A Study on Profitability and Dividend Distribution of Selected Cement Industries of India

By

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17PCO014

Under the Guidance of

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Thesis Submitted to

Avinashilingam Institute for Home Science and Higher Education for Women

Coimbatore – 641043

In Partial Fulfilment of the Requirement for the Award of the Degree of Master of Commerce

April - 2019

Avinashilingam Institute for Home Science and Higher Education for Women

Coimbatore – 641043

Department of Commerce

Certificate

This is to certify that the project entitled, on

A Study on Profitability and Dividend Distribution of Selected Cement Industries of India

Is a bonafide record of work done by

R. Saraswathi

17PCO014

Submitted in Partial fulfilment of the requirement for the Degree of Master of Commerce

Signature of the Dean

Signature of the Head of the Department

Signature of Supervisor

Signature of the External Examiner

Viva voce examination held on 30.4.19

CERTIFICATE

This is to certify that the project report entitled on *A Study on Profitability and Dividend Distribution of selected Cement Industries of India* submitted by Ms. R. Saraswathi, in partial fulfilment of the requirement for the award of the Degree of Master of Commerce, under the supervision and guidance of Dr. V. Vimala, M. Com., M. Phil., PGDMM., Ph. D Assistant Professor (SS), Department of Commerce, Avinashilingam Institute for Home Science and Higher Education for Women Coimbatore – 641043.

DECLARATION

I hereby declare that the project report entitled on *A Study on Profitability and Dividend Distribution of selected Cement Industries of India* submitted in partial fulfilment of the requirement for the award of the Degree of Master of Commerce, under the supervision and guidance of Dr. V. Vimala, M. Com., M. Phil., PGDMM., Ph. D Assistant Professor (SS), Department of Commerce, Avinashilingam Institute for Home Science and Higher Education for Women Coimbatore – 641043.

Place: Coimbatore

Date: 22-4-19

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Signature of the Candidate

ACKNOWLEDGEMENT

I would like to express our sincere thanks to the God almighty, for his constant love and grace that he has showered upon me.

I am very grateful to **Dr. P. R. Krishna Kumar,** Chancellor, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for his support and encouragement during the course of our research study.

I heartily thank **Dr. Premavathy Vijayan** M. Sc., M. Ed., M. Phil., and Dip. Special Edu (UK)., Ph. D Vice – Chancellor, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for extending all resources and facilitated us to carry our research study.

I express my sincere gratitude to **Dr. (Mrs.) S. Kowsalya,** M. Sc., M. Phil., Ph. D The Registrar Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for providing all facilities necessary for the study.

I am also thankful to **Dr. (Mrs.) U. Jerinabi,** M. Com., Dip Ed., M. Phil., Ph. D Dean, School of Commerce, for encouraging and motivating me to carry the research work successfully.

I heartily express my gratitude to **Dr. (Mrs.) D. Geetha,** M. Com., M. Phil., Dip. Ed., Ph. D Professor and Head, Department of Commerce, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for providing all facilities necessary for the study.

I take this opportunity to express my sincere thanks to our project guide **Dr. V. Vimala,** M. Com., M. Phil., PGDMM., Ph. D Assistant Professor (SS), Department of Commerce for her guidance, suggestions and motivation throughout this project.

I express my deep sense of gratitude to all our staff members and non-teaching staff for the support in carrying out this research work successfully.

I would like to extend my hearty thanks to my parents, friends and all my well wisher for their support, directly and indirectly for the successful completion of my research project.

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ABSTRACT

The present research study provides the all insight to understand the Profitability and Dividend Distribution of selected cement industries in India. The current research analysis is segregated into two parts such as **(i)** Analysis of Profitability and **(ii)** Analysis of Dividend Distribution. This research work focused on the Profitability and Dividend distribution's factors, dependent variables and independent variable. The analysis and interpretation is made by using statistical tools and techniques in order to arrive an authenticate information on the Profitability and dividend distribution of selected cement industries in India.

The study made an attempt to examine the impact of factors and independent variables on Profitability and Dividend distribution of selected cement industries. Dividend policy is the most important aspects affecting financial decision taken by the management in the area of its credit standing, share prices and overall value of the firm. Finally the study also made an attempt to offer new suggestions to enhance Profitability and Dividend distribution decision.

Key words:

Cement Industries, Profitability, Equity Dividend, Profit After Tax, Total Debt, Market price Per Share.

CHAPTER – I

INTRODUCTION

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`CHAPTER – I
INTRODUCTION

1.1 Introduction

Cement Industry is one of the largest industries of the world and occupies predominant place as one of the basic Industry for development and its employment generation capacity. Cement ranks next to the steel in construction material and so is the basis of all modern construction. The term 'Cement' was originally traced back to the Romans term 'Opuscaementicium'. They employed the term to describe masonry, which is similar to a concrete and was made from crushed rock with burnt like as blinder. Cement can be regarded as one of the basic materials needed for construction programs of various infrastructures such as transport, water and power supply, dams, roads as well as housing and industrial plants.

Apart from all other products, cement has been a major contributor to the modernization of human civilization. The massive urban infrastructure that we see today across the world would have been far from imagination without cement. Cement is the root substance that has given the essential element of building material which is a product of various innovations in the past and is manned in sophisticated manufacturing facilities. In 1824, Joseph Apdinu and a British Mason obtained a patent on his hydraulic cement formula that is very similar to the modern cement as we know today. He called it Portland cement and it was made through the process of proportionate mixing, burning and the subsequent grinding of a combination of clay and lime stones cement goes through many more improvement and developments during nineteenth and twentieth century. The industrial revolution and the subsequent development of the rotary kiln paved the way for huge and sophisticated cement manufacturing plants.

1.2 Cement Industry in India – An Overview

India entered into the cement Era in 1914, when the Indian Cement Company Ltd, started manufacturing cement in Porbundar in Gujarat. However even before that a small cement factory was established in Madras in 1994 by a company named South India Industrial Ltd. Indian Cement Company Ltd produced only one type of cement which was designed by the British standard committee as "*Artificial Portland Cement"*. This company marketed its product in Mumbai, Karachi, Madras and other

parts and became a financial success. At that time India had to import cement from England. The price of the imported cement was higher. Some other factors such as increase in domestic demand, reduction in supply from abroad, availability of Indian Capital, ample raw material, cheap labour, support of the government etc., made it a leading industry in India in a short period of time.

During the First World War period, cement production in these three important factories was taken under control of the government and later the control was lifted once the war was over. After the war, six more units were launched in India. In 1924, India's cement production was 2, 67,000 tons. However, initially this increased production could not reduce the imports and the industry suffered a rate war. This led to closure of many indigenous units. The Indian companies which were away from ports or commercial centres faced the location disadvantages. The above incidents led to the industry stakeholders approach to the government for some kind of protection. The British government constituted a Tariff board, which recommended protection of the indigenous industry against the dumping of the imported cement. It recommended rising of the customs duty to 41 per cent which was at that time, but this recommendation was not accepted by the government.

By 1947, there were 18 cement factories with a capacity of 21.15 lakh tonnes and production of 20.16 lakh tonnes. Rapid economic progress associated with massive building programmes during the plan period accelerated the demand for cement and provided stimulus to this industry. India achieved self sufficiency in cement only in 1980s during the short five year period of partial decontrol.

Prior to that Indian Cement industry had been seen days of total controls, partial decontrol and imports. This industry was totally de controlled in March 1989 and it grew in leaps and bounds in 1990s. Today, in terms of quality, productivity and efficiency, the industry is second to none in the world. Its technology is state of - the - art, its cost of production is one of the lowest in the world and its productivity is easily one of the highest. As on 30 April 2004 there were 16 large cement plants with an installed capacity of 144.98 million tonnes. Apart from these, there are 300 mini and tiny plants spread all over the country. The estimated capacity of mini plants is about 11 million tonnes per annum. The mini plants play a supplementary role.

Presently, the biggest demand drivers of cement are these housing and real estate sectors, accounting for about 65 percent of the total consumption in India. Some of the other leading consumers of centre include public infrastructure at 20 per

cent and industrial development at 15 per cent. India's overall cement production capacity was nearly 460 million tonnes as of 2017 - 2018. Its consumption is expected to grow by 5 per cent in the financial year 2019 supported by pick up in the housing segment and higher infrastructure spending.

Currently the industry is planning to produce 300 megatons in order to meet its domestic demand and 5 megatons for exports requirements. There are 200 large plants and 332 mini cement plants in the country. Out of these 200 large cement plants, 77 are located in the States of Andhra Pradesh, Rajasthan and Tamil Nadu. India produces a variety of cement. This industry is doing well in terms of production as well as export. Efforts are being made to generate adequate domestic demand and supply in order to sustain this industry. The main buyers of Indian Cement are Sri Lanka, Bangladesh, Myanmar, Indonesia, Malaysia, Nepal, Pakistan and South - East Asian countries. The exports to these countries are likely to increase as they do not have appreciable deposits of limestone and cannot develop cent industry on their own.

1.3 Statement of the problem

Profitability is the final measure of economic success achieved by a company in relation to the capital invested in it. This economic success is determined by the magnitude of the net profit accounting. Profitability ratios analyze the financial health of a business. A profitability ratio looks at how profit at how profit was earned in relation to sales, total assets and net worth. For a company to become profitable, income must exceed expenses. Expenses can be defined as the cost of resources used in the activities of a business. Any cost – saving measures initiated by a company will bring expenses down and increases overall profitability. The profitability may be defined as the ability of given investment to earn from its use. The increasing demand for cement depends on the competition of Indian Cement Industries in meeting the demand.

Successfully running of any business depends not only on increased earnings but also is it wise distributing dividends and retained earnings. The investors expect maximum return on their investments. A company on the other hand, is likely to retain more earnings to tap the availability of profitable investment opportunities. If the company paid dividend more than its earnings, for its future financial requirement the company have to depend upon the outsiders fond this will affect the value of the company and the market price of its shares. The firm’s decision to pay dividend must

be in such a manner so as to equitable apportion the profits between dividend and retained earnings. The firm's dividend declaration and retained earnings mainly depend upon the total earnings and financial position of the firm.

1.4 Objectives of the study

- To understand growth and performance of the selected cement industries in India.
- To analyze the profitability and the dividend distribution of the selected cement industries and
- To examine the factors influencing the dividend distribution of the selected cement industries.
- To offer suitable suggestions based on the findings of this study.

1.5 Scope of the study

The study made an attempt to analyze the profitability and dividend distribution of the selected cement industries in India. This study is based only on available secondary data and computed accounting information. Analysis of the profitability and the dividend distribution will help to understand the financial performance of the selected cement industries. The research study has analyzed the profitability and dividend distribution of selected cement industries by applying appropriate ratios and statistical tools like mean, standard deviation, co – efficient of variation, regression.

The list of cement companies that have been included in the sample category is presented in table 1.1.

Table - 1.1: Name of Industries selected for research study

Sl .No	Name of the selected Industries
1.	Ambuja Cements Limited
2.	Ultra Tech Cements Limited
3.	Deccan Cements Limited
4.	JK Lakshmi Cements Limited
5.	Ram Co Cements Limited

1.6 Profile of the selected Cement Industries in India

(a) Ambuja Cements Limited

Ambuja cements Ltd, is one of India's leading cement manufacturers. The company, initially called Gujarat Ambuja Cements Ltd, was founded by Narotam Sekhsaris in 1983 in partnership with Suresh. The cement industry is literally the building block of a nation. In that context, Ambuja plays a key role in India's development and its blueprint for the future. It has always stayed on the fast teack to growth and has gone on to become a major player in the country's cement sector. Ambuja Cement is an established brand in India for Ordinary Portland Cement (OPC) and Pozzolana Portland Cement (PPC), with significant footprints across western, eastern and northern markets of India. Their customer's tange from individual house builders (IHB), major governments to global construction firms.

(b) Ultra Tech Cement Limited

Ultra Tech Cement Limited is the largest manufacturer of cement in India and ranks among the world's leading cement makers. Ultra Tech's vision is to be 'The Leader' in Building Solutions. The company has consolidated capacity of 102.75 million tons per annum (MTPA) of grey cement. Ultra Tech has a strong presence in international markets such as Bangladesh, UAE, Sri Lanka and Bahrain. Ultra Tech is a founding member of the Global Cement and Concrete Association. It operates 20 integrated units, 26 grinding units, 7 bulk terminals and one clinkerisation plant for grey cement, one integrated white cement unit, two wall care putty plants and over 100 RMC plants. Ultra Tech has a dealer and retailer network of over 80000 partners across the country, with a market reach of more than 80 per cent Indian cities and towns. Ultra Tech is India's largest manufacturer of grey cement, white cement and ready mix concrete (RMC).in the white cement segment, Ultra Tech goes to market under the brand name of Birla White. It has a white cement plant with a capacity of 0.56 MTPA and two wall care putty plants with a combined capacity of 0.8 MTPA. The retail format of Ultra Tech Building Solutions offers a wide range of construction products to the end customers under one roof. Ultra Tech has over 1600 Building Solutions stores across India which is one – stop shop for all primary construction needs of our individual home builders.

