FACTORS INFLUENCING DIVIDEND PAY OUT
(A CASE STUDY ON OIL AND GAS SECTOR)

A Thesis

Submitted for the Award of Ph.D. degree

In ABST

(Faculty of Commerce)

to the

UNIVERSITY OF KOTA

by

PRADYUMNA SHARMA

Under the Supervision of

Dr. D.C. JAIN

DEPARTMENT OF ABST,
GOVERNMENT COMMERCE COLLEGE,
UNIVERSITY OF KOTA,
KOTA (RAJ.)

2018

Certificate

I feel great pleasure in certifying that the thesis entitled **"FACTORS INFLUENCING DIVIDEND PAY OUT (A CASE STUDY ON OIL AND GAS SECTOR)"** by **Pradyumna Sharma** under my guidance. He has completed the following requirements as per Ph.D regulations of the University.

(a) Course work as per the university rules.

(b) Residential requirements of the university (200 days)

(c) Regularly submitted annual progress report.

(d) Presented his work in the departmental committee.

(e) Published/accepted minimum of one research paper in a referred research journal,

I recommend the submission of thesis.

Date:

Dr. D.C. JAIN
Supervisor

Abstract

A dividend is a distribution of a portion of a company's earnings, decided by the board of directors, paid to a class of its shareholders. Corporate dividend payments to shareholders began more than 300 years ago and have continued as an acceptable, if not, required activity of corporate managers. Dividend policy is the set of guidelines a company uses to decide how much of its earnings it will pay out to shareholders. Therefore one of the major decision areas of financial management in which the shareholders are also actively interested is the formulation of dividend policy.

Since the principal objective of corporate financial management is to maximise the shareholders' wealth or the market value of shares, the choice would be influenced by its effect on this objective.

A vital question that would arise at this stage whether dividend policy pursued by a company has bearing on the market value of its equity shares. There is no clear cut answer to this question.

In fact, it is one of the most controversial and unresolved issues in corporate finance. On this issue the opinions of the academicians are sharply divided into two schools of thought. One school of thought considers the extent of earnings distributed as dividends among equity shareholders is relevant to the market value of equity shares. The other school of thought argues that dividend policy is not a factor of enhancing the market value of equity shares.

We are trying to identify answer to this question with respect to ***oil and gas sector*** *in India.*

Dividend policy of a company considers many factors and we are widely covering three impact factors which are:

1. Taxation 2. Sales Growth 3. Market Value of Share

All these factors are analysed with respect to following companies:

1. ONGC *2. IOCL* *3. BPCL*

4. RELIANCE *5. CAIRN INDIA*

We designed different hypothesis for each factor and analysed the impact on each company and then listed out the results.

The study has been presented in six chapters. The first chapter discusses the Introductory about the dividend and dividend policy. The second chapter deals with the survey of existing literature and also identifies the research gaps.

The third chapter presents the objectives of the study, its scope, the research methodology followed in the study, the limitations and the organisation of the study.

The fourth chapter focuses on profile of the selected companies. The fifth chapter examines the relationship between dividend payout ratio and the various factors affecting dividend policy of the selected companies. The analysis of the impact of these factors on the dividend policy of the companies under study is also made in this chapter.

The sixth chapter summarises the entire study and highlights the conclusions derived from the study and identifies the scope for further research in this field.

Conclusively we listed out 22 results with respect all selected companies which are supporting both the house of opinion related to dividend.

At the end we also incorporated 6 valuable suggestions to improve the dividend policy of a company.

Further scope for future research is also enumerated.

PRADYUMNA SHARMA

Candidate's Declaration

I, hereby, certify that the work, which is being presented in the thesis, entitled **FACTORS INFLUENCING DIVIDEND PAY OUT (A CASE STUDY ON OIL AND GAS SECTOR)** in partial fulfilment of the requirement for the award of the Degree of Doctor of Philosophy, carried under the supervision of **Dr. D.C. JAIN** and submitted to the faculty of Commerce, University of Kota, Kota, represents my ideas in my own words and where others ideas or words have been included. I have adequately cited and referenced the original sources. The work presented in this thesis has not been submitted elsewhere for the award of any other degree or diploma from any Institutions. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will cause for disciplinary action by the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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Date:

This is to certify that the above statement made by **Pradyumna Sharma** is correct to the best of my knowledge.

Date:

Dr. D.C. Jain
Supervisor

Acknowledgement

*I am thankful to the **SHRINATH JI** for giving me strength and zeal to complete this endeavour.*

*I take this opportunity to express my deep sense of gratitude to my supervisor, **Dr. D.C. Jain** for enriching valuable guidance and support throughout the course of present study.*

*I am also thankful to **Dr. Kapil Dev Sharma**, Principal Commerce College, Kota for creating good research environment during my study.*

*I also feel immense pleasure to put on record my sincere thanks to **Director (Research) University Of Kota and the whole staff** for their help and support during the course of my research work.*

I express my deep sense of gratitude to all the persons from whom I received encouragement, directly or indirectly in my research pursuits for a period of years which have culminated into the thesis.

*I would like to express my regards and respect at this moment for my grandfather **Late Mr. Brajraj Sharma** who had been a great source of inspiration for me.*

*I am highly indebted to my parents my father **Mr. Brajnath Sharma** and mother **Mrs. Manju Sharma** and my brothers **Manoj, Awadhesh, Arvind** and sister **Kavita.***

*I have paucity of words to express my feelings for my Wife **Mrs. Pallavi Sharma** for her constant help and concern without which this work would not have been possible.*

*Last but not the least I owe special thanks to my daughters **Aadhya** and **Navya** as they have to sacrifice valuable moments during the course of this work. Their innocent looks and smiling faces inspired me to complete this work.*

Pradyumna Sharma

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Introduction

INTRODUCTION

1.1 INTRODUCTION TO DIVIDENDS

A dividend is a distribution of a portion of a company's earnings, decided by the board of directors, paid to a class of its shareholders. Dividends can be issued as cash payments, as shares of stock, or other property.

The board of directors can choose to issue dividends over various timeframes and payout rates. Dividends are typically monthly or quarterly. It is also common for a company to issue special dividends either individually or simultaneously with a scheduled dividend.

Dividend refers to a reward, cash or otherwise, that a company gives to its shareholders. Dividends can be issued in various forms, such as cash payment, stocks or any other form. A company's dividend is decided by its board of directors and it requires the shareholders' approval. However, it is not obligatory for a company to pay dividend. Dividend is usually a part of the profit that the company shares with its shareholders.

After paying its creditors, a company can use part or whole of the residual profits to reward its shareholders as dividends. However, when companies face cash shortage or when it needs cash for reinvestments, it can also skip paying dividends. When a company announces dividend, it also fixes a record date and all shareholders who are registered as of that date become eligible to get dividend payout in proportion to their shareholding. The company usually mails the cheques to shareholders within in a week or so. Stocks are normally bought or sold with dividend until two business days ahead of the record date and then they turn ex-dividend. A recent study found that dividend-paying companies in India fell from 24 per cent in 2001 to almost 16 per cent in 2009 before rising to 19 per cent in 2010.

In the US, some of the companies like Sun Microsystems, Cisco and Oracle do not pay dividends and reinvest their total profit in the business itself. Dividend

payment usually does not affect the fundamental value of a company's share price. Companies with high growth rate and at an early stage of their ventures rarely pay dividends as they prefer to reinvest most of their profit to help sustain the higher growth and expansion. On the other hand, established companies try to offer regular dividends to reward loyal investors.

Dividends can be distributed only from earnings and not from any other source of equity, like, paid –in – surplus etc.

It must be in form of a real asset. It is common practice to pay dividends in cash (in form of dividend cheque) because of the convenience of the matter.

All stockholders' share in dividends is relative to their holding in the corporation.

Investors often view the company's dividend by its dividend yield which measures the dividend in terms of a percent of the current market price. The dividend rate can also be quoted in terms of the dollar amount each share receives (dividends per share, or DPS).

A company's net profits are an important factor in determining a dividend. Net profits can be allocated to shareholders via a dividend, or kept within the company as retained earnings. A company might also choose to use net profits to repurchase their own shares in the open market in a share buyback. Dividends and share buybacks do not change the fundamental value of a company's shares. Dividend payments must be approved by the shareholders and are managed by the board of directors.

Dividend policy has been an issue of interest since Joint Stock Companies came into existence. The question regarding the ratio of retained earnings to distributed earnings is referred to as *dividend decision or policy*. The guiding philosophy of dividend decision is to adopt a policy that maximizes the shareholders' wealth. Therefore, from the view point of financial management, the objective is to find out the dividend policy that will maximize or enhance the value of the firm.

Dividends are paid from the firm's after tax income. For the recipient, dividends are considered regular income and are therefore fully taxable. This tax treatment results de facto in double taxation of dividends in America (but not in several other countries, e.g. Canada and Germany), the only source of income that is subject to such treatment. In India the company declaring the dividend has to pay dividend distribution tax and dividend is tax free in the hands of the investor or shareholders.

However in most of the countries the economic consequence of dividends is an involuntary tax liability to the owners (country like India being an exception).

There is a disagreement which becomes evident at this juncture. The disagreement is that dividend announcements and payment are considered good news, held and hailed as such by investors and most analyst, whereas dividend cuts and reductions are considered bad news suggesting impending financial doom. This disagreement is commonly referred to as "Dividend puzzle". Three decades ago, Black (1976) wrote*: "The harder we look at dividend picture, the more it seems like a puzzle, with pieces that just don't fit together"* Brealey and Myers (2002) have enlisted dividend policy as one of the top ten puzzles in finance.

The questions of "Why do corporations pay dividends?" and "Why do investors pay attention to dividends?" have puzzled both academicians and corporate managers for many years.

Perhaps the answers to these questions are obvious. Perhaps dividends represent the return to the investor who puts his money at risk in the corporation. Perhaps corporations pay dividends to reward existing shareholders, and to encourage others to buy new issues of common stock at high prices. Perhaps investors pay attention to dividends because it is only through dividends or the prospect of dividends investors receive a return on their investment or the chance to sell their shares at a higher price in the future.

Or might be the answer is not so obvious. Might be a corporation that pays no dividends is demonstrating confidence that it has attractive investment

opportunities that might be missed if it paid dividends. If it makes these investments, it might increase the value of the shares by more than the amount of the lost dividends. If that happens, its shareholders might be even better off. They end up with capital appreciation greater than the dividends they missed out on, and they find they are taxed at lower effective rates on capital appreciation than on dividends.

Academic thinking about dividends – and whatever this thinking produced- has completely ignored the evolution of dividend payments in modern corporations. Dividend payment behavior, known as “dividend policy”, did not simply appear out of nowhere. It evolved with Modern Corporation over a period of four centuries.

1.2 DIVIDEND POLICY

Dividend policy is the set of guidelines a company uses to decide how much of its earnings it will pay out to shareholders. Some evidence suggests that investors are not concerned with a company's dividend policy since they can sell a portion of their portfolio of equities if they want cash. This evidence is called the "dividend irrelevance theory," and it essentially indicates that an issuance of dividends should have little to no impact on stock price. That being said, many companies do pay dividends, so let's look at how they do it.

There are three main approaches to dividends: residual, stability or a hybrid of the two.

1.2.1 Residual Dividend Policy

Companies using the residual dividend policy choose to rely on internally generated equity to finance any new projects. As a result, dividend payments can come out of the residual or leftover equity only after all project capital requirements are met. These companies usually attempt to maintain balance in their debt/equity ratios before making any dividend distributions, deciding on dividends only if there is enough money left over after all operating and expansion expenses are met.

Typically, this method of dividend payment creates volatility in the dividend payments that some investors find undesirable.

The residual-dividend model is based on three key pieces: an investment opportunity schedule (IOS), a target capital structure and a cost of external capital.

1. The first step in the residual dividend model to set a target dividend payout ratio to determine the optimal capital budget.
2. Then, management must determine the equity amount needed to finance the optimal capital budget. This should be done primarily through retained earnings.
3. The dividends are then paid out with the leftover, or residual, earnings. Given the use of residual earnings, the model is known as the "residual-dividend model."

A primary advantage of the dividend-residual model is that with capital-projects budgeting, the residual-dividend model is useful in setting longer-term dividend policy. A significant disadvantage is that dividends might be unstable. Earnings from year to year can vary depending on business situations. As such, it is difficult to maintain stable earnings and thus a stable dividend. While the residual-dividend model is useful for longer-term planning, many firms do not use the model in calculating dividends each quarter.

1.2.2 Dividend Stability Policy

The fluctuation of dividends created by the residual policy significantly contrasts with the certainty of the dividend stability policy. With the stability policy, quarterly dividends are set at a fraction of yearly earnings. This policy reduces uncertainty for investors and provides them with income.

1.2.3 Hybrid Dividend Policy

The final approach is a combination between the residual and stable dividend policy. Using this approach, companies tend to view the debt/equity ratio as a long-term rather than a short-term goal. In today's markets, this approach is commonly used by companies that pay dividends. As these companies will

generally experience business cycle fluctuations, they will generally have one set dividend, which is set as a relatively small portion of yearly income and can be easily maintained. On top of this set dividend, these companies will offer another extra dividend paid only when income exceeds general levels.

The debate over the importance of dividend policy first appeared in Miller and Modigliani (1961), who concluded that in a world of perfect capital markets, the payment of dividends does not affect the value of the firm and is therefore irrelevant. In such a world, firm value depends only on the distribution of future cash flows that result from the investments undertaken.

Mature companies with highly stable cash flows, paying too little in dividends could lead managers to investing excess cash flow in projects or acquisitions with insufficient net present value. Yet, for high growth companies, paying out too much in cash dividends might reduce the firm's financial flexibility and force it to pass up valuable investment opportunities. Either of these situations could negatively affect a firm's value over time. Despite much research intended to resolve the dividend puzzle, dividend policy remains one of the most judgmental decisions that a manager must make. As Ang (1987) notes, "Thus, we have moved from a position of not enough good reasons to explain why dividends are paid to one of too many. Unfortunately, some of these might not be very good reasons, i.e., not consistent with rational behavior."

Some scholars have surveyed corporate managers and institutional investors to determine their views about dividends. Despite extensive debate and research, the actual motivation for paying dividends remains a puzzle. Therefore this study is an Endeavour to add to the existing body of knowledge and contribute towards solving the dividend puzzle prevalent in Corporate Finance.

Because these decisions are dynamic they are labeled as payout policy. Payout policy is important because of the amount of money involved and repeated nature of the decisions, also payout policy is closely related to most of the financial and investments decisions companies make. Management and board of directors must decide the level of dividends, what repurchases to make, investment in real

assets, M & As, and debt issuance. As capital markets are neither perfect nor complete, all of these decisions intersect with each another.

The most common observations that play an important role in discussion of payout policies are:

a) Large and established companies typically pay out a significant percentage of their earnings in the form of dividends and repurchases.

b) Historically, cash dividends have been the predominant form of payout. Though nowadays stock repurchases, stock splits are also gaining importance.

c) Corporations smooth dividends relative to earnings.

d) Markets react positively to announcements of repurchases and dividend increases, and negatively to announcements of dividend decreases.

As it is known and well accepted that the objective of an organization is shareholders' wealth maximization. The challenge to financial economists is to develop a payout policy framework where companies maximize shareholders' wealth and investors maximize utility. Clear guidelines for an "optimal payout policy" have not yet emerged despite voluminous literature. An acceptable explanation for observed dividend behavior of companies has still not been obtained. The factors that drive dividend decisions and manner in which these factors interact need to be understood completely by the financial economist

To summarize, it can be stated Dividend decisions are recognized as centrally important because of increasingly significant role of the finances in the firm's overall growth strategy. Dividend policy connotes to the payout policy, which managers pursue in deciding the size and pattern of cash distribution to shareholders over time. Managements' primary goal is shareholders' wealth maximization, which translates into maximizing the value of the company as measured by the price of the company's common stock. This goal can be achieved by giving the shareholders a "fair" payment on their investments. However, the impact of firm's dividend policy on shareholders' wealth is still unresolved.

1.3 HISTORY OF DIVIDEND POLICY

Corporate dividend payments to shareholders began more than 300 years ago and have continued as an acceptable, if not, required activity of corporate managers, despite the apparent contradictory economic nature of these payments.

Frankfurter and Wood (1997) provide an excellent comprehensive survey of the history of corporate dividend policy since the inception of shareholder-held corporations.[4]It was noted early in the sixteenth century captains of sailing ships in Great Britain and Holland began selling to investors' claims to the financial payoffs of the voyages. At the conclusion of the voyages, proceeds from the sale of the cargo and shipping assets, if any, were divided among the participants proportionate to ownership in the enterprise. These distributions were, in fact, payments that effectively liquidated the venture, or *liquidating dividends*. By this practice, claimholders avoided complex accounting practices, such as accrual accounting procedures. In addition, the liquidation of ventures minimized potentially fraudulent bookkeeping practices. By the end of the century, these claims on voyage outcomes began trading in the open market. These claims to outcomes were later replaced by share ownership.

Even before the development of modern capital market theory, along with the statistical measurement of the impact of diversification on portfolio risk, investors in these sailing ventures regularly purchased shares from more than one captain to diversify the inherent risk in these endeavors. Also, as in the modern corporation, investors provided capital for these ventures, while the captains offered their specialized skills—for instance, seafaring and management skills.

However, as time passed owners began to realize that the complete liquidation of assets at the end of each voyage was inefficient; start-up and liquidation costs for new ventures were significant. A track record of success for a captain, and increasing confidence by shareholders in the accountability of the management of the firm.

Thus, the history of dividends began with the payout of liquidating dividends when sailing ventures were terminated upon completion and the profits and proceeds from asset sales were distributed to claimholders. However, due to inefficiencies induced by total liquidation, dividends began being paid from profits. Earnings were retained to finance new investments, and dividend payments became only small partial, or symbolic, liquidations.[5]

Frankfurter and Wood (1997) concluded their study on the evolution of dividends with the following observation:

Dividend-payment patterns (or what is often referred to as "dividend policy") of companies are a cultural phenomenon, influenced by customs, beliefs, regulations, public opinion, perceptions and hysteria, general economic conditions and several other factors, all in perpetual change, impacting different companies differently. *Accordingly, it cannot be modeled mathematically and uniformly for all companies at all times*

1.4 DIVIDEND POLICY

A dividend policy of a corporation might range from a mere decision regarding dividend action to rather complex formal statements approved by board of directors and reviewed on regular basis. Dividend policy might be reviewed at the annual shareholders' meeting or might be published in the annual report.

Not all the companies require a formal dividend policy. Closely held businesses in which the equity participants hold a position on the board of directors or maintain a working knowledge of the business probably do not require a formal policy. Formal dividend policies are normally associated with companies that have achieved significant size in revenue and variety of shareholders. The complexity of financial management and planning play an important part in determining when a formal dividend policy is required. Industrial organizations that are capital intensive and must engage in long range planning to assure adequate supplies of capital in future might require a specific dividend policy to assure that sufficient amount of funds are available when asset acquisition is undertaken. At the same time, it is important to achieve a balance between retained earnings and dividends to assure a market for new equity shares in event additional equity capital is required.

In view of the multi-dimensional nature of dividend policy decision, a deliberate policy needs to be framed and pursued in this regard. It should not be allowed to become a series of ad hoc decisions taken on the spur of the moment considering only the immediate availability of cash for dividend payment (Chakrabarty et.al.1981). Thus, the objective of choosing a dividend policy should be to maximize the value of the firm.

Dividend policy can be of two types: managed and residual. In residual dividend policy the amount of dividend is simply the cash left after the firm makes desirable investments using NPV rule. In this case the amount of dividend is going to be highly variable and often zero. If the manager believes dividend policy is important to their investors and it positively influences share price valuation, they will adopt managed dividend policy. The optimal dividend policy is the one that maximizes the company's stock price, which leads to maximization of shareholders' wealth. Whether or not dividend decisions can contribute to the value of firm is a debatable issue.

As an outcome of limitations present in the real world, most factors favour retention of earnings rather than cash dividend. The tax advantage from capital gains is substantial, and favours retention. Other factors include the presence of floatation costs, the phenomenon of under pricing and legal hassles that are also in favour of retention of earnings, rather than its distribution .The presence of transaction costs is the only factor that favours cash dividend payment.

Due to the factors overwhelmingly supporting retention, companies ought to follow the following dividend policy:

1) Identify all possible positive NPV projects.
2) Retain the required cash to accept all such projects, so as to increase the value of the firm.
3) Maximise returns to shareholders through increase in the prices of shares
4) Distribute the remaining cash balance only when all positive NPV projects are funded.
5) Raise fresh capital only when internally generated earnings are not enough to accept all positive NPV projects.

Such a policy of dividend is referred to as *passive residual dividend policy. This* policy dictates returning only excess cash. Following such a policy must lead to optimal results.

The passive residual dividend policy would imply fluctuating dividend from period to period, because the flow of earnings and the availability of positive NPV projects can hardly be said to be steady. Both earnings and available opportunities are volatile by nature. Therefore, following a passive residual dividend policy essentially implies volatile dividends over time.

However, the empirical evidence is contrary. Several studies have revealed that dividends are sticky and follow a smoother pattern than earnings, a phenomenon that is sustained by general observation. Companies generally do not raise dividends unless they are absolutely sure of sustaining this trend in future. Similarly, they do not reduce dividends unless they feel that the drop in earnings is due to bad economic conditions, or to other reasons that are likely to prevail for an extended time. Therefore dividends are likely to be more stable than earnings.

On occasion, the firm might have to maintain a stable dividend payout ratio simply because the shareholders expect it and reveal a preference for it. Shareholders might want a stable rate of dividend payment for a variety of reasons. Risk averse shareholders would be willing to invest only in those companies which pay high current returns on shares.

Some of them are partly or fully dependent on dividend to meet their day-to-day needs. This class of investors generally includes pensioners and other small savers. Similarly, educational institutions and charity companies prefer stable dividends, because they will not be able to carry on their current operations otherwise. Such investors would, therefore prefer companies which pay a regular dividend every year. Some might like more dividends, while some other. Investors who favour dividend might chose high- dividend paying companies for their portfolios, while the group that does not need dividend would pick stocks that offer more capital appreciation might prefer capital gains; yet another group might like to

have both. Thus the investors can be grouped according to their preference for dividend or capital gains. These groups are referred to as clienteles. The clientele effect refers to investors' selection of companies that match their preference for dividends. A change in dividend policy would cause the clienteles to shift their investments. The argument that companies should not change their dividend policies for the sake of retaining the same clientele is a debatable one.

1.5 DIVIDEND DECLARATION PROCESS

Most companies in the India pay dividends quarterly. After making the dividend decision during a board meeting, a firm's board of director's releases information on the size of the dividend on the *announcement date*. Further, the announcement states that the cash payment will be made to "shareholders of record" as of a specific *record date*. However, because of delays in the share transfer process, the stock goes "ex-dividend" two business days before the record date, or the *ex-dividend date*. After the stock goes ex-dividend, the shares trade *without* the rights to the *forthcoming* quarterly dividend. The dividend cheques are mailed to shareholders of record on the *payment date*, which is about two weeks after the record date. Figure 1 shows the time line of the period from the board meeting through the mailing of the dividend checks.

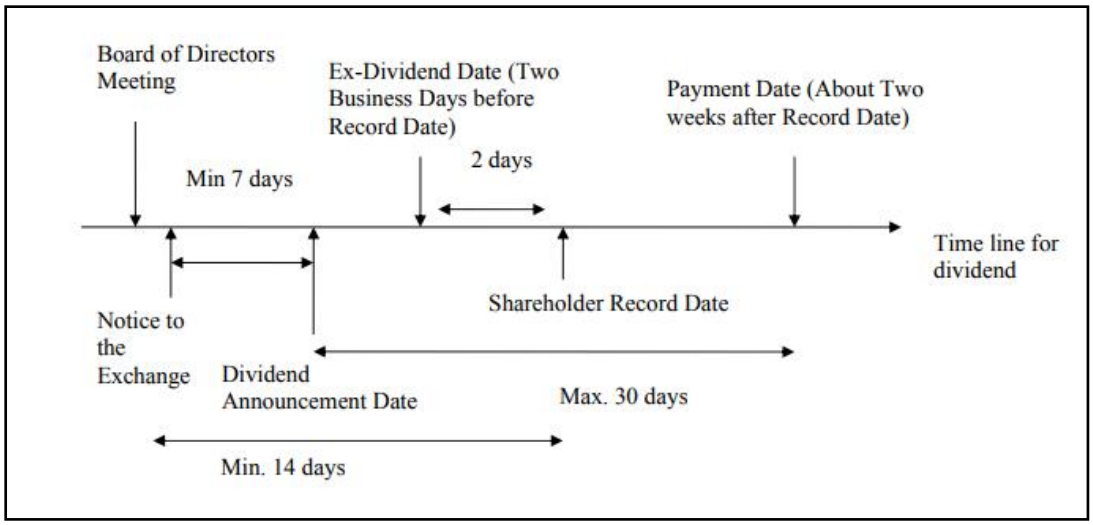


Fig. 1: Dividend Timelines

Dividend payouts follow a set procedure as follows:

1. Declaration date
2. Ex-dividend date
3. Holder-of-record date
4. Payment date

1. Declaration Date

Declaration date is the announcement that the company's board of directors approved the payment of the dividend.

2. Ex-Dividend Date

The ex-dividend date is the date on which investors are cut off from receiving a dividend. If for example, an investor purchases a stock on the ex-dividend date, that investor will not receive the dividend. This date is two business days before the holder-of-record date.

The ex-dividend date is important as, from this date and forward, new stockholders will not receive the dividend. As a result, the stock price of the company will be reflective of this. For example, on and after the ex-dividend date, a stock most likely trades at lower price, as the stock price is adjusted for the dividend that the new holder will not receive.

3. Holder-of-Record Date

The holder-of-record (owner-of-record) date is the date on which the stockholders who are to receive the dividend are recognized.

Understanding the dates of the dividend payout process can be tricky. We clear up the confusion in the following article:

4. Payment Date

Last is the payment date, the date on which the actual dividend is paid out to the stockholders of record.

Example of the process of dividend payment

Suppose New co would like to pay a dividend to its shareholders. The company would proceed as follows:

1. On Jan 28, the company declares it will pay its regular dividend of $0.30 per share to holders of record on Feb 27, with payment on Mar 17.
2. The ex-dividend date for the dividend is Feb 23 (usually four days before of the holder-of-record date). On Feb 23 new buyers do not have a right to the dividend.
3. At the close of business on Feb 27, all holders of Newco's stock are recorded, and those holders will receive the dividend.
4. On Mar 17, the payment date, Newco mails the dividend checks to the holders of record.

1.6 ALTERNATIVE FORMS OF DIVIDENDS

Companies normally reward shareholders with regular cash dividends Companies follow stable dividend policy and refrain from increasing dividend, even when earnings continue to grow. These earnings get accumulated over a period of time, enhancing the shareholders' wealth and causing share prices to rise consistently.

Besides cash payment, companies also have alternative methods to provide rewards to shareholders that directly or indirectly are in the interest of shareholders. These special types of dividend avoid any possibilities of miscommunication arising from the increased dividend, because such actions are taken as one - off measures.

There are ways other than regular or periodic cash dividends to reward shareholders. Three other ways of rewarding shareholders are very popular. They are as follows:

1.6.1 STOCK REPURCHASES OR SHARE BUY BACKS

Following a stable dividend policy, companies normally do not increase dividend payout, despite increased earnings, for the sake of reducing chances of misinterpretation of information content of dividend, and also as in pursuit of a

policy to retain a good proportion for future requirements, should good opportunities come by. Companies might be uncertain of future capital expenditure requirements with several projects under study. These might relate to acquisitions that require huge outlays. When flush with sufficient funds, with no relevant growth opportunities in sight, companies might decide to return the excess cash back to shareholders.

Hence, the firm faces two choices for returning the excess cash- either give bumper dividends or buyback shares. An increasingly popular method of rewarding shareholders in a form other than regular cash is the share buyback. Under stock repurchase plan, a firm buys back some of its outstanding stock, thereby decreasing the number of shares. This, in turn, increases both EPS and stock price. It is a substitute for dividend payment when it is large. It provides an option to shareholders to continue or exit their investment in any desired ratio. Till 1998, share buyback was not allowed in India. After it was allowed, several companies in India have offered share buyback. A share buyback has several advantages. It communicates the worth of the firm in the opinion of management, is capable of increasing promoters' shareholding, provides protection against hostile takeovers, and alters shareholding pattern and capital structure.

1.6.2 BONUS SHARES

Issue of bonus shares is a way of capitalizing reserves into shares. It only changes the form and not the content or wealth of shareholders.

Adhering to a stable dividend policy despite continuous excess earnings implies an accumulation of reserves. Shareholders are owners of the capital subscribed and residual profit that is retained in the business. These retained profits appear as 'Reserves and the Surplus'. The sum of the Capital subscribed and the reserves is referred to as *shareholders' fund*. These retained profits keep enhancing the value of the reserves and surplus, period after period. This increase in book value is reflected in share prices.

When proportion of reserves and surplus becomes relatively high in relation to subscribed capital, companies normally issue bonus shares, to get back an appropriate proportion of subscribed capital to reserves and surplus. The issue of bonus share is mere reorganization of shareholders' funds, keeping the overall value same as before.

1.6.3 STOCK SPLITS

The stock split too is a reward to shareholders that works in the same way as bonus shares. It is an action taken by a firm to increase the number of shares outstanding. Normally, splits reduce the price per share in proportion to the increase in shares because splits merely "divide the pie into smaller slices". A stock dividend is a dividend paid in additional shares of stock rather than in cash. Both stock dividends and splits are used to keep stock prices with in an "optimal" range.

Stock splits are identical to bonus issues in respect of the effects on valuation, liquidity, price, book value, and EPS. The only difference between two lies in the books of accounts. In case of bonus share issue 'reserves and surplus' is capitalized and transferred to paid up capital, while in case of split 'reserves and surplus' as well as 'capital' remain unaffected. The number of shares simply gets multiplied.

1.7 THE PROCESS OF DECLARATION OF DIVIDEND

Dividend relates to the return on the investment made in the shares; either equity or preference which is paid out of the profits of the company. Section 2 (35) of the Companies Act, 2013 defines that dividend includes any interim dividend and is, therefore, an inclusive definition. According to the commonly accepted definition, dividend implies the profit of a company that is not retained in the business but is in fact distributed among the shareholders in proportion to the amount paid-up on the shares held by them. Being the owners of the company, the shareholders are entitled to get their share of profit in the form of a dividend.

The regulating legislature, the Companies Act, 2013 provides the regulations for the declaration and distribution of dividend in Section 205. As per

the provisions, all companies that have a share capital, except those mentioned in Section 25 and make a profit, are mandated by law to declare and distribute dividends.

A dividend, including interim dividend, may be paid out of either current profits or profits accumulated over the previous years. Although, the depreciation for the entire year has to be provided before a dividend is declared or paid. For this, the Board needs first to approve the provisional financial results (unaudited) and a working of the profits available for distribution as a dividend that is available post providing for depreciation for the full year and amount required to be transferred to reserves as per the Companies Act.

Moreover, a separate bank account needs to be opened, into which the amount of dividend will need to be transferred. The dividend so declared will have to be remitted within 30 days of the said declaration and the other procedures mandated need also to be complied with.

1.7.1 Steps Involved for the Declaration of Dividend

A step-by-step procedure is mentioned below for the declaration of dividend:

1. Computation of depreciation

By the rate specified in Schedule XIV or any other basis approved by the Central Government, the depreciation shall first be computation.

2. Mandatory transfer of profits to reserves

Before declaring the dividend, some part of the profit has to be obligatorily transferred to the reserves of the Company. The amount to be transferred is based on the proposed rate of dividend. But, the voluntary transfer of a higher percentage of profits to the reserves is permitted subject to the conditions stipulated in the Act.

