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Case Study NJOBM

Comparative Performance Analysis of Selected Cement Companies: With Special Reference to ACC Ltd. and Ambuja Cements Ltd.

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Abstract

In this report, we have chosen the comparative financial analysis of Ambuja Cements Ltd and ACC Ltd. We have analyzed and compared the financial statements and annual reports of Ambuja Cements Ltd and ACC Ltd. We have extracted all the relevant data of both the companies that helps to analyze and compare the liquidity position, profitability, and soundness of both the companies with a view to know which company is better from an investment perspective. Relevant data were taken from various sources, mainly official websites and annual reports of Ambuja Cements Ltd and ACC Ltd. This topic will give an insight into the financial conditions of ACC and Ambuja Cements Ltd. This analysis was carried out through ratio analysis. It is described as the methodical application of ratios to the interpretation of financial statements in order to identify a firm's strengths and weaknesses, as well as its past financial performance and present financial situation. Specific ratios are included in this group (leverage ratios, profitability ratios, operating ratios, etc.). The study was carried out with the help of published annual reports of both companies Ambuja Cements Ltd and ACC Ltd during 2017–2021. So we took 5 years' financial data and information and used it to analyze and compare the company's position by making use of tables and graphs, after which some interpretations were made. The findings from the tables and graphs and some suggestions for the companies to work on are also provided. The ratios used in this research report are as follows: current ratio, quick ratio, total asset turnover ratio, working capital turnover ratio, net profit ratio, operating profit ratio, return on assets, return on capital employed, return on equity, profit after tax margin, interest overage ratio, debt to equity ratio, and earnings before interest, tax, depreciation, and amortization margin.

Keywords: Comparative performance, financial analysis, Ambuja Cements Ltd, ACC Ltd, net profit ratio, current ratio

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INTRODUCTION

Ambuja Cements Ltd

Ambuja Cements Limited is a holding company with its headquarters in India that produces cement and clinkers [1]. The company's segment for cement and products related to cement is how it operates.

Ambuja Plus Roof Special, a product of the company, can be used to build slabs and roofs. It also provides rooftop rainwater harvesting system installation. There are different products of Ambuja for meeting different unique requirements of the customers [2].

Two brands in the domain of micro materials are co-owned by the company. These include Dirk

Pozzocrete, which contains superfine fly ash, and Alccofine, which contains a variety of micro slag elements. Construction projects like metro rail, dams, highways, flyovers, bridges, and tunnels all make use of Alccofine micro materials [3].

The building that a man is holding by its foundation in the Ambuja Cement emblem represents the solid cement basis that holds the entire structure together [4].

ACC Ltd

With a strong operational and marketing presence across all of India, ACC Limited (ACC) is a major participant in the Indian construction materials industry [5]. It is part of Adani Group, that is having fastest and largest growth in portfolio. Cement is synonymous with ACC, which has developed a reputation as a pioneering organization that continuously sets new standards for product development and research [6].

Purpose of the Study

- To evaluate and contrast Ambuja Cements Ltd.'s financial performance with that of ACC Ltd. over the duration of 5 years (2017, 2018, 2019, 2020, and 2021).
- To evaluate Ambuja Cements Ltd.'s and ACC Ltd's profitability, liquidity, and solvency during the previous 5 years.
- To evaluate effectiveness of Ambuja Cements Ltd and ACC Ltd
- To understand strength and weakness of Ambuja Cements Ltd and ACC Ltd

Research Design

Secondary data are the foundation of this investigation. Data is based on balance sheets, profit and loss accounts of Ambuja Cements Ltd. that were collected to provide information on the behavior of liquidity, solvency, and profitability situation. Moneycontrol.com & Stock Screener provided the information that was required.

Data Sources

The study's data came from secondary sources. The balance sheet and the income statement for the past 5 years were provided in the annual reports of the companies and the other relevant data were obtained from, websites, books, and research papers.

The tool used for data analysis was ratio analysis.

RATIO ANALYSIS

The study or examination of the line items seen in any company's financial records is known as a ratio analysis. It can be used for assessing various aspects of a firm, for example, liquidity, solvency, operational effectiveness, and profitability [7].

Since financial statements are the main source of data utilized by external analysts to analyze any company's financial status, ratio analysis is carried out by them [8–10].

Data Interpretation

Liquid Ratios

The ideal current ratio is 2:1. According to Figure 1, both Ambuja Cements Ltd and ACC Ltd could not maintain the ideal current ratio. Ambuja Cements Ltd has the highest current ratio of 1.57 in year 2019 and the lowest current ratio of 1.24 in year 2017. ACC Ltd has the highest current ratio of 1.60 in year 2019 and the lowest current ratio of 1.13 in year 2020. Inadequacy of current assets was the reason why both companies could not maintain ideal current ratio (Tables 1–3).

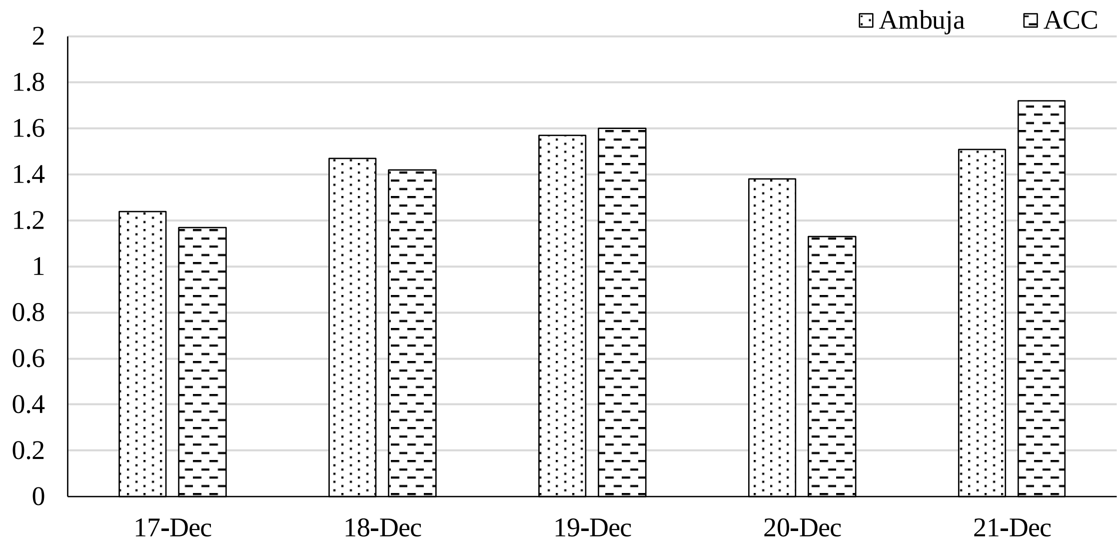

Figure 1. Graphical representation of current ratios of Ambuja Cements Ltd versus ACC Ltd.

Table 1. Current ratio of Ambuja Cements Ltd.

Year	Current ratio = CA/CL	Current ratio
Dec 2021	17022/11228	1.51
Dec 2020	12804/9260	1.38
Dec 2019	14319/9070	1.57
Dec 2018	12407/8394	1.47
Dec 2017	11095/8877	1.24

Amount in ₹ crores.
CA, current Assets; CL, current liabilities.