(c) Deccan Cements Limited

Deccan Cements Ltd was set up in the year 1946 and since then, it has gradually grown itself into one of the well known organizations in the cement and industrial segment in the country. Deccan Cement is one of the well known cement companies in India. It has a big market base in the infrastructure as well as real estate segment. The high quality products and services at affordable cost make it one of the most preferred cement companies in the country. More and more industry segments are opting for the products of Deccan Cement. It is the largest producer of cement in the southern part of India. The company has three cement plants in Tamil Nadu d four in the state of Andhra Pradesh. According to the recent surveys, the company has a market share of around 28 per cent in the states of South India. It has aiming to increase the market share to around 35 per cent over the next few years. The main aim of the company is to make use of the vast lime stones resource and expand the production by proper management and optimization of the existing plants. There are around 10,000 stockists who distribute products and services of the company. The company has its regional offices in all the states of South India and also in Maharashtra.

(d) JK Lakshmi Cements Ltd

JK Lakshmi Cements Ltd started its commercial production in May 1975, in its first plant Nimbahera in Rajasthan. The company was founded by Lala Kamlapat Singhaniain the year 1994. Today JK Cement is one of the largest cement manufacturers in North India. It is also the second largest product of white cement in India. JK Cement produces ordinary Portland Cement and Portland Pozzolana Cement. It markets white cement under the name JK White and Camel.

(e) Ram co Cements Limited

Ram Co Cements Limited (formerly Madras Cements Ltd) is the flagship company of the Ram Co Group, a business group based in Chennai, South India. It is the fifth largest cement producer in India. The company also produces ready mix concrete and dry mortar products and operates wind farms.

It manufactures and markets Portland cement, blast furnace slag cement, white cement and Pozzolana cement. The company has production facilities at so many places in India. Ram co opened its first wind farm at Muppandal in 1993. In 1995,

Ram Co Cement installed additional windmills at Poolavadi near Coimbatore. As of 2015, thetotal installed windmill capacity is with 159.185 MW with 229 individual units.

1.7 Hypotheses of the study

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1. H_0: The profitability factors affect the growth and performance of selected cement industries of India.

   H_1: The profitability factors do not affect the growth and performance of selected cement industries of India.

2. $H_{0:}$ The selected factors affect the payment of dividend distribution of selected cement industries in India.

   H_1: The selected factors does not affect the payment of dividend distribution of selected cement industries in India.

1.8 Limitations of the study

1. This study is restricted to Cement Companies within India.
2. The analysis of this study is purely depending on the secondary data of the select companies, accurate data is needed for the analysis.

1.9 Significant of the study

Profitability is the primary goal of all business ventures. Without profitability the business will not survive in the long run. Profitability is measured with income and expenses. A business that is not profitable cannot survive. Conversely, a business that is highly profitable has the ability to reward its owners with a large return on their investment. Increasing the profitability is one of the most important tasks of the business. Hence the investors and lenders are interested in knowing the profitability of the industry over a period of time.

Generation of earnings is not important. The way in which the earnings are distributed also matter. In present study analysis, how the Indian Cement companies deciding their distribution of earnings. This will also helps the managers to identify the pattern of distribution to maximize the wealth of the shareholders. Therefore, it is significant to analyze the profitability, dividend distribution and factors influencing profitability.

1.10 Scheme of Report

The present study is categorized into five main chapters which are tabulated and briefed below

Table – 1.2: Scheme of Report

Chapter Number	Name of the Chapters
I	Introduction
II	Review of Literature
III	Research Methodology
IV	Analysis of Profitability and Dividend Distribution
V	Findings, suggestion and conclusion
-	Bibiliography

The First Chapter – I, Introduction deals with the introductory aspects of cement industries in India and their over view, statement of the problem, objectives, scope of the study, profile of the selected cement industries in India, hypothesis , limitations, significant of the study and report of scheme.

The Second Chapter – II, Review of literature provides detailed insight on literature work carried out on profitability and dividend distribution from 2010.

The Third Chapter – III, Research Methodology deals with the sample size, source of data, research design, the statistical tools used for the study and period of the study.

The Fourth Chapter – IV, in this chapter the analysis and interpretation of the collected data of the selected cement industries are briefly explained.

The Fifth Chapter – V, Findings, Suggestions and Conclusion provides the entire research work. The findings are explained in two categories such as, **(i)** Profitability of selected cement Industries and **(ii)** Payment of Dividend distribution of selected cement Industries.

1.11 Conclusion

To sum up, this chapter provides introductory aspects on selected Indian Cement Industries and it explains the research design of the study, which includes the statement of the problem, objectives of the study, significance of the study, scope of the study, hypothesis of the study, limitations of the study and scheme of report.

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CHAPTER – II

REVIEW OF LITERATURE

2.1 Introduction

2.2 Review of Literature

2.3 Conclusion

Reference and Notes

CHAPTER - II
REVIEW OF LITERATURE

2.1 Introduction

This review of literature on Profitability and Dividend distribution of selected Cement Companies of India are analyzed in detail. The collection of reviews have been from various studies undertaken by the practitioners, researchers etc. this review a will enlighten the existing knowledge of the researcher. The gist of some of the relevant research studies and research papers on analysis of profitability and dividend distribution are presented in those studies. The literature relating the research work was carried out into two ways,

a. Profitability
b. Dividend distribution

2.2 Review of Literature

The literatures on Profitability and Dividend distribution relevant to the study are carried at both national and international level. The following are few reviews presented below.

(a) Profitability

Owolabi and Obida (2012)[1] in their articles titled *Liquidity Management Corporate Profitability* an attempt is made to measures the relationship between liquidity management and corporate profitability using data from selected manufacturing companies. The result of the study was obtained using descriptive analysis and the findings shows that liquidity management measured in terms of the company's credit policies, cash flow management and cash conversion cycle has significant impact on corporate profitability. They found that managers can increase profitability by adopting good credit policy, short cash conversion cycle and effective cash flow management procedures.

Narware, P.C. (2010)[2] in his research work on *Working Capital and Profitability: An Empirical Analysis* has focused on examining the inter- relationship between the working capital management and profitability with the assistance of techniques of ratio analysis. The study observed the sensitivity of Return on Investment to changes in the level of gross – working capital of the company through working capital leverage. The impact of working capital ratios on profitability was analyzed using multiple regression analysis. The study concluded that increase in the profitability of the company was less proportionate to decrease in working capital.

Andreas Stierwald (2011)[3] in his work analyzed profitability in *Does Firm Size Influence Profitability: Evidence from Indian Firms.* They measured the impact of firm size on profitability using assets as a proxy for profitability. The financial data of Indian firms was analyzed using multiple regression models incorporating various firm level variables to test the firms in industry were more efficient than small firms.

Venkataramana and Ramakrishna (2012)[4] in their work the profitability and financial position of selected cement companies in India through various financial ratio and applied correlation, mean, standard deviation and variance. The study uses liquidity and profitability ratios for assessment of impact of liquidity ratios on profitability performance of selected cement industries.

Amir Hossein Jamali and Asghar Asadi (2012)[5] in their study investigated the relationship between the management efficiency and the firms profitability for a sample of 13 auto mobiles manufacturing companies listed on the Bombay Stock Exchange. The analysis is carried out using Mini 14 and conducting Pearson Coefficient Correlation test on variables of the study including Gross profit ratio and Asset Turnover Ratio. The central conclusion of the study is that profitability and management efficiency are highly correlated to each other and based on the resulting of the study recommendations for improving the management efficiency and profitability in their industry are suggested.

Padmaja Manoharan (2012)[6] in her study *Analytical study on Profitability of Cement Industry in India* has revealed the variation in profitability of Indian cement companies depending on age, size and region. The study identified that quality of earnings depends on cost management, asset management and leverage management. Further, the analysis concluded that the profitability and quality of earnings is influenced by the liquidity factors.

Karthik Chandra Nandi (2012)[7] in his study *Trends in Liquidity Management and their Impact on Profitability***,** made an attempt to observe the trend values of liquidity position of the company and study the correlation between liquidity and profitability. An attempt has also been made to establish the linear relationship between liquidity and profitability with the help of a multiple regression model. He concluded that the selected company always tries to maintain adequate amount of net working capital in relation to current liabilities so as to keep a good amount of liquidity throughout the study period.

Vivek Kumar and Major Singh (2013)[8] conducted a study on *Profitability of Indian Banks***.** The study revealed that the various profitability ratios of two banks as the measure of profitability. The common denominator used for developing the various profitability ratios is business volume. The study analyses the published data for the two largest banks. The competitive analysis of the profitability of the two banks clearly reveals that there is a large difference between profitability of the two banks.

Moses Joshuva Daniel (2013)[9] in his study the main objectives to analyzing the overall financial status of the Tata Motors Ltd by using various financial tools. In order to analyze financial status in terms of profitability, solvency, activity and financial stability various accounting ratios have been used. It is cleared from the study that the company's financial performance is satisfactory. The company has stable growth and it shows a greater status in all the areas it works. The company has been suggested to reduce the expenditure as it increases every year. Decrease in expenses will increase the profitability.

Hari Govinda Rao and et. Al (2013)[10] in their study the main concept of their study is *Profitability and Liquidity Management is of Crucial importance in Financial Management Decision*. The most favorable financial performance could be achieved by a company that can trade off between profitability and liquidity performance indicators. The purpose of this study is to find out the financial position and know the significance of them.

(b) Dividend Distribution

Anupam Mehta (2012)[11] has conducted s research study entitled *An Empirical Analysis of Determinants of Dividend Policy – Evidence from the UAE Companies*. The objective of the study were to find out whether certain determinant as per the available literature have any influence on the dividend payout policies of UAE firms and to examine to what extent various determinants of dividend payout policy can explain the dividend decisions. The study revealed that Size and Risk are the two most important considerations in deciding on dividend policy by ratio have lower risk and high growth prospects. Profitability measured by Return on Assets and Earnings Per Share are negatively associated with the dividend payout ratio. It was suggested that, higher the firm's Price Earning, lower will be the risk, and higher is its payout ratio. The study rejects the hypothesis that profitability, liquidity and leverage affect dividend decisions.

Zahangir alam. MD and Mohammad Emdad Hossain (2012)[12] have done a research study entitled *Dividend Policy: A Comparative study of UK and Bangladesh Based Companies*. The objectives of the study were to present against that, a high cash dividend payout ratio as possible would reflect positively on the market value of shares. It was concluded that a high cash dividend payout ratio as possible would reflect positively on the market value of shares for the reasons of certainty, higher future dividend, information content, clientable effect, certainty about suggested that dividend payment should be avoided as they would lead to decrease in shareholders wealth for the reason of tax consequences, cost of policy formulation, transaction cost, and cost of capital default risk and tax free.

A.Ajanthan (2013)[13] have attempted a research study entitled *The Relationship between Dividend Payout and Firm Profitability: A study of Listed Hotels and Restaurant Companies in Sri Lanka*. The objective of the study were to examine the association between dividend payout and firm profitability among listed companies in Sri Lanka and to establish the extent of the association between dividend payout and firm profitability. The sample was confined to trading sector consists of 16 hotels and restaurant companies listed in the Colombo Stock Exchange (CSE) for a period of 5 years. It was revealed that dividend payout has a significant impact on profitability of listed firms in Sri Lanka. There was positive relationship between total assets and the profitability of firms. There was significant impact of dividend payout revenue and total assets on net profit. Hence, all independent

variables have significant impact of profitability of the hotels and restaurant companies.

Fahra Malik, Sajid Gul et al. (2013)[14] has conducted a research study entitled *Factors influencing Corporate Dividend Payout Decisions of Financial and Non – Financial Firms*. The objectives of the study were to examine the determinants of dividend policy of firms listed on Karachi Stock Exchange and are part of KSE – 100 Index and also to examine whether or not there exists any relationship among different financial characteristics and decision regarding dividend payment. They concluded that corporate dividend paying companies in Pakistan are very low as compared to other emerging economies. They also found that profitability, liquidity, earning per share and size of the firm positively affects the probability of paying dividend, whereas firm sales growth has negative impact on the probability of dividend payment.

Monogbe et al. (2015)[15] maintain that there is a connection between dividend and retention policies. Retained earnings are important sources of finance for Nigerian companies and encourage retaining profit instead of making dividend payments. They are, therefore, attractive sources of finance for developmental projects without taking recourse to extra funds from outsiders. The belief that there is no cost associated with the use of retained earnings though it is not true. It does not lead to cost involving cash payments. Thus, in periods of prosperity, the management may not be liberal in paying dividends because of availability of larger profitable investment opportunities. On the other hand, in periods of depression the management may retain a larger part of its earning to preserve the firm's liquidity position.

Amitabh Gupta & Charu Banga (2010)[16] have done a research study entitled *The Determinants of Corporate Dividend Policy*. The objective of the study was to examine the impact of various factors on the dividend decision of Indian companies. The sample was confined to 150 companies belonging to 16 industries from Bombay Stock Exchange 500 Index were selected and analyzed with the criteria that the companies had continuously paid dividend during the study period. The results reveal five factors influencing dividend policy namely leverage liquidity, profitability, ownership structure and growth. These factors were then subjected to multiple regressions with dividend rates of Indian companies while leverage was found to be negatively associated, liquidity was positively related. However in

practice, some non – financial factors may also have a bearing on the dividend decision of a firm.

Luke (2011)[17] states that a significant part of the returns that investors can realize from putting money into stocks comes from dividends paid by company. The amount of money a company pays in the form of dividend varies significantly from one business to another. Companies use their dividend policies to determine how much they will distribute.