3. Board Resolution

The Board Resolution is one of most, if not the most, vital steps in the process for the declaration of dividends. Until and unless the Board endorses the payment of dividends, it cannot be declared at an Annual General Meeting.

4. **Annual General Meeting (AGM)**

The agenda notice for an AGM must compulsorily mention the declaration of dividends and is required to be sent to both members as well as creditors. An ordinary resolution is required for the declaration of dividend. But it is notable to mention that the shareholders are not permitted to increase the amount of dividend recommended by the Board.

5. Time limit for payment of dividend

A separate dividend account is required to be opened with the Company's bankers. The dividend amount payable should then be transferred to the new account and within 30 days of the AGM, the dividend warrants should be sent out to the shareholders.

6. Transfer to unpaid dividend account

Within 7 days from the date of expiry of 30 days of the date of dividend declaration, the amount remaining unclaimed or unpaid needs to be transferred to the 'unpaid dividend account' that is to be opened in a scheduled Bank. The dividend which remains unpaid or unclaimed for 7 years is supposed to be transferred to the Investor Education and Protection Fund within a period of 30 days of its becoming due for the transfer.

7. Circumstances under which dividend need not be paid

1. Where it cannot be paid because of operation of any law
2. Where a shareholder has given direction to the company regarding payment of dividend and those directions could not be complied with
3. Where there is a dispute regarding the right to receive the dividend
4. Where the company has lawfully adjusted the dividend against any sum due from the shareholders
5. Where the dividend could not be paid not due to any default on the part of the company.

8. Tax limit

In conjunction with the income-tax chargeable in respect of the total income of a company for any assessment year, any amount declared, distributed or paid by

such company by way of dividends, interim or otherwise and also whether paid out of the current or accumulated profits is charged with an additional tax at the rate of 15%.

The liability regarding the payment of tax is the Principal Officer of the Company. This tax is to be paid within 14 days of declaration, distribution or payment of any dividend, whichever is the earliest.

9. Special provisions relating to Listed Company

Supplementing to the steps step above, listed companies also have to give prior intimation regarding the venue of the Board Meeting to the stock exchange where the securities are listed. Within 15 minutes of the closure of the Board Meeting, an intimation is also to be sent to the stock exchange enclosing the particulars of the dividend. These details are also to be given to the Stock Exchange.

The various steps above are usually involved in the declaration of dividend by a Company incorporated under the Companies Act, 2013. However, the Memorandum and Articles of Association of the Company may bring a deviation to the said steps.

1.8 DIVIDEND PAYMENT PATTERNS ACROSS THE LIFE CYCLE OF A FIRM.

The firm life cycle theory of dividends is based on the notion that as a firm becomes mature, its ability to generate cash overtakes its ability to find profitable investment opportunities. Eventually, it becomes optimal for the firm to distribute its free cash flow to shareholders in the form of dividends.

According to the firm life cycle theory of dividends, a young firm faces a relatively large investment opportunity set, but is not sufficiently profitable to be able to meet all its financing needs through internally-generated cash. In addition, it faces substantial hurdles in raising capital from external sources. As a result, the firm will conserve cash by forgoing dividend payments to shareholders. Over time, after a period of growth, the firm reaches a stage of maturity in its life cycle. At this

point, the firm's investment opportunity set is diminished, its growth and profitability have flattened, systematic risk has declined, and the firm generates more cash internally than it can profitably invest. Eventually, the firm begins dividend payments in order to distribute its earnings to shareholders. The extent to which a mature firm distributes earnings to shareholders instead of investing them internally will be a function of the extent to which the interests of its managers are aligned with those of its shareholders.

The life cycle theory of dividends predicts that a firm will begin paying dividends when its growth rate and profitability are expected to decline in the future. This is in sharp contrast to the signalling theory of dividends, which predicts that a firm will pay dividends in order to signal to the market that its growth and profitability prospects have improved, i.e., that dividend initiations and increases convey "good news."

The empirical evidence on dividend initiations and changes generally supports the life cycle theory of dividends but is contrary to the signalling theory. Benartzi, Michaely and Thaler (1997) find that dividend increases are not followed by an increase in the earnings growth rate, while dividend reductions are associated with an improvement in the growth rate. Grullon, Michaely and Swaminathan (2002) find that firm profitability declines following a dividend increase, and increases following a dividend decrease.

Bulan, Subramanian and Tanlu (2007) find that firms initiate dividends after reaching maturity in their life cycles. Initiators are firms that have grown larger, are more profitable, have greater cash reserves, and have fewer growth opportunities compared to non-initiators at the same stage in their life cycles. They also find that no significant improvement in profitability or growth occurs around the initiation. DeAngelo, DeAngelo and Stulz (2006) find that the probability that a firm pays dividends is significantly related to the mix of (internally-) earned capital and (externally-) contributed capital in its capital structure. Firms with a greater proportion of earned capital are more likely to be dividend payers. The evidence on the change in systematic risk around dividend changes is ambiguous. While Grullon

et al. (2002) find that firms that increase dividends experience a decline in systematic risk, Bulan et al. (2007) find that systematic risk does not decline after dividend initiations.

1.9 THE LIFE CYCLE THEORY OF THE FIRM

Mueller (1972) proposed a formal theory that a firm has a relatively well-defined life cycle, which is fundamental to the firm life cycle theory of dividends. His main focus is on the agency problem within the firm, namely the question of whether the managers of a firm maximize shareholder value, or pursue growth for its own sake and "over invest" in assets contrary to shareholder interests. However, he clearly recognizes the implications of the analysis for dividend policy and discusses the empirical evidence on shareholder preference for dividends in this context. Thus, studying the life cycle theory of the firm as proposed by Mueller is meaningful.

Drawing on the work of Knight (1921) and Schumpeter (1934), Mueller (1972) posits that a firm originates in an attempt to exploit an "innovation involving a new product, process, marketing or organizational technique." In its initial stages, the firm invests all available resources in developing the innovation and improving its profitability. The firm's growth is likely to be slow until it has successfully sorted out "teething issues" and establishes a foothold in the market. Thereafter, the enterprise will grow rapidly, as it enters new markets and expands its customer base before any major competition can arise. The agency problem is either absent or not significant at these initial stages for three reasons. First, the firm faces so many opportunities for profitable investment that the pursuit of growth is also consistent with the pursuit of profits. Second, unable to meet all its financing needs through internal cash generation, the firm is forced to tap external capital markets, and is therefore subject to market monitoring and discipline. Third, the entrepreneur/ manager still retains a sufficiently high fraction of the firm's shares for his/her interests to be well aligned with those of the other suppliers of capital.

After a while, competitors begin to enter the market, adopting and improving upon the pioneering firm's innovations. As existing markets become

saturated and new markets are harder to find, the growth of the firm begins to slow down. To maintain growth and profitability, the firm needs to generate innovations. However, as the firm grows as an organization, its ability to process information deteriorates, and the risk-taking incentives of the average manager diminish. These factors place a limit on the ability of a large firm to grow through innovations. As a result, the firm eventually reaches a point where it lacks profitable investment opportunities for the cash generated from its existing operations. At this "mature stage," a shareholder value maximizing firm would begin distributing its earnings to its shareholders. Eventually, when all the existing operations of the firm are on the verge of becoming unprofitable, a value maximizing firm would liquidate all assets and distribute the proceeds to its shareholders.

However, when the managers of a firm do not pursue strict value-maximization, but are rather interested in expanding the size of the firm in order to reap perks and other rewards, the distribution of earnings to shareholders will deviate from the optimal policy.

In summary, under the life cycle theory proposed by Mueller (1972), the typical firm will display an S-shaped growth pattern, with a period of slow growth at start-up leading to a period of rapid growth and eventually to maturity and stagnation or slow growth. The next section discusses corporate dividend policy in this framework.

1.10 DIVIDENDS IN THE FIRM'S LIFE CYCLE

Mueller (1972) also traces the implications of the life cycle theory of the firm to dividend policy. As discussed above, the optimal dividend policy at a value-maximizing firm in his framework is to retain all earnings in the rapid growth phase and payout 100% of the earnings at maturity. Using a static discounted cash flow model of equity valuation provides one means of understanding this optimal dividend policy.

1.10.1 A Simple Static Model of Optimal Dividend Policy

Consider a highly simplified constant growth model of a firm, of the type found in many valuation textbooks such as Bodie, Kane and Marcus (2005). The firm is infinitely lived and is fully equity financed. The number of shares outstanding is normalized to one for ease of exposition. The firm's return on assets in place is equal to its return on equity, which is denoted by ROE. In every period, the firm has access to a set of fresh investment opportunities with expected return equal to ROE. In order to focus on the payout decision, we abstract from external financing issues by assuming that the firm does not access external capital.

Let E0 denote the equity base at the end of year 0. In year 1, the firm earns an amount e1 given by (ROE)(E0). Assuming a constant payout ratio of d, the dividend amount for year 1, denoted by D1, is de1, and the amount of retained earnings for the period is (e1 - D1).

The firm invests the retained earnings in new assets that provide a rate of return of ROE. Hence, total earnings for year 2 are e2 = ROE(E0 + e1 - D1) = e1 + ROE(1 - d)e1 = (1 + g)e1, where g is the growth rate of earnings, given by

$$g = (e2 - e1)/ e1 = ROE(1 - d). \qquad (1)$$

Extending this logic, the earnings of the firm in year t are $et = e1(1+g)^{(t-1)}$, and the dividend amount paid in year t is $Dt = de1(1+g)^{(t-1)}$. The value of the firm at time 0, given by the present value of future dividends, is therefore equal to

$V0 = \sum Dt/(1+k)t = \sum de1(1+g)(t-1)/(1+k)t$,

where the summation is from t=1 to infinity.

Assuming for a moment that g< k, and substituting for g from equation (1), the value of the firm is given by

$$V0 = de1/(k - g) = de1/(k - ROE(1-d)). \qquad (2)$$

Equation (2) relates the value of the firm to its dividend policy. Based on equation 2, when ROE is greater than k, the value of the firm increases as the payout ratio d decreases. (However, to be consistent with the assumption that g < k,

this applies only for d > 1- k/ROE.) When ROE is less than k, the value of the firm increases with the payout ratio.

Thus, the optimal dividend policy is to maintain a 0% payout ratio when ROE > k and a 100% payout ratio when ROE < k.

The intuition for this optimal policy is exactly the same as that underlying Mueller's (1972) argument that a value-maximizing firm should maintain a zero payout ratio at the initial stages and increase the payout to 100% upon reaching maturity. Essentially, when the firm's 6 investments promise a rate of return (ROE) higher than the firm's cost of capital (k), it makes economic sense for the firm to reinvest all of its earnings in new assets. This is likely to be true for young firms which are in the process of expanding the market for their innovations. But when the expected return on the firm's investments is less than the firm's cost of capital (k), the optimal policy for the firm is to pay out all of its earnings to shareholders. This is likely to be true for firms that have exploited all profitable opportunities for their innovations and reached maturity in their life cycles.

The model of the firm described, though static and highly simplified, is useful in understanding the differences in dividend policy between young firms and mature firms. When combined with a description of the factors driving the changes in the investment opportunity set, i.e., ROE or marginal return on investment, and the cost of capital as a firm matures, the model will provide a complete life cycle based explanation of dividends.

In the context of Mueller's (1972) life cycle theory of the firm, one explanation for the decline in the marginal return on investment as a firm grows larger, is based on the hypothesis that the ability of an organization to process information and maintain risk-taking incentives declines as the firm matures.

1.10.2 Cost of Capital over the Firm's Life Cycle

The cost of capital faced by a firm will vary over its life cycle due to changes in risk, information asymmetry, and the extent of the agency problem.

1.10.3 Impact of Retained Earnings on Future Dividend Policy

The fundamental objective of the finance manager is to concentrate on how to maximize the shareholders wealth from whom the firm is being operational. In this context they analyze all available sources of funds depending upon their strength, weakness and future requirement.

Retained earnings is one of the most important and strategic sources of finance available for the established companies to finance its capital projects, expansion, diversification programs along with redemption of shares and debentures. These funds are cheapest mode of finance for further capital expenditure, accumulated over years and belong to the equity shareholders and are distributable taxed profits kept with the company without distributing them in the form of dividends. It increases the net worth of the company without any dilution of power and risk.

Company uses these surplus funds generated from operation after meeting all the contractual, statuary and working requirements of funds within the company for further profitable investment opportunities. It impacts company's growth and investor return in positive way and is an important factor determining the health of a company.

Through retaining profit, company get fund at minimum cost without any flotation charges and consider retained earning equivalent to the return forgone by the equity shareholder. For the shareholders, cost of retained earnings is basically an opportunity cost of such funds. It is equal to an income that they would otherwise obtain by placing these funds in alternative investment.

The cost of retained earnings is determined based on the opportunity rate of earnings of equity shareholders which is forgone continuously. If the retained earnings are distributed to the equity shareholders, then it will attract personal taxation to the individual shareholders.

Till organization has profitable investment opportunity and is earning return on them it is acceptable but some time organization have negative retained earnings

due to losses and if losses overtake retained earning amount then balance become negative which will impact future dividend policy to a great extent and will signal serious financial problem.

Beside losses if organization pays dividend or more in dividends to shareholders then negative retained earnings is bound to occur. If profit is retained from the start and it have negative balance then it will impact dividend policy and will lead to the problem of no dividend for long period to the shareholders or bankruptcy.

1.11 IMPACT OF DIVIDEND ON STOCK PRICE

Dividend policies largely depend upon the financial strength of the company which is possible with surplus profitability generated through judicious utilization of available resources, articles of association and prevailing economic conditions. It is true that dividend policy itself has a great deal of influence on the image of the company and also has implication for managers, investors and lenders and other claimholders. Its declaration has direct bearing on the market price of the company stock.

For investors, dividend declarations and payment generate positive and negative sense of security and returns and are considered important input for evaluating the firm for future investment. Mangers have to assess the flexibility of paying dividend and strength to invest in projects. More dividends means minimum fund available for investment and to bridge the gap manager will seek external financing from the capital market which will increase the risk.

Lenders consider, that if the organization will pay high dividend then available amount will not be sufficient for servicing and redemption of their claims. However dividends payments present an example of extraordinary agency situation which have ultimate impact on all claimholders. Its policy is used as a mechanism to minimize the agency cost and the adopted policies do not change very often.

Any reduction in dividend amount will be considered as a signal of company trouble and due to its signaling affect prices of share fluctuate. If company

retains the profit cutting dividend then it gives a growth signal to the investors and when company increase dividend then it implies that it would be able to sustain the high dividend in future. It is found that stock price increases at a time of dividend increase and reflect higher expectations for future EPS and gives stronger message of growth. If increase in dividend is accompanied by increase in earning then it gives message that growth is permanent.

And similarly, decrease in dividend coupled with dividend cut signifies terrible news. The company uses this information channel to inform the investors about the firms expected future cash flows which may impact the value of the firm. It has been observed by the financial economist that the issuance of cash dividends signals management's confidence in the future and also it affect the price of a share due to various reasons. Price of stock may not move unless the declaration of cash dividend is surprise.

It is also observed that if nature of dividend is surprise and companies normally pay stock dividends and all of sudden switches to cash or viceversa then it will impact the price of stock and it will move accordingly. If company is paying cash divided on regular basis then it will not impact stock market as it will be considered as a routine matter.

But if company dramatically increases or reduced the dividends then this fluctuation will impact stock prices and stock price will probably change on the very day. Similarly, dividend paid in the form of stock, impacts the market price to a great extent. It is a way of paying dividends by giving stocks of same company to the shareholders in the proportion of the stock already owned by them.

Issuance of stock dividends leads to fall of the stock price on ex- dividend date, or the days before the record date. Sometimes, to control the price of shares, companies perform stock split according to section 94 of the Company Act, 1956. It is known as a better device to control and reduce the market value per share and to increase the liquidity of the share. Splitting stock by multiplying the numbers of stock by two, three, or even four impact more shares flotation in the market and

ultimately it increase the liquidity of share. It helps small investors to hold the shares for long term benefit or can sell them for cash.

However, the drop in share value will be low enough that it will probably be equaled out by transaction costs and taxes. Thus for overall betterment keeping dividend, stock price relation and investor perception in view company must adopt prudent dividend policy as it has direct impact on investor decision and the market price of the company's stock.

1.12 IMPACT OF CLIENTELE ON DIVIDEND POLICY

Investments in companies are done by different group of investors or clientele and prefer different dividend policies. Generally, firms past dividend policy play important role in determining its current clientele of investors. Investors like senior citizens and retirees living on fixed income would prefer a steady income compensated by purchasing power and would prefer cash flow out of their investment whereas young investors and professionals prefer capital appreciation rather than current dividend.

It is found that individual investors do not have any definite dividend preferences and give wattage to current income. While deciding dividend policy, company must pay proper attention to the cliental impact on dividend policy and to control this perpetual situation companies should develop a clientele of investors whose needs match its dividend paying characteristics.

1.13 IMPACT OF TAX ON DIVIDEND POLICY

Tax policy play important role in companies dividend policy and needs to be considered paramount from the point of view of a company as well as from the shareholders. As far as the company is considered, dividend can be paid out of profit after tax. And by paying dividend, company does not get any tax advantage but it increases the tax burden which ultimately become disadvantage for the company. Further, as per the provision to Section 115-O of the Income Tax Act, 1961, company paying dividend is required to pay "tax on distributable profits" which is referred as "dividend tax". The imposed dividend tax on company is

12.5%, further increased by the surcharge of 10% and the education cess of 2%. As far as shareholders are concerned, according to the provision of Section 10(34) of the income tax Act, 1961, dividend (interim or final) received is tax free income and shareholders are not required to pay any tax on dividend received by them.

Table 1: Dividend Payout of Sensex 30 Companies

Year	Total Payout (Rs. Crore)	Average Dividend	Percent change
2001	167.97	6.46	
2002	356.31	13.71	112.23
2003	429.62	16.52	20.50
2004	546.56	26.02	57.50
2005	890.42	34.25	31.63
2006	1297.21	49.89	45.66
2007	1854.14	71.31	42.94
2008	2244.30	86.32	21.05
2009	244.30	94	8.90
2010	3236.00	124.46	32.40
2011	3885.60	149.45	20.10
2012	5121.05	196.96	31.79
2013	6860.70	263.87	33.97
2014	10684.04	410.93	55.73
2015	11768.33	452.63	10.15
2016	13602.70	523.18	15.59

The dividend yield is a simple measure that tells the shareholders and investors what would be the return from owning a stock irrespective of any capital gain or loss. It is worth mentioning here that new companies either do not pay dividend or pay small one. The underlying notion is that they are investing in future of the business rather than returning cash to shareholders. Only mature and old companies pay a high yield.

The average dividend yield of the Indian companies have gone up from 5.655% in 1990 to 17.5% in 2006, which is a 210% increase. Thus, it can be inferred that dividend yield has increased over the years showing that companies have generated more income per share as one moves from 2001 to 2016.

Table 1.2 given below shows that growth does not follow a consistent pattern. There are substantial variations in the shareholder's dividend yield. Since dividend yield is not only a function of dividend payout but also of market price of the stock. The fluctuations in the yield can be attributed to the volatility in stock prices.

Table 2: Dividend Yield of Sensex 30 Companies

Year	Dividend yield (%)	Total Yield (%) Average
2000	454.95	17.50
2002	274.87	10.57
2003	427.46	16.44
2004	317.34	12.21
2005	311.23	11.97
2006	239.04	9.19
2007	360.25	13.86
2008	274.68	9.68
2009	251.74	10.51
2010	242.48	9.35
2011	223.89	8.61
2012	157.47	6.06
2013	185.60	7.14
2014	88.23	3.40
2015	301.10	11.58
2016	146.99	5.65

From the trends in the payout, it is apparently conspicuous that the Indian companies are distributing dividend consistently. The market recognizes and favors the dividend distribution decisions of a firm. The fact that such a large number of companies in India are paying dividends and continuous progressive upward trend

reveals that "Dividend decisions are relevant" as far as the Indian companies are concerned. Thus it can be said, "Dividends are still in vogue in India". These results are in sharp contrast to the prediction of the made by Y. Subbba Reddy and Rath Subhrendu (2012) in their study that there would be decline in dividend payments in the time to come.

Singhania Monica (2009) studied 590 manufacturing, non-government, non-financial, non-banking companies listed on the Bombay Stock Exchange for a period from 1992 to 2004. The sample companies were categorized into payers and non payers, in the period understudy. Payers were further classified into regular payers, initiators and current payers. Non-payers companies were further categorized as never paid, former payers and current non-payers.

It was found that the percentage of companies paying dividends declined from 75.93 % in 1992 to 63.73 % in 2014.Total non-payers steadily increased from 2003 upto 2007 but increased thereafter. Companies, which have never paid continuously declined throughout the sample period from 86% in 2002-2003 to 16% in 2014-15.The number of companies, which have paid dividend at some point during the period of study, increased over time and reached almost 80% of non payers in 2015.

It was evident from the findings that companies in payer group have declined. In payer group, regular payers and initiators have consistently declined whereas current payers continuously increased. It can be inferred from the study that the never-paid companies and former payers have consistently declined while current no payers increased throughout the sample. The total number of companies paying dividend increased upto 2007 and registered a sustained decline thereafter, except for the year 2015 where there is an increase.

Among the sample companies, regular payers are more in number as compared to initiators and current payers throughout the period of study, ranging from 430 companies in 2004 to 239 companies in 2015 and have paid higher average dividend compared to that of current payers and initiators. Further, current

payers paid higher dividend compared to initiators except in the year 2006. The number of initiators declined throughout the sample period from 30 in 2004 to 4 in 2015, whereas current payers steadily increased in number from 35 in 2005 to 133 in 2015 throughout the period of study.

An analysis of average percentage dividend payout during 2003-2015 showed a volatile trend. Percentage increased from 25.47 in 1992 to 46.02 in 2008 and then showed a declining trend till 2011 before reaching the peak average percentage DPR of 67.86 in 2015. However, 1% trimmed average percentage DPR showed a more stable pattern, ranging between 22–40% up to 1997 and then recorded a declining trend up to 2010 before finally reaching 57.37 percent in 2015. An analysis of industry-wise DPR showed an increasing trend across all industries during the sample period. Companies in the business of metals and metal products registered a stable pattern of around 25% in dividend payout throughout the sample period.

Table 3: Average Percentage Payout During 2004-2016

Year	Average % Payout	Std. Deviation	1% Trimmed Average% Payout
2004	25.47	57.85	22.54
2005	29.46	49.63	27.34
2006	29.84	38.97	28.37
2007	30.15	38.01	28.84
2008	38.98	103.94	34.39
2009	46.02	100.07	41.90
2010	38.51	68.80	35.74
2011	47.93	218.67	37.25
2012	37.71	76.62	35.03
2013	43.75	91.99	41.12
2014	49.73	152.90	42.56
2015	48.69	146.52	42.61
2016	67.86	246.75	57.37

The aforementioned trends largely indicated that among the sample companies, the number of those declaring dividend in any given year has declined over the period of study from 448 in 2004 to 376 in 2016. However, the average dividend payout ratio increased significantly over the period of study. This implies that those companies, which declared dividend, paid high amounts as dividends over the period of study. Dividend payout ratio showed a volatile trend, ranging from about 25 to 68% during 2004-2016. In addition, wide industry-wise fluctuations are visible over the period of study. Moreover, a major proportion of the sample companies follow a dividend policy of part retention of profits and part distribution of profits over the period of study.

It is known that primarily, there are three basic approaches regarding dividend policy:

1. One hundred per cent retention of profits i.e. no dividend: Some managements might prefer to plough back their entire earnings indefinitely on the consideration of financial stability of the company.
2. One hundred per cent distribution of profits, i.e., no retention: Some managements might prefer to distribute all the earnings to the shareholders. This is carried out in order to give the due share of profits to the shareholders.
3. Part distribution and part retention of profits: Some managements prefer to adopt a course between the first and second policy. They plough back a part of the earnings and distribute the remaining part among shareholders.

The study also highlighted that predominantly a major proportion of the sample companies follow a dividend policy of part retention of profits and part distribution of profits over the period of study. However, companies following such a dividend policy have declined from about 75% in 2004 to about 56% in 2016. Conversely, companies following a policy of 100% retention of profits have increased over the period of study from 142 in 2004 to 214 in 2016 (i.e., from about 24% in 2004 to about 36% in 2016).

It might be emphasized that companies following a dividend policy of 100% distribution of profits have been an insignificant number (i.e., below 1% of sample companies) throughout the period of study. However, companies following such a dividend policy have increased in number from 5 in 2004 to 46 in 2016 over the period of study.

The various studies done in Indian context have several implications but there is no consensus as to what should be the dividend policy of the companies in India. Therefore it becomes important to study dividend behavior of Indian companies using the framework of empirical models.

1.14 DIVIDEND POLICY: THE GLOBAL PERSPECTIVE

Dividends are important in other countries where public companies are a common form of corporate organization. However, economic environments around the world differ in terms of laws, regulations, and customs. Consequently, dividend policies systematically vary from country to country. For example, cash dividend payments are smaller and less relevant for companies in Japan, Switzerland, and Israel but are relatively more important in Canada and the United Kingdom. The frequency of dividend payments also varies from country to country. Dividends typically are paid quarterly in the United States and Canada, but most companies in Finland, Italy, and many other countries pay dividends annually.

In the following sections the dividend payment patterns and trends in countries in Europe, the Pacific Rim, and North America has been discussed. These countries have developed sophisticated economic and capital market systems and their financial markets are studied frequently by scholars.

1.15 DIVIDEND SIZE AND FREQUENCY ACROSS THE WORLD

The average annual dividend yield in the European industrial countries, such as Germany, France, Switzerland, and Italy, is between 2.5 percent and 3.5 percent. This yield is less than the 4 percent average annual dividend yield in Canada and the United States.

Most companies in these European countries pay dividends only once a year. Again, this practice is in contrast to the United States and Canada, where dividends are typically declared quarterly and sometimes even monthly. The European country that seems unique in its companies' dividend policies is the United Kingdom. There, average dividend yields are higher (6.12 percent, according to one study) and dividends are paid semiannually. In recent years, most Japanese companies have increased their annual dividends and now declare dividends more frequently (twice a year rather than once). Moreover, companies have to pay dividends in order to be listed on the Tokyo Stock Exchange

1.16 INSTITUTIONAL FEATURES

The differences in dividend practices throughout the world can be attributed to unique institutional features in various countries. In most European countries and Japan, shareholders must typically approve the proposed dividend. In Germany, Switzerland, Brazil, and several other countries, the law specifies the minimum percentage of earnings that must be distributed as dividends. However, corporations in these countries usually are able to exploit loopholes in the tax code to circumvent these requirements. In Switzerland, companies raise considerable equity and simultaneously pay dividends. The information provided to the market concerning forthcoming dividend payments ranges from being available at the beginning of the ex-dividend month in Switzerland to the absence of any dividend announcement prior to the ex-dividend day in Japan.

1.17 TAX DIFFERENCES

A variety of tax codes, which change frequently as tax reforms are passed in various countries, also can have an important effect on dividend policies. Dividends and capital gains are the alternative sources of return for shareholders, but, in many countries, there are no capital gains taxes or they were introduced for the first time during the last decade of 20th century. For instance, in Canada capital gains taxes were introduced in the tax reform of 1971 and in Japan in the tax reform of 1988. In Israel, the government attempted to introduce capital gains taxes in 1994 but backed down under public pressure in 1995.

In contrast, capital gains have been taxed in the United States since early in the twentieth century. Under the U.S. tax code, capital gains received a preferential tax treatment relative to dividends between 1921 and the Tax Reform Act of 1986, when the rates were equalized. However, since the Omnibus Reconciliation Act of 1993, capital gains again have been taxed at a lower rate than dividends in the United States. In 1997, the capital gains tax rate was lowered again relative to dividends. U.S.A has removed the dividend tax both from companies and the recipients. Dividends received by low income individuals were taxed at a 5% until December 31, 2007 and will become fully untaxed in 2008. These provisions are set to expire on January 1, 2011. This way the government can keep check on the income of rich and exempt the small shareholders as well.

In England there are two different Income tax rates on dividends. The rate an individual pays depends on whether the overall taxable income (after allowances) falls within or above the basic rate Income tax limit, varying from 10-32.5%

In India, the dividend distribution tax was first introduced by Finance Act of 1997, was accepted by the Finance Minister, Yashwant Sinha, while presenting Finance Bill for 2002-03.Before that, dividends were taxed in hands of the recipients as any other income. This tax was again abolished in the year 2002.The budget for the financial year 2002-2003 proposed the removal of dividend distribution tax bringing back the regime of dividends being taxed in the hands of the recipients and the Finance Act 2002 implemented the proposal for dividends distributed since 1 April 2002. But presently, the new dividend distribution tax rate for companies was higher at 12.5%, and was increased with effect from 1st April 2007 to 15%. This Dividend distribution tax (DDT) was introduced by Section 115(O). In addition to the company tax, the Government sought to tax dividends distributed by the companies. However the introduction of DDT has evoked several controversies and debates in India. It has been severely criticized by the companies on the pretext of double taxation. Dividend is paid after paying income tax on the profits earned by the companies. DDT is further levied on profits distributed to shareholders of a company. The profits of the company are supposed to be the

income of shareholders. This way they as part owners i.e. the shareholders have already been taxed. DDT thus amounts to double taxation.

Shares or mutual funds become long term assets after one year of holding in Indian context. Sale of such long-term assets gives rise to long term capital gains. As per Section 10(38) of Income Tax Act, 1961 long term capital gains on shares or securities or mutual funds on which Securities Transaction Tax (STT) has been deducted and paid, no tax is payable. STT has been applied on all stock market transactions since October 2004 but does not apply to off-market transactions and company buybacks; therefore, the higher capital gains taxes will apply to such transactions where STT is not paid. However short term capital gains, on sale of shares and mutual funds are taxed at the rate of 10% under section 111A where STT is paid from Assessment Year 2005-06 as per Finance Act 2004. For Assessment Year 2009-10 the tax rate is 15%.

Dividend tax laws vary greatly among countries. The Canadian tax code calls for a dividend tax credit, although the details change from time to time (e.g., the tax reform of 1971). A dividend tax credit is part of the tax code in Japan and also was adopted in Germany in 1977. In the United Kingdom, a dividend imputation system is used off and on, depending on whether the Conservative Party or the Labour Party is in power.[15] A complicated dividend imputation system also was in place in Australia until recently. In New Zealand, until 1985, dividends were taxed or not taxed, depending on the source of the funds that financed the dividend. In Italy, dividends on registered stocks and savings stocks are taxed at different rates. The tax code for individuals in the United States is costly for shareholders. Dividends are subject to taxation both at the corporate and the individual level. Further, the United States has no tax credit or imputation system, although from time to time small amounts of dividend income are exempted from taxation. Tax laws for corporate income from dividends also are different in various countries, although the general rule in most of them is that corporate investors enjoy a preferential tax treatment of dividend income.

