International Research Journal of Education and Technology
Peer Reviewed Journal
ISSN 2581-7795

An Analysis of Financial performance of Cement Industry in India

Dr Meghna Chotaliya
Assistant Professor and Head of Department of Accountancy,
R.D.NationalCollege,Bandrawest,Mumbai 400050
Prof. Lakshmi Iyer
Associate Professor and Head of Department of Commerce,
R.D.National College, Bandra West, Mumbai 400050

Abstract

Indian Economic development is triggered by economic growth which is in turn triggered by industrial development. Certain industries such as Textiles, Chemicals, Food Processing, Steel, Transportation Equipment, Cement, Mining, Petroleum, Machinery, Software etc contribute to a significant share of GDP(Gross Domestic Product) growth of Indian economy. Cement Industry plays a very significant role in Indian economy. It facilitates the basic infrastructure facility for the development of the country. Indian Cement industry is the second largest industry throughout the Globe only after China. With this huge success, the cement industry in India has contributed almost 8 per cent to India's economic development. The present study is an attempt to evaluate the financial performance of Cement Industry of India through financial ratios and other financial techniques have also been applied in order to check the overall financial position of the selected companies. The main purpose of this research is to analyse, compare and evaluate the Indian cement companies. The companies taken into consideration are Ambuja Cement, J.K. Cement Ltd and UltraTech Cement Limited.

Introduction

The Indian cement industry is the second largest cement industry of the world. The largest cement industry is China but in spite of being the second largest cement industry India contributes only 8% of the world cement industry. Because China alone contributes 51% to world cement industry. The Indian Cement Industry has a total cement production capacity of about 455 million tonnes (MT) as of November 2018. But out of this currently they are utilising only 63% of this capacity. So while analysing our company we have also considered this point that what is capacity utilisation because better the capacity utilisation better the company. The housing and real estate sector is the biggest demand driver of cement, accounting for about 65% of the total consumption in India. The other major consumers of cement include public

infrastructure at 20% and industrial development at 15%. Industry growth is roughly 5-6% every year. Ambuja cement is the third largest cement company in India with a market cap of roughly 11000 Crores. UltraTech is the largest cement company with a market cap of 35000 crores roughly and JK is the fifth largest company with a market cap of 5000 crores roughly. So we have taken Ambuja as our base company and compared it with JK Cement and UltraTech Cement using common size and ratio analysis

Contribution to GDP: Sector-wise

At present, the following situation is there in the sector's contribution.

Sector	**Contribution**
Agriculture	20.19%
Service	53.89%
Industry	25.92%

Objective of the study

To examine the financial performance of selected cement companies, i.e.Ambuja Cement, J.K. Cement Ltd and UltraTech Cement Limited has been undertaken with the following objectives in view.

1. To assess the profitability position of the company.
2. To identify the liquidity position of the company.
3. To understand the turn over position of the company.
4. To identify the trend position of the company.

Research and methodology

Data was collected from secondary sources primarily from annual reports of the companies selected for the study. Further the tools used for financial analysis are the financial ratios of these companies for the year 2017-2018 and 2018-2019. After collecting the information, we analysed the same to calculate various ratios. The secondary data collected from various sources were subject to detailed analysis.

Analysis and Interpretation

The analysis and interpretation of financial statements are an attempt to determine the significance and meaning of the financial statements data so that a forecast may be made of the

prospects for future earnings, ability to pay interest debt maturities (both current and long term) and probability of a sound dividend policy.

Ratio Analysis

It refers to the systematic use of ratio to interpret the financial statements in terms of the operating performance and financial position of a firm. It involves comparison for a meaningful interpretation of the financial statements. In view of the needs of various uses of ratios the ratios, which can be calculated from the accounting data are classified into the following broad categories:-

A. Liquidity Ratio
B. Solvency or Leverage ratios
C. Profitability ratios

Liquidity Ratio

It measures the ability of the firm to meet its short-term obligations that is the capacity of the firm to pay its current liabilities as and when they fall due. Thus these ratios reflect the shortterm financial solvency of a firm. A firm should ensure that it does not suffer from lack of liquidity. The failure to meet obligations on due time may result in bad credit image, loss of creditor confidence, and even in legal proceedings against the firm on the other hand very high degree of liquidity is also not desirable since it would imply that funds are idle and earn nothing. So therefore it is necessary to strike a proper balance between liquidity and lack of liquidity.