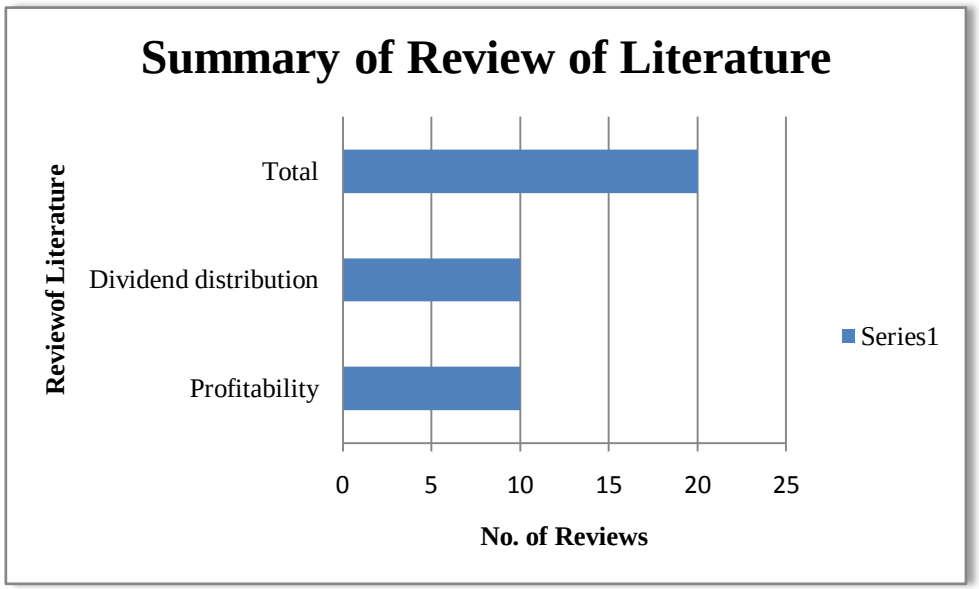
Mokaya et al. (2013)[18] state that companies generally prefer a stable dividend payout ratio because the shareholders expect it and reveal a preference for it. Shareholders may want a stable rate of dividend payment for a variety of reasons. Risk – adverse shareholders will be willing to invest only in those companies which pay high current returns on shares. Such investors, therefore, prefer companies which pay regular dividends every year. This clustering of stockholders in companies with dividend policies that match their preferences greatly affects their market prices and by extension the wealth of shareholders.

Manjutha. K (2013)[19] has done a research study entitled *Impact of Debt – equity and Dividend Payout Ratio on the value of the firm*. The objectives of the study were to ascertain the Debt – equity and Dividend Payout Ratio of the samples, to examine the possible effects that a firm's dividend policy might have on the market value of the firm. For the study, 29 companies belonging to different industries which were listed in Bombay Stock Exchange and National Stock Exchange, India for 2000 – 01 to 2009 – 10 were analyzed. It is found that there is no significant effect of dividend payout and debt equity ratio on share prices, debt – equity and share prices do not had a notable relationship between each other, only three companies were fit for formulating relation between dividend payout and return on equity. It is also found that software companies were showing deviation from others by having least debt equity and least Dividend Payout Ratio and still maintaining a good rate of return on share prices.

Ojeme et al. (2015)[20] the objective of the finance manager should be finding an optimal dividend policy that will enhance the value of the firm. It is often argued that the share price of the firm tend to reduce whenever there is a reduction in its dividend payments. Announcements of dividend increases generate up normal positive security returns while announcement of dividend decreases generate negative security returns. A drop in share price occurs because dividends have a signaling

effect. According to the signaling effect, manager have private and superior information about future prospectus and choose a dividend level to signal that private information such a calculation on the part of a firm's management may lead to a stable dividend payout ratio.

Graph – 2.1 Summary of Literature review on Profitability and Dividend distribution



Source: Computed Data, 2018

2.3 Conclusion

This chapter is deals with the view of the literature of Profitability and Dividend distribution, where it covers the literature relating to the profitability, corporate dividend distribution, liquidity and earnings management among various kinds of business concerns.

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CHAPTER – III

RESEARCH METHODOLOGY

3.1 Introduction

3.2 Sample size

3.3 Sources of data

3.4 Statistical tools and Techniques

3.5 Period of the study

3.6 Conclusion

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CHAPTER – III
RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is a mathematical way to find solution for a research problem. It is defined as the study of methods by which knowledge is gained. In methodology, the researcher uses different criteria for solving or searching the given research problem. It consists of the framework of the study, sequence of steps to be carried out, planned tools and techniques to be adopted. The objective of the study is proved with the help of the collected secondary data from the official websites of the selected cement industries in India.

3.2 Sampling size

In the present research study the sample size is 5 (cement industries in India) which are chosen based on convenient sample method. The five cement industries are selected on the basis of their net sales and capitalization. These five industries are listed in both NSE and BSE.

3.3 Sources of data

For this study the secondary data is used to analysis the profitability and dividend distribution of the selected cement industries. It was collected from "India Notes" database. The database provides complete financial statement of the industries. In addition to this, supportive data has been collected from the annual report of the selected cement industries.

3.4 Statistical tools and Techniques

The collected data was tabulated and analyzed with the help of financial ratios and statistical techniques.

Ratio Analysis

Ratio analysis was the major tool used to analyze and interpret the data. Ratio is a statistical yardstick that provides a measure of the relationship between variables. For the present study, selected ratios were applied to analyze the profitability and

dividend distribution pattern of the sample units. The financial analyst may calculate different accounting ratios for different purposes.

i. Profitability Ratios
ii. Dividend per share
iii. Net profit ratio
iv. Operating Profit Ratio
v. Operating Profit Margin
vi. Earnings per share
vii. Return on Net worth
viii. Dividend payout ratio
ix. Dividend Yield Ratio
x. Price earnings ratio
xi. Return on Total Assets
xii. Return on Capital Employed

(i) Profitability Ratios: Profitability is indications of the efficiency with the operations of the business are carried on. Poor operational performance may indicate poor sales and hence poor profit. A lower profitability may arise to the lack of control over the expenses. Bankers look at the profitability ratio as an indicator whether or not the firm earns substantially more then it pays interest for the use of borrowed funds and whether the ultimate repayment of their debt appears reasonably certain.

(ii) Dividend per share: Dividend per share is the sum of declared dividend issued by a company for every ordinary share outstanding. Dividend per share is the total dividends paid out by a business, including interim dividends, dividend by the number of outstanding ordinary shares issued.

Dividend per share is the sum of declare dividends issued by a company for every ordinary share outstanding. The figure is calculated by dividend the total dividends paid out by a business, including interim dividends, over a period of time by the number of outstanding ordinary shares issued.

Dividend per share = Dividends / No. of Shares

(iii) **Net profit ratio:** This ratio indicates net margin earned on a sale of after – tax profit to net sales. It reveals the remaining profit after all costs of production, administration, and financing have been deducted from sales, and income taxes recognized.

Net Profit Ratio = (Net Profit / Net Sales) x 100

This ratio helps in determining the efficiency with which affairs of the business are being managed. An increase in the ratio over the previous period indicates improvement in the operational efficiency of the business provided the gross profit ratio is constant. This ratio is thus an effective measure to check the profitability of business.

(iv) **Operating Profit Ratio:** The operating ratio is a company's operating expenses as a percentage of revenue. This financial ratio is most commonly used for industries which require a large percentage of revenues to maintain operations, such as ratios.

Operating Profit Ratio = (Operating Costs / Net Sales) x 100

Operating Profit: Net Sales – Operating Cost

(Or)

Net Sales – (Cost of goods sold + Administration and office expenses, Selling and distribution expenses).

This ratio is the test of the operational efficiency with which the business is being carried. The operating ratio should be low enough to leave a portion of sales to give a fair return to the investors. A comparison of the operational ratio will indicate whether the cost component is high or low in the future of sales. In case the comparison shows that there is increase in this ratio, the reason for such increase should be found out and management is advice to check the increase.

(v) Operating Profit Margin: The operating margin ratio, also known as the operating profit margin, is a profitability ratio that measures what percentages of total revenues is made up by operating income. In other words, the operating margin ratio demonstrates how much revenues are left over after all the variable or operating costs have been paid. Conversely, this ratio shows what proportion of revenues is available to cover non – operating costs like interest expenses.

Operating Profit Margin = Operating Income / Net Sales

The operating profit margin ratio indicates how much profit a company makes after paying for variable costs of production such as wages, raw materials, ect. It is also expressed as a percentage of sales and then shows the efficiency of a company controlling the costs and expenses associated with business operations.

(vi) Earnings per share: In order to avoid confusion on account of the varied meaning of the term capital employed, the overall; profitability can also be judged by calculating earnings per share with the help of the following formula;

Net profit after tax and preference dividend / No. of Equity shares

The earnings per share help in determining the market price of the equity share of the company. A comparison of earning per share of the company with another will also helps in deciding whether the equity share capital is being effectively used or not. It also helps in estimating the company's capacity to pay dividend to its equity share holder's.

A higher earnings per share is sign of higher earnings, strong financial position and reliable company to invest money.

(vii) Return on Net worth: Return on net worth is calculated to see the profitability of owner's investment. While there is no doubt that the preference shareholders who bear all the risks, participate in management and are entitled to all the profits remaining after all outside claims, including preference dividends met in full. The

ratio under reference serves this purpose. It is calculated by dividing the profits after taxes and preference dividends by the average equity of the ordinary shareholders.

Net income after interest and tax / Shareholder's Equity

(viii) Dividend payout ratio: Dividend payout ratio compares the dividends paid by the company to its earners. The relationship between dividends and earnings is important. The part of earnings that is not paid out in dividend is used for reinvestment and growth in future earnings. Investors who are interested in short term earnings prefer to invest in companies with high dividend payout ratio. On the other hand, investors who prefer to have capital growth like to invest in companies with lower dividend payout ratio.

Investors usually seek a consistent and improving dividend payout ratio. The dividend payout ratio should not be too high. The earnings should support the payment of dividends. If the company pays high levels of dividends it may become for it to maintain such levels of dividends if the earnings fall in the future. Dividends are paid in cash; therefore, high dividend payout ratio can have implications for the cash management and liquidity of the company.

Dividend payout ratio = Dividend per share / Earnings per share

(ix) Dividend Yield Ratio: Dividend yield is the amount that a company pays to its shareholders annually for their investments. It is expressed as a percentage and indicates attractiveness of investing in a company's stocks. Dividend yield is considered as ROI for income investors who are not interested in capital gains or long – term earnings. For an investor, not only the amount of this ratio is important but also the extent of coverage of this ratio by earnings yields. The dividend yield is computed by dividing the dividend per share by the market value per share.

(x) **Price earnings ratio:** This ratio indicates the number of times the earning per share is covered by its market price. Price earnings ratio helps the investor in deciding whether to buy the equity share of a company at a particular market price. It is mainly dependent on market factors. It can also be used to predict the market price of equity shares at some future date.

Price Earnings Ratio = Market value per share / Earnings per share

(xi) **Return on Total Assets:** Return on total asset ratio measures the profitability and efficiency of a business concern. Asset generates income. Hence, an analyst should judge the earning of the company in relation total assets. This ratio show how the total assets at the disposal of management of company have been used to generate income. Higher the ratio better is the efficiency of management.

Return on Total Assets = Net Income / Average Assets

(xii) **Return on Capital Employed:** The Return on Capital invested is a concept that measures the profit which a firm earns on investing a unit of capital. The profit being the net result of all operations, the return on capital expresses all efficiencies or inefficiencies of a business collectively and thus, is a dependable measure for judging its overall efficiency or inefficiency. The Return on Capital when calculated in this manner would also show whether the companies borrowing policy was economically and whether capital had been employed fruitfully. The business can survive only when the return on capital employed is more than the cost of capital employed in the business. This ratio is computed by dividing the profit before interest and tax by the total capital employed.

Return on Capital Employed = Net Operating Profit / Capital Employed **(Or)** **Return on Capital Employed = Net Operating Profit / Total Assets – Current Liabilities**

Arithmetic mean is the most popular and widely used measure of representing the entire data by one value. Its value is obtained by adding together all the items and by dividing this total by number of items.

$$\bar{x} = \frac{1}{n} \sum_{i=1}^{n} x_i$$

Standard Deviation

Standard deviation is one of the measures of dispersion which explains the amount of deviation between the mean value and individual values of group of represents.

$$\mathrm{SD} = \sqrt{\frac{\sum |x - \bar{x}|^2}{n}}$$

Co – efficient of variance

Co- efficient of variation is one of the relative measures of dispersion. It is defined as the ratio of standard deviation to the mean expressed in percentage. It is calculated to test the consistency of performance in sample companies during the study period.

Co efficient of Variance = (Standard Deviation / Mean) x 100

Multiple Regression Analysis

Multiple regression analysis is used to evaluate the functional relationship between a dependent variable and the number of independent variables. It is classified under two categories as simple regression and multiple regressions. In this study, multiple regression is performs between the dependent variable and independent variables mainly to assess the degree of relationship between independent variables and dependent variables and independent variables mainly to assess the degree of relationship between independent variables and dependent variable.

Inter Correlation Matrix

Inter correlation matrix are calculated to find out the relationship between profitability (PAT) and selected variables and finding out the relationship between dividend distribution and selected variables chosen for this study.

3.5 Period of the study

The present study covers a period of five months and will be undertaken from December 2018 to April 2019.

3.6 Conclusion

To sum up, this chapter explains about the methodology of study and provides details about the statistical tools and techniques used for the analysis collected data which help to interpret the results.