Table 2. Current ratio of ACC Ltd.

Year	Current ratio = CA/CL	Current ratio
Dec 2021	10369/6006	1.72
Dec 2020	8448/4804	1.13
Dec 2019	7534/4698	1.60
Dec 2018	6684/4706	1.42
Dec 2017	5654/4793	1.17

Amount in ₹ crores.
CA, current Assets; CL, current liabilities.

Table 3. Current ratios of Ambuja Cements Ltd versus ACC Ltd.

Year	Ambuja Cements Ltd	ACC Ltd
Dec 2021	1.51	1.72
Dec 2020	1.38	1.13
Dec 2019	1.57	1.60
Dec 2018	1.47	1.42
Dec 2017	1.24	1.17

Quick ratio = Liquid asset /Current liabilities
(Liquid asset = Current Assets – inventories)

The ideal quick ratio is 1:1. According to Figure 2, Both Ambuja Cements Ltd and ACC Ltd maintained ratio above the ideal current ratio. Ambuja Cements Ltd has the highest quick ratio of 1.34 in year 2019 and the lowest quick ratio of 0.97 in year 2017. ACC Ltd had the highest quick ratio of

1.57 in year 2020 and he lowest quick ratio of 0.88 in year 2017. Both companies have good amount of liquid assets. The higher quick ratio shows the company's liquidity and financial health (Tables 4–6).

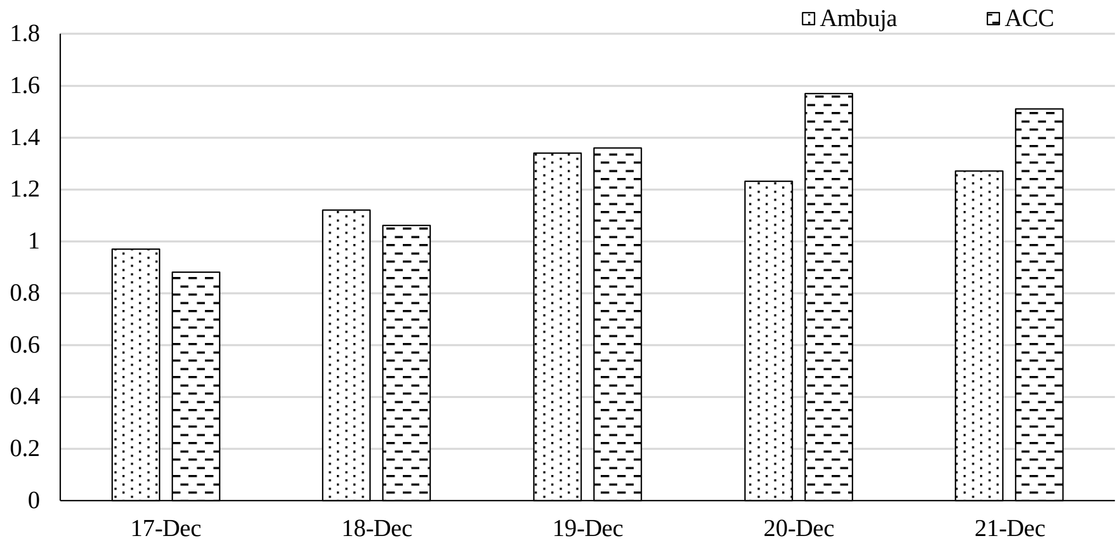

Figure 2. Graphical representation of quick ratios of Ambuja Cements Ltd and ACC Ltd.

Table 4. Quick ratio of Ambuja Cements Ltd.

Year	LA = CA – inventories	Quick ratio = LA/CL	Quick Ratio
Dec 2021	17022-2738 = 14284	14284/11228	1.27
Dec 2020	12804-1648 = 11156	11156/9260	1.23
Dec 2019	14319-2096 = 12223	12223/9070	1.34
Dec 2018	12407-2958 = 9449	9449/8394	1.12
Dec 2017	11095-2458 = 8637	8637/8877	0.97

Amount in ₹ crores.
CA, current assets; CL, current liabilities; LA, liquid assets.

Table 5. Quick ratio of ACC Ltd.

Year	LA = CA – inventories	Quick ratio = LA/CL	Quick Ratio
Dec 2021	10369-1274 =9095	9095/6006	1.51
Dec 2020	8448-901 = 7547	7547/4804	1.57
Dec 2019	7534-1142 =6392	6392/4698	1.36
Dec 2018	6684-1679 =5005	5005/4706	1.06
Dec 2017	5654-1404 =4250	4250/4793	0.88

Amount in ₹ crores.
CA, current assets; CL, current liabilities; LA, liquid assets.

Table 6. Quick ratios of Ambuja Cements Ltd versus ACC Ltd (2017–2021).

Year	Ambuja Cements Ltd	ACC Ltd
Dec 2021	1.27	1.51
Dec 2020	1.23	1.57
Dec 2019	1.34	1.36
Dec 2018	1.12	1.06
Dec 2017	0.97	0.88
Average of 5 years	1.18	1.27

Activity Ratios/ Efficiency Ratios/ Performance Ratios/ Turnover Ratios:

Figure 3 shows that Ambuja Cements Ltd has the highest total asset turnover ratio of 0.69 in year 2017 and the lowest total asset turnover ratio of 0.56 in year 2021. ACC Ltd has the highest total asset turnover ratio of 0.90 in year 2018 and the lowest total asset turnover ratio of 0.74 in year 2020 (Tables 7–9).

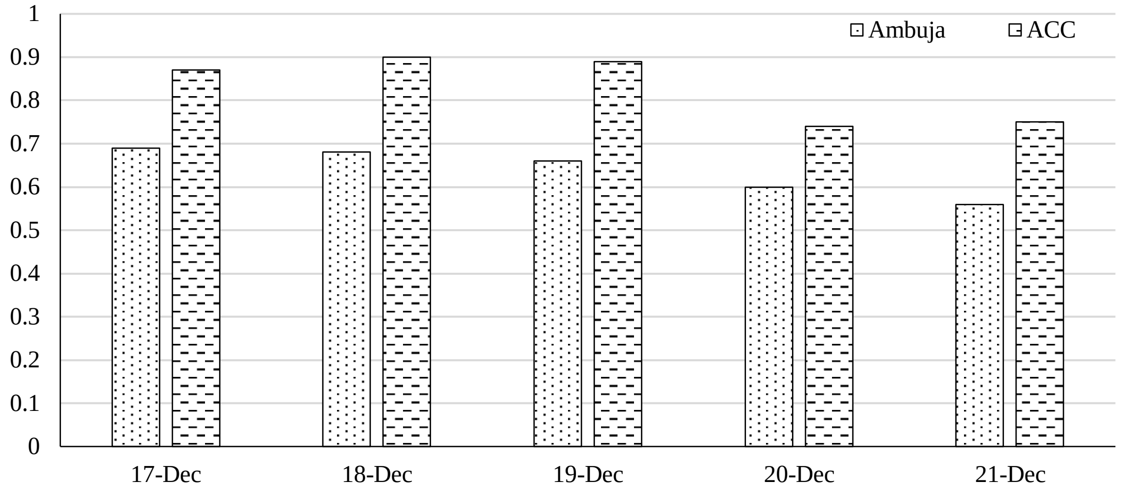

Figure 3. Graphical representation of total asset turnover ratios of Ambuja Cements Ltd and ACC Ltd.

