquidity ratio relates cash, bank and marketable securities to the current liabilities. Since absolute liquidity ratio lays down very strict and exacting standard of liquidity, therefore,

acceptable norm of this ratio is 50%. It means absolute liquid assets worth one half of the value of current liabilities are sufficient for satisfactory liquid position of a business. However, this ratio is not as popular as the previous two ratios discussed.

**Absolute Liquid Ratio = Absolute Liquid Assets / Liquid Liabilities**

**TABLE 3**  
**TABLE SHOWING ABSOLUTE LIQUID RATIO**

(Rupees in crores)

YEAR	ABSOLUTE LIQUID RATIO	CURRENT LIABILITIES	ABSOLUTE LIQUID RATIO
2014	309.78	3,407.81	0.09
2015	94.03	3,616.98	0.03
2016	278.4	4,003.49	0.07
2017	2,728.55	5,293.03	0.52
2018	4,647.73	5,330.56	0.87

(Source: 5 years annual report of ACC limited)

### INTERPRETATION

In the above table 3 the absolute liquid ratio is 0.09 in 2014 and reduced to 0.03 then increased to 0.07 and hikes during the year 2017 to 0.52 and 0.87 in 2018. The ratio is below 1 and hence the company needs more than its cash reserve to pay-off its current debt.

equity over time, using data from a specific point in time.

- Gross profit ratio
- Net profit ratio
- Operating profit ratio
- Operating ratio

### PROFITABILITY RATIOS

Profitability ratios are a class of financial metrics that are used to assess a business's ability to generate earnings relative to its revenue, operating costs, balance sheet assets, and shareholders'

### GROSS PROFIT RATIO

Gross profit ratio (GP ratio) is a profitability ratio that shows the relationship between gross profit and total net sales revenue. It is a popular tool to evaluate the operational performance of the business. The ratio is computed by dividing the gross profit figure by net sales.

**Gross Profit Ratio = Gross Profit / Sales × 100**

**TABLE 4**  
**TABLE SHOWING GROSS PROFIT**

(Rupees in crores)

YEAR	GROSS PROFIT	SALES	GROSS PROFIT RATIO
2014	8,938.54	11,738.79	76.15
2015	7,014.57	11,797.16	59.46
2016	5,779.28	11,167.55	51.75
2017	5,996.93	13,285.13	45.14
2018	5,728.16	15,657.55	36.58

(Source: 5 years annual report of ACC limited)

**INTERPRETATION**

The table 4 shows the relationship between the gross profit and net sales in percentage. In 2014 the gross profit was 76.15% and the gross profit decreases year by year to 59.46% in 2015, 51.75% in 2016, 45.14% in 2017 and 36.58% in 2018. During the study period the average gross profit position was 53.8%. However the company maintains a good gross profit ratio.

**NET PROFIT RATIO**

Net profit ratio (NP ratio) is a popular profitability ratio that shows relationship between net profit after tax and net sales. It is computed by dividing the net profit (after tax) by net sales. For the purpose of this ratio, net profit is equal to gross profit minus operating expenses and income tax. All non-operating revenues and expenses are not taken into account because the purpose of this ratio is to evaluate the profitability of the business from its primary operations.

$$\text{Net Profit Ratio} = \text{Net Profit} / \text{Sales} \times 100$$

**TABLE 5****TABLE SHOWING NET PROFIT RATIO****(Rupees in crores)**

YEAR	NET PROFIT	SALES	NET PROFIT RATIO
2014	1,150.67	11,738.79	9.80
2015	575.55	11,797.16	4.88
2016	595.72	11,167.55	5.33
2017	913.49	13,285.13	6.88
2018	1,363.52	15,657.55	8.71

*(Source: 5 years annual report of ACC limited)***INTERPRETATION**

The above table 5 shows the relationship between the net profit and net sales in percentage. In 2014 the net profit is at 9.80% and decreased to 4.88% during 2015 and increased to 5.33% in 2016, 6.88% in 2017 and 8.71% in 2018. During the study period the average net profit position was 7.1% and is in decreasing trend.

**OPERATING PROFIT RATIO**

Operating profit ratio establishes a relationship between operating Profit earned and net revenue generated from operations (net sales). Operating profit ratio is a type of profitability ratio which is expressed as a percentage. Net sales include both Cash and Credit Sales, on the other hand, Operating Profit is the net operating profit i.e. the Operating Profit before interest and taxes. Operating Profit ratio helps to find out Operating Profit earned in comparison to revenue earned from operations.

$$\text{Operating Profit Ratio} = \text{Operating Profit} / \text{Sales} \times 100$$

**TABLE 6****TABLE SHOWING OPERATING PROFIT RATIO****(Rupees in crores)**

YEAR	OPERATING PROFIT	SALES	OPERATING PROFIT RATIO
2014	1,513.29	11,738.79	12.89
2015	1,537.43	11,797.16	13.03
2016	1,420.73	11,167.55	12.72
2017	1,912.43	13,285.13	14.40
2018	2,412.78	15,657.55	15.41

*(Source: 5 years annual report of ACC limited)*

**INTERPRETATION**

The above table 6 shows that the operating profit ratio is 12.89% in year 2014 and keeps fluctuating in the upcoming years to 13.03% in 2015, 12.72% in 2016, 14.40% in 2017 and the current year 2019 ratio increased to 15.41%. So the company should decrease their expense to increase their profit.