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CHAPTER – IV

ANALYSIS OF PROFITABILITY AND DIVIDEND DISTRIBUTION OF SELECTED CEMENT INDUSTRIES OF INDIA

4.1 Introduction

4.2 Analysis and Interpretation of Profitability

4.3 Analysis and Interpretation of Dividend Distribution

CHAPTER – IV
ANALYSIS OF PROFITABILITY AND DIVIDEND DISTRIBUTION OF SELECTED CEMENTS INDUSTRIES OF INDIA

4.1 Introduction

Profit is the engine that drives the business enterprises. A business needs profits not only for its existence but also for expansion and diversification. The investors want an adequate return on their investments, workers want higher wages, creditor want higher security for their interest and loan and so on. A business enterprise can discharge its obligations to the various segments of the society only through earnings of profit. Profits are, thus, a useful measure of overall efficiency of the business.

Indeed, profit to the management are the test of efficiency and a measurement of control; to owners, a measure of net worth of their investments; to the creditors, the margin of safety; to employees, a source of fringe benefits; to Government, a measure of tax – paying capacity and the risk of legislative action; to customers, a hint to demand and price cuts. According to economic thinkers, profits are the report card of the past, incentive gold for the future and also stake for new venture.

4.2 Analysis and Interpretation of Profitability

In this part, the profitability of the select cement companies situated in India is analyzed with the help of the following ratios, as the measure of profitability.

1. Net Profit Ratio (NPR)
2. Operating Expense Ratio (OER)
3. Operating Income Ratio (OIR)
4. Return on Total Assets (RTA)
5. Return on Capital Employed (RCE)
6. Return on Net worth (RNW)

1. Net Profit Ratio

It establishes a relationship between net profit (after taxes) and sales, and indicates the efficiency of the management in manufacturing, selling, administrative and other activities of the firm. Net profit ratio is an indicator of overall profitability of the business. Higher the net profit ratio betters the business. A lower net profit ratio on the other hand, reveals that the company has poor profitability as compared to that of the industry. This ratio is highly useful in making inter – firm comparison of the profitability. A change in net profit of a business concern over a period of time might through light on the cause of such a change.

Table – 4.1
Net Profit Ratio (In %)

Year	Ram Co Cements	Ultra Tech Cements	JK Lakshmi Cements	Ambuja Cements	Deccan Cements
2009	25.92	22.65	20.22	21.96	32.2
2010	24.27	23.9	23.74	17.59	17.78
2011	16.68	14.8	12.36	6.42	13.32
2012	21.99	18.72	13.40	14.65	18.5
2013	20.01	19.32	15.52	12.33	8.7
2014	9.30	14.9	9.35	3.33	8.96
2015	15.10	14.7	8.81	9.53	10.94
2016	24.56	15.9	6.51	10.9	16.54
2017	24.15	17.8	11.09	10.8	16.20
2018	19.15	14.44	7.90	8.37	11.66
MEAN	20.11	17.69	12.89	11.59	15.47
STDEV	5.22	3.43	5.55	5.42	6.86
CV	25.96	19.41	43.05	46.75	44.31

Source: Computed Data, 2018

Inference

Table – 4.1 shows the Net profit ratio of the select cement industries during the study period of 2008 – 2009 to 2017 – 2018. Ram Co Cement Limited, 20.11 per cent and the Ultra Tech cement Limited, 17.69 per cent are very good with compared to the other companies mean value. But the standard deviation of these industries is low compared with Deccan Cements Limited, 6.86 per cent. The least Coefficient of Variance value of Ultra Tech cements Limited indicates that the company maintaining consistency in the net profit ratio than other companies.

2. Operating Expense Ratio

Operating expense ratio explains the changes in the profit margin (EBIT to Sales) ratio. It is calculated by dividing the total operating expense by net sales and is expressed as a percentage. This ratio is the test of the operational efficiency with which the business is being carried. The operating ratio should be low enough to leave a portion of sales to give a fair return to the investors. A comparison of the operating will indicate whether the cost component is higher or low in the figure of sales. In case, the comparison shoes that there is an increase in this ratio, the reason for such increase should be found out and the management are advised to check the increase.

Table – 4.2
Operating Expense Ratio (In %)

Year	Ram Co Cements	Ultra Tech Cements	JK Lakshmi Cements	Ambuja Cements	Deccan Cements
2009	79.06	80.27	82.00	82.05	70.64
2010	81.49	79.41	78.42	89.90	94.12
2011	89.73	88.55	96.54	99.09	99.76
2012	83.83	84.74	93.10	92.93	90.15
2013	85.73	83.50	90.45	95.29	98.08
2014	98.13	88.44	95.66	102.73	98.72
2015	92.60	89.35	93.80	100.36	95.60
2016	82.98	88.39	104.35	97.43	86.31
2017	79.57	87.37	101.70	96.04	85.65
2018	83.02	90.37	101.05	98.80	90.04
MEAN	85.62	86.04	93.71	95.46	90.91
STDEV	6.11	3.86	8.33	5.99	8.72
CV	7.13	4.49	8.89	6.27	9.59

Source: Computed Data, 2018

Inference

Table – 4.2 describes the analysis of the operating expenses of the selected cement industries during the study period of 2008 – 2009 to 2017 – 2018. In this Ram Co cements Limited, 85.62 per cent and Ultra Tech Cements Limited, 86.04 per cent are having the lower mean value, it denotes these two companies perform better that other companies in controlling the operating expenses. The lowest value of Coefficient of Variance reveals that the companies maintain the consistency in managing operating costs.

3. Operating Income Ratio

Operating profit is calculated by subtracting the operating expenses from the operating revenues. Operating profit ratio is an indicator of operational efficiency than the net profit ratio. Net profit includes non-operating incomes and expenses and, hence, net profit ratio may give misleading picture of operational efficiency. Higher the operating profit ratio better is the operational profitability of the business and managerial efficiency. The operating profit should be adequate to provide for the Operating profit ratio must be sufficient to give a reasonable return to the investors.

Table – 4.3
Operating Income Ratio (In %)

Year	Ram Co Cements	Ultra Tech Cements	JK Lakshmi Cements	Ambuja Cements	Deccan Cements
2009	31.2	27.3	25.7	27.6	35.8
2010	31.1	28.8	28.9	22.9	25.7
2011	24.9	20.4	16.5	13.2	20.2
2012	29.5	23.3	20.2	20.7	23.2
2013	27	23.8	22.2	18.5	13.5
2014	17.2	19.8	15.6	9.6	15.1
2015	21.4	19.3	13.6	15.4	15.3
2016	31.2	20.9	12.4	16.1	20
2017	31	22.5	16.4	15.4	20.5
2018	25.6	19.9	13.2	13.4	15.5
MEAN	27.01	22.6	18.47	17.28	20.48
STDEV	4.81	3.27	5.60	5.00	6.66
CV	17.80	14.47	30.34	28.96	32.51

Source: Computed data, 2018

Inference

Table – 4.3 presents the operating income ratio of the select cement industries, during the study period, from 2008 – 2009 to 2017 – 2018. The mean value of the Ram co Cement Limited, 27.01 per cent is higher than the other industries. This reveals that the company perform better that the other companies. The least Coefficient of Variance in Ultra Tech Cements Limited, 3.27 per cent shows that there was a consistency in operating income.

4. Return on Total Assets

Return on total asset ratio measures the profitability and efficiency of a business concern. Asset generates income. Hence, an analyst should judge the earning of the company in relation total assets. This ratio show how the total assets at the disposal of management of company have been used to generate income. Higher the ratio better is the efficiency of management.

Table – 4.4
Return on Assets (In %)

Year	Ram Co Cements	Ultra Tech Cements	JK Lakshmi Cements	Ambuja Cements	Deccan Cements
2009	10.37	4.91	7.05	8.22	10.43
2010	10.78	5.64	10.07	7.19	9.21
2011	6.91	6.72	4.65	2.54	7.85
2012	11.33	11.88	6.55	7.41	16.43
2013	12.13	13.59	9.08	6.95	7.52
2014	5.42	10.62	5.47	1.85	6.09
2015	8.70	11.78	5.80	5.27	8.36
2016	13.97	13.16	4.88	6.59	16.68
2017	15.09	14.89	9.22	6.90	14.00
2018	13.35	14.96	8.43	4.96	11.58
MEAN	10.81	10.81	7.12	5.79	10.81
STDEV	3.09	3.76	1.96	2.13	3.76
CV	28.56	34.80	27.52	36.75	34.78

Source: Computed data, 2018

Inference

In the above table – 4.4, the mean value of Ram Co Cements Ltd, Ultra Tech Cements Ltd and Deccan Cements Ltd have the same mean value of 10.81 per cent. This shows out of five cement companies the average return on total asset ratio of only three companies are having a same level and high mean value compared to others. The high Coefficient of Variance in Ultra Tech Cements, 34.80 per cent and Deccan Cements reveals that it has not maintained constancy in effectively managing its assets to general earnings.

5. Return on Capital Employed

The Return on Capital invested is a concept that measures the profit which a firm earns on investing a unit of capital. The profit being the net result of all operations, the return on capital expresses all efficiencies or inefficiencies of a business collectively and thus, is a dependable measure for judging its overall efficiency or inefficiency. The Return on Capital when calculated in this manner would also show whether the companies borrowing policy was economically and whether capital had been employed fruitfully. The business can survive only when the return on capital employed is more than the cost of capital employed in the business. This ratio is computed by dividing the profit before interest and tax by the total capital employed.

Table – 4.5
Return on Capital Employed (In %)

Year	Ram Co Cements	Ultra Tech Cements	JK Lakshmi Cements	Ambuja Cements	Deccan Cements
2009	9.4	15.8	11.4	7.6	6.8
2010	8	15.5	11.8	5.5	0.8
2011	4.9	8.6	3	1.1	0.4
2012	8.4	12.3	4.8	4.3	9.5
2013	8.3	11.9	7	2.8	1.5
2014	2.7	8.6	3.2	-3.7	1
2015	4.3	7.8	3.4	-0.1	4.5
2016	10.1	8.4	0	7.5	10.9
2017	19.1	13.3	8.4	7.4	10.3
2018	10.6	10.7	8.1	5	7.8
MEAN	8.58	11.29	6.11	3.74	5.35
STDEV	4.53	2.96	3.87	3.54	4.22
CV	52.79	26.22	63.36	94.68	78.89

Source: Computed data, 2018

Inference

Table – 4.5 shows the analysis of return on capital employed in selected cement companies during the study period 2008 – 2009 to 2017- 2018. In this period Ultra Tech Cements have the highest mean value of 11.29 per cent compared to others. Out of the five select cement companies Ultra Tech Cement Limited has been earning constant return for its capital employed, this is concluded based on its lowest Coefficient of Variance per cent.

6. **Return on Net worth**

Return on net worth is calculated to see the profitability of owner's investment. While there is no doubt that the preference shareholders who bear all the risks, participate in management and are entitled to all the profits remaining after all outside claims, including preference dividends met in full. The ratio under reference serves this purpose. It is calculated by dividing the profits after taxes and preference dividends by the average equity of the ordinary shareholders.

Table – 4.6
Return on Net Worth (In %)

Year	Ram Co Cements	Ultra Tech Cements	JK Lakshmi Cements	Ambuja Cements	Deccan Cements
2009	28.84	27.14	21.48	12.18	19.99
2010	22.70	23.75	23.62	8.57	2.49
2011	12.16	12.78	5.65	1.39	1.15
2012	18.78	18.69	9.26	6.59	21.80
2013	17.02	17.65	13.95	4.47	3.24
2014	5.55	12.88	7.12	-6.61	2.18
2015	9.16	11.04	7.88	-0.04	8.12
2016	18.05	11.30	0.33	2.30	15.94
2017	17.35	11.12	6.23	3.04	14.11
2018	13.75	8.43	3.01	1.34	10.54
MEAN	16.34	15.48	9.85	3.32	9.96
STDEV	6.66	6.14	7.61	5.13	7.72
CV	40.77	39.66	77.28	154.27	77.55

Source: Computed data, 2018

Inference

Table – 4.6 reveals the return on net worth ratio of select Cement companies during the study period from 2008 – 2009 to 2017 – 2018. In this comparison finally, Ram Co Cement Limited, 16.34 per cent and Ultra Tech Cements Limited, 15.48 per cent have the highest mean value. This shows that the companies effectively used the internal resources of fund and generating better income from it. The highest Coefficient of Variance in Ambuja Cements Limited, 154.27 per cent denotes that there is high variation in return on net worth ratio.

Correlation between the Profit After Tax and selected variables

The result of inter correlation matrix carried out to ascertain the relationship between profit after tax and the selected variables in Ambuja Cement Ltd during the study period are presented in table

List of variables selected for Correlation analysis

1. Profit After Tax (PAT)
2. Total Expenses (TE)
3. Total Assets (TA)
4. Total Current Assets (TCA)
5. Total Debt (TD)
6. Net Fixed Assets (NFA)
7. Total Shareholder's Equity (TSE)
8. Total Current Liabilities (TCL)
9. Net Sales (NS)

Reliability Statistics

Cronbach's Alpha	No of Items
.884	9

The Cronbach's Alpha indicates that, there is a good internal consistency of data to apply the correlation and regression, hence to test the formulated hypothesis, the statistical tool ANOVA is applied in the present study.