Table 7. Total asset turnover ratio of Ambuja Cements Ltd.

Year	TATR = sales/total assets	TATR
Dec 2021	25548/45207	0.56
Dec 2020	24093/39721	0.60
Dec 2019	26538/40182	0.66
Dec 2018	25419/37341	0.68
Dec 2017	24780/35512	0.69

Amount in ₹ crores.
TATR, total asset turnover ratio.

Table 8. Total asset turnover ratio of ACC Ltd.

Year	TATR = sales/total assets	TATR
Dec 2021	15814/21038	0.75
Dec 2020	13486/18200	0.74
Dec 2019	15343/17135	0.89
Dec 2018	14477/16056	0.90
Dec 2017	12930/14846	0.87

Amount in ₹ crores.
TATR, total asset turnover ratio.

Table 9. Total asset turnover ratios of Ambuja Cements Ltd versus ACC Ltd.

Year	Ambuja Cements Ltd	ACC Ltd
Dec 2021	0.56	0.75
Dec 2020	0.60	0.74
Dec 2019	0.66	0.89
Dec 2018	0.68	0.90
Dec 2017	0.69	0.87
Average of 5 years	0.63	0.83

Ideal working capital turnover ratio is more than 2. Both Ambuja Cements Ltd and ACC Ltd maintained ratio above the ideal working capital turnover ratio in the past 5 years (Figure 4). Ambuja Cements Ltd. had the highest working capital turnover ratio of 11.1 in year 2017 and the lowest working capital turnover ratio of 2.5 in year 2020. ACC Ltd had the highest working capital turnover ratio of 13.7 in year 2017 and the lowest working capital turnover ratio of 3.5 in year 2018 (Tables 10–12).

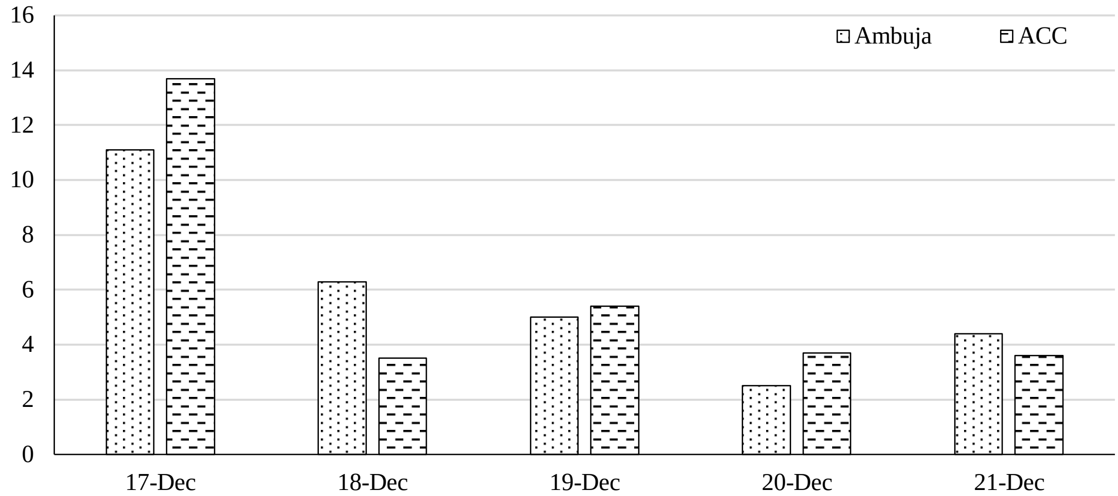

Figure 4. Working capital turnover ratios of Ambuja Cements Ltd and ACC Ltd.

Table 10. Working capital of Ambuja Cements Ltd.

Year	WC = CA – CL	Sales/WC	WCTR
Dec 2021	17022-11227 =5795	25548/5795	4.4
Dec 2020	18084-9260 =9544	24093/9544	2.5
Dec 2019	14319-9070 =5249	26538/5249	5.0
Dec 2018	12406-8394 =4012	25419/4012	6.3
Dec 2017	11094-8877 =2217	24780/2217	11.1

Amount in ₹ crores.
CA, current assets; CL, current liabilities; WC, working capital; WCTR, working capital turnover ratio.

Table 11. Working capital of ACC Ltd.

Year	WC = CA - CL	Sales/WC	WCTR
Dec 2021	10369-6006 = 4363	15814/4363	3.6
Dec 2020	8448-4804 = 3644	13486/3644	3.7
Dec 2019	7534-4698 = 2836	15343/2836	5.4
Dec 2018	6684-4706 = 4042	14477/4042	3.5
Dec 2017	15655-4793 = 942	12930/942	13.7

Amount in ₹ crores.
CA, current assets; CL, current liabilities; WC, working capital; WCTR, working capital turnover ratio.

Table 12. Working capital of Ambuja Cements Ltd versus ACC Ltd.

Year	Ambuja Cements Ltd	ACC Ltd
Dec 2021	4.4	3.6
Dec 2020	2.5	3.7
Dec 2019	5.0	5.4
Dec 2018	6.3	3.5
Dec 2017	11.1	13.7
Average of 5 years	5.86	5.98

Profitability Ratios

Profitability Ratios Based on Sales

Ideal net profit ratio is about 15%. Both Ambuja Cements Ltd and ACC Ltd maintained ratio close to the ideal net profit ratio (Figure 5). Ambuja Cements Ltd had the highest net profit ratio of 12.81% in year 2021 and the lowest net profit ratio of 8.23% in year 2017. ACC Ltd had the highest net profit ratio of 11.53% in year 2021 and the lowest net profit ratio of 6.9% in year 2017 (Tables 13–15).

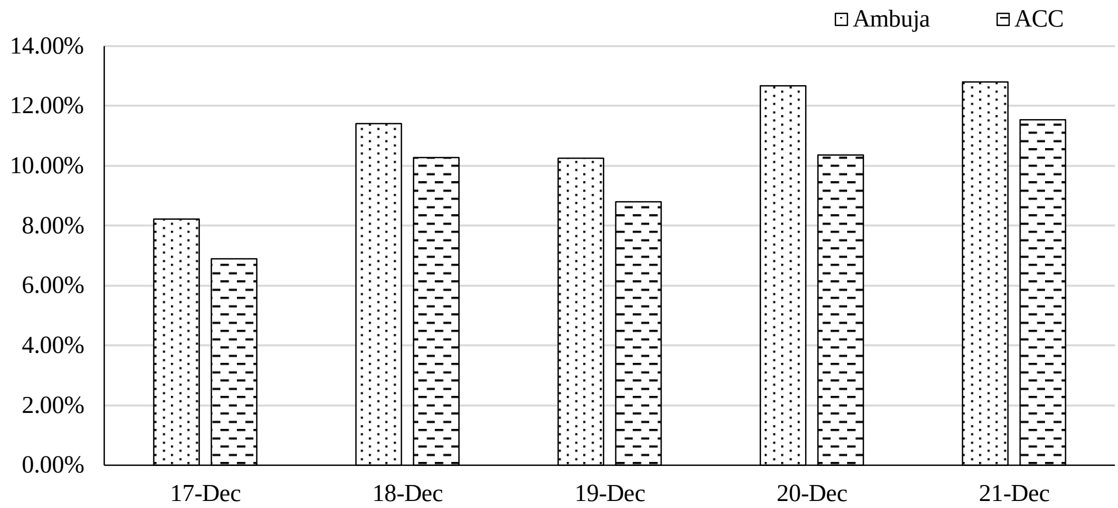

Figure 5. Net profit ratios graph of Ambuja Cements Ltd and ACC Ltd.