1.18 DIVIDEND PAYOUT PATTERNS AROUND THE WORLD

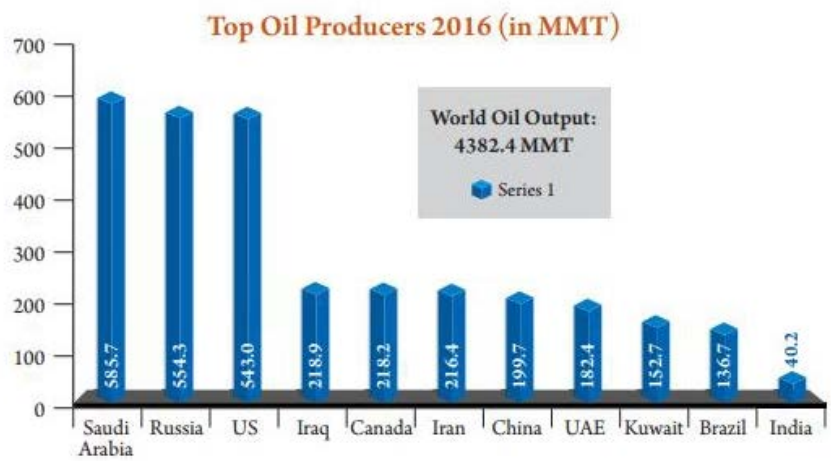
Despite the statistical differences in the characteristics (size, yield, frequency, etc.) of the dividend streams of corporations in various countries—and the range of tax laws, regulations, and institutional features— some similarities can be pointed out in corporate dividend policies in various countries. Specifically, dividend smoothing seems to be a management tendency everywhere which is in alignment with findings of classic study

Lintner's (1956) on corporate dividend decisions in the United States (Refer to the Literature review section for details). Numerous scholars have replicated Lintner's methodology and have observed similar corporate payout decisions in different countries. These scholars, using variations of Lintner's model, have documented patterns of dividend streams similar to those he found for U.S. companies. The evidence suggests that managers tend to maintain smooth dividend payout patterns; they pay out stable amounts of dividends and avoid sudden changes, especially cuts in dividends. This practice transcends national boundaries.

1.18.1 World's Oil and Gas Industry Scenario

Production of crude oil and natural gas, hereafter called oil and gas, world-wide are decreasing while consumption is increasing gradually year after year. There is tremendous pressure to improve oil recovery from existing oilfields as well as to discover new oilfields. This calls for major investments. Secondly almost all the oilfields have been discovered in onshore and shallow waters in seas.

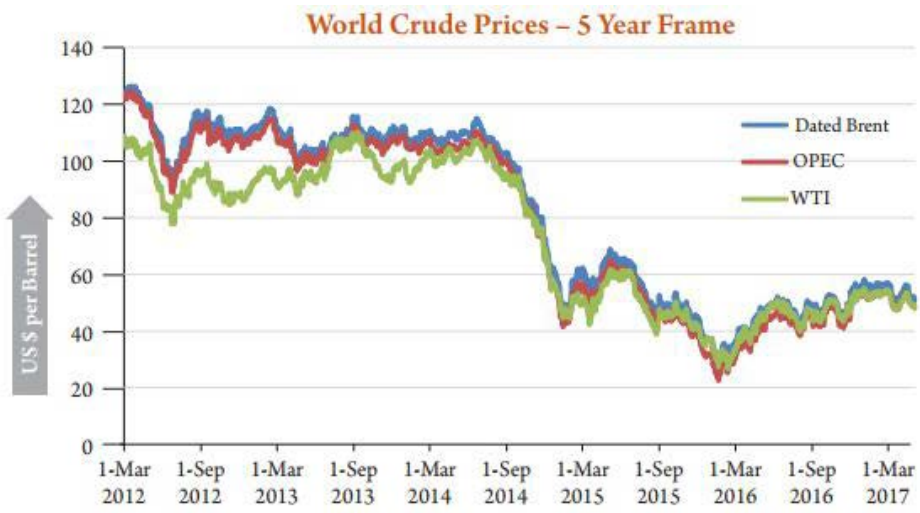
There is need to accelerate discovery in deepwater and arctic peninsula, which is risky, highly capital intensive and requiring newer technologies. World-wide declining discovery of oil and gas, declining crude oil production , increasing oil industry investments and increasing crude oil prices present a grim picture of world-wide upstream oil industry.



MMT: Million Metric Tons

Graph 1: World-wide Crude Oil Production (MMT)

Source: ONGC Annual Report 2016-17



Source: ONGC Annual Report 2016-17

Graph 2: World Crude Prices - 5 Year Frame

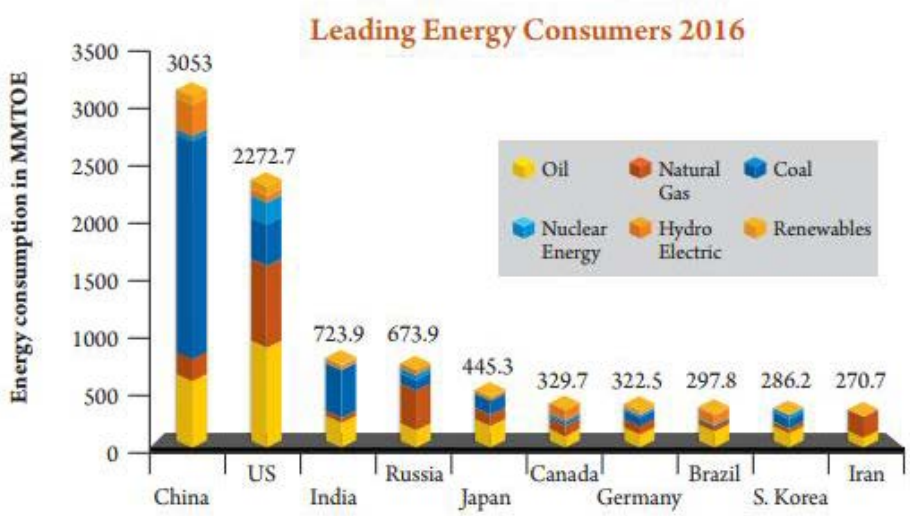
The **petroleum industry** includes the global processes of exploration, extraction, refining, transporting (often by oil tankers and pipelines), and marketing petroleum products. The largest volume products of the industry are fuel oil and gasoline (petrol). Petroleum (oil) is also the raw material for many chemical products, including pharmaceuticals, solvents, fertilizers, pesticides, and plastics. The industry is usually divided into three major components: upstream, midstream and downstream. Midstream operations are usually included in the downstream category.

1.18.2 Oil Consumption across the world

Oil accounts for a large percentage of the world's energy consumption, the given figure shows the leading energy consumers of the world.

The production, distribution, refining, and retailing of petroleum taken as a whole represents the world's largest industry in terms of dollar value.

Petroleum is vital to many industries, and is of importance to the maintenance of industrialized civilization itself, and thus is a critical concern for many nations.



Source: ONGC annual report 2016-17

Graph 3: Leading Energy Consumers 2016

1.19 INDUSTRY STRUCTURE

The American Petroleum Institute divides the petroleum industry into five sectors:

- upstream (exploration, development and production of crude oil or natural gas)
- downstream (oil tankers, refiners, retailers and consumers)
- pipeline
- marine
- service and supply

The oil and gas industry is usually divided into three major sectors: **upstream**, midstream and downstream.

- **Upstream**

The upstream oil sector is also commonly known as the *exploration and production (E&P) sector*.

The upstream sector includes the searching for potential underground or underwater crude oil and natural gas fields, drilling of exploratory wells, and subsequently drilling and operating the wells that recover and bring the crude oil and/or raw natural gas to the surface.

With the development of methods for extracting methane from coal seams, there has been a significant shift toward including unconventional gas as a part of the upstream sector, and corresponding developments in liquified natural gas (LNG) processing and transport.

Most upstream work in the oil field or on an oil well is contracted out to drilling contractors and oil field service companies

- **Midstream**

Midstream operations and processes include the following:

Gathering: The gathering process employs narrow, low-pressure pipelines to connect oil- and gas-producing wells to larger, long-haul pipelines or processing facilities

Processing/refining: Processing and refining operations turn crude oil and gas into marketable products. In the case of crude oil, these products include heating oil, gasoline for use in vehicles, jet fuel, and diesel oil

Transportation: Oil and gas are transported to processing facilities, and from there to end users, by pipeline, tanker/barge, truck, and rail.

Storage: Midstream service providers provide storage facilities at terminals throughout the oil and gas distribution systems

Technological applications: Midstream service providers apply technological solutions to improve efficiency during midstream processes. Technology can be used during compression of fuels to ease flow through pipelines; to better detect leaks in pipelines; and to automate communications for better pipeline and equipment monitoring

- **Downstream**

The downstream sector commonly refers to the refining of petroleum crude oil and the processing and purifying of raw natural gas, as well as the marketing and distribution of products derived from crude oil and natural gas. The downstream sector touches consumers through products such as gasoline or petrol, kerosene, jet fuel, diesel oil, heating oil, fuel oils, lubricants, waxes, asphalt, natural gas, and liquified petroleum gas (LPG) as well as hundreds of petrochemicals.

Midstream operations are often included in the downstream category and considered to be a part of the downstream sector.

- **Pipeline**

Pipeline transport is the transportation of goods through a pipe. Most commonly, liquids and gases are sent, but pneumatic tubes using compressed air can also transport solid capsules.

As for gases and liquids, any chemically stable substance can be sent through a pipeline. Therefore sewage, slurry, water, or even beer pipelines exist; but arguably the most valuable are those transporting crude petroleum and refined petroleum product including fuels: oil (oleo duct), natural gas (gas grid), and bio fuels.

1.20 Difference between Brownfield and green field projects

- Brown field is assimilated more to upstream oil & gas activities. It comes from the oil which is being produced from offshore facilities which is brown

in color. As for other industries e.g. petrochemical, the existing plant which had existed for years will actually had tarnished in its color to brown or even black etc. Its product can be of any color or even colorless, but is not necessarily brown in color unlike the oil from the oil & gas sector. This is one difference.

- Brown field projects have their unique complications in that they often have to be carried out in and around existing plant and operations, sometimes whilst operations continue.
- Green field, it is also synonymous and applicable to the offshore upstream activities when dealing with the installation of new facilities. But there again, one would like to expect to be called "blue field" since it is mostly being constructed in the middle of the ocean. This is true to the offshore sector. But there are also the onshore sector where one can find new facilities being built on land, which is normally surrounded by greens, hence it is rightly called "green field". On land facilities can exist in desert, arctic area which are not fully 'green'. Over here the color scheme is a bit mix-up.

The petroleum product and crude oil is core sector for any country. Now a days this sector is open for free market. The main benefits for exploring activity are fiscal incentives as a royalty and tax connection by the government. In addition to this attractive pricing and venture capital is another scope for the growth. It plays a vital role in the development of economics of the enterprise as well as country. So, the researcher would like to conduct the research on financial performance of oil industry. The main purpose of the study is to see the basic oil & petroleum scenario and what is the level of financial performance of the units undertaken the study.

In modern times a number of financial problems are faced by the industry and for effective and corrective solution of all problems, some analytical study of the financial performance must be here. Thus, the researcher would like to conduct the research in Oil Industry. The study is important in views of researcher by considering important of financial performance in profitability, liquidity, asset of leading refineries of oil sector industry. The researcher will try to shows the whole

pictures of selected Oil Industry and their various financial factors which affect the industry in various financial aspects.

The Universe of the study is all the leading units which are working in the Oil/Refinery sector. At initial stage researcher has decided to take all the unit of Oil/refinery sector for his research purpose but after collection of data, researcher decided that only list of 5 Oil Industries selected for his research. These are the best companies in oil and gas exploration, petroleum products sector and ranking process of companies. The study of the following industries mostly shows the financial picture from various aspects. Before analyzing the data of the oil industries undertaken for the study, here is the overview of the Oil industries.

1. Bharat Petroleum Corporation Limited (BPCL)
2. Cairn India
3. Indian Oil Corporation Limited (IOCL)
4. Oil & Natural Gas Corporation Limited (ONGC)
5. Reliance Petroleum Limited (RPL)

1.21 Indian Oil and Gas Industry Scenario

Indian national oil companies were awarded oil and gas blocks for exploration and production on nomination basis. Targets were set in the form of memorandum of understanding (MoU) signed between Ministry of Petroleum and Natural Gas (MoPNG), Government of India and CEOs of national oil companies. These MOUs contained targets on physical and financial parameters and the frequency of measurement were either annual or at most quarterly. The dimensions of measurement were very few and did not present a comprehensive picture of the enterprise performance.

Initially, two major central public sector enterprises (CPSE) existed in the upstream oil business namely Oil and Natural Gas Corporation Ltd. (ONGC) and Oil India Ltd. (OIL) and they signed the MoUs with government of India for performance reviews. With the introduction of new exploratory licensing policy (NELP) in 1998, few other downstream companies owned by Government of India such as Indian Oil Corporation Ltd. (IOCL), Hindustan Petroleum

Corporation Ltd. (HPCL), Bharat Petroleum Corporation Ltd. (BPCL), Gas Authority of India Ltd. (GAIL), private owned companies such as Reliance Industries Ltd. (RIL), Essar Oils Ltd. (EOL), Hindustan Oil Exploration Corporation Ltd. (HOECL), Gujarat State Petroleum Corporation Ltd. (GSPC), and MNCs such as Cairn Energy India Ltd. (CEIL), British Gas India Ltd. (BGIL), and Heramec India Ltd. etc. have entered into upstream business of oil and gas exploration and production. In place of nominations earlier, oil blocks are now auctioned through international bidding. An overview of the Indian oil industry in term of their ownership and types of operation is presented in Table.

Table 4: Overview of Indian Oil Industry

S.No	Company	Govt./Private Owned	Up-stream	Down-stream	Other Energy Sector
1	Oil & Natural Gas Corp. Ltd. (ONGC)	CG	√	√	√
2	Oil India Limited (OIL)	CG	√		
3	Gujarat State Petroleum Corporation (GSPC)	SG	√		
4	Reliance Industries Ltd. (RIL)	PV	√	√	
5	Essar Oil Ltd. (EOL)	PV	√	√	
6	Cairn Energy India Ltd. (CEIL)	PV	√		
7	British Gas India Ltd. (BGIL)	PV	√	√	
8	Gas Authority of India Ltd. (GAIL)	CG	√	√	
9	Indian Oil Corp. Ltd. (IOCL)	CG	√	√	
10	Hindustan Petroleum Corp. Ltd. (HPCL)	CG	√	√	
11	Bharat Petroleum Corp. Ltd. (BPCL)	CG	√	√	
12	Hindustan Oil Exploration Corp. Ltd. (HOECL)	PV	√		
13	Videocon Corp. Ltd.	PV	√		
14	Canoro Resources Ltd.	PV	√		
15	Heramec India Ltd.	PV	√		

Note: CG: Central Government owned; SG: State Government owned; PV: Private owned; √: operating in the selected sectors

Source: Ministry of Petroleum and Natural Gas, India (MoPNG) website www.petroleum.nic.in, Directorate General of Hydrocarbons, India (DGH) website www.dghindia.org and

1.22 DGH Annual report 2014-15

India's production of crude oil is hardly meeting 20 per cent and natural gas 80 per cent of total oil and natural gas consumption. The figures are taken from websites of Ministry of Petroleum and Natural Gas, India. Oil and Natural Gas production and consumption of India is given in the Table below.

Table 5: Crude Oil and Natural Gas Production and Consumption in India

	Year					
	Unit	2011-12	2012-13	2013-14	2014-15	2015-16
Crude Oil Production	MMT	32.19	33.99	34.12	3.51	33.69
Crude Oil Consumption	MMT	130.11	146.55	156.10	160.77	160.03
Natural Gas Production	BCM	32.20	31.75	32.42	32.85	47.51
Natural Gas Consumption *	BCM	37.91	39.64	42.30	42.25	57.97

** includes imported LNG and MMT to BCM conversion factor taken is 1.3 Note: MMT: Million Metric Tons, BCM: Billion Cubic Meter*
Source: Ministry of Petroleum and Natural Gas (MoPNG) website www.petroleum.nic.in

1.23 New Exploratory Licensing Policy

Since early 1990s, Government of India has gradually liberalized industrial and trade policies and Indian markets have been gradually opened to more competition. Globalization has accelerated competition from MNCs, other Indian companies and start ups in oil industry. Government of India introduced New Exploratory Licensing Policy (NELP) in 1998, and now oil and gas blocks are awarded through international bidding. This has brought more competition to existing Indian upstream oil companies from other Government owned and private companies including the MNCs. As a diversification strategy, the downstream companies and other start-ups have made joint ventures with oil companies having technological capabilities in oil exploration and production. In recent years with increase in crude oil and natural gas prices world over, there has been pressure on the government to increase the prices of petrol, diesel and compressed natural gas but due to socio-political compulsions it could not be

done. As a result, refining margins of downstream have gone down significantly. Therefore, these refining and distribution companies have grabbed new opportunity in oil exploration and production under the NELP.

Directorate General of Hydrocarbons (DGH) under the Ministry of Petroleum and Natural Gas is the nodal agency for implementation of NELP. It gives oil blocks for exploration to oil companies through open competitive international bidding, sign production sharing contracts (PSC) for producing fields, and monitors the development of oilfields. NELP has brought major liberalization in upstream oil sector, where 100 per cent foreign direct investment (FDI) is allowed.

Literature Review

LITERATURE REVIEW

2.1 INTRODUCTION

Literature reviews are important for the study as it give direction and important feedback relating to the concerned topic. In this study, it is authentically undertaken to understand the inverse relationship between dividend policy and shareholders wealth by critically examining different theories and empirical studies conducted worldwide. The judicious revelations of these studies indicate that they differ in opinion depending upon study time period, prevailing economy and market condition, companies futuristic plans, investors behaviour and academic ego.

In the context of dividend and its policies Berle and Means (1932) in their study highlighted the inefficient use of funds by the management in excess of profitable investment opportunities which gave new dimension to investment and return system. The text written by Graham and Dodd (1934) emphasizes the relevancy of dividend that firm's existence is possible only through dividend which became biblical word in short period of time. They advocated in their study that if two firms are operating in the same environment and are identical in all respect, the firm who pays regular income would command higher P/E than the other with erratic dividend paying firm. But serious academic thought and judicious research in the field of dividend decision and its practice started in the early 1950s.

The debate over the controversy and importance of dividend policy became hot topic as it hold importance due to economic and financial requirement which can be achieved through motivated investors. In due importance, researcher like Bhat and Pandey (1958) in their study revealed that share price to a extent get influenced by the dividend policies of the companies, Maunder (1959) in his study attempts to explain corporate saving and justified companies savings in terms of profitability for the aggregate and for some individuals industries as well, Gordon (1959) indorse the idea with firm belief that dividend increases shareholders wealth and on other hand Miller and Modigliani (1961) who revealed that in worldwide perfect capital market dividend declaration and its payment does not impact the value of the firm and advocated that value of a firm depends only on the distribution of the future cash flows that result from the investments undertaken.

Miller and Modigliani (1966) in his later study found that change in dividend convey healthy amount of information especially about expectations of management in respect of long run future profit.

Dhrymes and Kurz (1967) in his study found that firm financing decision and investment decision are closely linked which impact companies various policies including dividend policies.

Akerlof (1970) in his study justified that once the dividend-initiation decision becomes public, the market will react favorably to the positive information.

Krishnamurty and Sastry (1971) in their study examined the behavior of dividend in chemical industry. For the study he took cross sectional data of 40 public limited companies, Pettit (1972) in his study found that dividend announcement do convey valuable information.

McDonald, Jacquillat and Nusenbaum (1975) in their study investigated the French market and supported the Lintner revelation. According to them investment or external financing levels do not have any impact. The past dividends and current earning is the major indicator of variation in dividends.

Jensen and Meckling (1976) in their study adopted the work of Berle and Means on intellectual basis and promoted the work with new dimensions, Charest (1978) in their study witnessed that the announcement of a dividend increase generates an excess return, Kalay (1979) in his study explained that highly leveraged firms have burden of debt and choose tight dividend policy and pay fewer dividends.

Bhole (1980) conducted the study and tested the determinants of corporate savings, dividends and share prices respectively. For the purpose he tested profit allocation and Lintners model and used time series data by using simple, multiple and stepwise regressions. The study produced the fact that Lintner's model performed well in Indian context in the conducted period.

Aharony and Swary (1980) in their study found that there was abnormal returns on the day dividend was announced, Asquith and Mullins (1983) find that, like dividend increases, dividend initiations have a significant positive impact on shareholder wealth.

Patell and Wolfson (1984) in their study analyze the stock price reactions to earnings and dividend announcements. The study shows that most of the detected price reaction occurs within the first fifteen minutes after the earnings and dividend announcements.

Miller and Rock (1985) in their study suggested a model with dividends information about unused earnings which can exit with rational expectations. They revealed that due to information asymmetry between investors and managers dividend can result in market reaction.

Jensen's (1986) in his study based on free cash hypotheses tried to update the assertion by making combination of market information asymmetries with agency theory, Asquith and Mullins (1986) in their study suggest that dividends may be a better signal than earnings announcements due to managers' ability to manipulate earnings.

Ofer and Siegel (1987) and Healy and Palepu (1988) in their study examine changes in dividend policy in relation to future earnings and related analysts forecasts, also consistent with the information-signaling hypothesis.

Lakonishok and Lev (1987) in their study revealed an empirical evidence that is consistent with firms employing stock dividends and stock splits in order to shift share prices to an optimal trading level.

In line with this notion, Loughlin (1989) and Easton and Sinclair (1989) in their study found negative correlation concerning stock price and dividend payment, Ogden (1994), Stevens and Jose (1992), Kato and loewenstein (1995), Ariff and Finn (1986) and Lee (1995) all indorse the same view that there is considerable positive association between stock price and dividend payment

whereas Loughlin (1988) and Easton and Sinclair (1989) have common view that showed a negative correlation concerning dividend payment and stock price.

John and Lang (1991) in their study did not indicated dividend as a sole mechanism for promoting private information to the market. According to them, that firm has multiple cost effective signals to choose from to convey their private information, Dempsey and Laber (1992) in their study found that there is different financial behavior between insider and common shareholder within the firm. According to their revelation that as far as insider are concern dividend yield is negatively related to the proportion of stock held by them and positively related to the common share holder.

Noronha and Obaidullah (1993) in his study examined the dividend behavior of Sensex 30 blue chip Companies for the period of fifteen-year and study traced the fact that firms tend to follow a stable dividend policy, Agrawal and Jayaraman (1994) in their study distinctly examined the hypothesis that dividend payout minimize the advantage of free cash flow to the managers.

Bernheim and Wantz (1995) document a positive relation between increases in the tax rate on dividends and the share price response per dollar of dividends, Michaely, and Thaler (1997), and Jensen and Johnson (1995) document that dividend cuts are followed by earnings increases, consistent with dividend cuts marking the end of a firm's financial decline and the beginning of its structuring.

Shen (1998) in his study produced the fact that, no average reaction to dividend initiation announcements on rivals' stock prices and their earnings forecasts, Oludoyi (1999) in his study investigated the impact of earnings announcements on share prices in Nigeria around annual general meeting (AGM) dates between 1986 and 1994, DeAngelo and DeAngelo (2000) find evidence that the market penalized Times. Mirror for intending to poorly reinvest free cash flow and applauded later dividend redistributions of that cash flow.

La Porta et al. (2000) in his study revealed that dividends are paid because minority shareholders pressure corporate insiders to disgorge cash, Faccio et al.

(2001) in his study advocated that dividend rates to a large extent depend on the vulnerability to expropriation of minority shareholders which are measured by the discrepancy between the controlling shareholders ownership rights and its controlling rights.

Grullon, Michaeley and Swaminathan's (2002) in their study revealed that firms with anticipation of declining investment opportunity likely increase the dividends in order to protect the investor base, Schleicher, Caton et al. (2003) in their study examine whether information embedded in dividend omissions affect the cash flow expectations of rivals along with abnormal stock returns and abnormal earnings forecast revisions of rivals surrounding announcements of dividend omissions by announcing companies.

Henryk and Roland (2003) through their study tried to justify that announced dividend blow fresh information in the stock market and stock price react with spontaneity to it and move with coordination in the same direction as dividends moves.

Uddin and Chowdhury (2005) in their study produced the evidence that investors do not benefit from dividend announcement in DSE, their paper was based on the 137 DSE listed companies, Daine and Paul (2006) in their study found that dividend complexity impact change in price when the nature of news goes against the grain of recent market direction during unpredictable times.

Sharma Dhiraj (2007) in his empirical study examined the financial and dividend behaviour of selected Indian firms and tried to justify whether or not the dividends are still vogue in India with the help of signalling and tax effect theory. Study revealed firms paying dividend during this period have followed continuous progressive trend.

Kapoor (2009) in his study identified the circumstances under which dividend policy impact the firm value. It is traditionally argued that dividends are safer than capital gains and have different implications on share price and dividend ratio.

Aasia Asifi, Waqas Rasooll, Yasir Kamal (2011) in their study examined the management concern about capital structure, its impact on profit and wealth of shareholders of Pakistan firms and found that extent of corporate debt and practiced dividend policy significantly influenced the dividend policy. They also found that leverage have negative impact on dividend payout, companies with degree of leverage pay fewer dividends.

After going through literature review, it has been found that the dividend policy is exclusively researched topic in the field of finance but to decide either dividend policy affects the share price or not is still mystifying question. Some study justifies retention and some justify the dividend payout and some studies produced that company's financial health and its futuristic capital expenditure plans play significant role in determining the payout and retention policy. Due to these facts, dividend payout and retention in banking sector invites more studies time to time in order to develop scientific and authentic policies which have answer to all complexities.

The behaviour of dividend policy is one most debatable issue in the corporate finance literature and still keeps its prominent place both in developed and emerging markets (Hafeez & Attiya, 2009). Many researchers have tried to uncover issues regarding the dividend dynamics and determinants of dividend policy but we still don't have an acceptable explanation for the observed dividend behaviour of firms (Black, 1976; Brealey & Myers 2005). Dividend policy has been analyzed for many decades, but no universally accepted explanation for companies' observed dividend behaviour has been established (Samuel & Edward, 2011). It has long been a puzzle in corporate finance. Miller & Modigliani (1961) argued that under certain simplifying assumptions, the dividend decision does not affect the value of a firm and is, hence, unimportant. Yet, traditional wisdom with changed postulations advocates that a properly managed dividend policy is vital to shareholders because it can affect share prices and shareholder's wealth. This argument is based upon two assumptions that there is no tax disadvantage to an investor to receiving dividends, and the second is that firms can raise funds in capital markets for new investments without bearing significant issuance costs. The

proponents of the second school feel that dividends are bad for the average stockholder because of the tax disadvantage they create, which results in lower value. Finally, there are those in a third group who argued that dividends are clearly good because stockholders like them. Thus, despite voluminous research on dividends, corporate managers and financial economists still face what Black (1976) once described as a dividend enigma with pieces that just don't seem to fit.

Prior studies by Lease et al. (2000), Bierman (2001), Baker et al. (2002), Frankfurter et al. (2003) have described it as an appropriation of profits to shareholders after deducting tax and fixed interest obligations on debt capital. According to Olimalade & Adewumi (1987), it is seen as cash flows that accrue to equity investors. That is a form of return to shareholders on their investment, and the aim is to increase their confidence in the future of the company in which they have invested. Dividends are compensatory distribution to equity shareholders for both time and investment risks undertaken. Such distributions are usually net of tax and obligatory payments under debt capital and they represent a depletion of cash assets of the company (Lipson et al., 1998).

Dividend policy is the regulations and guidelines that a company uses to decide to make dividend payments to shareholders (Nissim & Ziv, 2001). The dividend policy decisions of firms are the primary element of corporate policy. Dividend, which is basically the benefit of shareholders in return for their risk and investment, is determined by different factors in an organization. Basically, these factors include financing limitations, investment chances and choices, firm size, pressure from shareholders and regulatory regimes. However, the dividend payout of firm’s is not only the source of cash flow to the shareholders but it also offers information relating to firm’s current and future performance. A considerable number of papers, including Bhattacharya (1979; 1980), Linter (1956), Linter (1962), Miller & Rock (1985) suggest that firms dividend payouts policies are designed to reveal the earnings prospects to investors.

Related prior studies on the dividend payout policies of firms have produced a large body of empirical research, particularly following the publication of Miller

and Modigliani (1961) on the dividend irrelevance hypothesis. Basically existing academic literatures presently on the determinants of dividend policy can be traced to the seminal paper of Lintner (1956) and Miller & Modigliani (1961). According to Lintner (1956), changes in earnings and existing dividend rates are the most important determinants of a firm's dividend policy decision. Miller and Modigliani (1961) while presenting the irrelevance proposition opined that in a perfect capital market company's dividend policy decision is not a thing of salient value at all. However, although investors agree on some key determinants of dividend policy of firms, the effect of dividend policy on firm value is largely challenged. Thus relating to the relationship between firm performance and dividend payout policy, many academic scholars have examined the effect of firm performance on dividend policy; still no general consensus has yet emerged after several decades of investigation, as scholars often disagree even about the same empirical evidence. This inconclusiveness of empirical findings has made the issue of dividend payouts more complex.

Kale and Noe (1990) in a related study opined that a firm's dividend basically indicates the stability of the firm's future cash flows. A review of related prior studies shows further that the main factors that influence a firm's dividend decisions include cash flow considerations, investment returns, after tax earnings, liquidity, future earnings, past dividend practices, inflation, interest, legal requirements and the future growth projection. This view however corroborates the suggestions of Brigham (1995) where a firm's dividend policy is seen as a major determinant for a firms' performance. Similarly, Zakaria and Tan (2007) also stressed the fact that investments made by firms' influences the future earnings and future dividends potential.

Likewise, Zeckhauser & Pound (1990) in a related study found out that there is no significant difference among dividend payouts with or without large block shareholders. In addition, Kouki and Guizani (2009), and Kumar (2006) also observed in their study that managerial ownership appears to have a visible and significant effect on dividend payout.

Nevertheless, while several prior empirical studies from developed economies have shed light on the relationship between firm performance and dividend payout, the same is not true in developing economies like Nigeria. This study therefore tends to fill this gap in literature by examing the relationship between the financial performance of firms and the dividend payout of listed firms in Nigeria. The study will in addition, attempted to find whether there is a relationship between ownership structure, firm size and the dividend payout of listed firms in Nigeria.

The literature that deals with dividend policy in the presence of market imperfections may be categorised under two basic views: for and against. On the 'against' camp are theories including the transaction cost theory of dividend and the tax hypothesis that suggest that dividend payments reduce shareholder wealth. On the 'for' camp are theories that suggest that dividend payments increase shareholder wealth, including the bird in the hand argument, the signalling theory and the agency theory of dividend. All these theories have been extensively discussed and tested but to date there is no consensus on how firms determine their dividend policies.

The aim of this chapter is to introduce the leading theoretical themes that have evolved to explain the dividend puzzle. It is also intended to review the main empirical methodologies that have been developed to test these theories and to present some of the evidence that have been collected.

2.2 DIVIDEND THEORIES

The transaction cost theory Firms may incur costs in distributing dividends while investors may incur costs in collecting and reinvesting these payments. Moreover, both firms and investors may incur costs when, due to paying dividends, the firm has to raise external finance in order to meet investment needs. Indeed, the transaction costs incurred in having to resort to external financing, is the cost of dividend in Bhattacharya's (1979) model. In contrast, however, it may be argued that dividend are beneficial as they save the transaction costs associated with selling stocks for consumption purposes2. Either way, if there are additional transaction

costs that are associated with paying or not paying dividends, then dividend policy should impact earnings expectations and hence share price and firm value.

Alternatively dividends may influence value if dividend policy has an impact on management's investment decisions. For example, managers may decide to forgo positive net present value investments because dividend payments exhausted internal finance and raising external funds involves transaction or other costs. Indeed in Miller and Rock's (1985) model the cost of dividends arise from cutting or distorting the investment decision. However, more typically, the transaction cost theory of dividend retains the assumption of a given level of investment, and focuses on the costs of raising external funds when the firm increases its dividend payment. Transaction costs include flotation costs to the firm of raising additional external finance such as underwriter fees, administration costs, management time, and legal expenses. Further, when the firm pays dividend and then has to raise additional external finance, existing shareholders suffer dilution of control. Thus to maintain control or for other reasons, existing shareholders may subscribe to the new issue, incurring trading costs such as stamp duty and stockbrokers' commissions. Ultimately all these transaction costs are reflected in the share price and firm value.