Table – 4.7

(A) Inter Correlation Matrix – Ambuja Cement Ltd

		PAT	TE	TA	TCA	TD	NFA	TSE	TCL	NS
PAT	Pearson Correlation	1								
	Sig. (2-tailed)									
TE	Pearson Correlation	-.637*	1							
	Sig. (2-tailed)	.048								
TA	Pearson Correlation	-.394	.887**	1						
	Sig. (2-tailed)	.260	.001							
TCA	Pearson Correlation	.234	.055	.153	1					
	Sig. (2-tailed)	.515	.879	.672						
TD	Pearson Correlation	-.588	.904**	.707*	.164	1				
	Sig. (2-tailed)	.074	.000	.022	.651					
NFA	Pearson Correlation	-.079	.670*	.916**	.287	.442	1			
	Sig. (2-tailed)	.829	.034	.000	.422	.201				
TSE	Pearson Correlation	-.004	.543	.868**	.253	.314	.961**	1		
	Sig. (2-tailed)	.990	.105	.001	.481	.376	.000			
TCL	Pearson Correlation	-.671	.767**	.557	-.508	.616	.313	.182	1	
	Sig. (2-tailed)	.034	.010	.095	.134	.058	.378	.616		
NS	Pearson Correlation	-.484	.981**	.901**	.127	.883**	.737*	.600	.711*	1
	Sig. (2-tailed)	.156	.000	.000	.726	.001	.015	.066	.021	
*. Correlation is significant at the 0.05 level (2-tailed).										
**. Correlation is significant at the 0.01 level (2-tailed).										

Source: Computed data, 2018

Inference

Table – 4.7 shows that the independent variables, such as Total Expenses and Total Current Liabilities are having a positive correlation, above .637 with dependent variable, Profit After Tax. The correlation between independent and dependent variables have been found to be significant either at five per cent or one per cent level of significance.

Reliability Statistics

Cronbach's Alpha	No of Items
.947	9

The Cronbach's Alpha indicates that, there is a good internal consistency of data to apply the correlation and regression, hence to test the formulated hypothesis, the statistical tools, correlation and regression were applied.

Table – 4. 8
(B) Inter Correlation Matrix – Ultra Tech Cement Ltd

		PAT	TE	TA	TCA	TD	NFA	TSE	TCL	NS
PAT	Pearson Correlation	1								
	Sig. (2-tailed)									
TE	Pearson Correlation	.814**	1							
	Sig. (2-tailed)	.004								
TA	Pearson Correlation	.746*	.988**	1						
	Sig. (2-tailed)	.013	.000							
TCA	Pearson Correlation	.844**	.925**	.913**	1					
	Sig. (2-tailed)	.002	.000	.000						
TD	Pearson Correlation	.512	.862**	.900**	.689*	1				
	Sig. (2-tailed)	.131	.001	.000	.028					
NFA	Pearson Correlation	.672*	.967**	.992**	.858**	.942**	1			
	Sig. (2-tailed)	.033	.000	.000	.001	.000				
TSE	Pearson Correlation	.807**	.979**	.984**	.956**	.819**	.957**	1		
	Sig. (2-tailed)	.005	.000	.000	.000	.004	.000			
TCL	Pearson Correlation	.709*	.936**	.930**	.852**	.750*	.909**	.918**	1	
	Sig. (2-tailed)	.022	.000	.000	.002	.013	.000	.000		
NS	Pearson Correlation	.843**	.998**	.982**	.927**	.850**	.957**	.977**	.929**	1
	Sig. (2-tailed)	.002	.000	.000	.000	.002	.000	.000	.000	
**. Correlation is significant at the 0.01 level (2-tailed).										
*. Correlation is significant at the 0.05 level (2-tailed).										

Source: Computed Data, 2018

Inference

Table – 4.8 indicates that all the independent variables, Total Expense, Total Assets, Total Current Assets, Net Fixed Assets, Total Shareholders Equity, Total Current Liabilities and Net Sales are having a positive correlation, above .521 with dependent variable, Profit After Tax.

It was conclude that all independent variables are significantly correlated with dependent variable, Profit After Tax during the study period. The correlation between independent variables has been found to be significant at five per cent and at one percent level of significance.

Reliability Statistics

Cronbach's Alpha	No of Items
.884	9

The Cronbach's Alpha indicates that, there is a good internal consistency of data to apply the correlation and regression, hence to test the formulated hypothesis, the statistical tools, correlation and regression were applied.

Table – 4.9

(C) Inter Correlation Matrix – Ram Co Cement Ltd

		PAT	TE	TA	TCA	NFA	TSE	TCL	TD	NS
PAT	Pearson Correlation	1								
	Sig. (2-tailed)									
TE	Pearson Correlation	.122	1							
	Sig. (2-tailed)	.736								
TA	Pearson Correlation	.290	.915**	1						
	Sig. (2-tailed)	.417	.000							
TCA	Pearson Correlation	.553	.775**	.829**	1					
	Sig. (2-tailed)	.098	.009	.003						
NFA	Pearson Correlation	.375	.907**	.980**	.820**	1				
	Sig. (2-tailed)	.286	.000	.000	.004					
TSE	Pearson Correlation	.640*	.780**	.866**	.850**	.927**	1			
	Sig. (2-tailed)	.046	.008	.001	.002	.000				
TCL	Pearson Correlation	.346	.801**	.853**	.694*	.897**	.834**	1		
	Sig. (2-tailed)	.327	.005	.002	.026	.000	.003			
TD	Pearson Correlation	-.728*	-.531	-.635	-.627	-.746	-.899	-.802	1	
	Sig. (2-tailed)	.017	.114	.048	.052	.013	.000	.005		
NS	Pearson Correlation	.469**	.930**	.892**	.870**	.925**	.913**	.824**	.735*	1
	Sig. (2-tailed)	.171	.000	.001	.001	.000	.000	.003	.016	
*. Correlation is significant at the 0.05 level (2-tailed).										
**. Correlation is significant at the 0.01 level (2-tailed).										

Source: Computed data, 2018

Inference

In this above table – 4.9 the independent variables, Total Shareholders Equity and Net Sales both are highly correlated, above .469 with the dependent variable, Profit After Tax. Total Debt is negatively correlated with the dependant variable. Remaining independent variables are positively correlated with the dependant variable but not at the high level.

Reliability Statistics

Cronbach's Alpha	No of Items
.934	9

The Cronbach's Alpha indicates that, there is a good internal consistency of data to apply the correlation and regression, hence to test the formulated hypothesis, the statistical tools, correlation and regression were applied.

Table – 4.10

(D) Inter Correlation Matrix – JK Lakshmi Cement Ltd

		PAT	TE	TA	TCA	TD	NFA	TSE	TCL	NS
PAT	Pearson Correlation	1								
	Sig. (2-tailed)									
TE	Pearson Correlation	.653*	1							
	Sig. (2-tailed)	.041								
TA	Pearson Correlation	.643*	.956**	1						
	Sig. (2-tailed)	.045	.000							
TCA	Pearson Correlation	.708*	.854**	.842**	1					
	Sig. (2-tailed)	.022	.002	.002						
TD	Pearson Correlation	-.607	.939**	.986**	.863**	1				
	Sig. (2-tailed)	.063	.000	.000	.001					
NFA	Pearson Correlation	.660*	.949**	.994**	.814**	.984**	1			
	Sig. (2-tailed)	.038	.000	.000	.004	.000				
TSE	Pearson Correlation	-.590	.881**	.935**	.699*	.866**	.915**	1		
	Sig. (2-tailed)	.073	.001	.000	.024	.001	.000			
TCL	Pearson Correlation	.693*	.962**	.984**	.830**	.971**	.988**	.893**	1	
	Sig. (2-tailed)	.026	.000	.000	.003	.000	.000	.000		
NS	Pearson Correlation	-.572	.994**	.946**	.816**	.926**	.936**	.879**	.948**	1
	Sig. (2-tailed)	.084	.000	.000	.004	.000	.000	.001	.000	
*. Correlation is significant at the 0.05 level (2-tailed).										
**. Correlation is significant at the 0.01 level (2-tailed).										

Source: Computed data, 2018

Inference

From the table – 4.10, it is proved that, independent variables, Total Expenses, Total Assets, Current Liabilities, Current Liabilities are having a positive correlation above .643 with dependent variable Profit After Tax. The remaining independent variables, Total Debt, Net Fixed Asset, Total Shareholders Equity, and Net Sales are negatively correlated with the dependent variable Profit After Tax.

Reliability Statistics

Cronbach's Alpha	No of Items
.884	9

The Cronbach's Alpha indicates that, there is a good internal consistency of data to apply the correlation and regression, hence to test the formulated hypothesis, the statistical tools, correlation and regression were applied.

Table – 4.11
(E) Inter Correlation Matrix – Deccan Cements Limited

		PAT	TE	TA	TCA	TD	NFA	TSE	TCL	NS
PAT	Pearson Correlation	1								
	Sig. (2-tailed)									
TE	Pearson Correlation	.269	1							
	Sig. (2-tailed)	.452								
TA	Pearson Correlation	-.413	-.567	1						
	Sig. (2-tailed)	.235	.087							
TCA	Pearson Correlation	.196	.339	.207	1					
	Sig. (2-tailed)	.586**	.338	.566						
TD	Pearson Correlation	-.558	-.718*	.824**	.341	1				
	Sig. (2-tailed)	.094	.019	.003	.334					
NFA	Pearson Correlation	-.471	.771**	.792**	.420	.968**	1			
	Sig. (2-tailed)	.170	.009	.006	.226	.000				
TSE	Pearson Correlation	.588	.693*	-.696*	.442	-.970**	-.906**	1		
	Sig. (2-tailed)	.074	.026	.025	.201	.000	.000			
TCL	Pearson Correlation	-.108	-.447	.628	.180	.603	.459	-.629	1	
	Sig. (2-tailed)	.766	.195	.052	.619	.065	.182	.051		
NS	Pearson Correlation	.468**	.974**	-.650*	.312	-.801**	-.819**	.783**	-.488	1
	Sig. (2-tailed)	.172	.000	.042	.380	.005	.004	.007	.153	
*. Correlation is significant at the 0.05 level (2-tailed).										
**. Correlation is significant at the 0.01 level (2-tailed).										

Source: Computed data, 2018

Inference

In the above table – 4.11, the independent variables, Net Sales and Total Current Assets are above .468 per cent positively correlated with the dependant variable of Profit After Tax. Independent variables like Total Debt and Net Fixed Assets are negatively correlated with the dependant variable.

Multiple Regression between the Profit After Tax and elect Independent Variables

In this study, Multiple Regression is performed between the Dependent Variable (Profit After Tax) and the Independent Variables mainly to assess the degree of relationship between Independent Variables and Dependent Variable.

Testing of Hypothesis – I

H_0: The profitability factors affect the growth and performance of selected cement industries in India.

H_1: The profitability factors does not affect the growth and performance of selected cement industries in India.

List of Profitability factors

1. Total Expenses (TE)
2. Total Current Assets (TCL)
3. Total Debt (TD)
4. Net Fixed Assets (NFA)
5. Total Shareholder's Equity (TSE)
6. Total Current Liabilities (TCL)
7. Net Sales (NS)

Table – 4.12: Multiple Regressions – Ambuja Cements Limited

Model	R	R Square	Adjusted R Square	F	P
1	.978[a]	.956	.801	84.40470	.147(b)

Model	Un standardized coefficients		Standardized coefficients	T	Sig.	Result
	B	Std. Error	Beta			
(Constant)	-406.76	860.769	-	-.473	.683	Not Significant
TE – X1	-.880	.229	-4.603	-3.839	.062	Not Significant
TCA – X2	.024	.235	.037	.101	.928	Not Significant
TD – X3	.099	.271	.204	.365	.750	Not Significant
NFA – X4	-.084	.177	-.506	-.476	.681	Not Significant
TSE – X5	.174	.234	.643	.745	.534	Not Significant
TCL – X6	.063	.274	.143	.229	.840	Not Significant
NS – X7	.816	.247	3.731	3.304	.081	Not Significant

Source: Computed Data, 2018

a. Dependent Variable: PAT

b. Predictors: (Constant), NS, TD, TCA, TCL, TE, TSE, NFA

Inference

Table – 4.12 reveals the regression result of Ambuja Cements Limited. R Square value was at .956 implying the select variables Total Expenses, Total Assets, Total Current Assets, Total Debt, Net Fixed Assets, Total Shareholders Equity, Total Current Liabilities, Net Sales cause .956 per cent variation in the dependant variable of Profit After Tax of Ambuja Cements Limited. All the independent variables are not significant on impact of Profit After Tax at five per cent level of significance.

Table – 4.13: Multiple Regressions – Ultra Tech Cements Limited

Model	R	R Square	Adjusted R Square	F	P
1	.999[a]	.999	.995	43.61481	.004(b)

Model	Un standardized coefficients		Standardized coefficients	T	Sig.	Result
	B	Std. Error	Beta			
(Constant)	-406.76	860.769	-	-.473	.683	Not Significant
TE- X1	-.880	.229	-4.603	-3.839	.062	Not Significant
TCA – X2	.024	.235	.037	.101	.928	Not Significant
TD – X3	.099	.271	.204	.365	.750	Not Significant
NFA – X4	-.084	.177	-.506	-.476	.681	Not Significant
TSE – X5	.174	.234	.643	.745	.534	Not Significant
TCL – X6	.063	.274	.143	.229	.840	Not Significant
NS – X7	.816	.247	3.731	3.304	.081	Not Significant

Source: Computed Data, 2018

a. Dependent Variable: PAT

b. Predictors: (Constant), NS, TD, TCA, TCL, TE, TSE, NFA

Inference

Table – 4.13 reveals the regression result of select cement companies in India. R Square value was at .999 implying the select variables Total Expenses, Total Assets, Total Current Assets, Total Debt, Net Fixed Assets, **Total** Shareholders Equity, Total Current Liabilities, Net Sales cause .999 per cent variation in the dependant variable of Profit After Tax of Ultra Tech Cements Limited. All the independent variables are not significant on impact of Profit After Tax at five per cent level of significance.