The various ratios that explains about the liquidity of the firm are

1. Current Ratio
2. Acid Test Ratio / quick ratio

1.Current Ratio :

The current ratio measures the short-term solvency of the firm. It establishes the relationship between current assets and current liabilities. It is calculated by dividing current assets by current liabilities.

International Research Journal of Education and Technology
Peer Reviewed Journal
ISSN 2581-7795

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

Current assets include cash and bank balances, marketable securities, inventory, and debtors, excluding provisions for bad debts and doubtful debts, bills receivables and prepaid expenses. Current liabilities includes sundry creditors, bills payable, short- term loans, income-tax liability, accrued expenses and dividends payable.

2.Acid test ratio/Quick ratio:

It has been an important indicator of the firm's liquidity position and is used as a complementary ratio to the current ratio. It establishes the relationship between quick assets and current liabilities. It is calculated by dividing quick assets by the current liabilities.

$$\text{Acid Test Ratio} = \frac{\text{Quick Assets}}{\text{Current liabilities}}$$

Quick assets are those current assets, which can be converted into cash immediately or within reasonable short time without a loss of value. These include cash and bank balances, sundry debtors, bill's receivables and short-term marketable securities.

Table No.1: Table showing current ratio and quick ratio of selected Cement companies in India

	Ambuja Cement	UltraTech Cement	JK Cement
Current Ratio	1.55	0.97	1.34
Quick Ratio	1.20	0.69	0.93

Interpretation :

The current ratio can give a sense of the efficiency of a company's operating cycle or its ability to turn its product into cash. Companies that have trouble getting paid on their receivables or have long inventory turnover can run into liquidity problems because they are unable to alleviate their

obligations. Because business operations differ in each industry, it is always more useful to compare companies within the same industry. Acceptable current ratios vary from industry to industry and are generally between 1 and 3 for healthy businesses. Ambuja has a high current and quick ratio compared to other companies and it shows that it will be better able to meet its obligations than its counterparts. The higher the current ratio, the more capable the company is of paying its obligations. A ratio under 1 suggests that the company would be unable to pay off its obligations if they came due at that point. While this shows the company is not in good financial health, it does not necessarily mean that it will go bankrupt - as there are many ways to access financing - but it is definitely not a good sign. If all other things were equal, a creditor, who is expecting to be paid in the next 12 months, would consider a high current ratio to be better than a low current ratio, because a high current ratio means that the company is more likely to meet its liabilities which fall due in the next 12 months. The quick ratio indicates a company's capacity to pay its current liabilities without needing to sell its inventory or get additional financing. The quick ratio is considered a more conservative measure than the current ratio, which includes all current assets as coverage for current liabilities. Ambuja cement has higher quick ratio and we know that the higher the ratio, the better a company's liquidity and financial health; the lower the ratio, the more likely the company will struggle with paying debts.

Solvency or Leverage ratios

The solvency or leverage ratios throws light on the long term solvency of a firm reflecting its ability to assure the long term creditors with regard to periodic payment of interest during the period and loan repayment of principal on maturity or in predetermined instalments at due dates. There are thus two aspects of the long-term solvency of a firm.

a. Ability to repay the principal amount when due
b. Regular payment of the interest.

The ratio is based on the relationship between borrowed funds and owner’s capital it is computed from the balance sheet, the second type are calculated from the profit and loss a/c.