Table 13. Net profit ratio of Ambuja Cements Ltd.

Year	(Net profit / sales)*100	Net profit ratio
Dec 2021	(3711/28965)*100	12.81%
Dec 2020	(3107/24516)*100	12.67%
Dec2019	(2783/27104)*100	10.26%
Dec 2018	(2973/26041)*100	11.41%
Dec 2017	(1945/23609)*100	8.23%

Amount in ₹ crores.

Table 14. Net profit ratio of ACC Ltd.

Year	(Net profit / sales) *100	Net profit ratio
Dec 2021	(1863/16152)*100	11.53%
Dec 2020	(1430/13786)*100	10.37%
Dec2019	(1378/15658)*100	8.80%
Dec 2018	(1521/14802)*100	10.27%
Dec 2017	(925/13285)*100	6.9%

Amount in ₹ crores.

Table 15. Net profit ratios of Ambuja Cements Ltd versus ACC Ltd.

Year	Ambuja Cements Ltd	ACC Ltd.
Dec 2021	12.81%	11.53%
Dec 2020	12.67%	10.37%
Dec 2019	10.26%	8.80%
Dec 2018	11.41%	10.27%
Dec 2017	8.23%	6.9%
Average of 5 years	11.07%	9.57%

Operating Profit Ratio = Operating Profit/Sales

The ideal operating profit ratio is 20%. Ambuja Cements Ltd maintained net profit ratio above the ideal net profit ratio in last 2 years, but ACC Ltd could not maintain the ideal net profit ratio in last 5 years (Figure 6). Ambuja Cements Ltd had the highest net Profit ratio of 21.48% in year 2021 and the lowest net profit ratio of 15.40% in year 2018. ACC Ltd had the highest net profit ratio of 18.56% in year 2021 and the lowest net profit ratio of 13.83% in year 2018 (Tables 16–18).

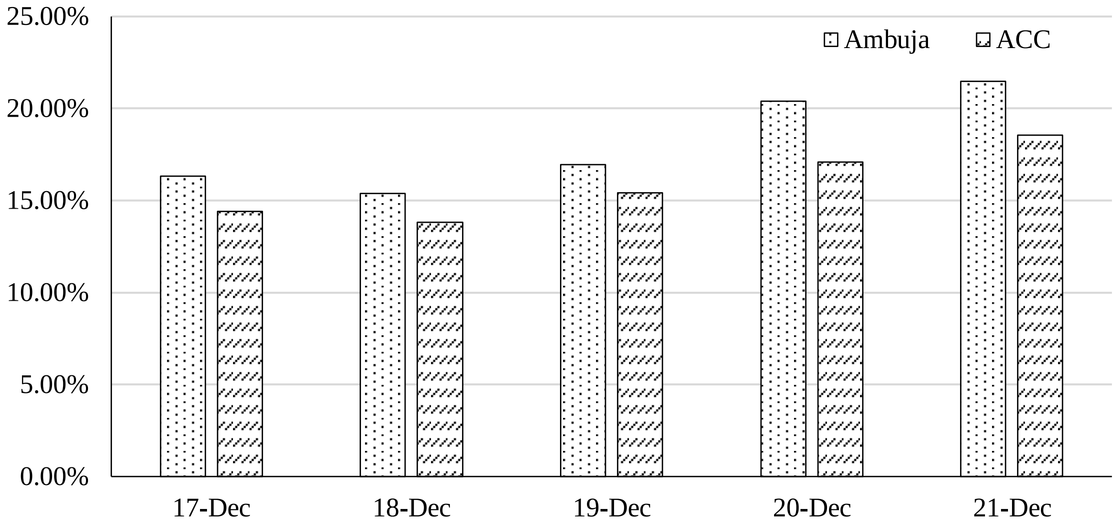

Figure 6. Operating profit ratio graph of Ambuja Cements Ltd and ACC Ltd.

Table 16. Operating profit ratio of Ambuja Cements Ltd.

Year	(Operating profit / sales) *100	Operating profit ratio
Dec 2021	(6210/28905)*100	21.48%
Dec 2020	(5006/24516)*100	20.41%
Dec2019	(4597/27104)*100	16.96%
Dec 2018	(4011/26041)*100	15.40%
Dec 2017	(3858/23609)*100	16.34%

Amount in ₹ crores.

Table17. Operating profit ratio of ACC Ltd.

Year	(Operating profit / sales) *100	Operating profit ratio
Dec 2021	(2998/16152)*100	18.56%
Dec 2020	(2355/13786)*100	17.08%
Dec2019	(2413/15658)*100	15.41%
Dec 2018	(2048/14802)*100	13.83%
Dec 2017	(1915/13285)*100	14.41%

Amount in ₹ crores.

Table 18. Operating profit ratios of Ambuja Cements Ltd versus ACC Ltd.

Year	Ambuja Cements Ltd	ACC Ltd.
Dec 2021	21.48%	18.56%
Dec 2020	20.41%	17.08%
Dec 2019	16.96%	15.41%
Dec 2018	15.40%	13.83%
Dec 2017	16.34%	14.41%
Average of 5 years	18.11%	15.85%

Profitability Ratios Related to Overall Return on Assets/ Investments

The ideal return on assets (ROA) is more than 5%. Both Ambuja Cements Ltd and ACC Ltd maintained ratio above the ideal ROA (Figure 7). Ambuja Cements Ltd had the highest ROA of 8.7 in year 2021 and the lowest ROA of 5.5 in year 2017. ACC Ltd had the highest ROA of 9.7 in year 2018 and the lowest ROA of 6.3 in year 2017 (Tables 19–21).