In addition to explicit transaction costs there are also less obvious costs that are associated with paying dividend and resorting to external finance, and which are due to information asymmetries and pecking order considerations. Particularly, raising new equity can be costly if it comes at a time when the shares are temporarily under-valued or due to the signals this action sends to the market regarding the value of the firm. Similarly, debt issues are also problematic because the announcement of the issue may be associated with increased probability of default and with managers trying to issue debt before such bad news are revealed. Like explicit transaction costs, these less obvious costs should also impact earnings expectations and be reflected in the firm's share price and value.

Subsequently, due to the costs associated with raising external finance, the transaction cost theory of dividend suggests that firms should utilise retained

earnings to the extent possible. Dividend should only be paid when this does not result in shortage of internal funds that are required for investment. Thus Rozeff (1982) suggests that firms that have greater dependency on external finance would maximise shareholder wealth by adopting lower payout policies. Leverage, growth potential and volatility are all factors that can increase dependency on costly external funds. High levels of leverage imply high fixed costs that the firm has to ensure it can meet. Growth potential means the firm is faced with good investment opportunities for which it requires funds. Similarly earnings volatility suggests that dependency on external finance is higher because there is less certainty regarding earnings to be generated. This implies that highly leveraged, risky or growth firms should be associated with conservative payout policies.

Another important factor that has implications for control consideration and for the transaction costs of raising external finance and thus for firms' dividend policies, is size. Particularly, the ownership structure of small companies is likely to be less dispersed than that of larger firms. The more dispersed is ownership the less control is exercised by each shareholder and hence the problem of loosing control is more critical for smaller firms. Further, the cost of external finance is likely to be higher for smaller firms compared with larger, well-established firms with easier access to the capital markets. Add to this the observation that growth firms are usually smaller and the conclusion is that small firms are likely to find the payment of dividends more costly compared with larger firms. This conclusion may explain the positive correlation often observed between firm size and the likelihood that the firm is a dividend payer. (Redding, 1997, and Fama and French, 2001).

2.2.1 Tax Theories

Another cost associated with dividend payments is taxes. The tax hypothesis proposes that corporate tax on distributions and taxes on dividends in the hand of investors are important costs to be considered when deciding on a dividend policy. More specifically, the difference between tax on dividends and on capital gains should be considered as well as the difference between corporate tax on distributed and on retained earnings. For example, if corporate tax on distributions is higher than that on retained earnings, this may reduce expected earnings of a firm that pays

dividends relative to a firm that does not. Similarly, if dividends in the hands of shareholders are taxed higher than capital gains, investors should evaluate expected returns on an after tax basis and share prices will vary inversely with the firm's payout level. Indeed, the basic tax hypothesis proposes that additional taxes on dividends make capital gains a less costly way of returning wealth to shareholders. Thus, the basic tax hypothesis supports a conservative dividend policy, and proposes that if the firm wants to return cash to shareholders then this should be done through share repurchases. It is thus puzzling to find that although repurchases have increased since the 1980s (Allen and Michaely, 1995, Jagannathan, Stephens and Weisbach, 2000, and Fama and French, 2001), they have not substituted for dividends (Fama and French, 2001, DeAngelo, DeAngelo and Skinner, 2000).

However Miller and Scholes (1978) show that under two provisions of the US Internal Revenue Code, taxable investors may still be indifferent to dividends even when the tax regime favours capital gains3. Furthermore, Miller and Modigliani (1961) argue that despite the presence of taxes, tax-induced clientele effect greatly reduces the tax costs of dividends. The idea is that there may be clienteles for both high and low dividend yields depending on tax positions. Institutions, which are often tax-exempt and individuals at low tax brackets may prefer companies with high payout policies. Other investors at high tax brackets for whom the relative tax cost of dividends is substantial will prefer firms with low payout policies. Shareholders select firms whose policies suit their preferences. As there are enough firms to satisfy all, no firm can increase its value by changing its dividend policy. Moreover, by changing its dividend policy, a firm may trigger a change in clientele and this could be costly due to trading costs. Thus the clientele effect hypothesis supports the dividend irrelevancy conclusions.

2.2.2 The Bird in the Hand Argument

The traditional argument in favour of dividend is the idea that dividends reduce risk because they bring shareholders' cash inflows forward. Although shareholders can create their own dividends by selling part of their holdings, this entails trading costs, which are saved when the firm pays dividends. The risk reduction or bird in the hand argument is associated with Graham and Dodd (1951)

and with Gordon (1959) and it is often defended as follows. By paying dividends the firm brings forward cash inflows to shareholders, thereby reducing the uncertainty associated with future cash flows. In terms of the discounted dividend equation of firm value, the idea is that the required rate of return demanded by investors (the discount rate) increases with the plough-back ratio. Although the increased earnings retention brings about higher expected future dividend, this additional dividend stream is more than offset by the increase in the discount rate.

This argument overlooks the fact that the risk of the firm is determined by its investment decisions and not by how these are financed. The required rate of return is influenced by the risk of the investments and should not change if these are financed from retained earnings rather than from the proceeds of new equity issues. As noted by Easterbrook (1984), in spite of paying dividends the firm does not withdraw from risky investments, thus the risk is merely transferred to new investors.

2.2.3 The Signalling Theory

A more convincing argument in favour of dividends is the signalling hypothesis, which is associated with propositions put forward in Bhattacharya (1979), Miller and Rock (1985), John and Williams (1985), and others. It is based on the idea of information asymmetries between the different participants in the market and in particular between managers and investors. Under such conditions, the costly payment of dividend is used by managers, to signal information about the firm's prospects to the market. For example, in John and Williams' (1985) model the firm may be temporarily under-valued when investors have to meet their liquidity needs. If investors sell their holdings when the firm is undervalued, then there is a wealth transfer from old to new shareholders. However, the firm can save losses to existing shareholders by paying dividends. Although investors pay taxes on the dividends, the benefits from holding on to the undervalued firm more than offset these extra tax costs. A poor quality firm would not mimic the dividend behaviour of an undervalued firm because holding-on to over-valued shares does not increase wealth.

The signalling hypothesis can explain the preference for dividends over stock repurchases in spite of the tax advantage of the latter4 . Particularly, as suggested in Jagannathan, Stephens and Weisbach (2000), Guay and Harford (2000) and DeAngelo, DeAngelo and Skinner (2000) among others, the regular dividend signal an ongoing commitment to pay out cash. This signal is consistent with Lintner (1956) observation that managers are typically reluctant to decrease dividend levels. However, unlike regular dividends, repurchases and special dividends can be used to signal prospects without long-term commitment to higher payouts. Therefore announcements of increases in regular dividends signal permanent improvements in performance, and should be interpreted as confidence in the firm on behalf of managers thus triggering a price rise. Conversely, announcements of dividend decreases should be interpreted as signalling poor performance and lack of managerial confidence and should therefore trigger drops in prices.

If changes in the levels of dividend release information to the market, then firms can reduce price volatility and influence share prices by paying dividends. However, it is only unexpected changes which have an informative value and which can thus impact prices. Therefore, the value of the signal depends on the level of information asymmetries in the market. For example, in developing countries where capital markets are typically less efficient and where information is not as reliable as in more sophisticated markets, the signalling function of dividend may be more important. Moreover, it can be argued that information will eventually be revealed whether or not the dividend signal is sent, hence the dividend impact on prices is only temporary.

2.2.4 The Agency Theory of Dividend

Another argument in favour of generous dividend payments is that this shifts the reinvestment decision back to the owners. The underlying assumption is that managers may not necessarily always act as to maximise shareholders' wealth. The problem here is the separation of ownership and control which gives rise to agency conflicts as defined in Jensen and Meckling (1976). Accordingly when the levels of retained earnings are high managers are expected to channel funds into bad projects either in order to advance their own interests or due to incompetency.

Hence generous dividend policy enhances the firm's value because it can be used to reduce the amount of free cash flows in the discretion of management and thus controls the over investment problem (Jensen, 1986).

Another agency theory based explanation of how dividends increase value is described in Easterbrook (1984). While the transaction cost theory of dividend proposes that dividend payments reduce value because they lead to the raising of costly external finance, Easterbrook (1984) argues that it is this process which reduces agency problems. The idea is that the payment of dividends is one possible solution to the problem of collective action that tends to lead to under-monitoring of the firm and its management. Thus the payment of dividends and the subsequent raising of external finance induce investigation of the firm by financial intermediaries such as investment banks, regulators of the securities exchange where the firm's stock is traded, and potential investors. This capital market monitoring reduces agency costs and lead to appreciation in the market value of the firm. Moreover, total agency cost, as defined by Jensen and Meckling (1976), is the sum of the agency cost of equity and the agency cost of debt. The latter is partly due to potential wealth transfer from bond to equity holders through assets substitutions. Thus Easterbrook (1984) note that by paying out dividends and then raising debt, new debt contracts can be negotiated to reduce the potential for wealth transfer.

2.3 REVIEW OF SELECTED EMPIRICAL STUDIES

The dividend theories mentioned in the previous section relate the impact of dividend on value to transaction costs, taxes, risk, signalling and agency conflicts. However, the main empirical studies of the dividend policy puzzle focus in particular on the tax hypothesis, the signalling hypothesis and agency studies5. Thus, following the spirit in Prasad, Green and Murinde (2001), it is around these three theories that the following discussion is organised. Transaction costs that are incurred due to changes in dividend policies are normally incorporated into each of these main hypotheses. These costs are commonly assumed to be a function of dependency on external finance and are controlled for by variables such as growth, size or profit. Relatively little empirical work has been conducted on the bird in the hand argument therefore this branch of empirical work is discussed no further.

Testing approaches depend to a large extent on the hypothesis under investigation. The clientele effect is often assessed by an event study around the dividend payment days. Other tax studies look at the trading activity rather than the stock price behaviour around ex-dividend days. Some tax hypothesis studies take a different approach, and review the impact of tax reforms on relative prices while other regress the dividend policy on tax proxies to assess the importance of the latter in influencing the former.

Studies that investigate the signalling hypothesis often follow an event study around the dividend announcement period. Other signalling studies assess revisions in earnings forecasts following unexpected changes in dividends. Another approach to testing the validity of the signalling hypothesis is by looking at changes in firm characteristics, following changes in its dividend policy. A particular attention has often been paid to changes in earnings. Cross sectional comparisons between firms of different characteristics are also used to assess how such differences may affect the value of the dividend signal.

Agency theory studies generally use regression analysis to assess the degree of substitutability among alternative mechanisms for controlling agency problems. Another approach, which is typically classified under the agency theory umbrella, is testing the suitability of Rozeff's (1982) cost minimisation model. The cost minimisation model actually combines transaction costs theory with agency theory, and proposes that the optimal payout ratio is that which minimises the sum of costs of paying dividends. Thus Rozeff (1982) and subsequent studies regress a proxy of the optimal payout ratio on proxies for agency costs that may be controlled by paying dividends and on proxies for transaction costs that are associated with dividend payment.

The literature review of this section will proceed by examining a limited number of studies dealing with each of the above mentioned theories in turn. However, some researchers have attempted to model the management's decision-making process that determines dividend changes. Some of these behavioural

models, notably Lintner's (1956), have important implications in particular for the signalling theory and are hence described first.

2.4 BEHAVIOURAL MODELS – THE PARTIAL ADJUSTMENT MODEL

The main studies

One approach to addressing the dividend puzzle is to understand the management's decision-making process that determines dividend changes. Indeed, this is the approach in Lintner (1956), who carry out a series of interviews with the managers of 28 US industrial firms about their firms' dividend policies in the 7 years from 1947 to 1953. From the survey it emerges that firms tend to establish dividend policies with target payout ratios that are applied to current earnings. It is also found that firms have adjustment rates that determine the percentage of the target change by which dividend levels are actually changed. Lintner (1956) also reports that although the target payout ratios and speed of adjustments vary across firms, in most cases they stay reasonably stable over time.

Based on his findings, Lintner (1956) develops the partial adjustment model of the change in the dividend level from the previous to the current period. The model reflects management's belief that investors dislike erratic patterns in dividend levels and hence the emphasis is on the change from the previous actual level:

$$\Delta D_{i,t} = \alpha_i + C_i\,[\,D^*_{i,t} - D_{i(t-1)}] + U_{i,t}$$

Where

$$\Delta D_{i,t} = D_{i,t} - D_{i(t-1)}$$

$$D^*i,t = R_{i(Pi,t)}$$

Thus $\Delta D_{i,t}$ is the change in the dividend payment; $D_{i,t}$ and $D_{i(t-1)}$ are the amounts of dividends paid in years t and t-1 respectively; $D^*_{i,t}$ is the target dividend amount where R_i is the target payout ratio and $P_{i,t}$ is current profits after tax; C_i is the speed of adjustment; α_i is a constant which in general will be positive to reflect

management's reluctance to reduce dividends; $U_{i,t}$ is an error term. Equation can alternatively be expressed as follows:

$D_{i,t} = \alpha_{i,t} + \beta P_{i,t} + \gamma D_{i\,(t-1)} + U_{i,t}$

Where

$\beta = C_i (R_i)$ and $\gamma = 1 - C_i$

According to Lintner (1956), current net earnings, Pt, play the most important role in determining dividend changes. This is because current earnings are widely available and hence managers' view is that investors expect dividends to reflect changes in this variable. Expanding (2.5), noting that Di(t-1) can be expressed as a function of that period's profits and the previous period's dividends, the dividend level in each period is a weighted average of current and past profits. Hence the dividend pattern is a smoothed pattern of earnings and is indicative of the time path of permanent earnings. The degree of smoothing depends on the speed of adjustment coefficient, Ci.

Thus the three key factors in the partial adjustment model are the speed of adjustment coefficient, Ci, the target payout ratio, Ri, and current earnings, Pt. Indeed, the three questions that are commonly raised about the Lintner model concern these factors. First, some researchers have investigated what determines the speed of adjustment and hence the degree to which smoothing takes place. Second, some researches try to establish whether firms have long-term target payout ratios towards which they move. Third, the question of whether current earnings are the key determinant of dividends has been investigated. In general, however, empirical tests of the Lintner model have confirmed its validity. One of the earliest and widely quoted such study is by Fama and Babiak (1968). Another, which is going to be reviewed here for the reason explained below, is by Mookerjee (1992).

Mookerjee (1992) is unique in that it applies the Lintner model, which has been developed on the basis of a US survey, to a developing rather than a developed country. Particularly, annual data for the aggregate Indian corporate sector for the period 1949 to 1981, before significant reforms were introduced, is utilised to show that the basic Lintner model performs well in explaining dividend behaviour in

India. Modification of the basic model, by adding the availability of external finance as an explanatory variable, improves the fit of the model. Indeed, the lagged external finance enters with a significant and positive estimated coefficient reflecting access to subsidised borrowing and hence tendency to use borrowing to finance higher dividends. Mookerjee (1992) also notes that the constant in the Lintner model is hypothesised to be significant and positive, reflecting the fact that firms are more willing to raise rather than lower dividends. Although the study finds the constant to be significant under all specifications, it enters with a negative sign in all regressions. It is suggested that this could be a reflection of the impact of taxes.

Although the study by Mookerjee (1992) is supportive of the Lintner's model, it also addresses the third of the three questions mentioned above, that are often raised with reference to this model. Namely this is the question of whether management set the desired dividend level as a fraction of current earnings or as a fraction of permanent earnings. If the latter is the case and it is assumed that earnings follow a random walk with a drift, than the lagged profit after tax, should enter with a negative and significant coefficient. Mookerjee (1992) finds that although the lagged earnings enter with a negative coefficient, in all cases it is also insignificant. In contrast, Lee (1996) finds stronger support for the view that it is permanent earnings as oppose to current earnings that determine dividend.

The study by Lee (1996) assesses whether there is long-term relationship between various definitions of earnings and dividends. The study utilises a bivariate time-series model of earnings and dividend obtained from annual observations on the Standard & Poor's Index for the period 1871 to 1992. The model is sufficiently general to allow various specification of target dividend to be nested within it. These restrictions are then tested, taking into account the non-stationarity of the dividend and earnings series and the cointegration between them. The results indicate that dividend behaviour is determined primarily by changes in permanent earnings and that the Lintner model performs better when the target payout ratio is a function of permanent rather than current earnings. This is supportive of the signalling hypothesis in the sense that current earnings are not a good indicator of

the long-term financial position, hence managers utilise dividends to signal this position.

Shirvani and Wilbratte (1997) also use cointegration (albeit multivariate rather than bivariate) techniques to test the validity of the Lintner model. However, their main aim is to address the second of the three questions mentioned above, namely whether firms have long-term payout ratios. Using quarterly observations on the Standard & Poor's 500 index for the period 1948 to 1994, the first stage is to confirm the non stationary of the dividends, earnings and price index series. Further, as these three series are found to co integrate, tests of the coefficients in the co integrated equation point to a long-run relationship between earnings and dividends. In particular the hypothesis that the coefficients on the logs of the dividend and earnings variables, are equal and of the opposite signs is not rejected.

The Shirvani and Wilbratte's (1997) study further estimates the error correction model to capture short-run deviations from the long-run target payout ratio and the speed of adjustment. Thus the study also touches on the first of the three questions about the Lintner model, namely the question of what determines the speed of adjustment. It is found that firms apply different adjustment rates in raising and lowering dividends. When the payout ratio is below its long-run target, the firm will increase dividends. However, when the payout ratio is above its target, the firm will hold the dividend level constant and wait for earnings to grow so that the target payout ratio is achieved. This ratchet effect is interpreted in terms of the signalling theory, and in particular as a way of avoiding the bad signals associated with dividend reductions.

The idea that the speed of adjustment is determined by the signalling role of dividends is also supported in Dewenter and Warther (1998). The study reports the results from running the partial adjustment model for each of 180 Japanese firms and 313 US firms with at least five years of nonzero dividend during the period 1982 to 1993. It is found that the median speed of adjustment is higher for Japanese firms compared with US firms, and higher still for Keiretsu members. This pattern is explained by the observation that the Japanese business environment is

characterised by less information problems, thus there is less need for the dividend-smoothing device in the case of these firms.

Returning to the question about the existence of long-term payout ratios, Hines (1996) looks at possible reasons for the Lintner (1956) observation that payout ratios vary across firms. In particular, the payout rates of 505 US firms for the period 1984 to 1989 as well as the dividend patterns for the aggregate US corporate sector during the period 1950 to 1986 are investigated. Hines (1996) finds that the payout rates applied to profits from foreign sources are about three times higher than the payout rates applied to domestic profits. These findings support the signalling hypothesis since information asymmetries surrounding overseas operations are likely to be more acute than for domestic activities. Managers, therefore, may feel a stronger need to send signals regarding the prospects of foreign operations.

2.5 REVIEW OF STUDIES CONDUCTED IN INDIA

1. Prof. Ranpreet Kaur, (2014) Studied the concept and scope of dividend policy, the irrelevance theory(Modigliani-Miller Model) dividend theory and to know the relationship between dividend policy approach and share prices (companies listed in CNX Dividend opportunities Index was chosen as population universe) and for sample 5% companies listed in index was considered. Analysis has been made by using secondary data and simple random sampling is used during period 2013-2014.The study found that there is neither positive nor negative relationship between the market price of shares and dividend payout. Author said that due to other factors share-prices are affected. It can be concluded that irrelevance theory shows true picture in current scenario in comparison to relevance theory in short time period.
2. Dr. T. Sobha Rani, (2013) The purpose of this research paper was to evaluate the profitability and its growth rate in selected pharmaceuticals companies in India. secondary data used for study purpose during the period 2002-2011.For an analysis purpose annual compound rate, Profit before interest and tax, profit after tax, earnings per share, dividend per share

variables were used. The study found that the profitability of pharmaceutical companies are affected by determinants of dividend and it also revealed that annual compound growth rates of dividends determination give the profitability and growth rate. Author also suggested that decisions regarding companies' performance depend not only on highest dividend per share but more on broad decision, dividend payout ratio and several other factors.

3. Gayathridevi & Mallikarjunappa, (2012) The aim of this paper was to analyse the trends and determinants of dividend decisions. For survey purpose NSC listed 114 Indian Textiles companies have been taken during the period 1989-2009.The simple Regression model was used to evaluate the study. Study revealed that most of the dividends paying companies are profit making companies. The study also showed that absolute value of dividends and dividend paid-up capital shows the significant and positive relationship between dividend policy and lagged earnings belonging to common shareholders, profit after tax, earnings belonging to shareholders cash flows, size, cash dividends and lagged dividends. It also showed that current Ratio and capital structure have insignificant influence on dividend policy.

4. N. R. Parasuraman, (2012) The aim of this research paper was to study the effectiveness of Linters' model for dividend payout. Analysis made on BSE Sensex firms during the period 2002-2011.For study purpose Linter model and another three basic models were used. Multiple regression were used to test the variables namely, cash earnings, basic earnings, lagged dividends and capital expenditure .By using Linter model as a base, it is found that the payout decision of Sensex firms depends on the factors like earnings, cash earnings, lagged dividends and capital expenditure. It can also be found that Linter Model holds good to a large extended in case of Sensex firms. In short the study support prevalence and relevance of Linter model of dividend policy. This simply suggested that managers can't ignore the variables like earnings capacity and lagged dividends while designing dividend policy.

5. Pasricha, (2012) Investigated links between the dividend policy and value of firms. For survey purpose 20 sample companies of information technology and pharmaceuticals industries of India have been taken during the period 2001 to 2010.The sample has been chosen from S& P CNX Index on the basis of their Net Worth. The data mainly used for study purpose has been obtained from prowess database of the Centre for monitoring Indian Economy (CMIE) India. Multiple Regression model used for study purpose and graphical pictorial previews were used for presenting data. The study concluded that the dividend payouts having considerable bearing and positive and significant relationship with the value of firms.
6. Pasricha D. A., (2011) The objective of this study was to test the applicability of dividend models in Indian context with special reference to engineering Industry. Regression model was used to test the study. It is found that the Linter model provided a good fit and other four models developed by Dobrovolsky, Brittain do not offer appropriate explanation of dividend behaviour in majority companies.
7. Amitabh Gupta, (2010) Re-examined the various factors that influenced the dividend decision of firms. The study has been conducted on BSE listed Indian companies for the period 2001-2007. Depending on the literature review author has found fifteen variables for framing dividend policy. Author used factor analysis for extracting prominent factors from various variables. And then multiple regression analysis has been conducted. The result of the factor analysis showed that leverage, liquidity, ownership structure and growth are major factors. The study revealed that after applying regression leverage and liquidity are the major determinants of dividend policy for Indian companies. The study also found that non-financial factors such as foreign collaborators' shareholding, attitude and behaviour of management, company policy etc. may also influence the dividend decision of firm.
8. Packkirisamy, 2010 The object of this paper was to evaluate the link between corporate leverage and the dividend policy of firms across industries in India in respect of size of corporate firms. Survey has been

conducted from 73 different companies of different industries namely cement, chemical and fertilizers, IT, oil and Gas, Pharmaceutical, Shipping and Textiles, Which was listed on NSC in India during the period 1996-2007. Multiple Regression technique (OLS Method) is used for survey purpose. The study revealed that dividend pay-out of small size, large size and overall corporate firms across industries in India is dependent on the level of debt in capital structure.

9. Parua A. a., (2009) The main aim of this study was to find out the trends in dividend payment and determinants of dividend decision.607 listed Indian companies have been considered for the study purpose during the period from 1993-94 to 2004-05.The study found that while setting dividend policy current-profit, past-profit and expected future profit have play significant positive role and cash position and cash flow has significant negative relationship with only dividend rate. Whereas interest expenses, capital expenditure, tax ratio and share price behaviours were not related to matter of dividend payment. The author also said that for any managers stability of dividends is the primary concern.

10. Pani, (2008) The object of this paper was to analyse the possible links between dividend policy and stock-price behaviour in Indian corporate sector. For study purpose 500 listed companies on BSC had been taken during the period 1996-2006.The survey made on six different industries namely electricity, food and beverage, mining, Non-metallic, Textile and service-sector. Fixed effect model had been used for study purpose. The variables like size and long term debt-equity ratio has been taken for analysing the relationship between dividend retention ratio and stock-price behaviour of the firm by using panel data approach. The study result based on fixed effect model. The result of this model indicated that there is possible links between dividend policy and stock price behaviour. The author said that in some industries it shows the possibility of “clientele effect.

11. Dr. Jasvir S. Sura, (2006) The object of this paper was to evaluate the factors influencing dividend policy decisions in banking sector. This study

examined the re-applicability of Linter's (1956) and Britain (1966) path breaking analyses of dividend policy. For, study purpose banks listed on National stock exchange have been taken. Survey has been made by using cross sectional analysis during the period 1996-2006. The study found that commercial banks in India generally followed stable dividend policy. The study also found that lagged dividends and current earnings are major determinants of dividends. The study also supported the argument of 'information content of dividends' with reference to dividend proceeds. Hence, author suggested that the management of the bank can use dividend policy as signalling device.

12. Sanjeev Mittal, (2006) Investigated the dividend behaviour of NSC and BSC firms. The article studied the dividend behaviour of selected firms during the period 2001-2005 and divides them into payers and non-payers groups. To know the relationship of dividend paid with investment opportunities, Growth cost of equity and ownership structure regression analysis was used. The study found that payer firms to have large size, less investment opportunities and high cost of retained earnings and the opposite in case of non-payers. Author also found that by reducing agency costs promoters can increase in dividend with increase in equity ownership.

13. Balyan This paper attempted to know the relationship between earnings and dividends particularly for top five selected companies from steel sector in India for finding out the difference practices. For analysis purpose variables like earnings per share, dividend per share, dividend payout ratio and dividend yield has been taken. For study purpose one-way ANOVA and an independent sample t-test has been used. The study found that companies belonging to steel industry who have declared dividend do not follow a similar pattern while declaring dividends to shareholders in relation to earnings.

2.6 REVIEW OF STUDIES CONDUCTED ABROAD

1. john consler, (2011) The object of this paper was to make the comparison of relative power of operating cash flow and earnings in the prediction of

dividends. 1902 dividends paying firms were analysed for study purpose. Quarterly CRSP and comp stat data has been taken for the year 2002 to 2006. Cash flow per share is shown to produce a better fit than earning per share based on selected model fit criteria. Author also suggested that investors and analysts predict dividends as a part of their stock valuation work.

2. Fairchild (2010) The aim of this paper was to analyse or to focus on the complex relationship between dividend policy, managerial incentives and firm value. A survey has been made by developing a theoretical model on dividend policy that combines signalling and free cash flow motives. Moreover, managerial communication and reputation effects are also considered into the model. Author said that for more investment in new value creating project firm may need to cut dividends. It is also found that investors are considered "dividend cut "as bad news and it effected to firms market value. To mitigate this problem managers communicate to the investors about the reason for dividend cut which could be helpful for improving managerial reputation effects. Author has also provided Real world examples to illustrate the complexity of dividend policy.
3. Joshua Abor, (2010) The object of this paper was to observe the effects of investment opportunity and corporate finance on dividend policy. Survey has been made with a sample of 34 emerging market countries for 17 year period during 1990-2006. Fixed effects panel model is used for study purpose. Results showed significant negative relationship between investment opportunity set and dividend payout policy. However, it showed that various measures of corporate finance like financial leverage, external financing and debt maturity have insignificant effects on dividend pay-out policy. Study also revealed that Profitability and stock market capitalizations also play an important role in dividend pay-out policy.
4. Setia-Atmaja, (2010) Investigated the broad influence of debt and dividend policies of family controlled firms. Panel data of Australian publically listed firms were considered for survey purpose during the period 2000 to 2005. Panel regression was used for survey purpose. The study found that in

comparison with non-family counterparts family controlled firms have higher levels of leverage and dividend pay-out ratios. The study also indicated that higher proportion of independent directors have positive impact on family control on dividend policy which reflected significant influence of independent directors on firm's dividend policy, specifically for controlled firms. Author also found that independent directors and dividends have complementary government mechanisms. And Author also found little evidences which show the relationship between family control and debt moderates by board independence.

5. Yahyaee, (2010) Investigated the stability of dividend policy by using a unique data set. Omani firms were used for study purpose. Author used Linter model to test the dividend smoothing behaviour. The specific econometric TOBIT regression was used for panel data. Author observed that Oman firms adopted a smoothing dividend policy. Author also observed that the prediction suggested by the high bank leverage, absence of taxes and variability of dividend payments in Oman does not suggested by stability of dividends. Author also observed the differences between dividend policies of Omani companies and developed markets companies. Author also said that while making their investment decisions potential investors are aware about these differences.

6. Al-Najjar, (2009) The purpose of this paper was to investigate the dividend policy situation, dividends behaviour and dividend policy decision in Jordan emerging markets, by comparing the differences between developed markets and emerging markets in the dividend policy context. It also covers determinants of dividend policy. For study purpose, Jordanian non-financial firms were considered. The paper found that the dividend policy in Jordan, as a developing country is influenced by number of factors like leverage ratio, institutional ownership, profitability, business risk, asset structure, growth rate and firm size. The study also revealed that Linter model is valid for Jordanian data and that Jordanian firm have target payout ratios and that they adjust to their target relatively faster than firms in more developed countries.

7. (Basil Al-Najjar, 2009) An attempt is made here in this paper to examine the association between dividend payout and outside directorships. 400 non-financial firms listed at London stock Exchange has been taken for the study purpose during the period 1991 to 2000. Author used Tobit and logit regression models to analyse the extent to which firms with a majority of outside directors on their boards experience significantly lower or higher dividend pay-out after controlling for insider ownership, profitability, liquidity, asset structure, business risk, firm size, firm's growth rate and borrowing ratio. It was found that dividend pay-out is negatively associated with the number of outsider directors on the board of directors.
8. Hoje jo, (2009) Investigated empirical association between managerial entrenchment and dividend policy. The study observed on entrenchment irrelevance hypothesis, the dividend signalling hypothesis and the optimal entrenchment hypothesis. Large numbers of US industrial firms were used for the study period during the period 1990 to 2003. Various LOGIT and TOBIT regression methods are used to investigate firm's propensity to pay dividends. Findings of the study showed that firms with more entrenched managers are more likely to pay dividends. It also observed that large cash reserve can be used to deter hostile takeovers and paying dividends reduces cash holdings, leaving the firm more vulnerable to hostile takeovers.
9. Khaled Hussainey, (2009) Examined the value relevance of voluntary disclosure and dividends signal future earnings for decline earnings growth firms. For study purpose, the behaviour of 33 non-financial UK firms after a decline of their sustained growth has been taken. Corporatized content used to analysis number of forward looking sentences in the annual report narratives. For examining the association with the abnormal future earnings, it shows changes in disclosures and dividends in the year of earning growth declines. The result showed that value relevant information about future earnings for declining earnings growth firms does not depend on increase in dividends.. But it is generally based on signalling theory and mentioned that forward looking information in annual report is an important tool for signalling future earnings for these firms.