1. Debt Equity Ratio

Debt equity ratio shows the relative claims of creditors (Outsiders) and owners (Interest) against the assets of the firm. Thus this ratio indicates the relative proportions of debt and equity in financing the firm’s assets. It can be calculated by dividing outsider funds (Debt) by shareholder funds (Equity)

Debt equity ratio = Outsider Funds (Total Debts)

Shareholder Funds or Equity

The outsider fund includes long-term debts as well as current liabilities. The shareholder funds include equity share capital, preference share capital, reserves and surplus including accumulated profits. However fictitious assets like accumulated deferred expenses etc. should be deducted from the total of these items to shareholders funds. The shareholder funds so calculated are known as net worth of the business.

2. Debt Service (Interest Coverage) Ratio

This shows the number of times the earnings of the firms are able to cover the fixed interest liability of the firm. This ratio therefore is also known as Interest coverage or time interest earned ratio. It is calculated by dividing the earnings before interest and tax (EBIT) by interest charges on loans.

$$\text{Debt Service Ratio} = \frac{\text{Earnings before interest and tax (EBIT)}}{\text{Interest Charges}}$$

Table No.2: Table showing Debt Equity ratio and Debt service coverage ratio of selected cement Industries in India

	Ambuja Cement	UltraTech Cement	JK Cement
D/E Ratio	almost nil	0.53	0.68
DSCR	25.72	0.75	1.90

Interpretation

A high debt/equity ratio generally indicates that a company has been aggressive in financing its growth with debt. This can result in volatile earnings as a result of the additional interest expense. If the company's interest expense grows too high, it may increase the company's chances of a default or bankruptcy. Typically, a D/E ratio greater than 2.0 indicates a risky scenario for an investor; however, this yardstick can vary by industry. Businesses that require large capital expenditures (CapEx), such as utility and manufacturing companies, may need to secure more loans than other companies. It's a good idea to measure a firm's leverage ratios against past performance and with companies operating in the same industry to better understand

the data. Ambuja has a low amount of debt whatever little debt it has is an interest free loan from state government secured by Bank Guarantee and partially secured by pledge of FDs. The loan is repayable only after February 2020.The D/E of the company is quite low due to not availing loans. But Ambuja ends up paying huge percent of tax whereas its peer UltraTech pays very less. Ambuja ends up with paying more tax due to not using debt as lever. An optimum mix of debt and equity would help Ambuja increase its earnings per share (EPS) and also help reduce tax.

Another leverage ratio concerned with interest payments is the interest coverage ratio. One problem with only reviewing the total debt liabilities for a company is they do not tell you anything about the company's ability to service the debt. This is exactly what the interest coverage ratio aims to fix. This ratio, which equals operating income divided by interest expenses, showcases the company's ability to make interest payments. You generally want to see a ratio of 3.0 or higher, although this varies from industry to industry. As Ambuja pays very less interest, its DSCR is relatively very high.

Profitability ratios

The profitability ratio of the firm can be measured by calculating various profitability ratios. General two groups of profitability ratios are calculated.

a. Profitability in relation to sales.
b. Profitability in relation to investments.

Profitability in relation to sales

1. Gross Profit Margin or Ratio: It measures the relationship between gross profit and sales. It is calculated by dividing gross profit by sales.

$$\text{Gross profit margin or ratio} = \frac{\text{Gross profit X 100}}{\text{Net sales}}$$

Gross profit is the difference between sales and cost of goods sold.

2. Net Profit Margin or Ratio:

It measures the relationship between net profit and sales of a firm. It indicates management's efficiency in manufacturing, administering, and selling the products. It is calculated by dividing net profit after tax by sales.

Net profit margin or ratio = Earnings after tax X 100
Net Sales

3. Operating Profit Margin or Ratio

Operating profit margin or ratio establishes the relationship between operating profit and net sales. It is calculated by dividing operating profit by sales.

Operating profit margin or ratio = Operating Profit X 100
Net sales

Operating profit is the difference between net sales and total operating expenses. (Operating profit = Net sales – cost of goods sold – administrative expenses – selling and distribution expenses.)