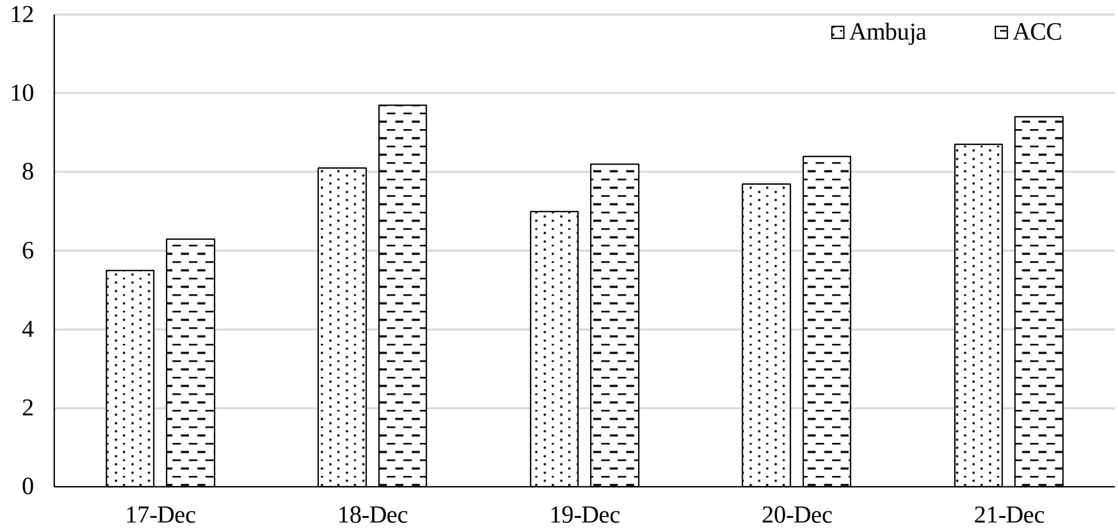

Figure 7. Return on assets graph of Ambuja Cements Ltd and ACC Ltd.

Table 19. Return on assets (ROA) of Ambuja Cements Ltd.

Year	ROA = net profit after tax / avg total asset	ROA
Dec 2021	3690/42209	8.7
Dec 2020	3092/39926	7.7
Dec 2019	2763/38982	7.0
Dec 2018	2960/36326	8.1
Dec 2017	1932/24769	5.5

Amount in ₹ crores.

Table 20. Return on assets (ROA) of ACC Ltd.

Year	ROA = net profit after tax / avg total asset	ROA
Dec 2021	1851/19619	9.4
Dec 2020	1421/17668	8.4
Dec 2019	1363/16596	8.2
Dec 2018	1510/15450	9.7
Dec 2017	913/14266	6.3

Amount in ₹ crores.

Table 21. Return on assets (ROA) of Ambuja Cements Ltd versus ACC Ltd.

Year	Ambuja Cements Ltd	ACC Ltd.
Dec 2021	8.7	9.4
Dec 2020	7.7	8.4
Dec 2019	7.0	8.2
Dec 2018	8.1	9.7
Dec 2017	5.5	6.3
Average of 5 years	7.4	8.4

*Return on Capital Employed = (Earnings before Interest and Tax /Capital employed)*100*

The ideal return on capital employed (ROCE) is 15%. Ambuja Cements Ltd could not maintain the ideal ROCE in last 5 years, but ACC Ltd attained ROCE above the ideal ROCE in year 2021 (Figure 8). Ambuja Cements Ltd had the highest ROCE of 13.05% in year 2020 and the lowest ROCE of 10.03% in year 2018. ACC Ltd had the highest ROCE of 16.59% in year 2021 and the lowest ROCE of 10.29% in year 2018 (Tables 22–24).

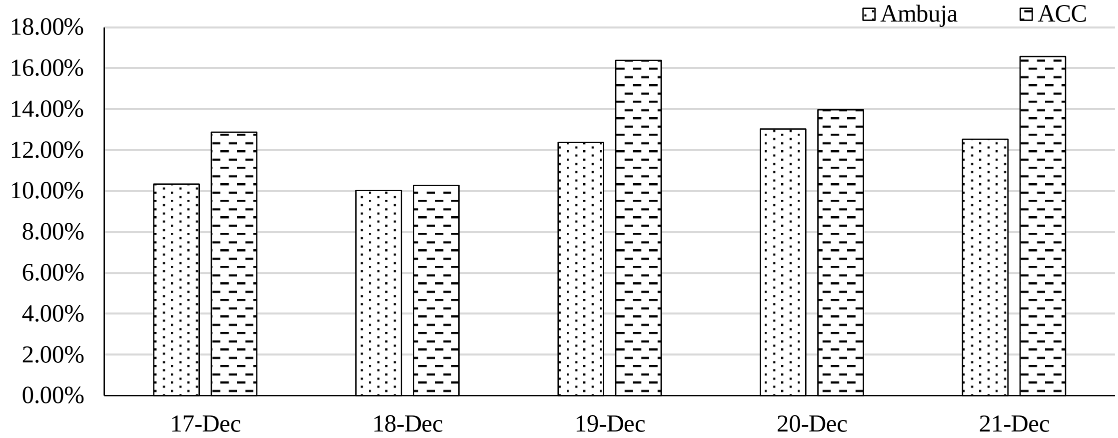

Figure 8. Return on capital employed graph of Ambuja Cements Ltd and ACC Ltd.

Table 22. Return on capital employed (ROCE) of Ambuja Cements Ltd.

Year	EBIT	CE=TA-CL	ROCE=EBIT/CE	ROCE
Dec 2021	5144	45207-4227=40980	(5144/40980)*100	12.55%
Dec 2020	3977	39720-9260=30460	(3977/30460)*100	13.05%
Dec 2019	3855	40182-9070=31112	(3855/31112)*100	12.39%
Dec 2018	2906	37341-8394=28947	(2906/28947)*100	10.03%
Dec 2017	2754	35513-8877=26636	(2754/26636)*100	10.33%

Amount in ₹ crores.
CE, capital employed; CL, current liabilities; EBIT, earnings before interest and tax; ROCE, return on capital employed; TA, total assets.

Table 23. Return on capital employed (ROCE) of ACC Ltd.

Year	EBIT	CE=TA-CL	ROCE=EBIT/CE	ROCE
Dec 2021	2494	21038-6006=15032	(2494/15032)*100	16.59%
Dec 2020	1875	18200-4804=13396	(1875/13396)*100	13.99%
Dec 2019	2038	17136-4698=12438	(2038/12438)*100	16.38%
Dec 2018	1499	16056-4706=14557	(1499/14557)*100	10.29%
Dec 2017	1298	14856-4792=10064	(1298/10064)*100	12.89%

Amount in ₹ crores.
CE, capital employed; CL, current liabilities; EBIT, earnings before interest and tax; ROCE, return on capital employed; TA, total assets.

Table 24. Return on capital employed of Ambuja Cements Ltd versus ACC Ltd.

Year	Ambuja Cements Ltd	ACC Ltd.
Dec 2021	12.55%	16.59%
Dec 2020	13.05%	13.99%
Dec 2019	12.39%	16.38%
Dec 2018	10.03%	10.29%
Dec 2017	10.33%	12.89%
Average of 5 years	12.55%	16.59%

*Return on Equity = (Net Profit /Shareholders fund) *100*

The ideal return on equity (ROE) is above 15%. Both Ambuja Cements Ltd and ACC Ltd could not maintain the ideal ROE (Figure 9). Ambuja Cements Ltd had the highest ROE of 14% in year 2021 and the lowest ROE of 9% in year 2017. ACC Ltd had the highest ROE of 12% in year 2021 and the lowest ROE of 9% in year 2017 (Tables 25–27).