10. Neil L. Fargher, (2009) The study investigated the cross-sectional differences in the profits, returns, and risk of high and low market to book ratio stocks before and after the initiation of regular cash dividend payments. Study has been conducted for the period of 1965-2000. For study purpose some parametric and non-parametric statistics was used. To test for differences in profits, returns and risk of high and low –market-to-book ratios stocks before and after dividend initiation ordinary regression was used. The study found that the low –market-to-book stocks positively connected with dividend initiation announcements. The study also showed that in comparison with low market to book stocks high market-to-book stock firms have large profits, cash levels and capital expenditure before and at the time of dividend initiation. The study also found that decrease in systematic risk is associated with excess returns earned by low market-to-book stock firms whereas high profitability is associated with high market-to-book stock firms.
11. Pourheydari, (2009) The aim of this paper was to evaluate the CFOS (Chief Financial Officers) views on dividend policy of Iranian firms. Survey has been made Iranian firms listed on the Tehran stock exchange regarding the factors influencing dividend policy for the year 2006. Based on theoretical and empirical works on dividend policy author identified the factors that are most important for study purpose. The finding showed that stability of cash flow, the available profitable investment opportunities and stability of profitability are important factors that influenced the dividend policy.
12. Temurshoev, (2009) The aim of this paper was to find out the problems related to overestimation of profits because of presence of cross-shareholding (CS) links among firms. Author used matrix Algebra to identify both direct and indirect financial interests. By comparing the industry, finding showed that retained earnings increases, while aggregate external shareholder's returns decreases unless dividend ratios are all unity. The study also revealed that for all profits specifications, qualitatively there is no difference but quantitatively there is a difference. The author also said

that if there are extensive CS links present in industry dividend payment have to be taken in to account by analysing market performance.

13. Hardjo Koerniadi, (2008) Investigated management earnings by studying whether stock dividends provides management with an incentive for manipulating earnings. For study purpose refined accrual model is used for controlling the performance effects in estimating the part of accrual subject to management discretion. It is found that discretionary accruals of stock dividend issuing firms are negatively correlated with the declines in both future earnings and abnormal stock returns.
14. Nalinaksha Bhattacharyya, (2008) This paper analysed the present and tests a model of the association between dividend payout and executive compensation. Study has been made on Canadian firms during the period 1993-95. The author used Bhattacharya model which is based on two best fit world, where managerial quality is not observed by shareholders and because of that first-best contracts are not possible and as per the second best world compensation contracts motivate high quality managers for retaining and investing in firms' earnings Whereas low quality managers are motivated to distribute the income among the shareholders. Survey found that with the prediction of Bhattacharya model, dividend payout is positively associated with executive compensation.
15. (Bhattacharyya, 2007) The Study aimed here to review in brief the principle theories of dividend policy and to summarize empirical evidence on these theories. For study purpose author has reviewed and identified major theoretical and empirical papers on dividend policy. It is found that still some dividend puzzles are not solved. Some empirical evidences are of ambiguous and the search for new explanation for dividends continues.
16. Douglas, (2007) The object of this paper was to study the explicit links with corporate social responsibility to the dividend flow. It aimed to examine that whether the corporate investment in social responsibility affects to expected dividends or not. For an analysis purpose 17670 US firms were undertaken for the period of 1991-2007. Univar ate and Multivariate techniques are used for study purpose. It is found that matured firms are more interested to

invest in corporate social responsibility. The study showed that investment in CSR and dividends trend increasing together. In short the study observed that CSR investment tend to be affected by the companies who can afford them and it does not lowering the value by lowering investors expected payout.

17. H. Kent Baker, (2007) The broad objective of this paper was to examine the survey results on the perceptions of dividends by Canadian managers. For survey purpose 291 dividends paying Canadian firms listed on Toronto Stock Exchange (TSX) has been taken and their view has been taken. The survey found that dividend policy is to be influenced by the level of current and expected future earnings stability of earnings and the pattern of past dividends. Canadian managers believed that dividend policy affects firm value. They expressed their strong support for the signalling and life cycle explanation for paying dividends, but not for the bird-in-hand, tax preference and dividend clientele, agency cost or catering explanation and expressed little agreement with the theory of a residual dividend policy. The author also said that Canadian dividend paying firms are significantly larger and more profitable.

18. Abeyratna Gunasekarage, (2006) The main aim of this paper was to analyse the long-run financial and return performance of UK companies following joint dividend earnings announcements. For analysis purpose, both stock market's share price performance and companies' detailed analysis by using financial ratios are for the period of five years have been for the study. It is found that there are positive relations between share returns and company's dividends and earnings. Author also said that dividend news does not signalling the long term future company performance. The study also revealed that those companies who cut the dividends and reported lower earnings; they can achieve largest excess return over next five years. Financial used for assessing company performance revealed the same pattern. In short, the author said that most of the future long term share performance was attributable to the earnings rather than to the dividend news.

19. John Goddard, (2006) The purpose of this paper was to test the validity of the smoothing and signalling hypothesis of dividend determination. Author used VAR framework for examination of the dynamic behaviour of share prices, dividends and earnings. Causality test is used for obtaining signalling hypothesis. For study purpose, 137 UK manufacturing and service companies are observed during the period 1970-2003. Author observed a strong relationship between prices, dividends, and earnings. Author also observed a little bit diversity in the casual relationship between prices, dividends and earnings.
20. Mohammed Amidu, (2006) This paper studied the determinants of dividend pay-out ratios. For analysis purpose, firms listed on Ghana stock Exchange have been taken for six years period. Ordinary Least square model is used to estimate the regression equation. Author used institutional holding as s proxy for agency cost. Growth in sales and market to book value were also used as proxies for investment opportunities. Study observed positive relationship between dividend pay-out ratios and profitability, cash flow and tax and negative association between dividend pay-out and risk institutional holding, growth and market to book value. Study also showed that profitability, cash flow, sales growth and market to book value are significant variables.

2.7 REVIEW OF STUDIES POST YEAR 2011

1. Khan & Amanullah (2012) revealed P/E ratio positively affects, stock return volatility, GDP positively affects stock return volatility and dividend positively influences stock return volatility. Further, they found that stock return volatility has an inverse relationship with interest rates and book to market (B/M) ratio.
2. Suwuigbe, Olowe, Olusegun, and Godswill (2012) established that financial performance and stock return volatility had a significant positive correlation.
3. Malhotra & Tandon (2013) concluded that book value positively affects stock price, price earnings ratio positively influences stock prices and dividend yield negatively influences stock prices.
4. Suwuigbe, Olowe, Olusegun, and Godswill (2012) investigated stock return volatility determinants in the Nigerian stock exchange market. Their study

used a sample of 30 listed firms. They adopted sampling technique method. The study was carried for a period to from 2006-2010. The study established that market value positively influenced financial performance. Further the study concluded that market value was significantly affected by financial leverage and dividend payouts.

5. Agrawal and Jayaraman (2015) took another approach to examine the hypothesis that dividends reduce the opportunity for managers to use free cash flows in a self-serving manner. Since both interest payments and dividends reduce the pool of excess cash that managers can misuse. Agrawal and Jayaram examined the free cash flow motive for dividend payments. They compared the dividend policies of debt free firms to those of comparable firms that were leveraged. If dividend policy is influenced by concerns that mangers may over invest excess cash, unleveraged firms should distribute more of their profits as dividends than leveraged firms, which distribute some operating profits as interest. Inline with this expectation, Agrawal and Jayaraman reported that the dividend payout ratios of all equity firms were significantly higher than the dividend payout ratios of leveraged firms. They also compared firms within the group of all equity firms where managers have significant shareholdings to firms in which managers have little equity stake. They reported that firms with high managerial shareholdings- presumably firms where the interests of managers and shareholders are more aligned – have lower payout ratios than firms with low shareholdings. Overall, these results suggest that dividends do serve as a means to reduce the conflicts of interest between managers and shareholders regarding the use of free cash flows.

6. Sharma Dhiraj (2016) empirically examined the dividend behavior of select Indian firms listed on BSE from 2000 to 2015.The study analyzed whether or not the dividends are still in vogue in India and tried to judge the applicability of one of the two extremely opposite schools of thoughts- relevance and irrelevance of dividend decision. The study also analyzed the applicability of tax theory in the Indian context. The findings offered mixed and inconclusive results about tax theory indicating that the change in the tax structure does not have a substantial effect on dividend behavior of firms.

REFERENCES

- Asifi, A., Rasooll, W. & Kamal, Y. (2011). Impact of Financial Leverage on Dividend Policy: Empirical Evidence from Karachi Stock Exchange - Listed Companies, African Journal of Business Management, 5(4), pp. 1312-1324 Retrieved from http:// www.academicjournals.org/AJBM, ISSN 1993-8233© 2011 Academic Journals.
- Alii, K.L., Khan, A.Q. & Ramirez, G.G. (1993) "Determinants of corporate dividend policy: A factorial analysis", Financial Review, vol. 28: 523-47
- Amadii, V.L. (2005) "An Investigation into the Role of Private Sector in Nigerian Higher Education: A Study of the University of Abuja", International Journal of Research in Education, vol. 2, no. 1&2: 113-122
- Al-Malkawi, H. N. (2007) "Determinant of Corporate Dividend Policy in Jordan", Journal of Economic and Administrative, vol. 23: 44-71
- Al- Obaidan, A. (2008). Information Content of Dividends in Commercial Banking Industry of Emerging Markets. International Research Journal of Finance and Economics, ISSN-1450-2887, (17).
- Amihud, Y. & Murgia, M. (1997). Dividends, Taxes and Signaling: Evidence from Germany. J. Finance, 52(1), pp. 397 - 408.
- Amidu, M. & Joshua, A. (2006). Determinants of Dividend Payout Ratios in Ghana. The Journal of Risk Finance, 7(2), pp. 136 - 145.
- Adeyemi, S.B. & Fagbemi, T.O. (2010) "Audit Quality, Corporate Governance and Firm Characteristics in Nigeria", International Journal of Business and Management, vol. 5, no. 5: 169-179
- Baker, K., Veit. E. T. & Powell, G. (1995) "Factors influencing dividend policy decisions of Nasdaq firms", Financial Review, vol. 36: 19-37
- Barclay, M., Holderness, C. & Sheehan, D. (2003) "Dividend and Dominant Shareholders", working paper, Rochester University
- Black, F. (1976) "The Dividend puzzle", The Journal of Portfolio Management, vol. 2: 5-84
- Brigham, E.F. (1995) Fundamentals of Financial Management, Harcourt Brace College, Publishers, Orlando, F1, pp. 423-489

- Brook, Y., W. T. C. Jr. & Hendershott, R. J. (1998). Do Firms Use Dividends to Signal Large Future Cash Flow Increases? Financial Management, 27(3), pp. 46 - 57.
- Bhattacharya, N. (2000). Essay on Dividend Policy PhD Dissertation. Columbia: University of British.
- Chen, H. D., Hsiang, L. H. & Ting, H. C. (2009). The Announcement Effects of Cash Dividends Changes on Share Prices - An Empirical Analysis of China. The Chinese Economy, 42(1), pp. 62 - 85.
- Corsetti, G., Pensenti, P. & Roubini, N. (1999).Paper Tigers: A Model of the Asian Crisis European Economic Review, 43(7), pp. 1211 - 1236.
- Collins, M. C., Sexena, A. K. & Wansley, J. W. (1996). The Role of Insiders and Dividends Policy: A Comparison of Regulated and Unregulated Firms. Journal of Finance and Strategies Decisions, 9(2), pp.1 - 9.
- Dhillon, U. & Johson, H. (1994). The Effect of Dividend Changes on Stock and Bond Prices. Journal of Finance, 49(1), pp. 281 - 289.
- Fama, E. F. & Babiak, H. (1968). Dividend Policy: An Empirical Analysis J. Am. Stat. Assoc., 63(324), pp. 1132 - 1161.
- Foong, S.S., Zakaria, N.B. & Tan, H.B. (2007) “Firm Performance and DividendRelated Factors: The Case of Malaysia”, Labuan Bulletin of International Business & Finance, vol. 5: 97-111
- Frankfurter, G.M. & Wood, B.G. Jr. (2002) “Dividend Policy Theories and Their Empirical Tests”, International Review of Financial Analysis, vol. 11: 111-138
- Gupta. P, (2001). A Stock of Study Market Efficiency in India. Finance India, 15, pp. 665 - 673.
- Grinblatt, M. S., Masulis, R.W., & Titman, S. (1984). The Valuation Effects of Stock Splits and Stock Dividends. Journal of Finance Economics, December, pp.461 - 490.
- Holder, M.E., Langrehr, F.W. & Hexter, J.L. (1998) “Dividend Policy Determinants: An Investigation of the Influences of Stakeholder Theory”, Financial Management, vol. 27, no. 3: 73-82

- Kent, B. H. & Powell, G. E. (2000). Determinants of Corporate Dividends Policy: A Survey of NYSE Firms: Financial Practice and Education, 9, pp. 29 - 40.
- Kapoor, S. (2006). Impact of Dividend Policy on Shareholder Values: A Study of Indian Firms, Synopsis of the Thesis to be Submitted in Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Management.
- Khan, K. I., Aamir, M., Qayyum, A., Nasir, A. & Khan, M. I. (2011). Can Dividend Decisions Affect the Stock Prices: A Case of Dividend Paying Companies of KSE. International Research Journal of Finance and Economics, ISSN 1450-2887, (76).
- Kouki, M. & Guizani, M. (2009) "Ownership Structure and Dividend Policy Evidence from the Tunisian Stock Market", European Journal of Scientific Research, vol. 25, no. 1: 42-53
- Kanwal, A. & Kapoor, S. (2008). Relevance of Signaling and Smoothing Approaches to Dividends: A Study of Indian IT Sector. Asia Pacific Business Review.
- Kumar, J. (2006) "Corporate Governance and Dividend Policy in India", Journal of Emerging Market Finance, vol. 5, no. 5: 15-58
- Lintner, J. (1956) "Distribution of income of corporations among dividends, retained earnings and taxes", American Economic Review, vol. 60: 1–40
- Litzenberger, R. H. & Ramaswamy, K. (1982). The Effects of Dividends on Common Stock Price Tax Effects on Information Effects? Journal of Finance, 37. pp. 429 - 443.
- Linter, J. (1962). Dividends, Earnings, Leverages, Stock Prices and the Supply of Capital to Corporations. Review, Economic Stat., 44(3), pp. 234 - 269.
- Miller, M. & Modigliani, F. (1961) "Dividend policy, growth, and the valuation of shares", Journal of Business, vol. 34: 411-433
- Myers, R. (1990) Classical and modern regression with applications (2nd ed.), Boston, MA: Duxbury

- Mookerjee, R. (1992). An Empirical Investigation of Corporate Dividend Payout Behavior in an Emerging Market. Applied Financial Economics, 2(40), pp. 243 - 246.
- Modiglini, F. & Miller, H. M. (1958). 'The Cost of Capital, Corporation Finance and the Theory of Investment. Am .Econ. Review, 48(3), pp. 261 - 297.
- Oyejide, T. A. (1976). Company Dividend Policy in Nigeria: An Empirical Analysis Niger. J. Econ. Soc. Stud., 18(2), pp. 179 - 195.
- Nissim, D. & Ziv, D. (2001) "Dividend changes and future profitability", Journal of Finance, vol. 56 (6): 2111–2133Rao, E. N. (1999). Stock Market Reaction to Macroeconomic Events. Finance India.
- Samy, N. B., Mohamed, G. & Amel, B. (2006). On Determinants and Dynamics of Dividend Policy. International Review of Finance, 6, pp.1 - 23.
- Siad, A. A. (2010). The Impact of Dividend Policy on Shareholders Wealth Based on Agency Cost Residual Dividend Theory, Master's Thesis, University Uttra Malaysia.
- Zafar, S. M. T. (2010). Comparative Study on Financial Leverage in Real Estate Industry and Its Explicit Impact on Shareholders Return. ACME Biannual Referred Research Journal.
- Zafar, S. M. T., Chaubey, D. S. & Nagar, S. (2010). Portfolio Performance in Relation to Risk and Return and Effect of Diversification: A Test of Market Efficiency in India. Gitam Journal of Management.
- Zeckhouser R.J. & Pound, J. (1990) "Are large shareholders effective monitors? An investigation of share ownership and corporate performance", in Hubbard, R.G. (ed.), Asymmetric information, corporate finance and investment, Chicago: The University of Chicago Press
- Umed Temurshoev, (2009) "Profits of horizontally interrelated firms with dividend obligations", Journal of Economic Studies, Vol. 36 Iss: 3, pp.296 – 306
- Basil Al-Najjar, KhaledHussainey, (2009) "The association between dividend payout and outside directorships", Journal of Applied Accounting Research, Vol. 10 Iss: 1, pp.4 – 19

- Basil Al-Najjar, (2009) "Dividend behaviour and smoothing new evidence from Jordanian panel data",Studies in Economics and Finance, Vol. 26 Iss: 3, pp.182 – 197
- N. Bhattacharyya, (2007) "Dividend policy: a review", Managerial Finance, Vol. 33 Iss: 1, pp.4 – 13
- H. Kent Baker, Samir Saadi, ShantanuDutta, Devinder Gandhi, (2007) "The perception of dividends by Canadian managers: new survey evidence", International Journal of Managerial Finance, Vol. 3 Iss:1, pp.70 – 91
- Abeyratna Gunasekarage, David M. Power, (2006) "Anomalous evidence in dividend Managerial Finance, Vol. 32 Iss: 3, pp.209 - 226announcement effect"
- John Goddard, David G. McMillan, John O.S. Wilson, (2006) "Dividend smoothing vs dividend signalling: evidence from UK firms", Managerial Finance, Vol. 32 Iss: 6, pp.493 – 504
- Richard Fairchild, (2010) "Dividend policy, signalling and free cash flow: an integrated approach",Managerial Finance, Vol. 36 Iss: 5, pp.394 – 413
- KhamisHamed Al-Yahyaee, Toan Pham, Terry Walter, (2010) "Dividend stability in a unique environment",Managerial Finance, Vol. 36 Iss: 10, pp.903 – 916
- Lukas Setia-Atmaja, (2010) "Dividend and debt policies of family controlled firms: The impact of board independence", International Journal of Managerial Finance, Vol. 6 Iss: 2, pp.128 – 142
- Hoje Jo, Carrie Pan, (2009) "Why are firms with entrenched managers more likely to pay dividends?", Review of Accounting and Finance, V
- Mohammed Amidu, Joshua Abor, (2006) "Determinants of dividend payout ratios in Ghana", The Journal of Risk Finance, Vol. 7 Iss: 2, pp.136 – 145
- John Consler, Greg M. Lepak, Susan F. Havranek, (2011) "Earnings per share versus cash flow per share as predictor of dividends per share", Managerial Finance, Vol. 37 Iss: 5, pp.482 – 488
- Joshua Abor, Godfred A. Bokpin, (2010) "Investment opportunities, corporate finance, and dividend payout policy: Evidence from emerging markets", Studies in Economics and Finance, Vol. 27 Iss: 3, pp.180 – 194

- Maria Rosa Borges, (2009) "A model of stock price adjustment after dividends", Journal of Economic Studies, Vol. 36 Iss: 5, pp.508 – 521
- KhaledHussainey, Jinan Aal-Eisa, (2009) "Disclosure and dividend signalling when sustained earnings growth declines", Managerial Auditing Journal, Vol. 24 Iss: 5, pp.445 – 454
- Neil L. Fargher, Robert A. Weigand, (2009) "Cross-sectional differences in the profits, returns and risk of firms initiating dividends", Managerial Finance, Vol. 35 Iss: 6, pp.509 – 530
- OmidPourheydari, (2009) "A survey of management views on dividend policy in Iranian firms", International Journal of Islamic and Middle Eastern Finance and Management, Vol. 2 Iss: 1, pp.20 – 31s
- HardjoKoerniadi, AlirezaTourani-Rad, (2008) "Earnings management and the market performance of stock dividend issuing firms: NZ evidence", Accounting Research Journal, Vol. 21 Iss: 1, pp.4 – 15
- Alan V. Douglas, (2007) "Managerial opportunism and proportional corporate payout policies", Managerial Finance, Vol. 33 Iss: 1, pp.26 – 42s
- Gayathridevi A., M. (2012, september). *Contemporary management Research*, *6*(2), 97.
- Pasricha, D. A. (2011). “An Empirical Study of Dividend Policy Models in Indian Context with special reference to engineering industry”,*Applied Research in Finance Bi-Annually, vol. III*(issue 2), pages 136-146.
- Packkirisamy, A. R. (2010). The Impact of Firm Size on Dividend Behaviour:A Study With Reference to Corporate Firms. *Managing Global Transitions , Volume 8* (Number 1), p.49-78.
- Parua, Anupam and Gupta, Arindam(2009). Dividend history and determinants in selected Indian companies: a study during 1993-'94 to 2004-'05, *Australasian Accounting, Business and Finance Journal*, 3(4),p.45-83
- Pani, Upananda (2008), Dividend Policy and Stock Price Behaviour in Indian Corporate Sector: A Panel Data Approach t SSRN.
- Dr. T. Sobha Rani, M. S. (2013, May). Determinants of Dividends in Indian Pharmaceutical. *International Journal of Scientific and Research Publications, Volume 3*(Issue 5).

- Sanjeev Mittal, M. C. (2006, July - December). "A study of payer and non-payer firms in India:Impact of investment Opportunities, growth and cost of equity. *"Delhi Business Review, Vol. 7*(No. 2), p37 to41.
- N. R. Parasuraman, P. J. (2012, september). Does Lintner model of dividend payout hold good? An Empirical evidence from BSE SENSEX firms. *sdmimd journal of management, Volume 3*(Issue 2), p63to76.
- Dr. Jasvir S. Sura, K. P. (2006, uly-December). Factors Influencing Dividend Policy Decisions in Banking Sector: An Indian Evidence. *Amity Business Review, Vol. 7*(No. 2), pp. 64-76.
- Amitabh Gupta, C. B. (2010, August). The Determinants of Corporate Dividend Policy. *Decision, Vol. 37*(No.2), pp63to77.
- Balyan, P. V. (n.d.). Relationship between Dividend and Earnings:A study of steel sector in India. *International Journal in Multidisciplinary and Academic Research (SSIJMAR), Vol.2*(No.2), p1to10.
- Malhotra, N., & Tandon, K. (2013). Determinants of stock prices: empirical evidence from NSE 100 companies. International Journal of Research in Management & Technology, 3(3), 86-95.
- Uwuigbe, U., Olusegun, O., & Godswill, A., (2012). An assessment of the determinants of share price in Nigeria: a study of selected listed firms. ACTA Universities Danubius, 8, (6).
- Prof. Ranpreet Kaur, D. s. (2014). The study of dividend policy:A review of irrelevance theory. *International Journal of Innovatory Research in Science and Management* , p1to12.
- http://www.ccfr.org.cn/cicf2012/papers/20120104143625.pdf
- http://ssrn.com/abstract=1216171

Research Methodology

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research in common parlance refers to a search for knowledge. Research, simply put, is an endeavor to discover answers to problems through the application of scientific method to the knowable universe. “Research is essentially a systematic enquiry seeking facts through objective verifiable methods in order to discover the relationship among them and to deduce from them broad principles or laws.” It is really a method of critical thinking.

3.1.1 Meaning of Research

Clifford Woddy has defined research. According to him, “the research comprises defining and redefining problems, formulating hypothesis or suggested solutions, organizing and evaluating data, making deductions and reaching conclusions, and at last carefully testing the conclusions to determine whether they fit the formulating hypothesis.”

According to Robert Ross, “Research is essentially an investigation, a recording and an analysis of evidence for the purpose of gaining knowledge.”

3.1.2 Meaning of Research Methodology

Social scientists grapple with numerous problems of bay to bay life. The complexity of problems of present day society makes it imperative for the social scientists to present day society makes it imperative for the social scientists to pursue a reliable course of action or a scientifically devised procedure of inquiry. Value free research or social inquiry without bias is the need of the twentieth century social sciences. Our search for definition of methodology would require us to know the nature of the course pursued by research scholars in social sciences. “The procedures by which researchers go about their work of describing, explaining and predicting phenomena are called methodology.” All the methods used by social scientists in their fact finding mission constitute methodology.

3.2 STATEMENT OF PROBLEM

Dividend is the most important aspects for stakeholders in any investment. Oil and Gas is always been an alluring option for stakeholders to choose from various options. The present financial study endeavor to understand and analyse the various aspects of dividend payouts with help of reliable statistical methods and techniques . Dividend is result of successful business operation and depends on internal and external determinants. Business operation runs parallel to various external and internal determinant results in dividend or no dividend to stakeholders. Confining focus to oil and gas sector and non probabilistic section of major public and private limited companies, the present study endeavor to find various determinant of dividend in selected domain.

As the financial figures are totally depend on the sentiment and the way investor and stakeholder thinks about the company, It become very important for business houses and companies listed on the stock exchange to maintain the financial figures and take decision which should not have negative impact on the market sentiments.

Every decision about dividend, various rations, corporate strategies like joint venture or merger on pattern of investment can positively or negatively impact the sentiments of investor about the company. Thus this becomes very critical to decide from management point of view to access the probable impact of certain decision and financial figures. Taking this criticalness the present study conducted to address this problem as how the sentiment of the market flows with financial decisions about dividend payout policies, sales of the company, dividend declared and others.

The association of various determinant of dividend are analyzed here as how they are association with each other with the here of statistical methods, which is extended by impact of dividend on stock market price of the shares.

3.3 RESEARCH GAP

The present study is inclined towards the oil and gas sector in India. This is represented by majority 10-15 companies. The data of annual figures are collected from the company's annual reports and other reliable and authentic secondary sources. As the study and the topic is comprehensive in nature, certain level of research gap is felt during the study , which is mentioned in below points.

- The study is based on selected determinant of dividend which can be further extended to addition of few more determinant and their impact and association can be analyzed for a more concrete understanding of subject matter.
- The study analyzed the data, report and annual figures of 5 major companies for oil and gas sector. The companies in to consideration are selected considering the suitable conditions still that can increased to addition of few more companies in the market.
- A data for dividend and stock prices are taken for a time span o fa decade, which can be further increase to a relatively longer period when required and deemed fit.

3.4 OBJECTIVES OF THE STUDY

The study covers the following objectives:

The objective of the study is based on various aspect of dividend in oil and gas sector. The study us based on financial data of major private and public sector colonies operating in the sector. Starting form finding out the determinant of dividend payout the association between them and impact on movement of share price is analysed, which is further segregated as individual objectives.

Objective 1 : To find out the various determinant of dividend in oil and gas sector.

With the help of review of literature, probable determinant of dividend is explored and identified. A pilot survey is conducted to record the opinion of various stake holder. The data collected is presented and inference are made with help of descriptive analysis.

Objective 2: To find out the most influencing factor in payout of dividend and association between the factors.

The selected determinants are assigned scores on the basis of dividend performance and With the help of factor analysis the most responsible factors are identified. The association between the factors are analysed by rotated component matrix.

Objective 3 : To find out the effect of dividend on stock price.

The stock price of selected companies are recorded by reliable sources of secondly data. The same is analysed with respect to dividend announced by the firm. The effect is identified by trend analysis in SPSS 23.0.

3.5 RESEARCH HYPOTHESIS

Hypothesis is an statement which a researcher intended to prove. This is something which can be a valid assumption from researcher point of view after review of literature.

With respect to all the three major objective in concern, the respective null and alternate hypothesis is formed. The hypothesis formed are rejected or accepted with the help of standard term and condition of suitable statistical test.

3.6 HYPOTHESES OF THE STUDY

Hypotheses are the presumption, assumption, supposition and the statement which are to be tested in the light of the objectives. The hypotheses are mainly classified into null and alternative hypothesis. Null Hypothesis is the negligence of the statement and alternative hypothesis are the opposite of null statement. On the basis of objectives, following are the testable statement of the research-

Null Hypothesis (Ho) : The dividend has a relation with various market factor nominated as determinant of dividend.

Alternate Hypothesis (Ha) : The dividend has no relation with various market factor nominated as determinant of dividend.

Hypothesis 2

Null Hypothesis (Ho) : The factor responsible for dividend are random and not specific in nature.

Alternate Hypothesis (Ha) : The factor responsible for dividend are not random and specific in nature.

Hypothesis 3

Null Hypothesis (Ho) : The stock price has a depended on dividend and both are dependent innature.

Alternate Hypothesis (Ha) : The stock price is not depended on dividend and both are independent in nature.

All hypothesis are formed keeping both the aspect open to testing statistical test are conducted to prove the same. The standard critical value of the test is compared with evaluated test score and hypothesis are approve and rejected accordingly.

3.7 RESEARCH METHODOLOGY

Research Methodology is an important part of the research. Research methodology includes the criteria of variable selection, various tools applied, time frame of the study and sources of data in the study for analysis.

To identify the association and impact of dependent variable corporate tax on dividend payout ratio, which is considered as independent variable in the study, Pearson correlation is used. This analytical study is based on finding a relation between two variable. This is done with the help of considering number of cases on a scale. The mean value of the both variable are identified and standard deviation, which is deviation of observed value from the mean value is calculated.

The pattern of deviation from the mean is analysed to establish the relation between the two variables with the help of Pearson correlation coefficient method.

The Pearson product-moment correlation coefficient (or Pearson correlation coefficient, for short) is a measure of the strength of a linear association between two variables and is denoted by *r*. Basically, a Pearson product-moment correlation attempts to draw a line of best fit through the data of two variables, and the Pearson correlation coefficient, *r*, indicates how far away all these data points are to this line of best fit (i.e., how well the data points fit this new model/line of best fit).

The Pearson correlation coefficient, *r*, can take a range of values from +1 to -1. A value of 0 indicates that there is no association between the two variables. A value greater than 0 indicates a positive association; that is, as the value of one variable increases, so does the value of the other variable. A value less than 0 indicates a negative association; that is, as the value of one variable increases, the value of the other variable decreases.

The stronger the association of the two variables, the closer the Pearson correlation coefficient, *r*, will be to either +1 or -1 depending on whether the relationship is positive or negative, respectively. Achieving a value of +1 or -1 means that all your data points are included on the line of best fit – there are no data points that show any variation away from this line. Values for *r* between +1 and -1 (for example, *r* = 0.8 or -0.4) indicate that there is variation around the line of best fit. The closer the value of *r* to 0 the greater the variation around the line of best fit.

Strength of Association	**Coefficient, *r***	
	Positive	**Negative**
Small	.1 to .3	-0.1 to -0.3
Medium	.3 to .5	-0.3 to -0.5
Large	.5 to 1.0	-0.5 to -1.0

The study Endeavour to find out the impact of dividend decollation and dividend payout policies on stock prices. This becomes a major objective in the study for a detailed analysis, the study is conducted for every company in to consideration. As the stock price are driven sentiment in the market, the impact is immediate. The analytical study is done for major companies in oil and gas industry in India and dividend declaration date from past 10 years is documented. With the help of secondary data available on reliable sources, the stock price of immediate

previous trading day of declaration of dividend is recorded. This is data is tabulated for past ten years for final declared dividend dates.

To take the study for further execution, the stock price of next trading date after declaring of dividend is recorded for last 10 years. The same is tabulate analysed with paired sample t-test.

3.7.1 Paired Sample t- Test

Paired sample t-test can used to examine if the there is a difference in mean between two set of observation. Each subject is measure twice, which result in pair of observation hence this is also called as paired sample t-test. This is used in before and after studies which have case control ore repeated measure design. In this approach the impact or effect of any external stimulus can measured by calculating the values of the set before and after the application of external factor.

In a quest to determine the impact of dividend on stick price, we have to set of observation of stock price, which is before and after declaration of dividend. The mean of both the observation is calculated and observed with the help of spss 23.0 version.

Like many statistical procedures, the paired sample *t*-test has two competing hypotheses, the null hypothesis and the alternative hypothesis. The null hypothesis assumes that the true mean difference between the paired samples is zero. Under this model, all observable differences are explained by random variation. Conversely, the alternative hypothesis assumes that the true mean difference between the paired samples is not equal to zero. The alternative hypothesis can take one of several forms depending on the expected outcome. If the direction of the difference does not matter, a two-tailed hypothesis is used. Otherwise, an upper-tailed or lower-tailed hypothesis can be used to increase the power of the test. The null hypothesis remains the same for each type of alternative hypothesis. The paired sample *t*-test hypotheses are formally defined below:

- The null hypothesis ($H0$) assumes that the true mean difference (μd) is equal to zero and dividend has no impact of stock prices.