Table No.3 : Table showing Gross Profit margin and Net profit margin of selected cement companies in India

	Ambuja Cement	UltraTech Cement	JK Cement
Gross Profit Margin	0.54	0.48	0.50
Net Profit Margin	0.13	0.07	0.06
Operating Profit Margin	0.12	0.13	0.12

Interpretation

Investors and analysts typically use both gross profit margin and net profit margin to gauge how efficient a company's management is in earning profits relative to the costs involved in producing their goods and services. It's best to compare the margins to companies within the same industry and over multiple periods to get a sense of any trends. However, profit margins can vary by industry. Growth companies might have a higher profit margin than retail companies, but retailers make up for their lower profit margins with higher sales volumes.It's important to note that it's possible for a company to have a negative net profit margin. A negative net profit margin occurs when a company has a loss for the quarter or year. That loss, though, may just be a

temporary issue for the company. Reasons for losses could be increases in the cost of labor and raw materials, recessionary periods, and the introduction of disruptive technological tools that could affect the company's bottom line. Operating profit shows a company's ability to manage its indirect costs. Therefore, this section of the income statement shows how a company is investing in areas it expects will help to improve its brand and business growth through several channels. A company may have a high gross profit margin but a relatively low operating profit margin if its indirect expenses for things like marketing, or capital investment allocations are high.

Profitability in relation to investments

1. **Dividends pay-out ratio (PAYOUT RATIO)**

It measures the relationship between the earnings belonging to the equity shareholders and the dividends paid to them. It shows what percentage shares of the earnings are available for the ordinary shareholders are paid out as dividends to ordinary shareholders. It can be calculated by dividing the total dividend paid to the equity shareholders by the total earnings available to them or alternatively by dividing dividends per share by earnings per share.

$$\text{Dividend pay-out ratio (Pay-out ratio)} = \frac{\text{Total dividend paid to equity shareholders}}{\text{Total earnings available to equity shareholders}}$$

$$\text{Or } \frac{\text{Dividend per share}}{\text{Earnings per share}}$$

Retention ratio

It is the proportion of earnings kept back in the business as retained earnings. The retention ratio refers to the percentage of net income that is retained to grow the business, rather than being paid out as dividends. It is the opposite of the pay-out ratio, which measures the percentage of profit paid out to shareholders as dividends. The retention ratio is also called the plowback ratio.

Retention Ratio=Net Income/Retained Earnings

Return on Equity

Return on equity (ROE) is a measure of financial performance calculated by dividing net income by shareholder's equity. Because shareholders' equity is equal to a company's assets minus its debt, ROE could be thought of as the return on net assets .ROE is considered a measure of how effectively management is using a company's assets to create profits.

Return on Equity=Average Shareholders Equity/Net Income

2. Earnings per share

It measures the profit available to the equity shareholders on a per share basis. It is computed by dividing earnings available to the equity shareholders by the total number of equity shares outstanding.

$$\text{Earnings per share} = \frac{\text{Earnings after tax – Preferred dividends (if any)}}{\text{Equity shares outstanding}}$$

3. Diluted EPS

Diluted EPS is a calculation used to gauge the quality of a company's earnings per share (EPS) if all convertible securities were exercised. Convertible securities are all outstanding convertible preferred shares, convertible debentures, stock options, and warrants. Unless a company has no additional potential shares outstanding (rare), the diluted EPS will always be lower than the simple or basic EPS.

Diluted EPS=Net Income−Preferred Dividends/WASO+CDS

Where: WASO=Weighted Average Shares Outstanding, CDS=Conversion of dilutive securities, warrants and other securities.

4. Price earnings ratio

The reciprocal of the earnings yield is called price earnings ratio. It is calculated by dividing the market price of the share by the earnings per share.

$$\text{Price earnings (P/E) ratio} = \frac{\text{Market price of share}}{\text{Earnings per share}}$$

International Research Journal of Education and Technology
Peer Reviewed Journal
ISSN 2581-7795

Table No.4: Table showing Dividend Payout Ratio and Retention Ratio of selected cement companies in India