Table – 4.14: **Multiple Regressions – Ram Co Cements Limited**

Model	R	R Square	Adjusted R Square	F	P
1	.998[a]	.996	.968	35.554	.129(b)

Model	Un standardized coefficients		Standardized coefficients	T	Sig.	Result
	B	Std. Error	Beta			
(Constant)	134.028	363.020	-	.369	.775	Not Significant
TE – X1	-.734	.102	-2.593	-7.161	.088	Not Significant
TCA – X2	-.149	.234	-.152	-.636	.639	Not Significant
NFA – X3	-.419	.235	-1.497	-1.780	.326	Not Significant
TSE – X4	.203	.138	1.130	1.465	.381	Not Significant
TCL – X5	.167	.137	.400	1.214	.439	Not Significant
TD – X6	.155	.158	.495	.982	.506	Not Significant
NS – X7	.651	.104	2.443	6.254	.101	Not Significant

Source: Computed Data, 2018

a. Dependent Variable: PAT

b. Predictors: (Constant), NS, TD, TCA, TCL, TE, TSE, NFA

Inference

Table – 4.14 reveals the regression result of Ram Co Cements Limited. R Square value was at .996 implying the select variables Total Expenses, Total Assets, Total Current Assets, Total Debt, Net Fixed Assets, Total Shareholders Equity, Total Current Liabilities, Net Sales cause .996 per cent variation in the dependant variable of Profit After Tax of Deccan Cements Limited. All the independent variables are not significant on impact of Profit After Tax at five per cent level of significance.

Table – 4.15: Multiple Regressions – JK Lakshmi Cements

Model	R	R Square	Adjusted R Square	F	P
1	.990[a]	.980	.909	21.43509	.069(b)

Model	Un standardized coefficients		Standardized coefficients	T	Sig.	Result
	B	Std. Error	Beta			
(Constant)	88.158	119.583	-	.737	.538	Not Significant
TE – X1	-.427	.150	-5.350	-2.848	.104	Not Significant
TCA – X2	-.134	.169	-.324	-.796	.509	Not Significant
TD – X3	.212	.124	1.922	1.710	.229	Not Significant
NFA – X4	-.085	.109	-1.262	-.776	.519	Not Significant
TSE – X5	.017	.124	.047	.139	.902	Not Significant
TCL – X6	-.126	.125	-.806	-1.006	.420	Not Significant
NS – X7	.462	.139	5.132	3.320	.080	Not Significant

Source: Computed Data, 2018

a. Dependent Variable: PAT

b. Predictors: (Constant), NS, TD, TCA, TCL,TE, TSE, NFA

Inference

Table – 4.15 reveals the regression result of select cement companies in India. R Square value was at .980 implying the select variables Total Expenses, Total Assets, Total Current Assets, Total Debt, Net Fixed Assets, **Total** Shareholders Equity, Total Current Liabilities, Net Sales cause .980 per cent variation in the dependant variable of Profit After Tax of JK Lakshmi Cements Limited. All the independent variables are not significant on impact of Profit After Tax at five per cent level of significance**.**

Table – 4.16: Multi Regression – Deccan Cements Limited

Model	R	R Square	Adjusted R Square	F	P
1	.991[a]	.983	.845	7.62946	.282(b)

Model	Un standardized coefficients		Standardized coefficients	T	Sig.	Result
	B	Std. Error	Beta			
(Constant)	-63.183	269.798	-	-.234	.854	Not Significant
TE – X1	-.642	.228	-3.907	-2.816	.217	Not Significant
TCA – X2	.059	.615	.075	.095	.939	Not Significant
TD – X3	.067	.698	.381	.096	.939	Not Significant
NFA – X4	-.039	1.086	-.091	-.036	.977	Not Significant
TSE – X5	.078	.587	.270	.133	.916	Not Significant
TCL – X6	.295	.455	.256	.650	.633	Not Significant
NS – X7	.673	.209	4.395	3.215	.192	Not Significant

Source: Computed Data, 2018

a. Dependent Variable: PAT

b. Predictors: (Constant), NS, TD, TCA, TCL, TA, TSE, NFA

Inference

Table – 4.16 reveals the regression result of select cement companies in India. R Square value was at .983 implying the select variables Total Expenses, Total Assets, Total Current Assets, Total Debt, Net Fixed Assets, Total Shareholders Equity, Total Current Liabilities, Net Sales cause .983 per cent variation in the dependant variable of Profit After Tax of Deccan Cements Limited. All the independent variables are not significant on impact of Profit After Tax at five per cent level of significance. Here the null hypothesis accepted**,** because the independent variables do not have impact on the profitability of the company.

4.3 Analysis and Interpretation of Dividend distribution

The term dividend refers to that part of a company which is distributed by the company among its shareholders. It is the reward of the shareholders for investments made by them in the shares of the company. The investors are interested in earning the maximum return on their investments and to maximize their wealth a company, on the other hand, needs to provide funds to finance its long – term growth. If a company pays out as dividend most of what it earns, then for business requirements and further expansion it will have to depend upon outside resources such as issue of debt or new shares. Dividend policy of a firm, thus affects both the long- term financing and the wealth of shareholders. As a result, the firm's decision to pay dividends must be reached in such a manner so as to equitably apportion the distributed profits and retained earnings. Since dividend is a right of shareholders to participate in the profits and surplus of the company for their investment in the share capital of the company, they should receive fair amount as dividends to its members and retain the rest for its growth and survival.

In this part, the Dividend distribution of the select cement companies situated in India is analyzed with the help of the following ratios, as the measure of Dividend distribution.

1. Dividend Payout Ratio
2. Dividend per share
3. Dividend yield ratio
4. Price earnings ratio
5. Earnings per share

1. Dividend Payout Ratio

Dividend payout ratio compares the dividends paid by the company to its earners. The relationship between dividends and earnings is important. The part of earnings that is not paid out in dividend is used for reinvestment and growth in future earnings. Investors who are interested in short term earnings prefer to invest in companies with high dividend payout ratio. On the other hand, investors who prefer to have capital growth like to invest in companies with lower dividend payout ratio.

Investors usually seek a consistent and improving dividend payout ratio. The dividend payout ratio should not be too high. The earnings should support the payment of dividends. If the company pays high levels of dividends it may become for it to maintain such levels of dividends if the earnings fall in the future. Dividends are paid in cash; therefore, high dividend payout ratio can have implications for the cash management and liquidity of the company.

Table – 4.17

Dividend Payout Ratio (In %)

Year	Ram Co Cements	Ultra Tech Cements	JK Lakshmi Cements	Ambuja Cements	Deccan Cements
2009	13.1	6.4	18.70	15.6	6.1
2010	13.5	6.8	3.50	20.3	48.4
2011	14.1	12	2.50	70.6	42.2
2012	15.5	9.1	3.10	23.6	4.4
2013	17.7	9.2	2.60	32.9	19.1
2014	17.3	11.2	1.80	51.8	16.7
2015	14.8	11.8	0.60	53.8	8.8
2016	12.8	11.8	0.10	46.6	7.7
2017	0	9.6	0.20	44.5	0
2018	12.7	12.3	0.20	26.7	10.9
MEAN	13.15	10.02	3.33	38.64	16.43
STDEV	4.95	2.16	5.55	17.61	16.26
CV	37.64	21.56	166.71	45.57	98.97

Source: Computed Data, 2018

Inference

Table – 4.17 represent the dividend payout ratio of the select cement companies. In this Ambuja Cements Limited 38.64per cent have the highest mean value, it mean which shows its good performance in payout ratio.

2. Dividend per share

Dividend per share is the sum of declared dividends issued by a company for every ordinary share outstanding. Dividend per share is the total dividends paid out by a business, including interim dividends, divided by the no. of outstanding ordinary shares issued.

Table – 4.18

Dividend per Share (In %)

Year	Ram Co Cements	Ultra Tech Cements	JK Lakshmi Cements	Ambuja Cements	Deccan Cements
2009	2	5	4.00	2.3	2.98
2010	2	6	2.50	2.3	3.00
2011	1.3	6	1.30	1.4	1.22
2012	2.5	8	2.00	2.1	3.00
2013	3	9	2.50	2.0	1.99
2014	1	9	2.00	5.02	1.20
2015	1.5	9	2.00	2.80	2.50
2016	3	9.5	0.30	2.28	5.01
2017	3	10	0.80	1.2	0.00
2018	3	10.5	0.80	1.2	3.00
MEAN	2.23	8.20	1.82	2.27	2.39
STDEV	0.78	1.89	1.08	1.10	1.37
CV	34.93	23.03	59.17	48.34	57.44

Source: Computed Data, 2018

Inference

The dividend per share of the selected cement companies are presented in the Table – 4.18, during the study period from 2008 – 2009 to 2017 – 2018. In this Ultra Tech Cements has the highest mean value of 8.20 per cent. This shows, the company offering better return to its shareholders' investment. The highest Coefficient of Variance in JK Lakshmi Cements shows that there is high variation in dividend per share during the study period.

3. Dividend yield ratio

Dividend yield is the amount that a company pays to its shareholders annually for their investments. It is expressed as a percentage and indicates attractiveness of investing in a company's stocks. Dividend yield is considered as ROI for income investors who are not interested in capital gains or long – term earnings. For an investor, not only the amount of this ratio is important but also the extent of coverage of this ratio by earnings yields. The dividend yield is computed by dividing the dividend per share by the market value per share.

Table – 4.19
Dividend Yield Ratio (In %)

Year	Ram Co Cements	Ultra Tech cements	JK Lakshmi cements	Ambuja cements	Deccan cements
2009	2.8	0.9	18.70	3.4	4.5
2010	1.6	0.5	3.50	2.2	3.3
2011	1.2	0.5	2.50	2.2	1.7
2012	1.6	0.5	3.10	2.1	3.4
2013	1.2	0.5	2.60	2.1	1.9
2014	0.5	0.4	1.80	2.5	1.4
2015	0.5	0.3	0.60	1.1	1.6
2016	0.8	0.3	0.10	1.2	1.7
2017	0.4	0.3	0.20	1.5	1.1
2018	0.4	0.3	0.20	0.6	0.6
MEAN	1.1	0.45	3.33	1.89	2.12
STDEV	0.76	0.18	5.55	0.81	1.21
CV	69.10	40.91	166.71	42.65	57.20

Source: Computed Data, 2018

Inference

The above Table – 4.19 reveals the analysis of dividend yield ratio of selected cement companies during the study period from 2008 – 2009 to 2017 – 2018. In this period JK Lakshmi Cements have the highest mean value of 3.33 per cent compared to other companies. This shows, that the company is offering better yield to the shareholders' investment in the form of dividend. The least Coefficient of Variance of variation in Ultra Tech Cements Ltd shows that there isles variation in dividend yield during the study period.

4. Price earnings ratio

This ratio indicates the number of times the earning per share is covered by its market price. Price earnings ratio helps the investor in deciding whether to buy the equity share of a company at a particular market price. It is mainly dependent on market factors. It can also be used to predict the market price of equity shares at some future date.

Table – 4.20
Price Earnings Ratio (In %)

Year	Ram Co Cements	Ultra Tech Cements	JK Lakshmi Cements	Ambuja Cements	Deccan Cements
2009	4.7	7	0.7	7	1.4
2010	8.2	13.1	3.6	11.7	14.5
2011	11.5	22.8	10.5	53.1	24.6
2012	9.5	17.3	7.3	13.2	1.3
2013	15	19.1	6.5	14.4	10
2014	37.2	27.1	14.2	-7.7	12.3
2015	30	37.6	40	-2,224.60	5.6
2016	17.1	35.7	925.3	22.8	4.5
2017	24.5	40.4	62.3	31.7	8.4
2018	30.7	48.8	125.1	62	18.4
MEAN	18.84	26.89	119.55	-201.64	10.1
STDEV	11.09	13.38	285.74	711.11	7.53
CV	58.85	49.74	239.01	-352.66	74.60

Source: Computed Data, 2018

Inference

Table – 4.20 shows, the analysis of price earnings ratio of select cement companies during the study period from 2008 – 2009 to 2017 – 2018. In which JK Lakshmi Cement Ltd has the highest mean value of 119.55 per cent and the lowest mean value by the Deccan Cements Limited with10.1 percent. It concludes that the JK Lakshmi Cements have a good performance in price earnings ratio than the other companies. The lowest Coefficient of Variance of variation in Ambuja Cements Limited shows that there is less variation in price earnings ratio during the study period.

5. Earnings per share

This ratio is calculated to assess the availability of total profits per share. It is calculated by dividing the net profit after tax and preference dividend by number of equity shares. Earnings per share throw light on the overall profitability and helps in determining the market price of equity shares. It reflects upon the capacity of the business concern to pay dividend to its equity shareholders.

