



## A STUDY ON FINANCIAL PERFORMANCE OF CEMENT INDUSTRY

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### Abstract

The present study attempts to evaluate the financial Performance of cement industry in India by choosing three Leading cement companies like ACC, Gujarat Ambuja and UltraTech cement for the period 2006-2015 by using the Extended DuPont approach. The extended DuPont approach Has emphasized on analysis of Return on Equity (ROE) which Disaggregates performance into five components: pre-Interest/pretax margin, asset turnover, interest burden, tax Efficiency and the equity multiplier. In the present study, we Employed a two-step methodology: first, used extended DuPont Approach to calculate return on equity of three companies and Coefficient of correlation has been used to determine the Relationship between the five components and return on Equity. The results shows that return on equity of all three Leading cement companies have declined drastically during 2012-2022 In the tough phase of cement industry all three Leading companies have exhibited more or less similar financial Performance during the study period. The contribution of five factors towards ROE is more or less similar among companies. The extended DuPont approach that we made for three leading Cement companies in India emphasized on calculation of ROE Is not relevant at all situations for taking rational economic Decisions. In order to increase the rate of taking better Economic decisions the results of extended DuPont approach Can be compared across companies within an industry, Between industries, or within a firm itself.

### Keywords:

DuPont, Equity Multiplier, Financial Performance, Return on Equity.

### INTRODUCTION

Cement is a binder, a substance that sets and hardens independently, and can bind other materials together. The term Cement has originated from the Roman term 'Opus Caementicium'. At the primary dimension, "Cement is a coupling ingredient that is gotten ready for use in housing or construction substance and can resist fluctuating natural situations. The four components important for its formation are iron, aluminium, silicon, and calcium." Cement Industry is one of the largest industries of the world and occupies a predominant place as one of the basic industries for development and its employment generation capacity. Cement ranks next to steel in construction material and so is the basis of all modern construction. John Smeaton, who is also known as "father of civil engineering" and credited for the design of many bridges, canals, harbours, etc. was the first proclaimed civil engineer and pioneered the use of 'hydraulic lime', which led to the discovery of modern cement.

### STATEMENT OF THE PROBLEM:

Analysing financial performance is the process of evaluating the common parts of financial statements to obtain a better understanding of Companies position and performance. Financial performance analysis enables the investors and creditors to evaluate past and current Performance and financial position, and to predict the future performance. It is the process of identifying the financial strength and Weakness of the available accounting data and financial statement. The analysis is done by properly establishing the relationship between the items of balance sheet and profit and loss account. The task of financial analyst is to determine the information relevant to the decision under consideration from the total information contained in the financial statement. The second step is to arrange information in a way to highlight significant relationship. The final step is interpretation and



drawing of inference and conclusion. Thus financial analysis is the Process of selection relating and the evaluation of the accounting data.

### **OBJECTIVES OF THE STUDY:**

- ☐ To study the financial performance analysis of cement industry
- ☐ To analyse the profitability position of the cement industry in India
- ☐ To analyse the liquidity position of cement industry in India
- ☐ To analyse the solvency position of cement industry in India

### **INDIAN CEMENT INDUSTRY-AN OVERVIEW:**

India ranked second both in terms of production and consumption, in the global cement market after China. The cement industry plays a vital role in economic development by providing employment to more than a million people. Ever since it was deregulated in 1982, the Indian cement industry has attracted huge investments, both from internal and external financial sources.

India has the abundant potential for development in the infrastructure and construction division, and the cement units are expected to benefit from it. Expecting such economic progress and supported by the government foreign policies, several international players such as Lafarge- Holcim, Heidelberg Cement, and Vicat have funded in the country in the recent past. An important factor contributing to the growth of this sector is the ready availability of the raw materials for making cement, such as limestone and coal.

### **GOVERNMENT INITIATIVES:**

In the 12th Five Year Plan, the Government of India plans to increase investment in infrastructure to the tune of US\$ 1 trillion and increase the industry's capacity to 150 MT. The Union Budget proposed to assign infrastructure status to affordable housing projects and facilitate higher investments and better credit facilities, in line with the government's aim to provide housing for all by 2022 which will boost cement demand.

### **DIFFERENT KINDS OF CEMENT**

There are several types of cement based on different compositions according to specific end uses. The basic difference lies in the percentage of clinker used. Clinker is a brick that has been burned too much in the kiln.

#### **ORDINARY PORTLAND CEMENT (OPC)**

OPC is also known as grey cement, has 95% clinker and 5% of gypsum and others substances. It signifies for 70% of the total consumption. White cement is a variation of OPC and is used for decorative purposes like the rendering of walls, flooring, etc. It contains a very low proportion of iron oxid.

#### **PORTLAND POZZOLANA CEMENT (PPC)**

PPC accounts for 80% clinker, 15% Pozolona and 5% gypsum and accounts for 18% of the aggregate-cement utilization. Pozolona has siliceous and aluminous substances that don't have to possess cementing properties however build up these properties in the presence of water. It is economically manufactured because it uses fly powder/consumed mud/coal squander as an essential component. It has a lesser warmth of hydration, which aids in stopping splits where large volumes are being cast.