	Ambuja Cement	UltraTech Cement	JK Cement
Dividend Pay-out Ratio	0.30	0.14	0.26
Retention Ratio	0.70	0.86	0.74
Return on Equity	7.08	8.79	11.23
Earnings per share (EPS)	7.49	89.49	45.31
Diluted EPS	7.49	89.46	45.31
Price to earnings (P/E)	29.96	44.67	17.89

Interpretation

The shareholder's fund of Ambuja is quite high with respect to the debt percentage being very low when compared with peers. The major reason behind high Shareholders Fund is the high amount of Reserves & Surplus. The company retains huge chunk of profits. Ambuja cement has retained 70% of profit and distributed 30% as dividend. As explained by dividend pay-out ratio and retention ratio. Ambuja has a robust track record of rewarding its shareholders with a generous dividend pay-out (both interim & final). However, with a view to conserve resources for the upcoming expansion & other capital expenditure projects, the Company did not declare the Interim Dividend during the year 2018. One of reasons of company holding a high amount of Reserves & Surplus could be that it's planning for an acquisition. Ambuja cement had bid for Binani Cements in the month of Nov 18, however UltraTech won the bid. Also the company has a high distribution cost which it would be planning to pare down by having plants located in various locations. Therefore, by acquiring and by having plants located in different locations the company can probably bring down its cost of distribution. There is always a trade-off between transportation costs and is the plant being utilized to its capacity. The EPS of Ambuja is quite

low 7.49 due to large no. of equity shareholders (198cr) whereas Ultratech (27cr), JK (7 cr).Relatively high or low ROE ratios will vary significantly from one industry group or sector to another. When used to evaluate one company to another similar company the comparison will be more meaningful. Simply put, with ROE, investors can see if they're getting a good return on their money, while a company can evaluate how efficiently they're utilizing the firm's equity. A high ROE could mean a company is more successful in generating profit internally. However, it doesn't fully show the risk associated with that return.

Looking at the P/E of a stock tells you very little about it if it's not compared to the company's historical P/E or the competitor's P/E from the same industry. It's not easy to conclude whether a stock with a P/E of 10x is a bargain, or a P/E of 50x is expensive without performing any comparisons.

Conclusion and Findings

1. Ambuja Cement Company had a best current ratio and quick ratio among the three companies
2. Debt equity Ratio of JK and Ultratech are in a good position and Debt service ratio of Ambuja cement is the best
3. Gross Profit Margin Ratio and Net Profit Margin Ratio of Ambuja cement is better than Ultratech and JK cement
4. Operating Margin Ratio is almost the same for all the three companies
5. Dividend pay-out ratio of Ambuja and JK is better than Ultratech
6. Earnings per share, Retention Ratio and Diluted EPS of Ultratech is better than the other two

The study was conducted for the selected cement companies (ULTRA, Ambuja and JK). Ambuja cement was good for the Absolute liquid ratio, Net profit margin ratio and Gross profit margin ratio. JK was good in dividend pay ratio.

References

1. https://blog.investyadnya.in/7-factor-analysis-of-indias-cement-sector-ratios-basedanalysis-of-top-8-cement-companies/
2. http://www.icmrr.org/global/pdffiles/IJFRR/f201704003.pdf
3. https://www.infrontanalytics.com/fe-EN/30310GN/CEMENT-INDUSTRIESDEVELOPMENT/financial-ratios
4. https://www.moneycontrol.com/financials/indiacements/ratios/IC

5. https://www.equitymaster.com/research-it/annual-resultsanalysis/CEMCO/ULTRATECH-CEMENT-2017-18-Annual-Report-Analysis/48
6. http://www.trp.org.in/wp-content/uploads/2018/08/AJMS-Vol.7-No.2-JulySeptember-2018-pp.16-20.pdf
7. https://www.ijraset.com/fileserve.php?FID=3971
8. https://ijrcs.org/wp-content/uploads/201709024.pdf
9. https://www.researchgate.net/publication/327426586_A_STUDY_ON_FINANCIAL_PERFORMANCE_OF_CEMENT_INDUSTRY_WITH_SPECIAL_REFERENCE_TO_ACC_LIMITED