Table – 4.21
Earnings per Share (In %)

Year	Ram Co Cements	Ultra Tech Cements	JK Lakshmi Cements	Ambuja Cements	Deccan Cements
2009	15.3	78.6	29.2	15	48.9
2010	14.9	88	19.7	11.5	6.2
2011	9	61.4	4.8	2	2.9
2012	16	87.7	8.9	8.8	68.2
2013	17	97.7	14.8	6.1	10.4
2014	6	80.4	8	-7.9	7.2
2015	10	76.4	8.8	-0.1	28.4
2016	23	90.3	0.1	3.7	65
2017	27	98.9	7.3	5.3	33.5
2018	23	80.9	4.7	2.3	27.5
MEAN	16.12	84.03	10.63	4.67	29.82
STDEV	6.72	11.05	8.49	6.39	24.19
CV	41.69	13.15	79.88	136.80	81.12

Source: Computed Data, 2018

Inference

Table – 4.21 describes the analysis of earnings per share of select cement companies during the study period from 2008 – 2009 to 2017 – 2018. In this Ultra Tech Cements Limited has the highest mean value of earnings per share Rs. 84.03and the lowest mean value is secured by Ambuja Cements Limited with Rs. 4.67 per share. This shows that the Ultra Tech Cements Limited generating better earnings for each shares. The highest Coefficient of Variance variation in Ambuja Cements Limited shows that there is high variation in earnings per share during the study period.

Correlation between the Equity Dividend and selected variables

The result of inter correlation matrix carried out to ascertain the relationship between equity dividend and the selected variables of the select cement companies.

Reliability Statistics

Cronbach's Alpha	No of Items
.462	6

The Cronbach's Alpha indicates that, there is a good internal consistency of data to apply the correlation and regression, hence to test the formulated hypothesis, the statistical tools, correlation and regression were applied.

Table – 4.22
(A) Inter Correlation Matrix – Ambuja Cement Ltd

		ED	PAT	DEP	INT	LF	MPS
ED	Pearson Correlation	1					
	Sig. (2-tailed)						
PAT	Pearson Correlation	.802**	1				
	Sig. (2-tailed)	.005					
DEP	Pearson Correlation	-.553	-.708*	1			
	Sig. (2-tailed)	.098	.022				
INT	Pearson Correlation	-.734*	-.633*	.872**	1		
	Sig. (2-tailed)	.016	.049	.001			
LF	Pearson Correlation	-.484	-.349	.382	.630	1	
	Sig. (2-tailed)	.156	.322	.276	.051		
MPS	Pearson Correlation	-.097	.081	-.067	.208	.400	1
	Sig. (2-tailed)	.790	.823	.853	.565	.252	
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

Source: Computed Data, 2018

Inference

Table – 4.22 reveals that the independent variable, profit after tax is highly correlated .802 per cent with the dependent variable, equity dividend. The remaining independent variables, depreciation, liquid fund, market price of the share, interest are negatively correlated with the depend variable.

All the independent variables are correlated with the dependent variable at five per cent and one per cent level of significance.

Reliability Statistics

Cronbach's Alpha	No of Items
.692	6

The Cronbach's Alpha indicates that, there is a good internal consistency of data to apply the correlation and regression, hence to test the formulated hypothesis, the statistical tools, correlation and regression were applied.

Table – 4.23
(B) Inter Correlation Matrix – Ultra Tech Cement Ltd

		ED	PAT	DEP	INT	LF	MPS
ED	Pearson Correlation	1					
	Sig. (2-tailed)						
PAT	Pearson Correlation	.916**	1				
	Sig. (2-tailed)	.000					
DEP	Pearson Correlation	.935**	.760*	1			
	Sig. (2-tailed)	.000	.011				
INT	Pearson Correlation	.709*	.460	.906**	1		
	Sig. (2-tailed)	.022	.181	.000			
LF	Pearson Correlation	.946**	.843**	.898**	.703*	1	
	Sig. (2-tailed)	.000	.002	.000	.023		
MPS	Pearson Correlation	.843**	.702*	.920**	.876**	.883**	1
	Sig. (2-tailed)	.002	.024	.000	.001	.001	
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

Source: Computed data, 2018

Inference

Table – 4.23 reveals that all the independent variables, Profit After Tax, Depreciation, Interest, Liquid Funds, Market Price of the Shares are highly correlated above .709 per cent with the dependent variable.

Reliability Statistics

Cronbach's Alpha	No of Items
.692	6

The Cronbach's Alpha indicates that, there is a good internal consistency of data to apply the correlation and regression, hence to test the formulated hypothesis, the statistical tools, correlation and regression were applied.

Table – 4.24
(C) Inter Correlation Matrix – Ram Co Cement Ltd

		ED	PAT	DEP	INT	LF	MPS
ED	Pearson Correlation	1					
	Sig. (2-tailed)						
PAT	Pearson Correlation	.925**	1				
	Sig. (2-tailed)	.000					
DEP	Pearson Correlation	.256	.199	1			
	Sig. (2-tailed)	.476	.581				
INT	Pearson Correlation	-.379	-.542	.141	1		
	Sig. (2-tailed)	.280	.105	.698			
LF	Pearson Correlation	.446	.498	.880**	-.020	1	
	Sig. (2-tailed)	.197	.143	.001	.957		
MPS	Pearson Correlation	.602	.733*	.633*	-.512	.852**	1
	Sig. (2-tailed)	.065	.016	.050	.130	.002	
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

Source: Computed data, 2018

Inference

The above table – 4.24 shows that the independent variable, Profit After Tax is highly correlated with .925 per cent the dependent variable, Equity Dividend. The independent variable, Interest is negatively correlated with the dependent variable. Remaining independent variables are positively correlated with the dependent variable.

Reliability Statistics

Cronbach's Alpha	No of Items
.364	6

The Cronbach's Alpha indicates that, there is a good internal consistency of data to apply the correlation and regression, hence to test the formulated hypothesis, the statistical tools, correlation and regression were applied.

Table – 4.25
(D) Inter Correlation Matrix – JK Lakshmi Cement Ltd

		ED	PAT	DEP	INT	LF	MPS
ED	Pearson Correlation	1					
	Sig. (2-tailed)						
PAT	Pearson Correlation	.866**	1				
	Sig. (2-tailed)	.001					
DEP	Pearson Correlation	-.563	-.517	1			
	Sig. (2-tailed)	.090	.126				
INT	Pearson Correlation	-.881**	-.744*	.856**	1		
	Sig. (2-tailed)	.001	.014	.002			
LF	Pearson Correlation	-.726*	-.731*	.653*	.830**	1	
	Sig. (2-tailed)	.017	.016	.040	.003		
MPS	Pearson Correlation	-.481	-.376	.701*	.750*	.690*	1
	Sig. (2-tailed)	.159	.284	.024	.013	.027	
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

Source: Computed Data, 2018

Inference

Table – 4.25 shows that the independent variable, profit after tax is highly correlated .925 per cent with the dependent variable, equity dividend. The remaining independent variables, depreciation, liquid fund, market price of the share, interest are negatively correlated with the depend variable.

Reliability Statistics

Cronbach's Alpha	No of Items
.498	6

The Cronbach's Alpha indicates that, there is a good internal consistency of data to apply the correlation and regression, hence to test the formulated hypothesis, the statistical tools, correlation and regression were applied.

Table – 4.26
(E) Inter Correlation Matrix – Deccan Cement Ltd

		ED	PAT	DEP	INT	LF	MPS
ED	Pearson Correlation	1					
	Sig. (2-tailed)						
PAT	Pearson Correlation	.365	1				
	Sig. (2-tailed)	.300					
DEP	Pearson Correlation	-.137	-.294	1			
	Sig. (2-tailed)	.705	.410				
INT	Pearson Correlation	-.290	-.560	.604	1		
	Sig. (2-tailed)	.417	.092	.064			
LF	Pearson Correlation	.012	.084	.674*	.076	1	
	Sig. (2-tailed)	.975	.817	.032	.835		
MPS	Pearson Correlation	.578	.540	.093	-.642*	.496	1
	Sig. (2-tailed)	.080	.107	.798	.045	.145	
*. Correlation is significant at the 0.05 level (2-tailed).							

Source: Computed Data, 2018

Inference

In this above table – 4.26, the independent variables, Profit After Tax, Depreciation, Liquid Funds and Market Price of the Share are positively correlated with the dependent variable, Equity Dividend.

All the independent variables are correlated with the dependent variable at five per cent level of significance.

Multiple Regressions of selected Dependent and Independent variables

In this study, Multiple Regression is performed between the Dependent Variable (Equity Dividend) and the Independent Variables mainly to assess the degree of relationship between the Independent Variable and Dependent Variable.

Testing of Hypothesis – II

H_0: The selected factors affect the payment of dividend distribution of selected cement industries in India.

H_1: The selected factors does not affect the payment of dividend distribution of selected cement industries in India.

List of Variables selected to analyze dividend distribution

1. Equity Dividend (ED)
2. Profit After Tax (PAT)
3. Depreciation (DEP)
4. Interest (INT)
5. Liquidity Fund (LF)
6. Market price Per Share (MPS)

Table – 4.27: Multiple Regressions –Ambuja Cement Ltd

Model	R	R Square	Adjusted R Square	F	P
1	.955[a]	.912	.802	1286.78776	.031(b)

Model	Un standardized coefficients		Standardized coefficients	T	Sig.	Result
	B	Std. Error	Beta			
(Constant)	-16201.84	8304.372	-	-1.95	.123	Not Significant
PAT – X1	12.191	3.258	.798	3.742	.020	Significant
DEP – X2	86.866	30.749	1.130	2.825	.048	Significant
INT – X3	-28.621	9.227	-1.338	-3.10	.036	Significant
LF – X4	2.185	3.105	.153	.704	.520	Not Significant
MPS – X5	8.086	11.188	.131	.723	.510	Not Significant

Source: Computed Data, 2018

a. Dependent Variable: ED

b. Predictors: (Constant), MPS, DEP, LF, PAT, INT

Inference

Table – 4.27 reveals the regression result of Ambuja Cements Limited. R Square value was at .912 implying the select variables Profit After Tax, Depreciation, Interest, Liquid Funds and Market Price of the Share of Ambuja Cements Limited. The independent variables Profit After Tax, Depreciation and Interest are found to be significant on impact of Equity Dividend at 5 per cent level of significant.

Equity Dividend = -16201.840 + 12.191 X1 + 86.866 X2 – 28.621 X3

Table – 4.28: Multiple Regressions – Ultra Tech Cement Ltd

Model	R	R Square	Adjusted R Square	F	P
1	.995[a]	.989	.976	1264.32070	.001(b)

Model	Un standardized coefficients		Standardized coefficients	T	Sig.	Result
	B	Std. Error	Beta			
(Constant)	-1115.18	1575.397	-	-.708	.518	NS Not Significant
PAT – X1	3.155	2.065	.251	1.528	.201	Not Significant
DEP – X2	16.361	7.059	.924	2.318	.081	Not Significant
INT – X3	-7.143	7.718	-.295	-.926	.407	Not Significant
LF – X4	.480	.454	.204	1.055	.351	Not Significant
MPS – X5	-.711	1.340	-.104	-.530	.624	Not Significant

Source: Computed Data, 2018

a. Dependent Variable: ED

b. Predictors: (Constant), MPS, DEP, LF, PAT, INT

Inference

Table – 4.28 reveals the regression result of Ultra Tech Cements Limited. R Square value was at .989 per cent implying the select variables Profit After Tax, Depreciation, Interest, Liquid Funds and Market Price of the Share of Ultra Tech Cements Limited. The independent variables Profit After Tax, Depreciation Interest, Liquid Funds and Market Price of the Share are found to be not significant on impact of Equity Dividend.

Table – 4.29: Multiple Regressions – Ram Co Cement Ltd

Model	R	R Square	Adjusted R Square	F	P
1	.968[a]	.938	.859	692.13698	.016(b)

Model	Un standardized coefficients		Standardized coefficients	T	Sig.	Result
	B	Std. Error	Beta			
(Constant)	-2694.18	1976.239	-	-1.363	.244	Not Significant
PAT – X1	14.260	2.416	1.268	5.903	.004	Significant
DEP – X2	23.234	12.665	.646	1.834	.140	Not Significant
INT – X3	14.533	17.878	.343	.813	.462	Not Significant
LF – X4	-6.914	6.429	-.990	-1.075	.343	Not Significant
MPS – X5	2.325	7.164	.284	.325	.762	Not Significant

Source: Computed Data, 2018

a. Dependent Variable: ED

b. Predictors: (Constant), MPS, DEP, LF, PAT, INT

Inference

Table – 4.29 reveals the regression result of Ram Co Cements Limited. R Square value was at .938 implying the select variables Profit After Tax, Depreciation, Interest, Liquid Funds and Market Price of the Share of Ram Co Cements Limited. The independent variable Profit After Tax is found to be significant on impact of Equity Dividend at 5 per cent level of significant.

Equity Dividend = -2694.185 + 14.260 X1

Table – 4.30: Multiple Regressions – JK Lakshmi Cement Ltd

Model	R	R Square	Adjusted R Square	F	P
1	.991[a]	.982	.960	184.44188	.001(b)

Model	Un standardized coefficients		Standardized coefficients	T	Sig.	Result
	B	Std. Error	Beta			
(Constant)	1165.349	497.481	-	2.342	.079	Not Significant
PAT – X1	3.819	1.613	.292	2.367	.077	Not Significant
DEP – X2	11.236	2.646	.584	4.246	.013	Significant
INT – X3	-15.138	2.227	-1.458	-6.79	.002	Significant
LF – X4	.894	.623	.193	1.435	.225	Not Significant
MPS – X5	.836	.549	.179	1.524	.202	Not Significant

Source: Computed Data, 2018

a. Dependent Variable: ED

b. Predictors: (Constant), MPS, DEP, LF, PAT, INT

Inference

Table – 4.30 reveals the regression result of JK Lakshmi Cements Limited. R Square value was at .982 implying the select variables Profit After Tax, Depreciation, Interest, Liquid Funds and Market Price of the Share of JK Lakshmi Cements Limited. The independent variables Depreciation and Interest are found to be significant on impact of Equity Dividend at 5 per cent level of significant. Here the alternative hypothesis is accepted, because the independent variables have significant impact on the Equity Dividend.