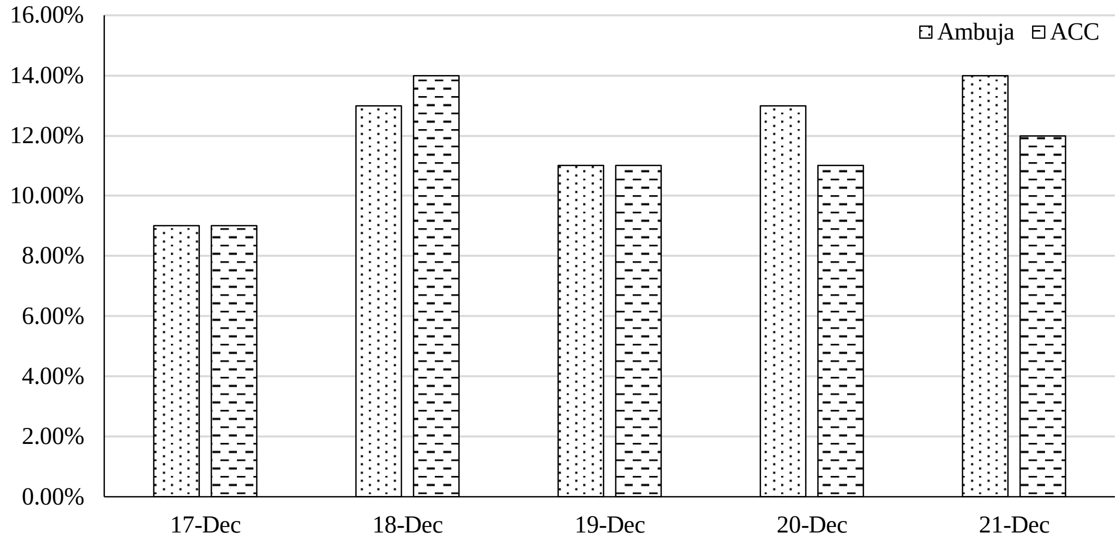

Figure 9. Return on equity graph for Ambuja Cements Ltd and ACC Ltd.

Table 25. Return on equity (ROE) of Ambuja Cements Ltd.

Year	ROE=(net profit /shareholders fund) *100	ROE
Dec 2021	(3691/25353)*100	14%
Dec 2020	(3092/22757)*100	13%
Dec 2019	(2763/24077)*100	11%
Dec 2018	(2960/22370)*100	13%
Dec 2017	(1932/20672)*100	9%

Amount in ₹ crores.

Table 26. Return on equity (RO) of ACC Ltd.

Year	ROE=(net profit /shareholders fund) *100	ROE
Dec 2021	(1851/14309)*100	12%
Dec 2020	(1421/12699)*100	11%
Dec 2019	(1363/11544)*100	11%
Dec 2018	(1510/10532)*100	14%
Dec 2017	(914/9356)*100	9%

Amount in ₹ crores.

Table 27. Return on equity (ROE) of Ambuja Cements Ltd versus ACC Ltd.

Year	Ambuja Cements Ltd	ACC Ltd.
Dec 2021	14%	12%
Dec 2020	13%	11%
Dec 2019	11%	11%
Dec 2018	13%	14%
Dec 2017	9%	9%
Average of 5 years	*12%*	*11%*

*Profit After Tax Margin = (PAT/Total revenue)*100*

The ideal profit after tax (PAT) margin is 7% (Table 10). Both Ambuja Cements Ltd and ACC Ltd maintained ratio above the ideal PAT margin. Ambuja Cements Ltd had the highest PAT margin of 14% in year 2021 and the lowest PAT margin of 9% in year 2017. ACC Ltd had the highest PAT margin of 11% in year 2021 and the lowest PAT margin of 6% in year 2017 (Tables 28–30).

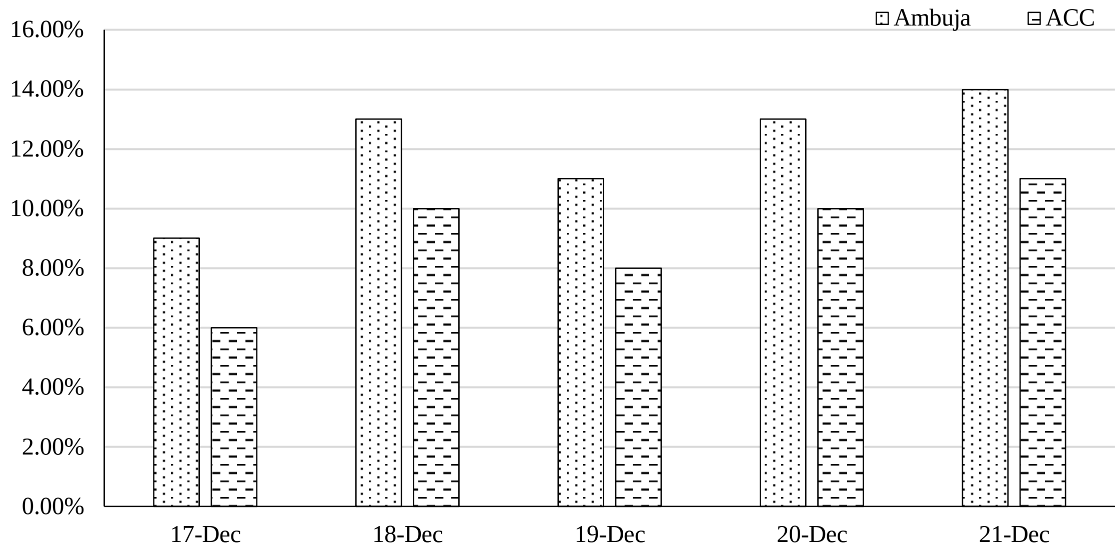

Figure 10. Profit after tax (PAT) margin graph of Ambuja Cements Ltd and ACC Ltd.

Table 28. Profit after tax (PAT) margin of Ambuja Cements Ltd.

Year	PAT margin =(PAT/Total revenue)*100	PAT Margin
Dec 2021	(3691/29317)*100	14%
Dec 2020	(3092/24966)*100	13%
Dec 2019	(2763/27685)*100	11%
Dec 2018	(2960/26412)*100	13%
Dec 2017	(1932/23931)*100	9%

Amount in ₹ crores.

Table 29. Profit after tax (PAT) margin of ACC Ltd.

Year	PAT margin = (PAT/Total revenue)*100	PAT Margin
Dec 2021	(1851/16358)*100	11%
Dec 2020	(1421/14002)*100	10%
Dec 2019	(1363/15976)*100	8%
Dec 2018	(1510/14944)*100	10%
Dec 2017	(914/13414)*100	6%

Amount in ₹ crores.

Table 30. Profit after tax margin of Ambuja Cements Ltd versus ACC Ltd.

Year	Ambuja Cements Ltd	ACC Ltd.
Dec 2021	14%	11%
Dec 2020	13%	10%
Dec 2019	11%	8%
Dec 2018	13%	10%
Dec 2017	9%	6%
Average of 5 years	12%	9%

Interest coverage ratio = Earnings before interest and tax /Interest payment

Ideal interest coverage ratio is more than 3. Both Ambuja Cements Ltd and ACC Ltd maintained interest coverage ratio above the ideal (Figure 11). Ambuja Cements Ltd had the highest interest coverage ratio of 43.6 in year 2021 and the lowest interest coverage ratio of 13.9 in year 2017. ACC Ltd had the highest interest coverage ratio of 34.4 in year 2021 and the lowest interest coverage ratio of 12.8 in year 2017 (Tables 31–33).