- The two-tailed alternative hypothesis ($H1$) assumes that μd is not equal to zero and dividend has an impact of share price

The mathematical representations of the null and alternative hypotheses are defined below:

- $H0$: $\mu d = 0$
- $H1$: $\mu d \neq 0$ (two-tailed)

D = Differences between two paired samples

di = The *ith* observation in D

n = The sample size

d = The sample mean of the differences

σ^ = The sample standard deviation of the differences

T = The critical value of a t-distribution with $(n - 1)$ degrees of freedom

t = The t-statistic (t-test statistic) for a paired sample t-test

p = The p-value (probability value) for the t-statistic.

Statistical significance is determined by looking at the p-value. The p-value gives the probability of observing the test results under the null hypothesis. The lower the p-value, the lower the probability of obtaining a result like the one that was observed if the null hypothesis was true. Thus, a low p-value indicates decreased support for the null hypothesis. However, the possibility that the null hypothesis is true and that we simply obtained a very rare result can never be ruled out completely. The cutoff value for determining statistical significance is ultimately decided on by the researcher, but usually a value of .05 or less is chosen. This corresponds to a 5% (or less) chance of obtaining a result like the one that was observed if the null hypothesis was true.

3.7.2 Time Period of Study

In order to analysis the association of various determinant of dividend and association between them a period of 10 year is considered for the study. This study is conducted for the data from 2008 to 2017. The same period is considered for analysis of impact of dividend on stock prices.

3.7.3 Sources of Data

The study has been carried out by exploiting the secondary sources of data. To serve the purpose of the study i.e. to carry out a comparative analysis of service sector FDI and the impact of Services sector on Indian economy, the data has been collected from the various sources :

- Journals, Periodicals and Magazines
- Reports and publications of national and international institutions
- SIA News Letters
- Business and Financial dailies.
- Text Books and Reference Books related to the subject.
- Websites of Department of Industrial Policy & Promotion

3.8 SIGNIFICANCE OF THE STUDY

Following are the main significance of the study:

The study is very important for management of the companies and business house to understand the correlation between various determinant of dividend in oil and gas sector companies in India.

The study is equally significant from a investor and stack holder post of view to understand the various dynamics for market sentiment and financial figures announced by companies.

The study gives a very clear comparison of major players in oil and gas sector in India. The comparison of these companies on determinant like dividend payout policies, stock market price and others certainly helpful for investor to take wise decisions.

3.9 PLAN OF THE STUDY

The chapters of the study have been classified as under:

The **first** chapter deals with the introductory background of the study and theories of dividend and

The **second** chapter discussed the review of literature which helped to find the research gap on the basis of which objective of the study have been set out and hypotheses have been framed to achieve these objectives.

The **third** chapter deals research methodology adopted for the study. It covers the statement of problem, research gap, objectives of the study and hypotheses to achieve these objectives, statistical tools and techniques applied and significance of the study.

The **fourth** chapter deals with the profile of the companies selected for the study.

The **fifth** chapter provides the analysis and interpretation of impact of dividend on OIL and Gas selected companies for the study

The **sixth** chapter and the last chapter reveals the major findings of the study on the basis of the results of the data analysed and interpreted. On the basis of these findings, specific suggestions have been given. A conclusion has also been drawn in the light of the findings. The directions for the future research have also been given.

3.10 LIMITATIONS OF THE STUDY

Research being never ending process makes ground for further researchers. Obviously, all studies have their own limitations and this study is no exception as such. Despite its theoretical and practical relevance, the study does suffer from limitations. These limitations are as:

- The data is taken from the secondary information therefore errors of secondary sources bound to be occurred.
- The study period is taken from 2003-04 to 2016-17. The data has been taken from authentic sources however inferences of the study are widely depends upon authenticity of data.
- The study is confined to India only and with some selected years while the inclusion of other developing countries under the purview of the study may influence the results.
- Though utmost care has been taken while selecting the variables having

relationship with dividend in oil and gas sector but still the inclusion of some other variables may influence the results.

- The study is entirely based on the use of secondary data, while the inclusion of domestic and non-domestic investor's perception regarding various variables and their relationship with dividend may give more appropriate findings.

Profile - Selected Companies

PROFILE - SELECTED COMPANIES

4.1 UNCOVERING THE OIL AND GAS INDUSTRY

Considered to be the biggest sector in the world in terms of dollar value, the oil and gas industry is a global powerhouse employing hundreds of thousands of workers worldwide as well as generating hundreds of billions of dollars globally each year. In regions which house the major NOCs, these oil and gas companies are so vital they often contribute a significant amount towards national GDP.

In this introduction to oil and gas industry we provide a snapshot of the petroleum sector.

The oil and gas industry can be broken down into three key areas: Upstream, midstream and downstream.

The Upstream component is also referred to as the E&P (exploration and exploration). This involves search for underwater and underground natural gas fields or crude oil fields and the drilling of exploration wells and drilling into established wells to recover oil and gas.

Downstream refers to the filtering of the raw materials obtained during the upstream phase. This means refining crude oil and purifying natural gas. The marketing and commercial distribution of these products to consumers and end users in a number of forms including: natural gas, diesel oil, petrol, gasoline, lubricants, kerosene, jet fuel, asphalt, heating oil, LPG (liquefied petroleum gas) as well as a number of other types of petrochemicals. Midstream is generally classified under the downstream category.

The largest volumes of products of the oil and gas industry are fuel oil and gasoline (petrol). Petroleum is the primary material for a multitude of chemical products, including pharmaceuticals, fertilizers, solvents and plastics. Petroleum is therefore integral to many industries, and is of critical importance to many nations as the foundation of their industries.

In recent years there has been a growing negative sentiment towards the oil and gas industry and "big energy". Major environmental disasters such as the Deepwater Horizon Gulf Of Mexico Oil Spill have cast a negative spotlight up on the industry. The trend towards Renewable and Alternative energy is also another threat to traditional oil and gas companies. Coupled with the rise in pro-eco legislation and governmental pressure has meant the oil and gas industry is under more scrutiny than ever.

However the Oil and gas industry is still extraordinarily successful and still experiences massive growth. It's estimated that 30 billions barrels are consumed globally each year - primarily by developed nations. Oil also accounts for a significant percentage of energy consumption regionally from 32% for Europe and Asia, 40% for North America, 41% for Africa, 44% for South and 53% for the Middle East.

In this resource centre you will find Oil & Gas IQ's top rated oil and gas industry content including articles, videos, webinars, podcasts and in-depth reports. You can find the latest content in the sidebar on the right.

Oiland GasI Q.com is the online portal dedicated to providing the latest intelligence for the oil and gas community worldwide. We explore Oil and Gas industry developments and facilitate the continued learning of oil and gas professionals. In addition to our online oil and gas content we offer a slew of technical and strategic oil and gas industry conferences across Europe, Asia, the US and the Middle East.

The character of Chuck Noland, played by Tom Hanks, says near the end of the film *Cast Away*, "…because tomorrow the sun will rise. Who knows what the tide could bring?" He makes this observation after having survived on a desert island for four years before being rescued and returned to civilization. If you're a top executive in an oil and gas company, more than likely you're feeling the same way right about now — optimistic but extremely cautious.

Much of the oil and gas industry has survived an especially tough few years with weak demand and low prices. It has been difficult to make strategic decisions and plan for the future. Only now is the sector beginning to emerge from its upheaval. If there is hope on the horizon, we must, like Noland in *Cast Away,* remain mindful of the risk.

For instance, although prices appear to be recovering — Brent crude was up around 90 percent in 2016 to just over US$50 per barrel — they are still well below $115 per barrel, the post-recession high-water mark reached in March 2011. As a result, even as companies begin to view new investments in resource development as more attractive, the upstream oil and gas sector must move gingerly. Continuing price improvements will probably be slow, and supply may be constrained by the cutbacks in reserve development projects over the last few years.

The oil price collapse, which began in June 2014, triggered a wave of cost reduction among upstream businesses. Global oil and gas companies slashed capital expenditures by about 40 percent between 2014 and 2016. As part of this cost-cutting campaign, some 400,000 workers were let go, and major projects that did not meet profitability criteria were either canceled or deferred. These steps, combined with efficiency improvements, are beginning to bear fruit for the industry. A growing number of projects can break even at oil prices in the high $20s. One good example is Statoil's Johan Sverdrup field in the North Sea, where the break-even price of development costs has been reduced to around $25 per barrel. That would have been unthinkable a few years ago.

4.2 GREENSHOOTS OF RECOVERY

In the near future, the recent oil price gains — which are due to a rebalancing of supply and demand fundamentals, partly accelerated by OPEC's recent decision to cut production — are expected to remain in place. That expectation is behind a number of positive industry forecasts: According to Barclays's latest E&P Spending Survey, oil and gas industry capital expenditures are expected to increase by as much as 7 percent in 2017. In addition, global rig counts, particularly in the U.S., have been on the rise since the middle of 2016, according to Baker

Hughes. Moreover, we are seeing the green shoots of a recovery in M&A as companies have pursued asset deals in recent months.

It's possible that we might see a spike in oil prices sometime in the next five to 10 years — if, because of the hiatus of investment in major projects since 2014, the industry finds it difficult to meet increasing demand. The resulting uncertainty would no doubt be welcomed by traders, who have largely avoided the oil market during its price plunge. An uptick in trading activity could in itself drive up oil prices significantly in the three- to five-year time frame. Oil and gas companies will need to ensure that their business models are prepared to manage and benefit from this volatility.

As oil prices recover, can international oil companies (IOCs) hold on to the benefits of cost reduction? Some cost escalation is inevitable. For example, oil-field services (OFS) companies will likely start taking back price concessions they gave IOCs when the market collapsed. This could add as much as 15 percent to the price of producing a barrel of oil, which in turn would allow OFS company operations to get back to break-even levels.

But upstream companies will have to be diligent about containing other expenditure increases, particularly in the supply chain and resource development arenas. That may prove difficult, because the wave of worker layoffs eliminated significant experience, knowledge, and skills. The loss of these capabilities could push development project costs up substantially if they are not carefully monitored. Smart IOCs will embrace new digital initiatives as a means of offsetting expense escalation and furthering the cost and efficiency improvements they have already achieved.

4.3 REGIONAL SHIFTS

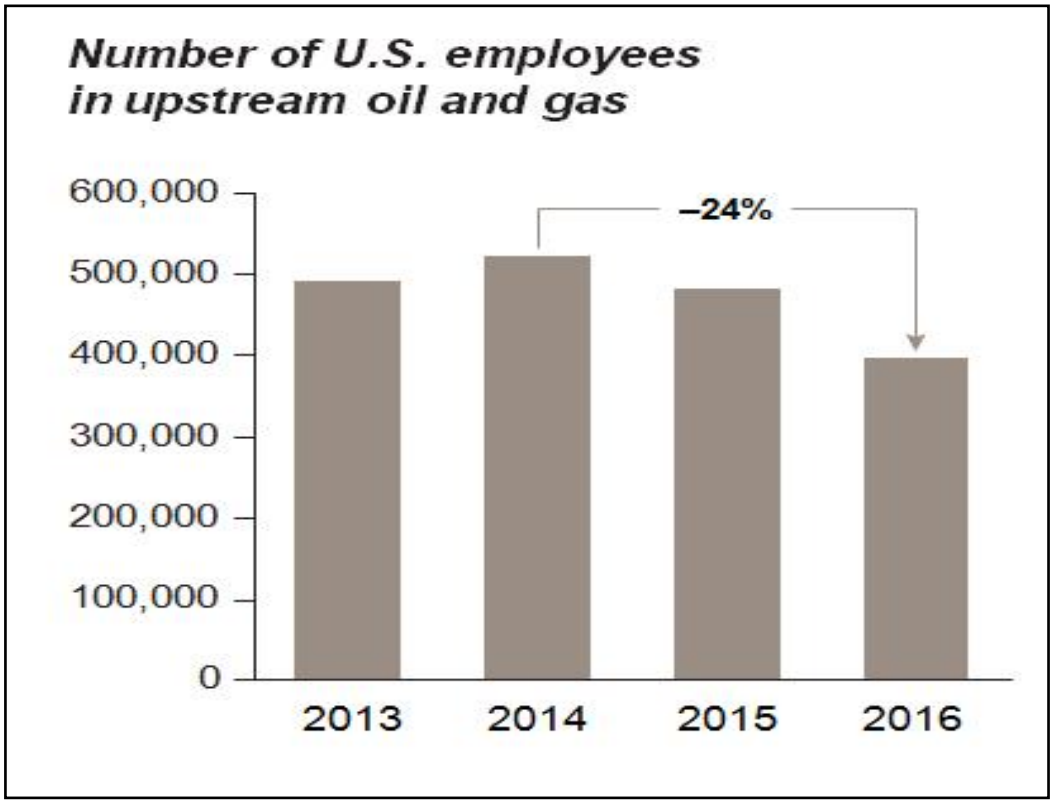
A great deal of the activity in the oil and gas sector is focused on OPEC countries and the U.S., but other regions may also play a key role in the coming years. For instance, in Latin America, the investment environment is improving. Some domestic oil and gas industries are on the upswing, creating jobs. A prime

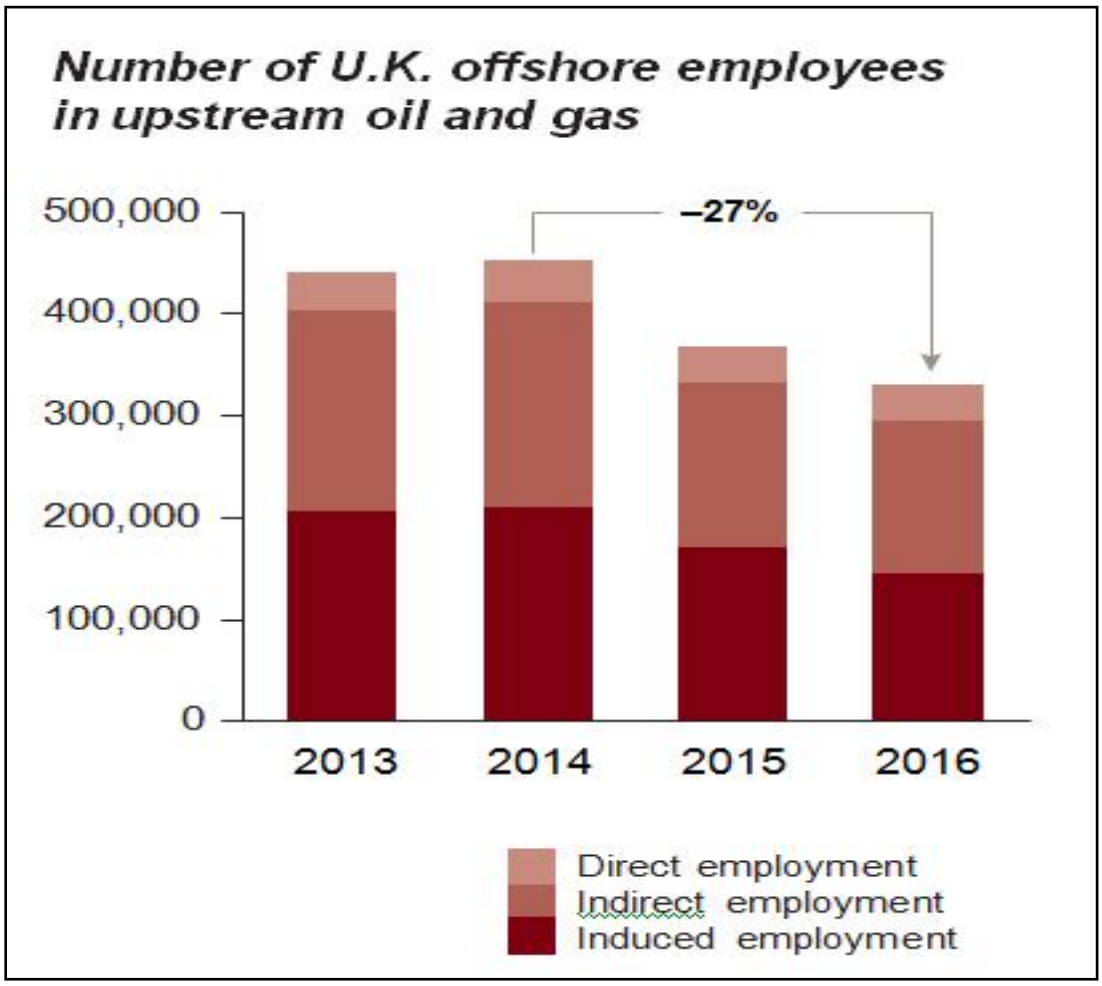
illustration is Mexico, where energy reform is opening the door for nontraditional operators to establish a presence in the country. In the recent deepwater auction in that country, companies successfully bidding for acreage included China's Offshore Oil Corporation, Australia's BHP Billiton, France's Total, American firms Chevron and ExxonMobil, and Japan's Inpex.

Other hydrocarbon hot spots include offshore Egypt, where BP recently acquired a stake in Eni's giant gas field Zohr, and the Caspian Sea, home to Kazakhstan's Kashagan reserves, the world's largest oil- field discovery in the past 30 years, where commercial production resumed at the end of 2016. As oil prices rise, private equity is likely to have a bigger hand in the industry. This is already evident in two recent high-profile deals in the U.K.'s North Sea: Siccar Point Energy's acquisition of OMV's assets and Chrysaor's decision to pick up divested assets from Shell.

EXHIBIT 1:

Oil price jitters resulted in a loss of critical talent





Source: *U.S. Bureau of Labor Statistics; Oil & Gas U.K. Economic Report 2016; Strategy& research*

4.4 LOOKING AHEAD

So if you are an oil and gas executive peering out over 2017 and beyond, you will face structural and cultural issues internally; many companies do not have the talent, organizational framework, systems, processes, or attitudes to be sufficiently flexible and innovative in an evolving and uncertain marketplace. You should be prepared to pursue new drilling and extraction technologies and to increase your research into sustainability and clean energy. To start planning for the future, oil and gas leaders in all segments might consider some fundamental questions: Do I have the right business models in place? How can my company develop new capabilities and in what areas? How should asset portfolios evolve? What type of technology plays should I invest in?

As companies address these challenges, we see a number of business models and strategic responses emerging between now and 2020:

1. Corporate strategic objectives will increasingly focus on sustainable profitability

The recent and extended oil price downturn once again highlighted the urgency for companies to have plans for profitability under a number of different price scenarios. Although profitability is always a key metric, in the oil and gas industry, growth in production and reserves has often been more important. However, the shock of low prices and the strong possibility that interest rates will rise in the near future, increasing the cost of debt, has elevated free cash flow from earnings to priority status.

Generally, the super majors already have profitability and capital efficiency hardwired into their corporate DNA. Other firms — such as national oil companies (NOCs) in the Middle East, which tend to emphasize production volume targets — will have to adapt. For such companies, a new focus on cost efficiency and profitability will require a significant shift in corporate culture and outlook, and ultimately a realignment of company portfolios. Indeed, the recent report that Shell is considering the sale of its interests in the super giant Majnoon and West Qurna fields in Iraq, where profit margins under the terms of the technical service contracts are low, may reflect such a trend.

2. Differentiatedcapabilitieswillbecomeakeyfactor for futuresuccess

In recent years, the oil and gas sector has been characterized by a diverse range of operating environments, including onshore unconventional reservoir production and frontier exploration in increasingly challenging and remote environments. Although the super majors have traditionally sought to participate in all environments, even these companies do not have the skills — or corporate culture — to compete in all situations anymore. In fact, the U.S. unconventional sector is dominated by companies, such as Chesapeake Energy, EOG Resources, and Whiting Petroleum, that have tailored their operating models to the unique demands of unconventional production.

Similarly, in recent years, smaller exploration and production companies with particular sets of capabilities — for instance, a laser like focus on cost efficiency — have been able to acquire mature assets and outperform the super majors in specific segments. Such specialization will likely become more commonplace in the future. In fact, the sector's current uncertainties make it imperative for companies of all sizes to identify the capabilities that are critical to profitable growth, and even survival, and allocate capital accordingly.

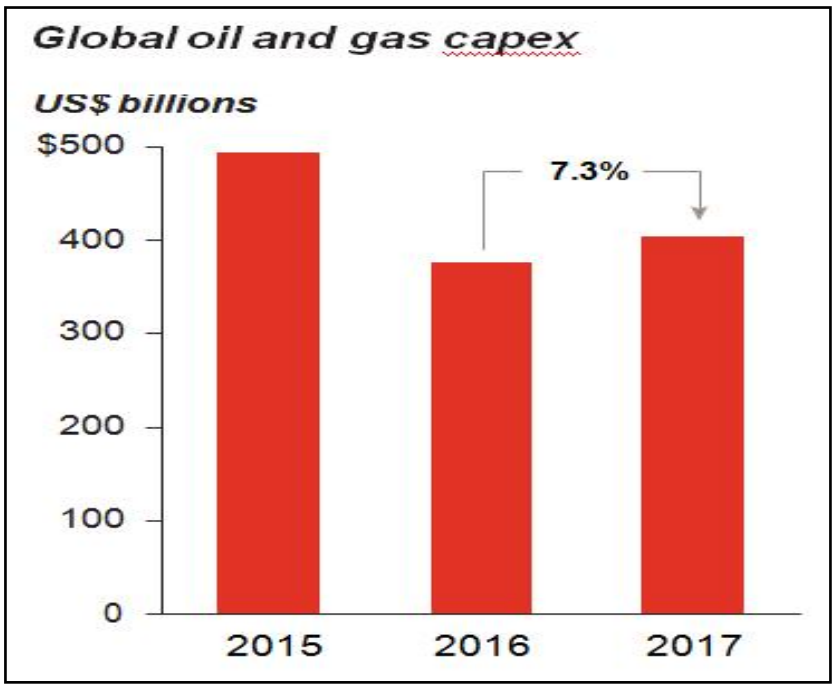
Recent M&A activity in the OFS sector suggests the emergence of operating models built around specific capabilities. For example, at the heart of GE's recent acquisition of Baker Hughes is an effort to create a business focused on more efficient well operations through automation, enhanced imaging, and data analysis. And the just- completed combination of Technip and FMC Technologies has fashioned a company whose core capabilities will be subsea engineering and equipment.

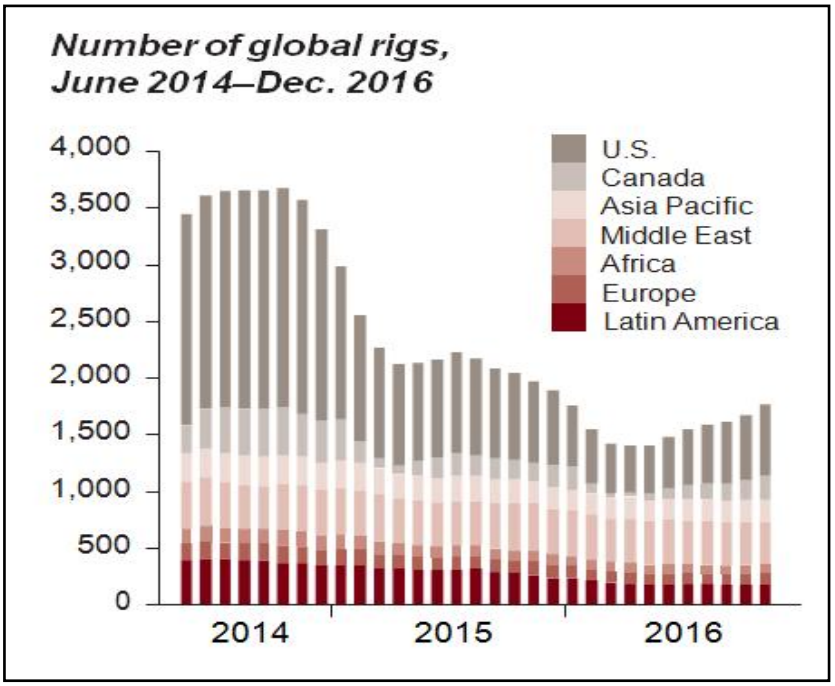
3. New business models and forms of partnership will emerge

The evolution of the oil and gas sector from one dominated by large, generalist companies to one featuring specialists in narrower aspects of the operating environment will require companies to establish new ways to collaborate, ways that leverage the specific skill sets of each organization. In our view, the model of a single integrated company discovering and developing an oil or gas field, and operating it until it is depleted, is being replaced by alliances and changes in ownership designed to ensure that the company most able to extract value manages the field in relevant stages of its life.

Exhibit 2

Energy companies are increasing production activity in response to higher oil prices





Source: Barclays 2017 E&P Spending Outlook; Baker Hughes; Strategy& research

This is illustrated by the emergence of exploration specialists like Kosmos Energy and of mature production players like EnQuest in the North Sea. And BP's recent alliance with Kosmos to seek assets in Mauritania and Senegal is a good

example of a major IOC leveraging the technical exploration skills of a smaller rival. Moreover, the relationship between oil and gas companies and OFS outfits will continue to evolve in a similar direction. The major OFS companies, such as Schlumberger and Halliburton, already offer integrated field management solutions that oversee and operate assets on behalf of companies, and others, such as Petrofac, manage day-to-day operations. However, although it is critically important, developing new collaboration and partnership models will not be easy for some established companies — particularly for some Middle East NOCs, which tend to prefer full control over their assets.

4. As business models evolve, portfolios will be reviewed for coherence and resilience

Portfolio evaluation should strive for more than simply using divestment to generate cash. It should be seen as an opportunity to radically restructure the business based on forecasts of future conditions and to ensure that the projects the company is undertaking match the organization's capabilities. For example, in reassessing their portfolios, some companies may choose to diversify in preparation for a low-carbon environment. France's Total has taken this step by implementing a plan that requires one-fifth of its asset base to be focused on low-carbon technologies and by acquiring a battery manufacturer to spearhead its efforts in electricity storage. Similarly, Dong Energy, originally an oil and gas producer, is shifting its focus to renewable energy, using its legacy fossil fuel businesses to generate cash flow for the development of offshore wind farms.

The need for portfolio evaluation will become increasingly pressing as companies participate in the wave of consolidation we expect to see in the sector over the coming year or more. In the recent past, oil price volatility (specifically, concerns about how low prices might go) has made it difficult for buyers and sellers to come to agreement on oil-field valuations. However, now that prices have recovered somewhat — and there is a growing sense that a price floor in the vicinity of $50 per barrel has been set — the pace of deal making is picking up. In recent transactions, Total and Statoil completed multibillion-dollar deals for Brazil's sub-salt deepwater oil reserves, while Exxon has bid on Papua New Guinea's InterOil and

Noble Energy acquired assets in the U.S. Permian basin from Clayton Williams. Going forward, we expect that companies will increasingly focus on asset deals to build their portfolio in a cost-effective way.

For upstream companies, M&A opportunities represent a critical part of portfolio reevaluation. This approach can be used to divest noncore assets and to recalibrate company strategy and direction to best profit from the wave of change coursing through the industry. In some cases, M&A can be a fulcrum for transforming a company — as was the case with Shell's $70 billion deal to buy Britain's BG Group in 2016, a move that greatly expanded Shell's position in the natural gas market. Or M&A can be used to bolt on less ambitious but equally promising new capabilities, which was the purpose of several deals over the past few years by Total and Statoil that give these companies a foothold in renewable energy.

5. Companies will explore new forms of technology deployment

Companies will need to examine the role that digital technologies can play in improving their performance. New applications will certainly be developed to support back-office and shared functions, where rewards are modest, but technology adoption will also have to go well beyond these obvious implementations. Digitization should be a lever for innovation that improves productivity and efficiency in the field. For instance, robotics are likely to become more commonplace in the industry, handling complex and repetitive tasks such as connecting pipes and replacing broken machinery, which in turn will reduce labor requirements.

In some cases, technology will be acquired through partnerships. GE has announced an array of agreements with large and small oil companies to implement digital devices, databases, and sensors that could predict equipment breakdowns before they occur and expand exploration and production efficiency in deep sea and offshore oil platforms.

6. Innovative approaches to retaining and recruiting talent will be essential for long-term success

The human cost of restructuring within the oil and gas sector has been enormous. Downsizing, which has been both cyclical and harsh, has deprived the industry of some of its smartest veteran talent while scaring away new recruits. Yet there are still opportunities that oil and gas companies must not pass up.

From a management perspective, now is the time to recruit new talent from pools of highly capable men and women, casting a net in a range of global regions. Younger employees expect somewhat less traditional workplaces — they are seeking more collaboration and open communication and less top-down decision making. Oil and gas companies need to engage with these recent graduates because they can provide the new ideas that will make the future easier to navigate. With so much innovation in the sector, it shouldn't be hard to engage younger employees, but companies need a clear and attractive story line to do so.

Oil & Gas Industry in India

4.5 INTRODUCTION

The oil and gas sector is among the six core industries in India and plays a major role in influencing decision making for all the other important sections of the economy.

In 1997–98, the New Exploration Licensing Policy (NELP) was envisaged to fill the ever-increasing gap between India's gas demand and supply. India's economic growth is closely related to energy demand; therefore the need for oil and gas is projected to grow more, thereby making the sector quite conducive for investment.

The Government of India has adopted several policies to fulfil the increasing demand. The government has allowed 100 per cent Foreign Direct Investment (FDI) in many segments of the sector, including natural gas, petroleum products, and refineries, among others. Today, it attracts both domestic and foreign investment, as attested by the presence of Reliance Industries Ltd (RIL) and Cairn India.

4.6 MARKET SIZE

India is expected to be one of the largest contributors to non-OECD petroleum consumption growth globally. Total oil imports rose 4.24 per cent year-on-year to US$ 86.45 billion in 2016-17. India's oil consumption grew 8.3 per cent year-on-year to 212.7 million tonnes in 2016, as against the global growth of 1.5 per cent, thereby making it the third-largest oil consuming nation in the world.

India is the fourth-largest Liquefied Natural Gas (LNG) importer after Japan, South Korea and China, and accounts for 5.8 per cent of the total global trade. Domestic LNG demand is expected to grow at a CAGR of 16.89 per cent to 306.54 MMSCMD by 2021 from 64 MMSCMD in 2015.

The demand of Petroleum Oil and Lubricants grew at a Compound Annual Growth Rate (CAGR) of 5.6 per cent under the 12th Five Year Plan (2012-17)

The country's gas production is expected to touch 90 Billion Cubic Metres (BCM) in 2040 from 23.09 BCM in FY2016-17 (till December 2016). Gas pipeline infrastructure in the country stood at 16,240.4 km in November 2016.

State-owned Oil and Natural Gas Corporation (ONGC) dominates the upstream segment (exploration and production), and produced around 1,847 thousand metric tonnes (TMT) of crude oil, as against the country's 2,939 MT oil output in April 2017. The company also accounted for 57 percent of the country's domestic crude oil production in 2016-17.

4.7 INVESTMENT

According to data released by the Department of Industrial Policy and Promotion (DIPP), the petroleum and natural gas sector attracted FDI worth US$ 6.86 billion between April 2000 and June 2017.