**OPERATING RATIO**

The operating ratio shows the efficiency of a company's management by comparing the total operating expense (OPEX) of a company to net sales. The operating ratio shows how efficient a company's management is at keeping costs low while generating revenue or sales. The smaller the ratio, the more efficient the company is at generating revenue vs. total expenses.

$$\text{Operating Ratio} = \text{Cost of Goods Sold} + \text{Operating Expenses} / \text{Sales} \times 100$$

**TABLE 7****TABLE SHOWING OPERATING RATIO****(Rupees in crores)**

<b>YEAR</b>	<b>OPERATING PROFIT RATIO</b>	<b>OPERATING RATIO</b>
2014	12.89	87.11
2015	13.03	86.97
2016	12.72	87.28
2017	14.4	85.6
2018	15.41	84.59

(Source: 5 years annual report of ACC limited)

**INTERPRETATION**

From the above table 7, it is clear that operating profit is consistently good. The operating profit in 2014 is 87.11% and fluctuates year by year to 86.97% in 2015, 87.28% in 2016, 85.6% in 2017 and in the year 2018 it is 84.59% and it has to decrease their expenses to increase profit.

**WORKING CAPITAL**

Working capital, also known as net working capital (NWC), is the difference between a company's current assets, such as cash, accounts receivable (customers' unpaid bills) and inventories of raw materials and finished goods, and its current liabilities, such as accounts payable. Net operating working capital is a measure of a company's liquidity and refers to the difference between operating current assets and operating current liabilities.



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Working Capital = Current Assets – Current Liabilities

**Table 8**  
**TABLE SHOWING THE SCHEDULE OF CHANGES IN WORKING CAPITAL FOR THE YEAR ENDED 2014 - 2015**

(Rupees in Crores)

PARTICULARS	2014	2015	INCREASE	DECREASE
<b>Current Assets</b>				
Inventories	1,256.38	1,189.43		66.95
Sundry Debtors	410.6	484.43	73.83	
Cash and Bank	309.78	94.03		215.75
Loans and Advances	1,697.82	1,990.99	293.17	
<b>Total (A)</b>	<b>3,674.58</b>	<b>3,758.88</b>		
<b>Current Liabilities</b>				
Current liabilities	3,407.81	3,616.98		209.17
Provisions	1,053.21	759.19	294.02	
<b>Total (B)</b>	<b>4,461.02</b>	<b>4,376.17</b>		
<b>Working capital (A-B)</b>	-786.44	-617.29		
Net increase in working capital	169.15			169.15
<b>Total</b>	-617.29	-617.29	661.02	661.02

(Source: Secondary Data)

### INTERPRETATION

Current asset during 2014, 2015 is Rs.3,674.58 and Rs.3,758.88 respectively. The current asset increases by Rs.84.3. A current liability during 2014, 2015 is Rs.4,461.02 and Rs.4,376.17 respectively. The current liability decreases by Rs.84.85.

### INFERENCE

Net increase in working capital is Rs.169.15.





**Table 9**  
**TABLE SHOWING THE SCHEDULE OF CHANGES IN WORKING CAPITAL FOR THE YEAR ENDED 2015-2016**

(Rupees in Crores)

PARTICULARS	2015	2016	INCREASE	DECREASE
<b>Current Assets</b>				
Inventories	1,189.43	1,224.63	35.20	
Sundry Debtors	484.43	466.35		18.08
Cash and Bank	94.03	278.4	184.37	
Loans and Advances	1,990.99	1,969.38		21.61
<b>Total (A)</b>	<b>3,758.88</b>	<b>3,938.76</b>		
<b>Current Liabilities</b>				
Current liabilities	3,616.98	4,003.49		386.51
Provisions	759.19	738.74	20.45	
<b>Total (B)</b>	<b>4,376.17</b>	<b>4,742.23</b>		
<b>Working capital (A-B)</b>	-617.29	-803.47		
Net decrease in working capital		186.18	186.18	
<b>Total</b>	-617.29	-617.29	426.20	426.20

(Source: Secondary Data)

### INTERPRETATION

Current asset during 2015, 2016 is Rs.3,758.88 and Rs.3,938.76 respectively. The current asset increased by Rs.179.88. A current liability during 2015, 2016 is Rs.4,376.17 and Rs.4,742.23 respectively. The current liability increases by Rs.366.06.