Equity Dividend = 1165.349 + 11.236 X2 -15.138 X3

Table – 4.31: Multiple Regression – Deccan Dement Ltd

Model	R	R Square	Adjusted R Square	F	P
1	.848[a]	.720	.370	99.28833	.253(b)

Model	Un standardized coefficients		Standardized coefficients	T	Sig.	Result
	B	Std. Error	Beta			
(Constant)	237.931	163.685	-	1.454	.220	Not Significant
PAT – X1	-.297	2.235	-.046	-.133	.901	Not Significant
DEP – X2	-22.452	15.496	-.959	-1.45	.221	Not Significant
INT – X3	12.721	6.338	1.422	2.007	.115	Not Significant
LF – X4	-1.203	1.688	-.320	-.713	.515	Not Significant
MPS – X5	1.542	.539	1.764	2.861	.046	Significant

Source: Computed Data, 2018

a. Dependent Variable: ED

b. Predictors: (Constant), MPS, DEP, LF, PAT, INT

Inference

Table – 4.31 reveals the regression result of Deccan Cements Limited. R Square value was at .720 per cent implying the select variables Profit After Tax, Depreciation, Interest, Liquid Funds and Market Price of the Share of Deccan Cements Limited. The independent variable Market Price of the Share is found to be significant on impact of Equity Dividend at 5 per cent level of significant.

Equity Dividend = 237.931 + 1.542 X5

CHAPTER – V

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 Findings of the study

5.2 Suggestions of the study

5.3 Conclusion

CHAPTER – V
FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 Introduction

Profit is a reward for risk – taken in the business. Profitability of a firm, as it is well known is the operational performance and the touchstone of financial stability. The profit is necessary for the survival and growth of the cement industries. It enables the business to grow, helps employee motivation, eases negotiations with banks, attracts investors and gives clients and customers a confidence in business. Thus, the importance of profit and profitability for the cement companies is significant. Dividend decision of the firm is yet another crucial area of financial management. The important aspect of dividend policy is to determine the amount of earnings to be distributed to shareholders and the amount to be retained in the firm.

To measure the profitability and for analyzing the dividend distribution, ratio analysis and various statistical tools like mean, standard deviation and co-efficient of variance were used. To identifying the factors determining the profitability and payment of dividend, statistical tools like inter correlation matrix, and multiple regressions were used in the present study

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5.2 Findings of the study

The findings of the study has been categorized in two ways they are -

A. Profitability of selected cement industries
B. Payment of Dividend Distribution of selected cement industries

A. Profitability of selected cement industries

The result of evaluating profitability in selected cement industries through ratio analysis, inter correlation matrix and multiple regression are summarized in the following.

- Net profit ratio of the select cement industries during the study period of 2008 – 2009 to 2017 – 2018. Ram Co Cement Limited 20.11 per cent and the Ultra Tech cement Limited, 17.69 per cent are very good with compared to the other companies mean value. But the standard deviation of these industries are low compared with Deccan Cements Limited, 6.86 per cent. The least Co efficient

of Variance value of Ultra Tech cements Limited indicates that the company maintaining consistency in the net profit ratio than other companies.

- The analysis of the operating expenses of the selected cement industries during the study period of 2008 – 2009 to 2017 – 2018, Ram Co cements Limited, 85.62 per cent and Ultra Tech Cements Limited, 86.04 per cent are having the lower mean value, it denotes these two companies perform better that other companies in controlling the operating expenses. The lowest value of Co efficient of Variance reveals that the companies maintain the consistency in managing operating costs.
- In Operating Income Ratio, the mean value of the Ram co Cement Limited, 27.01 per cent is higher than the other industries. This reveals that the company perform better that the other companies. The least Co efficient of Variance in Ultra Tech Cements Limited, 3.27 per cent shows that there was a consistency in operating income.
- The mean value of Ram Co Cements Ltd, Ultra Tech Cements Ltd and Deccan Cements Ltd has the same mean value of 10.81 per cent. This shows out of five cement companies the average return on total asset ratio of only three companies are having a same level and high mean value compared to others. The high Co efficient of Variance in Ultra Tech Cements, 34.80 per cent and Deccan Cements reveals that it has not maintained constancy in effectively managing its assets to general earnings.
- Ultra Tech Cements have the highest mean value of 11.29 per cent compared to others. Out of the five select cement companies Ultra Tech Cement Limited has been earning constant return for its capital employed, this is concluded based on its lowest Co efficient of Variance per cent.
- In Return on Net Worth analysis, Ram Co Cement Limited, 16.34 per cent and Ultra Tech Cements Limited, 15.48 per cent have the highest mean value. This shows that the companies effectively used the internal resources of fund and generating better income from it. The highest Co efficient of Variance in Ambuja Cements Limited, 154.27 per cent denotes that there is high variation in return on net worth ratio.

- In the inter correlation matrix of Ambuja Cements Limited, Total Expenses and Total Current Liabilities are having a positive correlation, above.637 per cent with dependent variable, Profit After Tax. The correlation between independent and dependent variables have been found to be significant either at five per cent or one per cent level of significance.
- Total Expense, Total Assets, Total Current Assets, Net Fixed Assets, Total Shareholders Equity, Total Current Liabilities and Net Sales are having a positive correlation, above .521 percent with dependent variable, Profit After Tax in Ultra Tech Cements Ltd.
- The inter correlation matrix of Ram Co Cements Limited reveals that, the independent variables, Total Shareholders Equity and Net Sales both are highly correlated, above .469 per cent with the dependent variable, Profit After Tax. Total Debt is negatively correlated with the dependant variable. Remaining independent variables are positively correlated with the dependant variable but not at the high level.
- In JK Lakshmi Cements Limited, , independent variables, Total Expenses, Total Assets, Current Liabilities, Current Liabilities are having a positive correlation above .643 per cent with dependent variable Profit After Tax. The remaining independent variables, Total Debt, Net Fixed Asset, Total Shareholders Equity, and Net Sales are negatively correlated with the dependent variable Profit After Tax.
- The independent variables, Net Sales and Total Current Assets are, above .468 per cent positively correlated with the dependant variable of Profit After Tax. Independent variables like Total Debt and Net Fixed Assets are negatively correlated with the dependant variable of Deccan Cements Limited.
- R Square value was at .956 implying the select variables Total Expenses, Total Assets, Total Current Assets, Total Debt, Net Fixed Assets, Total Shareholders Equity, Total Current Liabilities, Net Sales cause .956 per cent variation in the dependant variable of Profit After Tax of Ambuja Cements Limited. All the independent variables are not significant on impact of Profit After Tax at five per cent level of significance.

- In Ultra Tech Cements Limited. R Square value was at .999 implying the select variables Total Expenses, Total Assets, Total Current Assets, Total Debt, Net Fixed Assets, **Total** Shareholders Equity, Total Current Liabilities, Net Sales cause .999 per cent variation in the dependant variable of Profit After Tax of Ultra Tech Cements Limited. All the independent variables are not significant on impact of Profit After Tax at five per cent level of significance.
- In the regression result of Ram Co Cements Limited, R Square value was at .996 implying the select variables Total Expenses, Total Assets, Total Current Assets, Total Debt, Net Fixed Assets, Total Shareholders Equity, Total Current Liabilities, Net Sales cause .996 per cent variation in the dependant variable of Profit After Tax of Deccan Cements Limited. All the independent variables are not significant on impact of Profit After Tax at five per cent level of significance.
- R Square value was at .980 implying the select variables Total Expenses, Total Assets, Total Current Assets, Total Debt, Net Fixed Assets, **Total** Shareholders Equity, Total Current Liabilities, Net Sales cause .980 per cent variation in the dependant variable of Profit After Tax of JK Lakshmi Cements Limited. All the independent variables are not significant on impact of Profit After Tax at five per cent level of significance**.**
- In Deccan Cements Limited, R Square value was at .981 implying the select variables Total Expenses, Total Assets, Total Current Assets, Total Debt, Net Fixed Assets, Total Shareholders Equity, Total Current Liabilities, Net Sales cause .981 per cent variation in the dependant variable of Profit After Tax of Deccan Cements Limited. All the independent variables are not significant on impact of Profit After Tax at five per cent level of significance.

B. **Payment of Dividend distribution of selected cement industries**

The result of evaluating dividend distribution in select cement companies through ratio analysis, inter correlation matrix and multiple regression are summarized in the following.

- Dividend payout ratio of the select cement companies reveals, Ambuja Cements Limited, 38.64per cent have the highest mean value, it mean which shows its good performance in payout ratio.

- Dividend per share - In this Ultra Tech Cements has the highest mean value of 8.20 per cent. This shows, the company offering better return to its shareholders' investment. The highest Co efficient of Variance in JK Lakshmi Cements shows that there is high variation in dividend per share during the study period.
- The analysis of dividend yield ratio of selected cement companies during the study period from 2008 – 2009 to 2017 – 2018. In this period JK Lakshmi Cements have the highest mean value of 3.33 per cent compared to other companies. This shows, that the company is offering better yield to the shareholders' investment in the form of dividend. The least Co efficient of Variance of variation in Ultra Tech Cements Ltd shows that there is less variation in dividend yield during the study period.
- The analysis of price earnings ratio of select cement companies, in which JK Lakshmi Cement Ltd has the highest mean value of 119.55 per cent and the lowest mean value by the Deccan Cements Limited with 10.1 percent. It concludes that the JK Lakshmi Cements have a good performance in price earnings ratio than the other companies. The lowest Co efficient of Variance of variation in Ambuja Cements Limited shows that there is less variation in price earnings ratio during the study period.
- The analysis of earnings per share of select cement companies, in this Ultra Tech Cements Limited has the highest mean value of earnings per share Rs. 84.03and the lowest mean value is secured by Ambuja Cements Limited with Rs. 4.67 per share. This shows that the Ultra Tech Cements Limited generating better earnings for each shares. The highest CV variation in Ambuja Cements Limited shows that there is high variation in earnings per share during the study period.
- In Ambuja Cements Limited, the independent variable, profit after tax is highly correlated, .802 per cent with the dependent variable, equity dividend. The remaining independent variables, depreciation, liquid fund, market price of the share, interest are negatively correlated with the dependent variable.
- All the independent variables, Profit After Tax, Depreciation, Interest, Liquid Funds, Market Price of the Shares are highly correlated, above .709 per cent with the dependent variable in Ultra Tech Cements Limited.

- In Ram Co Cements the independent variable, Profit After Tax is highly correlated with, .925 per cent the dependent variable, Equity Dividend. The independent variable, Interest is negatively correlated with the dependent variable. Remaining independent variables are positively correlated with the dependent variable.
- The independent variable, profit after tax is highly correlated, .925 per cent with the dependent variable, equity dividend. . The remaining independent variables, depreciation, liquid fund, market price of the share, interest are negatively correlated with the depend variable in JK Lakshmi Cements.
- In Deccan Cements Limited the independent variable, profit after tax is highly correlated, .925 per cent with the dependent variable, equity dividend. . The remaining independent variables, depreciation, liquid fund, market price of the share, interest are negatively correlated with the depend variable.
- In Ambuja Cements Limited, the independent variables Profit After Tax, Depreciation and Interest are found to be significant on impact of Equity Dividend at 5 per cent level of significant.
- Among five independent variables, all the independent variables Profit After Tax, Depreciation Interest, Liquid Funds and Market Price of the Share are found to be not significant on impact of Equity Dividend.
- Ram Co Cements Limited, The independent variable Profit After Tax is found to be significant on impact of Equity Dividend at 5 per cent level of significant.
- JK Lakshmi Cements Limited. R Square value was at .982 implying the select variables Profit After Tax, Depreciation, Interest, Liquid Funds and Market Price of the Share of JK Lakshmi Cements Limited. The independent variables Depreciation and Interest are found to be significant on impact of Equity Dividend at 5 per cent level of significant
- In Deccan Cements Limited, the independent variable Market Price of the Share is found to be significant on impact of Equity Dividend at 5 per cent level of significant.

5.3 Suggestions

The cement industries in India facing a lot of difficulties like excess cement capacity, inadequate availability of wagons and shortage of coal and other raw materials etc. the rising cost of input has further adversely affected the profitability of the cement industries in India. The following suggestions may be considered by the cement companies to improve their profitability and to provide better return to the shareholders in the form of dividend.

1. Cost control measures should be effectively carried out by the cement companies which will enhance their earnings to avoid financial crisis.
2. Cement companies should concentrate more on quality management at every level of activity to enhance their performance and this will enable them to supply quality cement products to the public.
3. To control the cost the cement industries can also use alternative fuels, especially bio energy and also use alternative raw materials for cement production. This not only helps to bring down production cost by cement industries, but also proves effective in reducing emissions.

5.4 Conclusion

In this study the analysis is reveals the impact of independent variables on profitability and the dividend distribution. In profitability analysis there is no impact of independent variables on the profitability of the selected cement companies. To conclude, the cement companies in India needs the induction of additional funds along with restructuring of finance, modernization of technology for better operating performance.

Dividend policy is the most important aspects affecting financial decision taken by the management in the area of its credit standing, share prices and overall value of the firm. By the analysis of dividend distribution the independent variables have an impact on dividend distribution of all the selected cement companies.

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