Following are some of the major investments and developments in the oil and gas sector:

- World's largest oil exporter Saudi Aramco is planning to invest in refineries and petrochemicals in India as it looks to enter into a strategic partnership with the country.
- Bharat Petroleum Corporation Ltd (BPCL) plans to invest Rs 1.08 trillion (US$ 16.88 billion) over the coming five years for expansion of operations across business segments, of which the company plans to invest Rs 45,000 crore (US$ 7.03 billion) in the petrochemicals segment.
- Vedanta Ltd has planned a capital expenditure of US$ 2.4 billion over FY 2017-18 and FY 2018-19, across various projects such as Hindustan Zinc, increasing volumes for its oil and gas business and to double the capacity at the Tuticorin copper smelter.
- Reliance Industries Ltd (RIL), along with its partner BP plc, has decided to invest US$ 6 billion for the development of new R-series gas fields in the KG-D6 block.
- Indian Oil Corp Ltd (IOC), Bharat Petroleum Corp Ltd (BPCL) and Hindustan Petroleum Corp Ltd (HPCL), have signed an agreement to build

integrated refinery-cum-petrochemicals complexes, which would have a capacity of 60 million metric tonnes per annum (MMTPA) and cost approximately US$ 40 billion. The refinery is expected to commence operation by 2022.

- Oil and Natural Gas Corporation (ONGC) plans to invest US$ 11 billion in exploration and development of blocks in the Krishna Godavari (KG)basin, which is expected to increase gas production by around 30 per cent over the next three-four years.
- The merger process of Vedanta and Cairn India was completed on April 11, 2017, thereby creating a combined entity with a market capitalisation of US$ 15.6 billion and a free float of 49.9 per cent.
- Indian Oil Corporation expects to invest Rs 20,000 crore (US$ 3.1 billion) over the next four years covering 20 projects in order to add a 25 million tonne (MMT) pipeline to its existing pipeline capacity of 93.7 MMT.
- Larsen & Toubro's (L&T) subsidiary, L&T Hydrocarbon Engineering has bagged an order relating to Oil and Natural Gas Corporation's (ONGC) Neelam Re-Development and B173AC projects worth Rs 1,656 crore (US$ 257 million) which involves building four new platforms, a 32 kilometre pipeline and modification work on existing platforms in the India's western off shore basin, Neelam Field. The project is expected to be completed by 2019 and would result in incremental gain of 2.76 million ton crude oil and 4.786 BCM gas until 2034-35.
- The total investment by oil marketing companies (OMCs) on fuel upgradation programme will reach Rs 90,000 crore (US$ 13.95 billion) by 2020, according to Mr K D Tripathi, Secretary, Ministry of Petroleum and Natural Gas, Government of India.
- Indian Oil Corporation (IOC) plans to invest around Rs 40,000 crore (US$ 5.9 billion) to set up a 15 million tonne (MT) refinery at Nagapattinam in Tamil Nadu.
- ONGC has signed an agreement with the Government of Andhra Pradesh to invest around Rs 78,000 crore (US$ 11.7 billion) in the Krishna Godavari basin for producing hydrocarbons by FY 2021-22.

4.8 GOVERNMENT INITIATIVES

Some of the major initiatives taken by the Government of India to promote oil and gas sector are:

- State-run oil firms are planning investments worth Rs 723 crore (US$ 111.30 million) in Uttar Pradesh to improve the liquefied petroleum gas (LPG) infrastructure in a bid to promote clean energy and generate employment, according to Mr Dharmendra Pradhan, Minister of Petroleum and Natural Gas, Government of India.
- The Government of India is planning to introduce a new policy to encourage the use of biofuels in transport fuel and is looking at an investment of Rs 1 lakh crore (US$ 15.64 billion) in the entire value chain.
- The Government of India plans to build a nine million tonne (MT) refinery in Rajasthan as well as a 60 MT refinery in Maharashtra, auction oil and gas fields, increase use of liquefied natural gas (LNG), and is in discussions with Saudi Arabian Oil Co (Saudi Aramco) regarding investments in India, as per Mr Dharmendra Pradhan, Minister of State for Petroleum and Natural Gas, Government of India.
- The Government of India plans to merge state oil companies to create integrated oil major that could compete globally, and utilise the synergy between various state entities for achieving efficiency and cost competitiveness in order to create more value for all shareholders.
- The Government of India plans to unveil a new policy for renewing and extending the lease of 28 oil and gas blocks in the country, with a view to attract more investments into these fields.
- The Cabinet Committee on Economic Affairs, Government of India, has approved the awarding of contracts on 23 onshore and 8 offshore contract areas of discovered small oil and gas fields that earlier belonged to Oil and Natural Gas Corporation (ONGC) and Oil India Limited (OIL).

4.9 ROAD AHEAD

India's oil demand is expected to grow at a CAGR of 3.6 per cent to 458 Million Tonnes of Oil Equivalent (MTOE) by 2040, while demand for energy will

more than double by 2040 as economy will grow to more than five times its current size, as stated by Mr Dharmendra Pradhan, Minister of State for Petroleum and Natural Gas.

Gas production will likely touch 90 Billion Cubic Metres (BCM) by 2040, subject to adjustment to the current formula that determines the price paid to domestic producers, while demand for natural gas will grow at a CAGR of 4.6 per cent to touch 149 MTOE.

After the completion of certain projects which are undertaken by various refineries, the Refining Capacity of India is expected to reach 256.55 MMTPA by 2019-20.

The demand for petroleum products is estimated to reach 244,960 MT by 2021-22, up from 186,209 MT in 2016, and the demand for natural gas is expected to reach 606 MMSCMD by 2021-22 as against a demand of 473 MMSCMD in 2016-17.

Exchange Rate Used: INR 1 = US$ 0.015 as on October 10, 2017

References: Media Reports, Press Releases, Press Information Bureau, Ministry of Petroleum and Natural Gas, Union Budget 2016-17

Note: 1- According to data from the Petroleum Planning & Analysis Cell, Ministry of Petroleum and Natural Gas; 2- According to a report by Fitch; 3- IGU World Gas LNG Report 2016 Edition

4.10 TOP PUBLIC AND PRIVATE SECTOR COMPANIES IN THE SECTOR

4.10.1 Bharat Petroleum Corporation Ltd. [BPCL]

Bharat Petroleum Corporation Ltd (BPCL) is a Government of India owned oil and gas company which is headquartered in Mumbai, Maharashtra. BPCL started as Burmah-Shell Refineries Ltd in 1952, which later changed to Bharat Refineries Ltd(BRL) and subsequently to Bharat Petroleum Corporation Ltd.

Presently, BPCL operates the following refineries, namely; Mumbai Refinery, Kochi Refinery, Bina Refinery and Numaligarh Refinery, in India. It also exports products such as fuel oil, naphtha and base oil (Group II) from its refineries on a regular basis.

Bharat Petroleum offers a full range of automotive engine oils, gear oils, transmission oils, specialty oils and greases. Since 2002, it has also introduced new generation branded fuels such as Speed, Hi Speed Diesel and Speed 97.

- Ranked in the Fortune Global 500
- Pioneers in introducing premium fuel brands in the country
- One of the most admired global energy companies
- Leading player in the Indian petroleum sector

Bharat Petroleum: Foremost Oil and Natural Gas Producers

2013 - Receives PSE Excellence Awards for Operational Performance Excellence in the Maharatna and Navratna Category

2012 - Receives CIDC Vishwakarma Award for the second year running for Corporate Social Responsibility

2010 - Receives two prestigious communication awards from Association of Business Communicators of India (ABCI)

2009 - Receives PetroFed Oil and Gas Marketing Company of the Year for the second time in a row

2000 - Receives the National HRD Award from National HRD Network for making Outstanding Contribution to HRD

4.10.2 Indian Oil Corporation Limited

Established as an oil marketing entity on June 30, 1959, Indian Oil Company Ltd was renamed Indian Oil Corporation Ltd (IOCL) on September 1, 1964, following its merger with Indian Refineries Ltd. The integrated refining and marketing entity has since grown into India's largest commercial enterprise. It is the country's number one company in the prestigious Fortune 'Global 500' listing of the world's largest corporates. IOCL is currently at the 85th position in the list.

IOCL has a strong workforce of over 34,000 employees. In the company, operations are strategically structured along the following verticals: Refineries, Pipelines, Marketing, R&D Centre and Business Development – E&P, Petrochemicals and Natural Gas.

It's world class research and development (R&D) centre, established in 1972, has state-of -the-art facilities and has delivered pioneering results in lubricants technology, refining process, pipeline transportation, bio-fuels and fuel-efficient appliances.

IOCL and its subsidiaries own and operate 10 of India's 22 refineries, and its cross-country network of over 11,000 km of crude oil, product and gas pipelines is the largest in the country, meeting the vital energy needs of consumers in an efficient and environment-friendly manner.

- Net revenue of Rs 414,909 crore (US$ 68.19 billion) in FY 13
- Profit after tax of Rs 5,005 crore (US$ 822.62 million) in FY 13
- Ranked in Fortune 'Global 500' listing in 2013
- Over 34,000 employees
- World class R&D centre with state-of-the-art facilities

Indian Oil Corporation: The Energy of India

2014 - Maintains its position as the country's largest company, according to the list of 500 Indian companies released by Financial Express

2013 - Tops Fortune India 500 list

2009 - Celebrates its Golden Jubilee

2009 - Inaugurates first wind power project in Kutch district of Gujarat

2009 - Inaugurates first LPG pipeline in North India from Panipat–Nabha–Jalandhar

4.10.3 Oil and Natural Gas Limited

Oil and Natural Gas Corporation Limited (ONGC) is an Indian multinational oil and gas company headquartered in Dehradun, India. It is a public sector undertaking (PSU) of the Government of India, under the administrative

control of the Ministry of Petroleum and Natural Gas. It is India's largest oil and gas exploration and production company. It produces around 69 per cent of India's crude oil (equivalent to around 30 per cent of the country's total demand) and around 62 per cent of its natural gas.

ONGC was founded on August 14, 1956 by Government of India, which currently holds a 69.23 per cent equity stake. It is involved in exploring for and exploiting hydrocarbons in 26 sedimentary basins of India, and owns and operates over 11,000 kilometers of pipelines in the country. Its international subsidiary ONGC Videsh Ltd (OVL) currently has projects in 15 countries. ONGC has discovered 6 of the 7 commercially-producing Indian Basins, in the last 50 years, adding over 7.1 billion tonnes (BT) of in-place oil and gas volume of hydrocarbons in Indian basins.

- ONGC is the largest upstream oil company
- ONGC accounts for 62 per cent of India’s total crude oil output and 49 per cent of total gas production
- Revenue stood at US$ 15.2 billion during FY12
- ONGC registered highest ever oil production
- Highest ever dividend payout of US$ 1.6 billion

ONGC: Continuing on its strong growth path

2003 - ONGC Videsh acquired Talisman Energy's 25 per cent stake in the Greater Nile Oil project

2006 - A commemorative coin set was issued to mark the 50th anniversary of the founding of ONGC

2010 - ONGC was conferred with 'Maharatna' status by the Government of India

2012 - ONGC comes out on top in the Oil Industry Safety Awards

2013 - ONGC Group secures PSU Champions awards

4.10.4 RELIANCE INDUSTRIES LIMITED

Reliance Industries Limited (RIL) is India's largest private sector company with businesses in the energy and materials value chain. It is also the first private sector company from India to feature in Fortune Global 500 list of 'World's Largest Corporations' and 'World's Top 100 companies'.

The group's activities span exploration and production of oil and gas, petroleum refining and marketing, petrochemicals (polyester, fibre intermediates, plastics and chemicals), textiles, retail, infotel and special economic zones (SEZs).

RIL is enhancing India's energy landscape. Exploration and production, the initial link in the energy and materials value chain, remains a major growth area and Reliance envisions evolving as a global energy major. Petroleum refining and retailing is the second link in RIL's drive for growth and global leadership in the core energy and materials value chain. The company has crude processing capacity of 1.24 million barrels per day (MBPD), the largest at any single location in the world.

- India's largest private sector enterprise
- Exports of Rs 2,392.26 billion (US$ 39.58 billion) in FY 13
- Total revenues of Rs 3,711.19 billion (US$ 61.40 billion) during FY 13
- Net profit of at Rs 210.03 billion (US$ 3.48 billion) in FY 13

Reliance Industries: Well positioned for growth

2012-13	-	Receives prestigious 'International Refiner of the Year' Award 2013 at Hart Energy's 27th World Refining & Fuel Conference, USA
2011-12	-	Becomes first Indian company to be certified as 'Responsible Care Company' under stringent standards of American Chemistry Council (ACC), USA
2010-11	-	Acquires 95 per cent stake in Infotel Broadband Services Ltd
2009-10	-	Ranks as fifth biggest 'sustainable value creator' in a Boston Consulting Group (BCG) list
2008-09	-	Merger takes place between Reliance Petroleum Ltd (RPL) and Reliance Industries Ltd (RIL)

4.10.5 Cairn India

Cairn India is one of the largest independent oil and gas exploration and production companies in India with a market capitalisation of around US$ 10 billion.

It operates around 30 per cent of India's domestic crude oil production. Through its affiliates, Cairn India has been operating for close to 20 years playing an active role in developing India's oil and gas resources. Till now Cairn India has opened four frontier basins with over 40 discoveries out of which 31 are in Rajasthan alone.

The Mangala field in Rajasthan, discovered in January 2004, is the largest onshore oil discovery in the country in more than two decades. Mangala, Bhagyam and Aishwariya fields, which are major discoveries in the Rajasthan block, have gross ultimate oil recovery of over 1 billion barrels.

Cairn India has a portfolio of nine blocks - one block in Rajasthan, which contains multiple assets; two on the west coast; four on the east coast; and one each in Sri Lanka and South Africa. Oil and gas is currently being produced from Rajasthan, Ravva and Cambay.

- One of the largest independent oil and gas exploration companies in India
- Operates 30 per cent of India's domestic crude oil
- Made the largest onshore oil discovery in India

Cairn India: Largest Indian Oil and Gas Exploration Company

2014 - Receives Businessworld Award for India's Fastest Growing Company in middleweight category

2013 - Bags FICCI Corporate Social Responsibility Award

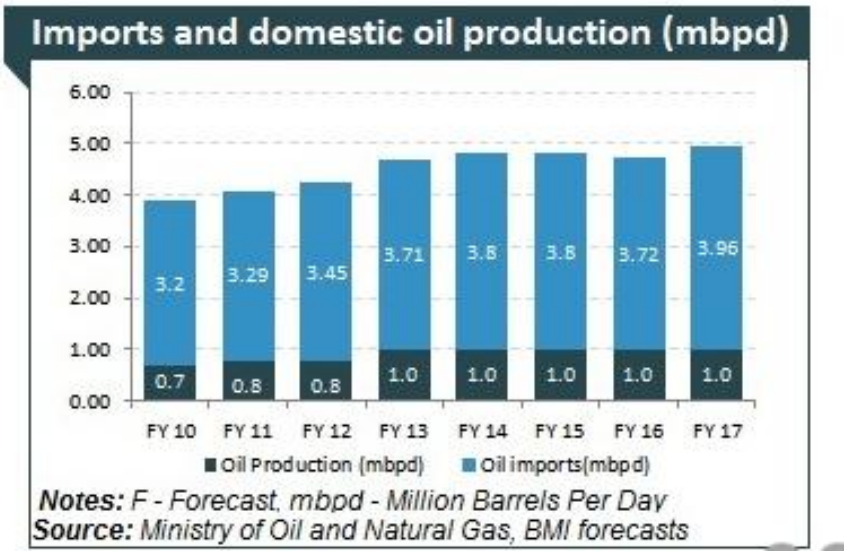
2012 - Wins Golden Peacock Award for Corporate Social Responsibility

2011 - Commissions world's longest continuously heated and insulated pipeline in a joint venture (JV) with ONGC

2010 - Gets awarded at the 6th Social and Corporate Governance Awards

2009 - Receives Oil & Gas Deal of the Year Award for Asia Pacific region by Project Finance International

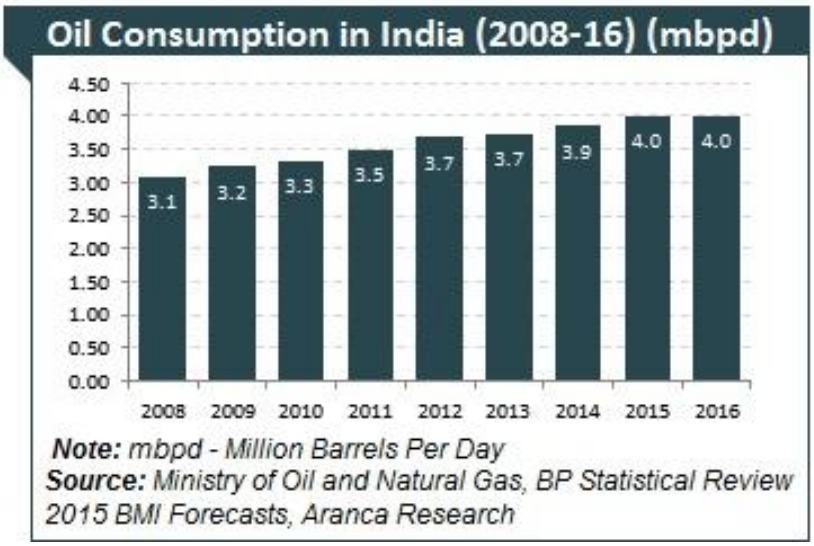
IMPORTS AND DOMESTIC OIL CONSUMPTION



Notes: *F-Forecast,mbpd-MillionBarrelsPerDay*
Source: *Ministry of Oil and Natural Gas, BMI forecasts, Aranca*

- In FY16, total crude oil imports were valued at US$ 64.4 billion as compared to US$ 112.7 billion in FY15. In FY14, imports accounted for more than 80 per cent of the country's total oil demand.
- Backed by new oil fields, domestic oil output is anticipated to grow to 1.0 mbpd by FY16.
- In March 2017, the Indian Strategic Petroleum Reserve Ltd (ISPRL) and Abu Dhabi National Oil Company (ADNOC) of UAE signed an agreement, to fill up 0.81 MMT or 5,860,000 million barrels of crude oil at ISPRL storage facility at Mangalore, Karnataka.
- According to the Organisation of the Petroleum Exporting Countries (OPEC), the demand for oil across the world will grow by 1.26 million barrels per day (mb/d). Moreover, majority of the oil demand across the globe is expected to originate from India.

4.11 OIL CONSUMPTION IN INDIA



Notes: *F- Forecast, CAGR - Compound Annual Growth Rate, mbpd - Million Barrels Per Day*

Source: *Ministry of oil and Natural Gas, BP Statistical Review 2015 BMI Forecasts, Aranca Research*

- Oil consumption has expanded at a CAGR of 3.3 per cent during FY2008–16F to reach 4.0 mbpd by 2016.
- Due to the expected strong growth in demand, India's dependency on oil imports is likely to increase further
- Rapid economic growth is leading to greater outputs, which in turn is increasing the demand of oil for production and transportation
- With rising income levels, demand for automobile is estimated to increase, in turn leading to augmented demand for oil and gas.

4.12 THE INDUSTRY'S FUTURE

We are acutely aware that oil and gas executives have their hands full during this upheaval, and that there may be more pain to come. But the industry has proven over time its ability to innovate and to reinvent itself. Despite a tough two years, the sector has successfully brought costs down in order to operate in an environment of radically lower oil prices. With the right actions, a more flexible and robust sector can emerge, one that is prepared to get the most value out of existing and yet-to-be-discovered fossil fuel reserves while making an orderly transition to a lower-carbon world. In other words, the industry's future lies on the optimistic side of *Cast Away*'s mixed message.

4.13 CONCLUSION

In 2016, India became the fourth-largest energy consumer in the world with oil and gas accounting for 37 per cent of its total energy consumption. Annual consumption stood at 4.00 million barrels per day (MBPD) of oil and 49 billion cubic meters (bcm) of gas. By 2035, India's energy demand is expected to double to 1,516 Mtoe by 2035 from 723.9 Mtoe in 2016. According to the International Energy Agency (IEA), India is expected to account for almost one-third of the global growth in energy demand by 2040.

India has proven oil reserves of 600 million metric tonnes (MMT), and gas reserves of 1.2 trillion cubic meters. In 2016-17, India's production of crude oil and natural gas stood at 36 MMT and 31 bcm respectively, yet given the low production base, the country remains a net importer of energy.

India has a flourishing crude oil refining industry with an annual capacity of 243.5 MMT, as of FY17. In 2016, India's public and private sector refineries processed 126.3 MMT and 80 MMT of crude oil.

Several initiatives have been taken by the Government of India including the launch of National Gas Hydrate Programme (NGHP), a consortium of national exploration and production (E&P) companies and research institutions, to map gas hydrates for use as an alternate source of energy. It has allowed 100 per cent foreign direct investment (FDI) in E&P projects/companies and 49 per cent in refining under the automatic route.

Data Analysis and Interpretation

DATA ANALYSIS AND INTERPRETATION

5.1 BACKDROP

Dividend are the most important aspects for stakeholders in any investment. Oil and Gas is always been an alluring option for stakeholders to choose from various options. The present financial study endeavour to understand and analyses the various aspects of dividend payouts with help of reliable statistical methods and techniques. Dividend are result of successful business operation and depend on internal and external determinants. Business operation runs parallel to various external and internal determinant result in dividend or no dividend to stakeholders. Confining focus to oil and gas sector and non-probabilistic section of major public and private limited companies, the present study endeavour to find various determinant of dividend in selected domain. Considering the determinants as factors, the association is find out with the help of factor analysis. The score for each factor is recorded on a rating scale of 1-5, which is further tabulated and sorted for clubbing of similar categories. With the help rotated component matrix the co-relation between factors is calculated.

To access the impact of factors on dividend is analysed considering variation as a parameter of impact on dividend. The cumulative variation of factors in each category calculated in SPSS version 23.0 to find the most important determinant responsible for dividend payout.

Shares prices flairs with confidence of investor in companies and sector. Dividend strengthen the trout and confidence of investor in a company which lead to movement of share prices.

In Third part of the study analytical work is done to know the effect of dividend on share price. The relevant secondary data and information is collected from reliable sources which is further analysed with the help of trend analysis in SPSS version 23.0. The descriptive and analytical figures are represented in the form of table and graphs for better understanding and representation.

5.2 RESEARCH OBJECTIVE

The objective of the study is based on various aspect of dividend in oil and gas sector. The study we based on financial data of major private and public sector colonies operating in the sector. Starting form finding out the determinant of dividend payout the association between them and impact on movement of share price is analysed, which is further segregated as individual objectives.

Objective 1: To find out the various determinant of dividend in oil and gas sector.

With the help of review of literature, probable determinant of dividend is explored and identified. A pilot survey is conducted to record the opinion of various stake holder. The data collected is presented and inference are made with help of descriptive analysis.

Objective 2: To find out the relation between dividend payout ratio and various determinant of dividend.

The selected determinants are assigned scores on the basis of dividend performance and with the help of Pearson correlation analysis the association between the variable is identified.

Objective 3: To find out the effect of dividend on stock price.

The stock price of selected companies are recorded by reliable sources of secondly data. The same is analysed with respect to dividend announced by the firm. The effect is identified by trend analysis in SPSS 23.0.

5.3 RESEARCH HYPOTHESIS

Hypothesis is a statement which a researcher intended to prove. This is something which can be a valid assumption from researcher point of view after review of literature.

With respect to all the three major objective in concern, the respective null and alternate hypothesis is formed. The hypothesis formed are rejected or accepted with the help of standard term and condition of suitable statistical test.

Hypothesis 1

Null Hypothesis (Ho): The dividend has a relation with various market factor nominated as determinant dividend.

Alternate Hypothesis (Ha): The dividend has no relation with various market factor nominated as determinant of dividend.

Hypothesis 2

Null Hypothesis (Ho): The determinant of dividend are positively correlate with dividend payout ratio.

Alternate Hypothesis (Ha): The determinant of dividend are negatively correlate with dividend payout ratio.

Hypothesis 3

Null Hypothesis (Ho): The stock price has a depended on dividend and both are dependent in nature.

Alternate Hypothesis (Ha): The stock price is not depended on dividend and both are independent in nature.

All hypothesis are formed keeping both the aspect open to testing statistical test are conducted to prove the same. The standard critical value of the test is compared with evaluated test score and hypothesis are approve and rejected accordingly.

Objective 1: To investigate the association between various factors and dividend payout policies of Indian oil and gas companies.

H (O) : Corporate Tax has a significant association and positive impact on dividend policies of oil and gas companies in India.

H (a) : Corporate Tax does not have a significant association and positive impact on dividend policies of oil and gas companies in India.

5.4 DIVIDEND POLICY AND CORPORATE TAX

5.4.1 Descriptive Analysis of Oil and Natural Gas Corporation

Table 6: Dividend Payout Ratio for Past 10 Years for Oil and Natural Gas Corporation

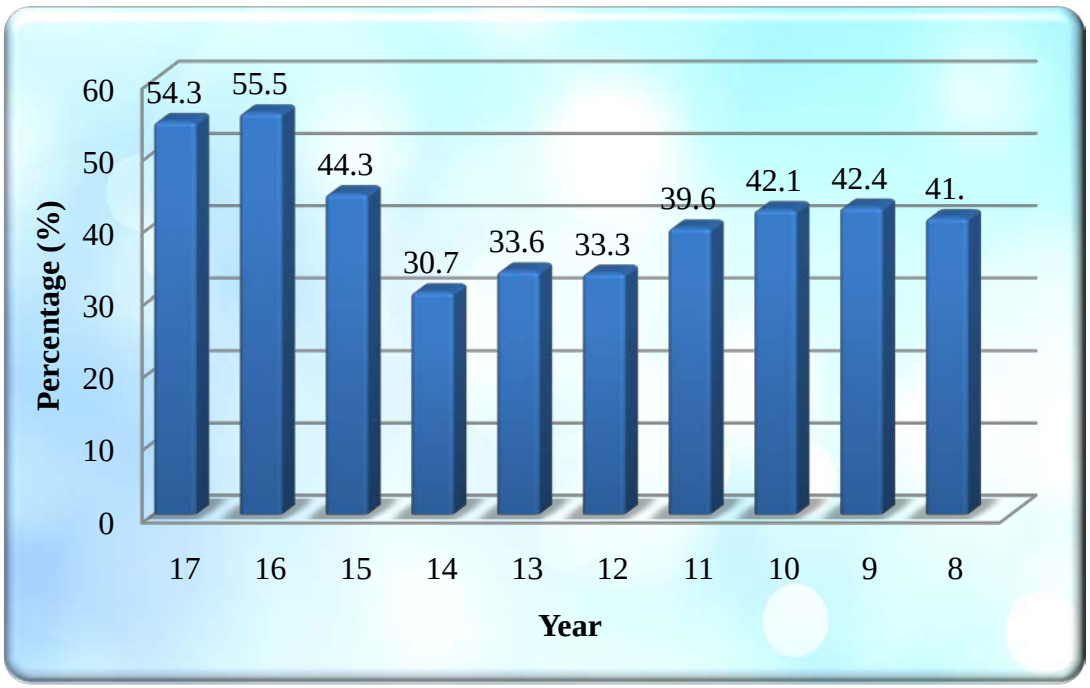
Year	Dividend Payout Ratio (In %)	Corporate tax (in Rs Lac)
2017	54.3	73,155
2016	55.5	74,589
2015	44.3	88,222
2014	30.7	1,03,371
2013	33.6	96,186
2012	33.3	1,15,196
2011	39.55	86,924
2010	42.09	82,163
2009	42.44	78,544
2008	40.98	85,330

In first part of the study, with the help of literature survey, the factors associated with dividend policies of oil and gas companies are identified and selected. The associate on of each individual factor is analysed with the help of relevant statistical test. With the help of annual report and the authentic financial document, the dividend and net income is recorded and tabulated to calculate the dividend payout ratio. Dividend payout ratio of ONGC is taken as independent variable. The first factor under consideration viz corporate tax is labelled as dependent variable. The value for both the variable are recorded for past 10 years, the same is tabulated and illustrated with the help of table no 1 and graph no 1.

Analysis Technique

To identify the association and impact of dependent variable corporate tax on dividend payout ratio, which is considered as independent variable in the study, Pearson correlation is used. This analytical study is based on finding a relation between two variable. This is done with the help of considering number of cases on a scale. The mean value of the both variable are identified and standard deviation, which is deviation of observed value from the mean value is calculated.

The pattern of deviation from the mean is analysed to establish the relation between the two variable with the help of Pearson correlation coefficient method.



Graph 4: Dividend Payout Ratio for Past 10 Years for Oil and Natural Gas Corporation

The Pearson product-moment correlation coefficient (or Pearson correlation coefficient, for short) is a measure of the strength of a linear association between two variables and is denoted by *r*. Basically, a Pearson product-moment correlation attempts to draw a line of best fit through the data of two variables, and the Pearson correlation coefficient, *r*, indicates how far away all these data points are to this line of best fit (i.e., how well the data points fit this new model/line of best fit).

The Pearson correlation coefficient, *r*, can take a range of values from +1 to -1. A value of 0 indicates that there is no association between the two variables. A value greater than 0 indicates a positive association; that is, as the value of one variable increases, so does the value of the other variable. A value less than 0 indicates a negative association; that is, as the value of one variable increases, the value of the other variable decreases.

Table 7: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Div_Pay_ Ratio	10	30.70	55.50	41.7060	8.25981	68.224
Corporate_ tax	10	73155.00	115196.00	88395.0000	13191.84417	174024752.667
Valid N (listwise)	10					

The stronger the association of the two variables, the closer the Pearson correlation coefficient, *r*, will be to either +1 or -1 depending on whether the relationship is positive or negative, respectively. Achieving a value of +1 or -1 means that all your data points are included on the line of best fit – there are no data points that show any variation away from this line. Values for *r* between +1 and -1 (for example, *r* = 0.8 or -0.4) indicate that there is variation around the line of best fit. The closer the value of *r* to 0 the greater the variation around the line of best fit.

Table 8: Correlation Coefficient

Strength of Association	**Coefficient, *r***	
	Positive	**Negative**
Small	.1 to .3	-0.1 to -0.3
Medium	.3 to .5	-0.3 to -0.5
Large	.5 to 1.0	-0.5 to -1.0

5.4.2 Correlation Between Dividend Payout Policies and Corporate Tax-ONGC

Table 9: Correlation Coefficient

Correlations		**Div_Pay_Ratio**	**Corporate_tax**
Div_Pay_Ratio	Pearson Correlation	1	-.845**
	Sig. (2-tailed)		.002
	N	10	10
Corporate_tax	Pearson Correlation	-.845**	1
	Sig. (2-tailed)	.002	
	N	10	10

**. Correlation is significant at the 0.01 level (2-tailed).

The values for both the variable are collected and feeded in SPSS 23.0 version. Descriptive analysis for both the variable is calculated which include mean, standard deviation, variance, maximum and minimum value. N denote the number of cases considered which was 10, which was ten years for both the variable. The minimum value for dividend payout ratio is 30.70% and maximum value is 55.5-%. Standard deviation found is 8.35%. For corporate tax the minimum value is 73,155 and maximum value is 88,395. The standard deviation for corporate tax is 13,191.84The value for Pearson correlation coefficient is -.845 which shows the dividend payout policy and corporate are negatively correlate with each other. Increase in corporate tax decrease the dividend payout ration and decrease in corporate tax increases the dividend payout ratio.