#### **PORTLAND BLAST FURNACE SLAG CEMENT (PBFSC)**

It comprises of 45% clinker, 50% blast furnace slag and 5% gypsum and records for 10% of the aggregate-cement utilization. It has a warmth of hydration even lesser than PPC and is commonly



utilized in the construction of dams. White Cement

OPC: clinker utilizing fuel oil (rather than coal) and with iron oxide content below 0.4% to ensure whiteness. Special cooling method is used. It is used to enhance aesthetic value, in tiles and for ground surface. White cement is more expensive than grey cement.

### **SPECIALIZED CEMENT**

**Oil Well Cement** is made from clinker with special additional substances to stop a penetrability.

**Rapid Hardening Portland Cement** resembles to OPC, except that it is ground much finer so that on casting, the compressible strength increases rapidly.

**Water Proof Cement** is like to OPC, with a little fragment of calcium stearate or no- saponifiable oil to impart waterproofing assets.

### **ROLE OF INDIAN CEMENT INDUSTRY:**

The Indian cement industry is one of the booming sectors of the economic development of a country. This Industry has been on a sustained growth path adding capacity, driven largely by the construction sector and the ambitious infrastructural projects announced by the government from time to time. Role of Cement Industry in terms of GDP, Production and Mergers and Acquisitions.

### **MERGERS AND ACQUISITIONS:**

a The pace of merger and acquisition activity in the Indian cement industry has picked up leading cement producers looking to strengthen their positions at the top.

b The Aditya Birla Group's Ultra Tech Cement is leading the acquisition trail to build a stronger base. The company is currently the single-largest cement producer in India, with a total domestic capacity of 66.6Mta in 2017.

c Lafarge Holcim has initiated a process of merging of its Indian operations ACC With a capacity of 33.41Mta and Ambuja Cement has a capacity of 29.65Mta, spread across five integrated plants and eight grinding units.

d As of June 2018, ACC is in discussions with Jaiprakash Associates to purchase 5.5 MTPA cement business for a consideration of Rs. 5,200 crore.

e In November 2018, Ultratech Cement received approval for its purchase of Binani Cement for a consideration of Rs 7,950 crore.

In October 2018, India Cements entered into a share purchase agreement worth Rs.182.89 crore for acquisition of Springway Mining. The acquisition will help the company to enter the Uttar Pradesh market and other markets in North India.<sup>16</sup>

### **FINANCIAL PERFORMANCE OF INDIAN CEMENT INDUSTRY**

The financial performance of the Indian cement industry has also recorded impressive growth. The growth of Indian Cement companies has also attracted global companies to India. Their investment in the Indian cement sector is also giving a boost to the Indian economy. Many of the Indian cement manufacturing units are close down and some of the units are merged with the foreign players due to imperfect planning of capital structure. Hence, the present study is focusing on the financial performance of the cement industry in India. Here, the study mainly based on the company's liquidity position, profitability analysis with the application of the DuPont model, and Capital structure of the industry.

### **CAPITAL STRUCTURE AND ITS RELEVANCE:**

Capital structure of a company has its impact on the value of the firm and cost of capital. Capital structure is nothing but the composition of equity and debt in financing an organisation, that too permanent finance. The capital structure has its influence on the financial performance of the company. It is to be properly evaluated and mix of equity and debt is to be decided. According to



Gerestenberg, 'capital structure of a company refers to the composition of its capitalization and it includes all long term capital resources viz., loans, reserves, shares, and bonds'.

## RELEVANCE OF CAPITAL STRUCTURE

The capital structure of the financing pattern decision is a significant managerial decision. It influences shareholders' wealth. As a result, the market value of the share may be affected by the capital structure decision. The capital structure decision is a continuous process. Any change in the capital structure pattern affects the debt-equity mix, which in turn influences the cost of capital. Consequently, this affects the value of the firm. As a general rule, there should be a proper mix of debt and equity capital in financing the firm's assets. Capital structure is usually designed to serve the interest of the equity shareholders. The relevance of Capital Structure is as follows:

### 1. INCREASE IN VALUE OF THE FIRM:

A sound capital structure of a company helps to increase the market price of shares and securities which, in turn, lead to an increase in the value of the firm.

### 1. UTILIZATION OF AVAILABLE FUNDS:

A good capital structure enables a firm to utilize the available funds fully. It ensures the determination of the financial requirements of the firm and raise the funds in such proportions from various sources for their best possible utilization. It protects the business enterprise from over-capitalization and under-capitalization.

### 1. MAXIMIZATION OF RETURN:

It enables management to increase the profits of a company in the form of higher return to the equity shareholders i.e., increase in earnings per share.