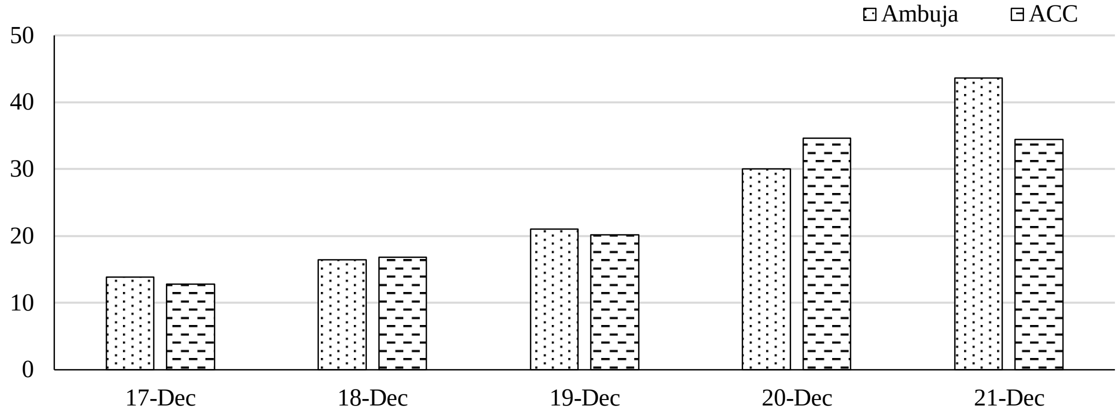

Figure 11. Interest coverage ratio graph of Ambuja Cements Ltd and ACC Ltd.

Table 31. Interest coverage ratio of Ambuja Cements Ltd.

Year	EBIT = EBITDA – depreciation and amortization	ICR = EBIT/ Interest payment	ICR
Dec 2021	6211-1152 = 5059	5059/147	34.4
Dec 2020	5007-1162 =4845	4845/140	34.6
Dec 2019	4597-1153 =3435	3435/170	20.2
Dec 2018	4010-1154 =2856	2856/170	16.8
Dec 2017	3857-1219 =2638	2638/206	12.8

Amount in ₹ crores.
EBIT, earnings before interest and tax; EBITDA, earnings before interest, tax, depreciation, and amortization; ICR = interest coverage ratio.

Table 32. Interest coverage ratio of ACC Ltd.

Year	EBIT = EBITDA – depreciation and amortization	ICR = EBIT/ Interest payment	ICR
Dec 2021	2998-600 = 2398	2398/55	43.6
Dec 2020	2354-639 = 1715	1715/57	30.0
Dec 2019	2420-606 = 1814	1814/86	21.0
Dec 2018	2048-603 = 1445	1445/88	16.4
Dec 2017	1911-643 = 1268	1268/98	13.9

Amount in ₹ crores.
EBIT, earnings before interest and tax; EBITDA, earnings before interest, tax, depreciation, and amortization; ICR = interest coverage ratio.

Table 33. Interest coverage ratio of Ambuja Cements Ltd versus ACC Ltd.

Year	Ambuja Cements Ltd	ACC Ltd.
Dec 2021	43.6	34.4
Dec 2020	30.0	34.6
Dec 2019	21.0	20.2
Dec 2018	16.4	16.8
Dec 2017	13.9	12.8
Average of 5 years	24.9	23.7

Tables 34 and 35 show that both Ambuja Cements Ltd and ACC Ltd have the debt to equity ratio zero, which indicates that both firms do not have finance through borrowing at all.

Earnings before interest, tax, depreciation, and amortization margin = (Earnings before interest, tax, depreciation, and amortization / total revenue – other expenses)*100

Table 34. Debt to equity ratio of Ambuja Cements Ltd.

Year	Total debt / total shareholders fund	Debt to equity ratio
Dec 2021	0/25353	0
Dec 2020	0/22757	0
Dec 2019	0/24077	0
Dec 2018	0/22370	0
Dec 2017	0/20672	0

Amount in ₹ crores.

Table 35. Debt to equity ratio of ACC Ltd.

Year	Total debt / total shareholder funds	Debt to equity ratio
Dec 2021	0/14308	0
Dec 2020	0/12699	0
Dec 2019	0/11543	0
Dec 2018	0/10532	0
Dec 2017	0/9356	0

Amount in ₹ crores.

Ambuja Cements Ltd. versus ACC Ltd.

The ideal EBITDA margin is 20%. Ambuja Cements Ltd maintained EBITDA margin above the ideal (Figure 12). Ambuja Cements Ltd. had the highest EBITDA margin of 36.11% in year 2021 and the lowest EBITDA margin of 27.29% in year 2018. ACC Ltd had the highest EBITDA margin of 19.75% in year 2020 and the lowest EBITDA margin of 16.33% in year 2021 (Tables 36–38).

Table 36. EBITDA margin of Ambuja Cements Ltd.

Year	EBITDA=operating revenue-operating expense	Total revenue- other expenses	(EBITDA/Total revenue-other exp)*100	EBITDA margin
Dec 2021	28965-22754 = 6211	29318-11521 = 17197	6211/17197	36.11%
Dec 2020	24517-19510 = 5007	24966-10040 = 14926	5007/14926	33.54%
Dec 2019	27104-22507 = 4597	27685-11538 = 16147	4597/16147	28.46%
Dec 2018	26041-22031 = 4010	26412-11723 = 14689	4010/14689	27.29%
Dec 2017	23608-19751 = 3857	23931-10519 = 13412	3857/13412	28.75%

Amount in ₹ crores.
EBITDA, earnings before interest, tax, depreciation, and amortization.

Table 37. EBITDA margin of ACC Ltd.

Year	EBITDA=operating revenue-operating expense	Total revenue- other expenses	(EBITDA/Total revenue-other exp)*100	EBITDA margin
Dec 2021	16152-13154 = 2298	16358-2287 = 14071	2298/14071	16.33%
Dec 2020	13786-11432 = 2354	14002-2087 = 11915	2354/11915	19.75%
Dec 2019	15666-13246 = 2420	15975-2495 = 13480	2420/13480	17.94%
Dec 2018	14801-12753 = 2048	14944-2546 = 12398	2048/12398	16.51%
Dec 2017	13285-11374 = 1911	13415-2440 = 10975	1911/10975	17.41%

Amt in ₹ crores.
EBITDA, earnings before interest, tax, depreciation, and amortization.

Table 38. EBITDA margin of Ambuja Cements Ltd vrsus ACC Ltd.