### INFERENCE

Net decrease in working capital is Rs.186.18





**Table 10**  
**TABLE SHOWING THE SCHEDULE OF CHANGES IN WORKING CAPITAL FOR THE YEAR ENDED 2016-2017**

(Rupees in Crores)

PARTICULARS	2016	2017	INCREASE	DECREASE
<b>Current Assets</b>				
Inventories	1,224.63	1,404.78	180.15	
Sundry Debtors	466.35	665.97	199.62	
Cash and Bank	278.4	2,728.55	2,450.15	
Loans and Advances	1,969.38	2,402.27	432.89	
<b>Total (A)</b>	<b>3,938.76</b>	<b>7,201.57</b>		
<b>Current Liabilities</b>				
Current liabilities	4,003.49	5,293.03		1,289.54
Provisions	738.74	193.98	544.76	
<b>Total (B)</b>	<b>4,742.23</b>	<b>5,487.01</b>		
<b>Working capital (A-B)</b>	-803.47	1,714.56		
Net decrease in working capital		2,518.03		2,518.03
<b>Total</b>	-803.47	-803.47	3,807.57	3,807.57

(Source: Secondary Data)

### INTERPRETATION

Current asset during 2016, 2017 is Rs.3,938.76 and Rs.7,201.57 respectively. The current asset increases by Rs.3262.81. A current liability during 2017, 2018 is Rs.4,742.23 and Rs.5,487.01 respectively. The current liability increases to Rs.744.78.

### INFERENCE

Net decrease in working capital is Rs.2518.03.



**Table 11**  
**TABLE SHOWING THE SCHEDULE OF CHANGES IN WORKING CAPITAL FOR THE YEAR ENDED 2017-2018**

(Rupees in Crores)				
PARTICULARS	2017	2018	INCREASE	DECREASE
<b>Current Assets</b>				
Inventories	1,404.78	1,141.93		262.85
Sundry Debtors	665.97	626.65		39.32
Cash and Bank	2,728.55	4,647.73	1,919.18	
Loans and Advances	2,402.27	3,131.09	728.82	
<b>Total (A)</b>	<b>7,201.57</b>	<b>9,547.40</b>		
<b>Current Liabilities</b>				
Current liabilities	5,293.03	5,330.56		37.53
Provisions	193.98	258.49		<b>64.51</b>
<b>Total (B)</b>	<b>5,487.01</b>	<b>5,589.05</b>		
<b>Working capital (A-B)</b>	<b>1,714.56</b>	<b>3,958.35</b>		
Net increase in working capital	2,243.79			2,243.79
<b>Total</b>	<b>3,958.35</b>	<b>3,958.35</b>	<b>2,648.00</b>	<b>2,648.00</b>

(Source: Secondary Data)

### INTERPRETATION

Current asset during 2017, 2019 is Rs.7,201.57 and Rs.9,547.40 respectively. The current asset increases by Rs.2345.83. A current liability during 2017, 2019 is Rs.5,487.01 and Rs.5,589.05 respectively. The current liability increases by Rs. 102.04.

### INFERENCE

Net increase in working capital is Rs.2243.79.

### FINDINGS, SUGGESTION AND CONCLUSION

#### FINDINGS OF THE STUDY

- Current ratio of the company was highest in the year 2018 and lowest in the year 2015 and 2016.
- Liquid ratio, highest in the year 2018 and in the lowest in the year 2015.

- Absolute liquid ratio of the company was highest in the year 2018 and lowest in the year 2015.
- Gross profit of the company was highest in the year 2014 and lowest in the year 2018.
- Net profit of the company was highest in the year 2014 and lowest in the year 2015.
- Operating profit of the company was highest in the year 2018 and lowest in the year 2016.
- Operating ratio of the company was highest in the year 2016 and lowest in the year 2018.
- Working capital was increased in the year 2014 and 2015.
- Working capital was decreased in the year 2015 and 2016.
- Working capital was decreased in the year 2016 and 2017.



- Working capital was increased in the year 2017 and 2018.

*reference to ACC limited” International Journal of Creative Research Thoughts, volume 5(4).*

## SUGGESTIONS

- The company is able to pay short term obligations and the company has enough quick assets to pay for its current liabilities, so the company has to maintain this further
- The company's day-to-day cash management need to be improved.
- The gross profit margin may be improved by increasing sales price or decreasing cost of sales.
- The company has to improve the efficiency at converting sales into actual profit to enjoy the best profit.
- The company should try to keep the costs lower and increase its sales.
- The company has to maintain change in working capital at a moderate level as decrease in or great increase at change in working capital is not good.

## CONCLUSION

The analysis of financial performance of ACC Limited is stated in this report. The liquidity position of the company is satisfactory hence the company can meet out its short term liabilities and have enough quick assets to pay off current liabilities and future it has to maintain day to day cash management to increase the absolute liquid ratio alone. However the profitability position of the company is not much better, that the company has to decrease the cost of production and keep the cost lower or increase sales price and also need to improve the efficiency in converting sales into actual profit. The change in working capital should be increased without decreasing and has to maintain the change in working capital at a moderate position.

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