### 1. MINIMIZATION OF COST OF CAPITAL:

An ideal capital structure of any firm maximizes shareholders' wealth through minimization of the overall cost of capital. This can also be done by incorporating long-term debt capital in the capital structure as the cost of debt capital is lower than the cost of equity or preference share capital since the interest on the debt is tax deductible.

### 1. SOLVENCY OR LIQUIDITY POSITION:

An optimum capital structure never allows a business enterprise to go for too much raising of debt capital because, at the time of poor earning, the solvency is disturbed for compulsory payment of interest to the debt-supplier.

### 1. FLEXIBILITY:

It provides a room for expansion or reduction of debt capital so that, according to changing conditions, adjustment of capital can be made.

### 1. UNDISTURBED CONTROLLING:

A good capital structure does not allow the equity shareholders control on business to be diluted.

### 1. MINIMIZATION OF FINANCIAL RISK:

If the debt component increases in the capital structure of a company, the financial risk will also increase. It protects a business enterprise from such financial risk through a judicious mix of debt and equity in the capital structure.<sup>19</sup>

This research work is undertaken to know the importance of capital structure on the profitability of cement industry in India.

## INSTITUTIONAL INITIATIVES

The cement industry is one of the major sectors deriving hefty revenues for the Indian Railways. Cement and its raw materials have the third highest share in the total cargo moved by the railways. Therefore, the Ministry of railways in a recent announcement is planning to develop dedicated corridors in different parts of the country to meet the requirements of the cement sector. These corridors will be created specifically in areas, where the Concentration of cement factories is higher, and those corridors would be interlinked with the source of raw Materials, such as, clinker, limestone,



and fly-ash. This will help the cement industry significantly to reduce Logistic, and operational costs. The effort will be put in place for the next 10 years until the FY 2033.

In the Union Budget 2023-24, the Government allocated US\$ 1.8 billion for the creation of safe housing, clean Drinking water, sanitation, and increasing road and telecom connectivity, among other initiatives. It also allocated US\$ 9.6 billion to address urban housing shortages. It is anticipated that India's infrastructure will expand at 7 per cent between the years 2022 and 2027; however, 42 per cent of the projects in the National Infrastructure Pipeline (NIP) are already under implementation. Construction work picked up as a direct result of the Government's investment of US\$ 1.4 trillion in Infrastructure projects between 2019 and 2023. Additionally, it is anticipated that over 40 per cent of India's Population will migrate to cities by the year 2030, which will create a need for 25 million new dwellings. The Cement manufacturers reported a seven-fold increase in demand, which culminated in a two-fold increase in Production. In terms of mergers, the cement industry evoked considerable discussion in 2022. In September, Asia's richest Man Gautam Adani's Adani Group bought the cement business of Swiss building materials major Holcim, which Included Ambuja Cement and ACC, for \$6.4 billion

### **RISKS AND CHALLENGES**

India's cement industry is facing headwinds, such as, rising input costs including cost of coal and petcoke, and gypsum, which may dent the profitability of cement manufacturers. The most expensive components of logistics are transportation, non-physical handling tasks like accounting, and the time entailed to do these things. Since cement is shipped in copious quantities, its weight adds to the total cost of shipping. In the past, cement plants that were located far from limestone plants and had higher freight costs and less efficient transportation caused some idle capacity, i.e., around 170 million tonnes. Most limestone plants are located in Madhya Pradesh, Rajasthan, Andhra Pradesh, Gujarat, Chhattisgarh, Tamil Nadu, and Karnataka.<sup>29</sup> Infrastructure and logistics bottlenecks remain a major challenge for the cement industry. Poor road infrastructure and delays at the ports have adversely affected the timely delivery of cement, which has further led to increased costs and reduced end-use satisfaction. However, the recent announcement of creating dedicated corridors in different parts of the country to meet the requirements of the cement sector by the Ministry of Railways is a welcome move. But it will take time to finish the project and benefits from this effort are difficult to be assessed immediately.

### **CONCLUSION:**

The efficiency of a company Depends on the work operations of the company. Earnings gain is considered essential for the Survival of the business. The profitability ratios show the efficiency of the selected companies. The financial positions of the selected cement Companies are satisfactory. But both companies must improve their solvency in the short term. From the above results of Extended DuPont approach it can Be inferred that the financial performance of all three Leading cement companies seems to be similar as measured By ROE with minimal deviation among companies. It Reflects that the financial performance of the cement Companies in India is influenced by similar factors. The Quiet interesting fact is that pre interest pre-tax margin and Equity multiplier contributes to great extent for ROE of ACC; assets turnover contributes to large extent for ROE of Gujarat Ambuja Cements and equity multiplier contributes Significantly for ROE of Ultratech Cement. The DuPont approach that we made for three leading Cement companies in India emphasized on calculation of ROE are not relevant at all point of time for taking rational Economic decisions. In order to increase the rate of taking better economic decisions using DuPont approach Comparisons can be made across companies within an Industry, between industries, or within a firm itself. As Future research direction, we suggest to expand the scope of Research by increasing the sample of companies to evaluate Factors influencing the financial performance of the cement Industry in India.





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