Year	Ambuja Cements Ltd	ACC Ltd.
Dec 2021	36.11%	16.33%
Dec 2020	33.54%	19.75%
Dec 2019	28.46%	17.94%
Dec 2018	27.29%	16.51%
Dec 2017	28.75%	17.41%
Average of 5 years	30.83%	17.58%

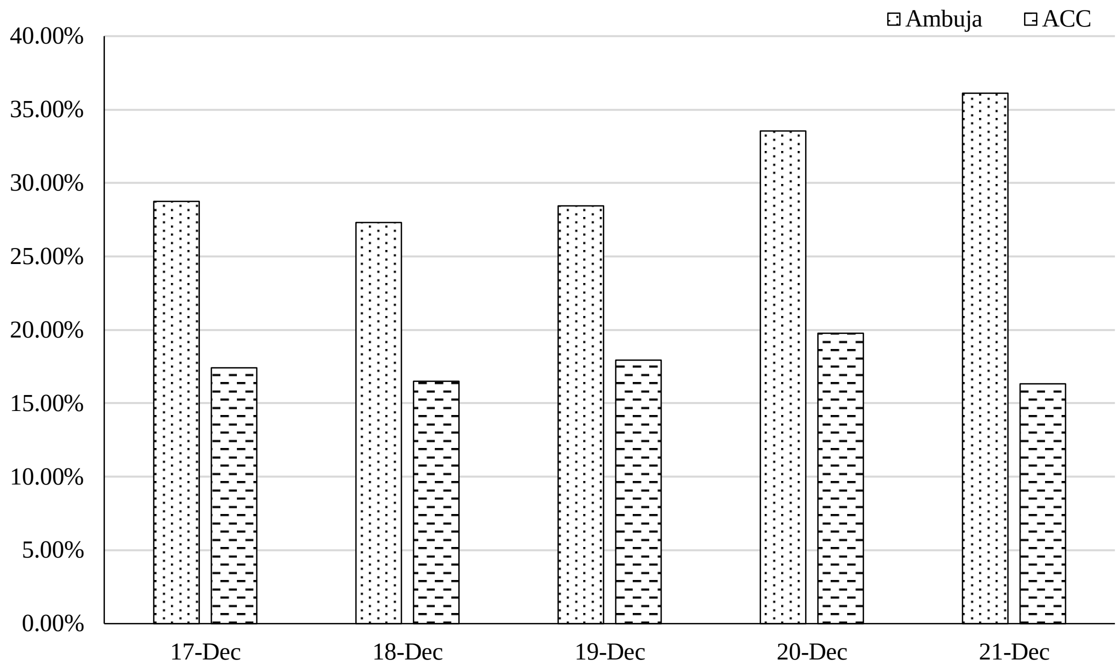

Figure 12. Earnings before interest, tax, depreciation and amortization (EBITDA) graphs of Ambuja Cements Ltd and ACC Ltd.

Findings

1. The current ratio of selected companies for the last 5 years (2017–2021) was below the ideal ratio, which indicates that both the companies are not fully capable of meeting their short-term debts.
2. The quick ratio of both the companies (Ambuja Cements Ltd and ACC Ltd) for the last 5 years (2017–2021) was above the ideal ratio, which indicates both the companies have enough liquid assets to pay off their current liabilities.
3. The total assets turnover ratio of the selected companies for the last 5 years (2017–2021) was below the ideal ratio, which indicates that both the companies are not using its total assets to generate sales.
4. The working capital turnover ratio of selected companies for the last 5 years (2017–2021) was stable, which indicates that both the companies are running smoothly and have limited needs for additional funding.
5. The operating profit ratio of selected companies (Ambuja Cements Ltd and ACC Ltd) can be seen increasing for the last 5 years (2017–2021), which indicates that both the companies are efficient at their operations and good at turning sales into profits.
6. The return on asset ratio of both the companies (Ambuja Cements Ltd and ACC Ltd) for the last 5 years (2017–2021) was above 5%, which indicates that both the companies are efficient and productive at managing their balance sheet to generate profits.

7. The return on capital employed of both the companies (Ambuja Cements Ltd and ACC Ltd) for the last 5 years (2017–2021) was below the ideal ratio, which indicates both the companies are not using their capital efficiently and are not generating high returns on the investment.
8. The return on equity of both the companies (Ambuja Cements Ltd and ACC Ltd) for the last 5 years (2017–2021) was below the ideal ratio, which indicates both the companies are not using the capital efficiently invested by the shareholders.
9. The profit after tax of both the companies (Ambuja Cements Ltd and ACC Ltd) for the last 5 years (2017–2021) was above the ideal ratio, which indicates both the companies are running efficiently and are providing more value in the form of profit to shareholders.
10. The interest coverage ratio of both the companies (Ambuja Cements Ltd and ACC Ltd) for the last 5 years (2017–2021) was above the ideal ratio, which indicates both the companies are well placed to pay their debt.
11. The debt to equity ratio of both the companies (Ambuja Cements Ltd and ACC Ltd) for the last 5 years (2017–2021) was 0, which indicates that both the companies did not rely on borrowing for financial operations.
12. The EBITDA of Ambuja Cements Ltd for the last 5 years (2017–2021) was above the ideal ratio, which indicates operating expenses are lower in relation to total revenue. The EBITDA of ACC Ltd. for the last 5 years (2017–2021) was below the ideal ratio, which indicates the company had issue with the cash flow.

CONCLUSION

The study was conducted with the main objective of analyzing and comparing the overall financial performance of Ambuja Cements Ltd and ACC Ltd. The purpose of the study was to evaluate and contrast the profitability and liquidity of the financial performance. The study was carried out with the help of published annual reports of both companies Ambuja Cements Ltd and ACC Ltd for years 2017–2021. The various ratios used in the study are current ratio, quick ratio, total assets turnover ratio, working capital turnover ratio, net profit ratio, operating profit ratio, return on asset, return on capital employed ,return on equity, profit after tax , internet coverage ratio, debt to equity ratio and EBITDA. The study highlights that Ambuja Cements Ltd's financial performance is superior in terms of current ratio, net profit ratio, operating profit ratio, return on equity, profit after tax, interest coverage Ratio, and EBITDA. Both companies have debt to equity ratio 0 as they have not borrowed funds for financial operations. From the investor’s point of view, Ambuja Cements Ltd is a better option as it offers better return for their stock (as its return on equity is better as compared to ACC Ltd).

Suggestions

1. Ambuja Cements Ltd and ACC Ltd both have current ratios that fall short of the desired level. To improve the ratio both companies need to maintain their current assets to pay off short-term debt easily in future if any.
2. Both Ambuja Cements Ltd and ACC Ltd have a total assets turnover ratio that is less than 1, the ideal ratio. To improve the ratio both companies need to effectively use investment in fixed assets to increase sales.
3. Both Ambuja Cements Ltd and ACC Ltd's net profit ratios fall short of the desired ratio. To improve the ratio, both companies should try to reduce cost, increase turnover, increase productivity, and improve efficiency.
4. Both Ambuja Cements Ltd and ACC Ltd's operating profit ratios fall short of the desired ratio. To improve the ratio, both companies should try to boost their revenue by lowering expenses.
5. The optimum ratio of return on capital employed is not met by Ambuja Cements Ltd or ACC Ltd. To improve the ratio, both companies need to monitor areas that may be raking up excusive or inefficient cost in an important part of operational efficiency. Also paying off debts, thereby reducing liabilities, can also improve the return on capital employed.
6. Both Ambuja Cements Ltd and ACC Ltd have a negative return on equity. To improve the ratio, both companies need to reduce the value of shareholder equity.

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