5.4.3 Dividend Payout Ratio and Corporate Tax in Indian Oil

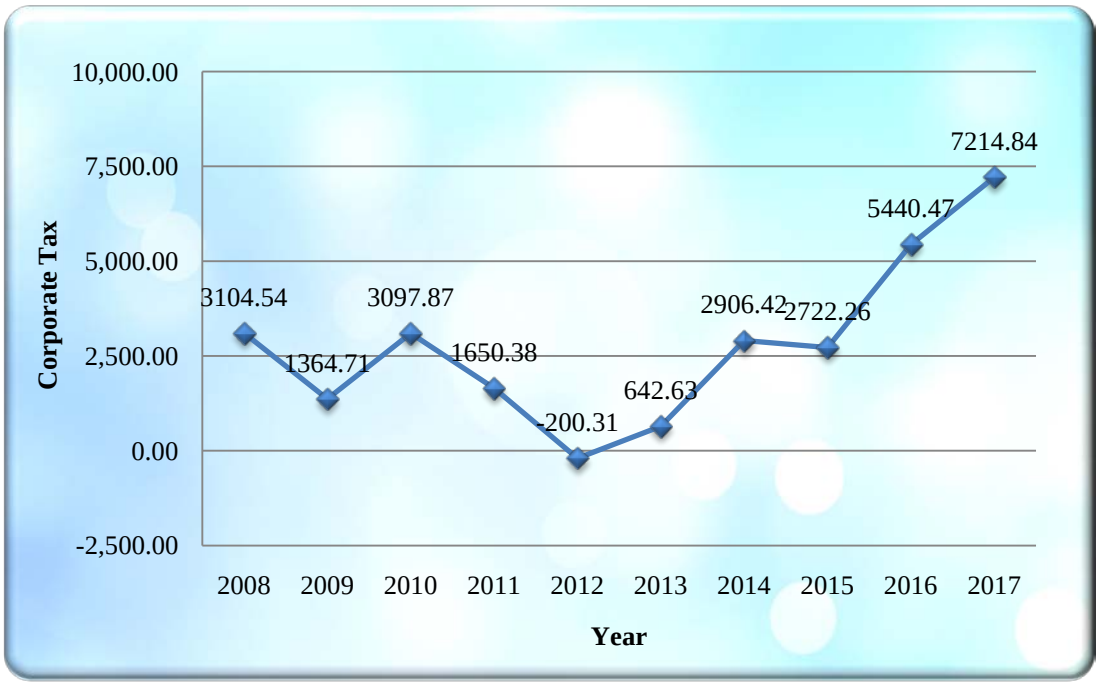
After analysis of co-relation between the dividend payout ratio and corporate tax in oil and natural gas corporation, the same analysis is done for Indian oil which is second comply in consideration.

With the help of secondary sources the annual figures for dividend payout ratio and corporate tax is collected and tabulated year wise.

Table 10: Dividend Payout Ratio and Corporate Tax in Indian Oil

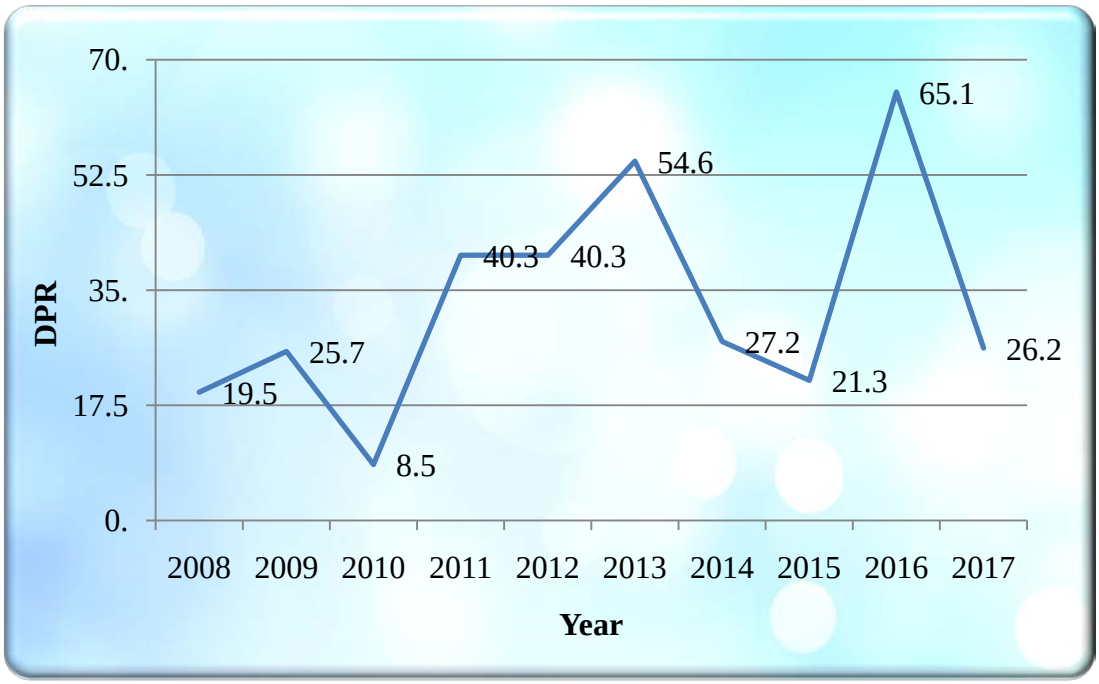
Year	Corporate Tax	DPR
2008	3,104.54	19.5
2009	1,364.71	25.7
2010	3,097.87	8.5
2011	1,650.38	40.3
2012	-200.31	40.3
2013	642.63	54.6
2014	2,906.42	27.2
2015	2,722.26	21.3
2016	5,440.47	65.1
2017	7,214.84	26.2

As shown in the table the corporate tax paid by the company is varied relatively in past 10 years. Starting from 2008 when the amount was 3104 cr came down to 1364 Cr in 2009. Fluctuating which almost 200% this raised at to 3.97 in 2010 and continuously shown a decreasing trend till 2013. From 2014 the amount is increased to 2906 cr and 2722 cr in 2015. With many reforms and economics improvement in Indian oil and gas industries this valued 5440 in 2016 and highest value 7214 in 2017.



5.4.4 Dividend Payout Ratio of Indian Oil

An analytical study of companies financial document reveal that the company announced the dividend from past 10 years and amount is varied every year. This showed a random trend in terms of values. The dividend payout ratio is calculated with the help of amount of dividend declared per share and number of share present in the market. The value received are tabulated and used for further analytic inferences in the study.



In past ten years, the highest dividend payout ratio identified was in 2016, where this valued at 65.1% which is followed by 54.6% in 2013 and 40.3 % in 2011 and 2012. In recent last year the value is dropped to 26.2 %, slightly less than 27.2% in 2014. The ratio was 19.5% in 2008, 25.7% in 2009 and lowest 8.5% in year 2010.

5.4.5 Correlation Between Corporate Tax and Dividend Payout Ratio- IOCL

Table 11: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Corporate_tax_ Indian Oil	10	-200.31	7214.84	2794.3810	2203.51253	4855467.459
DPR_Indian_ Oil	10	8.50	65.10	32.8700	17.17861	295.105
Valid N (list wise)	10					

Table 12: Correlations Coefficients

Correlations		**Corporate_tax_ Indian Oil**	**DPR_Indian_ Oil**
Corporate_tax_ Indian Oil	Pearson Correlation	1	-.067
	Sig. (2-tailed)		.854
	N	10	10
DPR_Indian_ Oil	Pearson Correlation	-.067	1
	Sig. (2-tailed)	.854	
	N	10	10

The values for both the variables are collected and feeded in SPSS 23.0 version. Descriptive analysis of the data is calculated which included mean, standard deviation, maximum and minimum value for both the variables. N denote the number of cases in to consideration, which stand at a value ten, denoting last ten years. The minimum value for dividend payout ratio was 8.5% and the maximum value of dividend payout ratio is 65. 10%. Standard deviation calculated was 17.17%.

The value for Pearson correlation coefficient is -0.067, which shows that the corporate tax and dividend payout policy are negatively co relate with each other. Increase in corporate tax decreased the dividend payout ratio and decrees in corporate may increase in dividend payout ratio.

5.4.6 Dividend Payout Ratio and Corporate Tax in Reliance Industries Limited

After analysis of co-relation between the dividend payout ratio and corporate tax in Indian oil, the same analysis is done for reliance industries limited, which is third company in consideration.

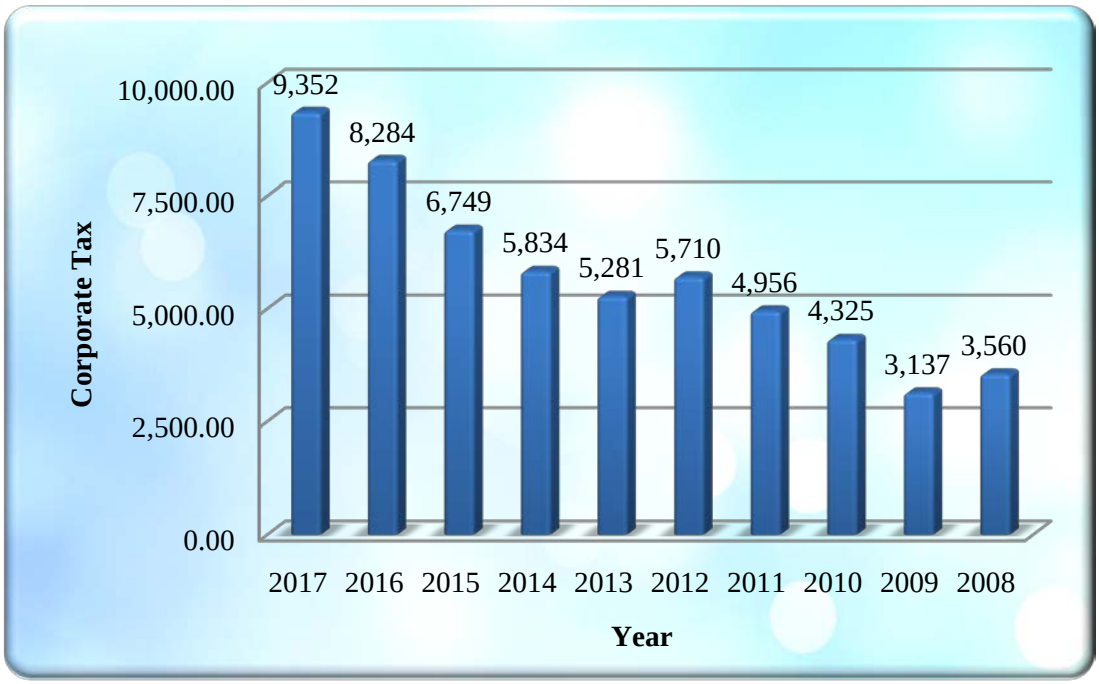
With the help of secondary sources the annual figures for dividend payout ratio and corporate tax is collected and tabulated year wise.

Table 13: Dividend Payout Ratio for Past 10 Years for Reliance

Year	DPR	Corporate tax
2017	11.5	9,352.00
2016	11.1	8,284.00
2015	12.1	6,749.00
2014	12	5,834.00
2013	12	5,281.00
2012	10.8	5,710.00
2011	10.8	4,956.00
2010	7.9	4,324.97
2009	12	3,137.34
2008		3,559.85

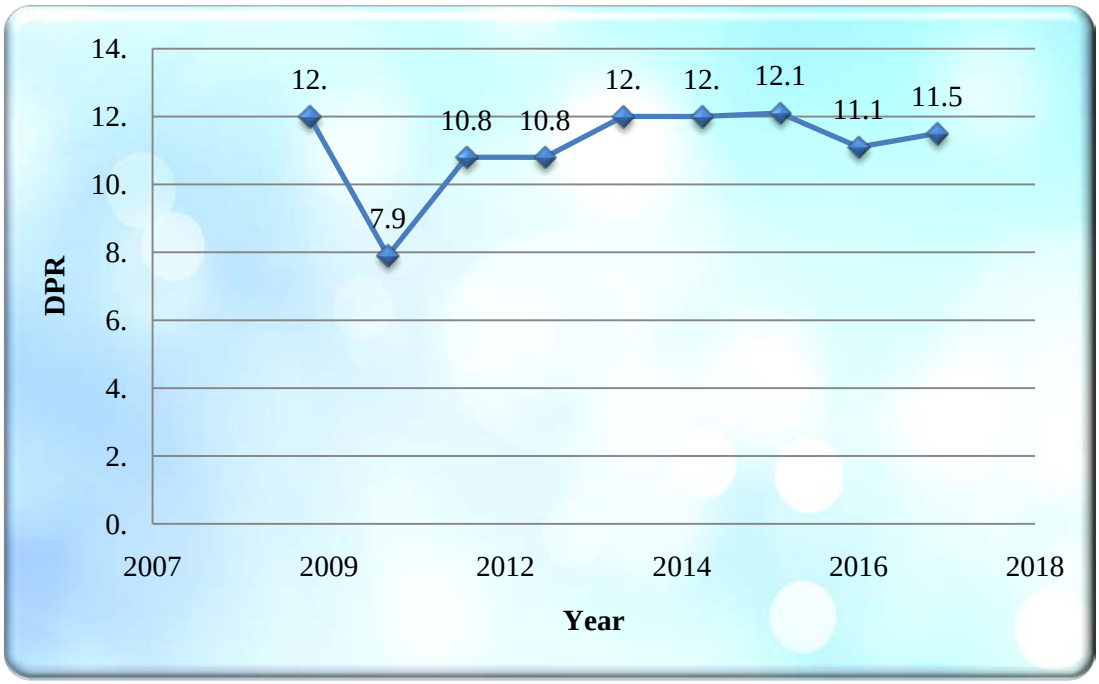
As shown in the table the corporate tax paid by the company is varied relatively in past 10 years. Starting from 2008 when the amount was 3,559 cr came down to 3,137 Cr in 2009. Fluctuating which almost 40% this raised at to 4324 CR in 2010. The corporate tax paid by the company is continuously shown an increasing trend. From 2011 the amount is increased to 4956 cr and 5710 cr in 2012.

In 2013 the corporate tax decreased to 5281 and again increased to 5834 in 2014 and stand at 6749 in 2015. In 2016 the company paid corporate tax of 8284 crore and latest in 2017 the amount was 9352cr.



Graph 5: Corporate Tax for Past 10 Years for Reliance

An analytical study of companies financial document reveal that the company announced the dividend from past 10 years and amount is varied every year. This showed a random trend in terms of values. The dividend payout ratio is calculated with the help of amount of dividend declared per share and number of share present in the market. The value received are tabulated and used for further analytic inferences in the study.



Graph 6: DPR for Past 10 Years for Reliance

The figure out shows that from 2008, on a continuous basis the company announced dividend. The dividend payout ratio is calculated with the help of the amount of dividend declared and number of shares flair in the market. DPR is valued 11.5 % in 2017 and 11.1% in 2016. This was slightly less than 12 and 12.1 % in 2014 and 2015 respectively. In 2009 the dividend payout ratio was 12% which was decreased to 7.9% in 2010.

5.4.7 Correlation Between Corporate Tax and Dividend Payout Ratio in Reliance Industries

Table 14: Descriptive Statistics of Reliance Industries

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation	Variance
DPR_Reliance	9	7.90	12.10	11.1333	1.32288	1.750
Corporate_Tax_Reliance	10	3137.34	9352.00	5718.8160	1969.10440	3877372.153
Valid N (list wise)	9					

Table 15: Correlations Coefficients of Reliance Industries

Correlations		**Corporate_Tax_Reliance**	**DPR_Reliance**
Corporate_Tax_Reliance	Pearson Correlation	1	.220
	Sig. (2-tailed)		.569
	N	10	9
DPR_Reliance	Pearson Correlation	.220	1
	Sig. (2-tailed)	.569	
	N	9	9

The values for both the variables are collected and feeded in SPSS 23.0 version. Descriptive analysis of the data is calculated which included mean, standard deviation, maximum and minimum value for both the variables. N denote the number of cases in to consideration, which stand at a value ten, denoting last ten years. The minimum value for dividend payout ratio was 7.9 % and the maximum value of dividend payout ratio is 12. 10%. Standard deviation calculated was 1.322 %.

The value for Pearson correlation coefficient is 0.220, which shows that the corporate tax and dividend payout policy are positively correlate with each other. Increase in corporate tax may increase the dividend payout ratio and decrease in corporate tax may decrease in dividend payout ratio. The value .220 shows a small correlation.

5.4.8 Dividend Payout Ratio and Corporate Tax in BPCL

Bharat Petroleum Corporation limited is leading public sector company chosen for analytical study for variables in to consideration. To establish the relation between dividend and its association with the corporate tax the data is collected.

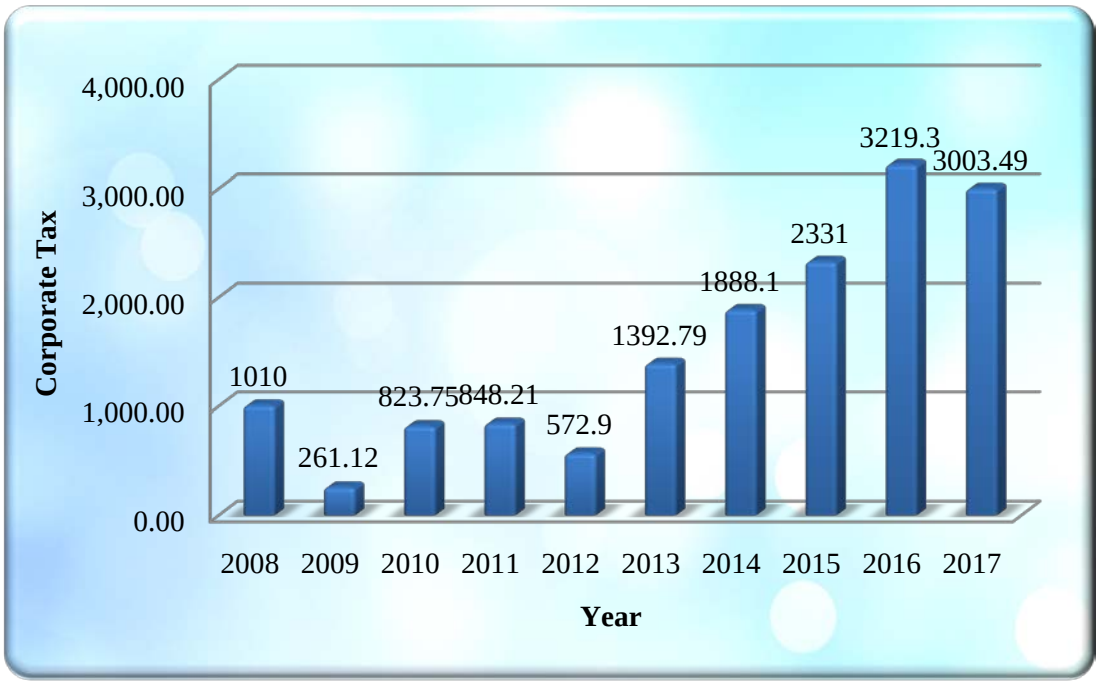
With the help of secondary sources the annual figures for dividend payout ratio and corporate tax is collected and tabulated year wise.

Table 16: Dividend Payout Ratio for Past 10 Years for BPCL

Year	DPR	Corporate Tax
2008	20.4	1,010.00
2009	22.8	261.12
2010	15.5	823.75
2011	31	848.21
2012	31	572.9
2013	64.8	1,392.79
2014	21.1	1,888.10
2015	20.3	2,331.00
2016	25.6	3,219.30
2017	34.9	3,003.49

As shown in the table the corporate tax paid by the company is varied relatively in past 10 years. Starting from 2008 when the amount was 1010 cr came down to 261 Cr in 2009. Fluctuating which almost 400% this raised at to 823 CR in 2010. The corporate tax paid by the company is continuously shown an increasing trend. From 2011 the amount is increased to 848 cr which decrease to and 572 cr in 2012.

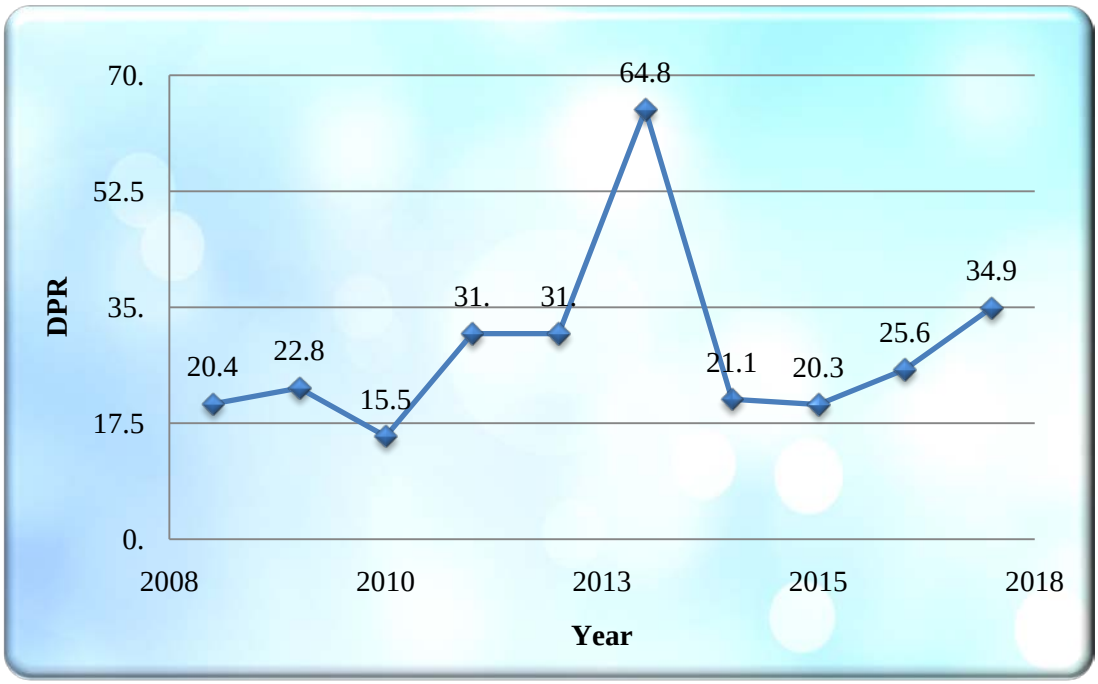
In 2013 the corporate tax decreased to 1392 and again increased to 1888 cr in 2014 and stand at 2331 in 2015. In 2016 the company paid corporate tax of 3219 crore and latest in 2017 the amount was 3003cr.



Graph 7: Corporate Tax for Past 10 Years for BPCL

5.4.9 Dividend Payout Ratio of Bharat Petroleum Corporation Limited

An analytical study of companies financial document reveal that the company announced the dividend from past 10 years and amount is varied every year. This showed a random trend in terms of values. The dividend payout ratio is calculated with the help of amount of dividend declared per share and number of share present in the market. The value received are tabulated and used for further analytic inferences in the study.



Graph 8: DPR for Past 10 Years for BPCL

The figure out shows that from 2008, on a continuous basis the company announced dividend. The dividend payout ratio is calculated with the help of the amount of dividend declared and number of shares flair in the market. DPR is valued 34.9 % in 2017 and 25.6% in 2016. This was slightly high than 21.1 and 20.3 % in 2014 and 2015 respectively. In 2013 the dividend payout ratio was at highest 64.8% in the past 10 year history. In 2012 and 2011 the dividend payout ratio remain same 31%. In 2009 the dividend payout ratio was 22.8 % which was decreased to 15.5% in 2010.

5.4.10 Correlation between Corporate Tax and Dividend Payout Ratio in BPCL

Table 17: Descriptive Statistics of BPCL

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Corporate_ Tax_BPCL	10	261.12	3219.30	1535.0660	1031.36573	1063715.261
DRP_BPCL	10	15.50	64.80	28.7400	14.01620	196.454
Valid N (listwise)	10					

Table 18: Correlations Coefficients of BPCL

Correlations		DRP_BPCL	Corporate_Tax_BPCL
DRP_BPCL	Pearson Correlation	1	.053
	Sig. (2-tailed)		.885
	N	10	10
Corporate_ Tax_BPCL	Pearson Correlation	.053	1
	Sig. (2-tailed)	.885	
	N	10	10

The values for both the variables are collected and feeded in SPSS 23.0 version. Descriptive analysis of the data is calculated which included mean, standard deviation, maximum and minimum value for both the variables. N denote the number of cases in to consideration, which stand at a value ten, denoting last ten years. The minimum value for dividend payout ratio was 15.5 % and the maximum value of dividend payout ratio is 64.8 %. Standard deviation calculated was 14.016 %.

The value for Pearson correlation coefficient is 0.053, which shows that the corporate tax and dividend payout policy are very slightly positively correlate with each other. Increase in corporate tax may increase the dividend payout ratio and decrease in corporate tax may decrease in dividend payout ratio. The value .053 shows a small correlation.

5.4.11 Dividend Payout Ratio and Corporate Tax in Cairn Energy

Cairn Energy limited is leading company in oil and gas sector in India. The company chosen for analytical study for variables in to consideration. To establish the relation between dividend and its association with the corporate tax the data is collected.

With the help of secondary sources the annual figures for dividend payout ratio and corporate tax is collected and tabulated year wise.

Table 19: Dividend payout ratio and corporate tax in Cairn Energy

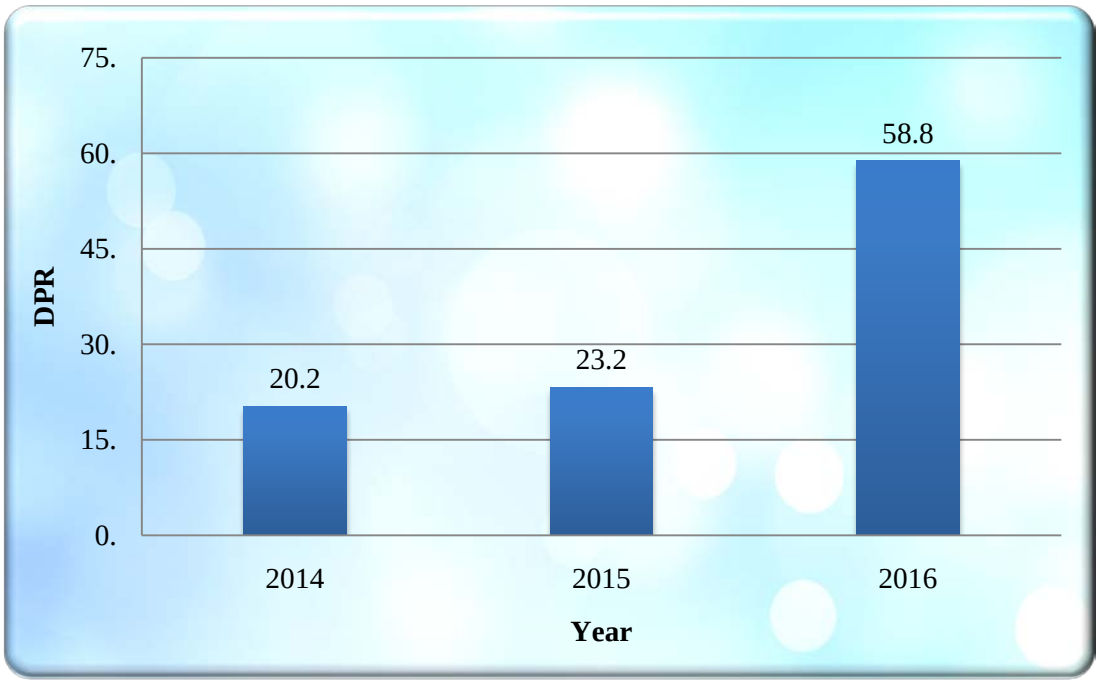
Year	Corporate Tax	DPR
2008	0	
2009	32.05	
2010	57.83	
2011	4.4	
2012	0	
2013	3.54	
2014	264.45	20.2
2015	321.12	23.2
2016	274.33	58.8
2017	39.78	

As shown in the table the corporate tax paid by the company is varied relatively in past 10 years. Starting from 2009 when the amount was 32.05 cr increase to 57.83 Cr in 2010. Fluctuating highly this decrease to only 4.4 CR in 2011. The corporate tax paid by the company is was 0 in year 2012 and From 2013 the amount is increased to 3.54 cr, which increase to and 264.45 in cr in 2014, 321 in 2015, 274 in 2016 and 39.78 in 2017.

Graph 9: Corporate tax in Cairn Energy

5.4.12 Dividend Payout Ratio of Cairn Energy Limited

An analytical study of companies financial document reveal that the company announced the dividend only three times in past 10 years. This showed a random trend in terms of values. The dividend payout ratio is calculated with the help of amount of dividend declared per share and number of share present in the market. The value received are tabulated and used for further analytic inferences in the study.



Graph 10: Dividend Payout Ratio of Cairn Energy Limited

The dividend payout ratio is calculated with the help of the amount of dividend declared and number of shares flair in the market. DPR is valued 20.2% in 2014 and 23.2% in 2015. In 2016 the company's dividend payout ratio was 58.8%.

5.4.13 Correlation between corporate tax and dividend payout ratio in Cairn Energy

Table 20: Descriptive Statistics - Cairn Energy

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Corporate_tax_Cairn	10	.00	321.12	99.7500	131.14624	17199.337
DPR_Cairn_Energy	10	0	59	10.22	19.320	373.248
Valid N (listwise)	10					

Table 21: Correlations - Cairn Energy

Correlations		Corporate_tax_Cairn	DPR_Cairn_Energy
Corporate_tax_Cairn	Pearson Correlation	1	.821**
	Sig. (2-tailed)		.004
	N	10	10
DPR_Cairn_Energy	Pearson Correlation	.821**	1
	Sig. (2-tailed)	.004	
	N	10	10

***. Correlation is significant at the 0.01 level (2-tailed).*

The values for both the variables are collected and feeded in SPSS 23.0 version. Descriptive analysis of the data is calculated which included mean, standard deviation, maximum and minimum value for both the variables. N denote the number of cases in to consideration, which stand at a value ten, denoting last ten years. The minimum value for dividend payout ratio was 20.2% and the maximum value of dividend payout ratio is 58.8 %. Standard deviation calculated was 19.32%.

The value for Pearson correlation coefficient is 0.81, which shows that the corporate tax and dividend payout policy are very positively correlate with each other. Increase in corporate tax may increase the dividend payout ratio and decrease in corporate tax may decrease in dividend payout ratio.

5.5 DIVIDEND POLICY AND SALES GROWTH

To establish the relation between sales growth and dividend policy, several letarture has been reviewed. In is study Higgins (1972) concluded that for growth of sales, the form need more money and expense increase. For the same reason this effect the dividend payout and indirectly relate to the sales growth.

In another study Ahmed and Javid (2012) describe that the company with higher sales growth pays less dividend as compared to companies with stagnant growth rate and opportunities. The firm have two option for the profit earned. Either they distribute the same as dividend to shareholders or invest the same in expansion of business. Al-Kuwari (2009) conclude that the company with high sales growth pay less dividend and invest profit in expansion of business.

Analysis Technique

To identify the association and impact of dependent variable corporate tax on dividend payout ratio, which is considered as independent variable in the study, Pearson correlation is used. This analytical study is based on finding a relation between two variable. This is done with the help of considering number of cases on a scale. The mean value of the both variable are identified and standard deviation, which is deviation of observed value from the mean value is calculated.

The pattern of deviation from the mean is analyzed to establish the relation between the two variable with the help of Pearson correlation coefficient method.

The Pearson product-moment correlation coefficient (or Pearson correlation coefficient, for short) is a measure of the strength of a linear association between two variables and is denoted by *r*. Basically, a Pearson product-moment correlation attempts to draw a line of best fit through the data of two variables, and the Pearson correlation coefficient, *r*, indicates how far away all these data points are to this line of best fit (i.e., how well the data points fit this new model/line of best fit).

The Pearson correlation coefficient, *r*, can take a range of values from +1 to -1. A value of 0 indicates that there is no association between the two variables. A value greater than 0 indicates a positive association; that is, as the value of one

variable increases, so does the value of the other variable. A value less than 0 indicates a negative association; that is, as the value of one variable increases, the value of the other variable decreases.

The stronger the association of the two variables, the closer the Pearson correlation coefficient, *r*, will be to either +1 or -1 depending on whether the relationship is positive or negative, respectively. Achieving a value of +1 or -1 means that all your data points are included on the line of best fit – there are no data points that show any variation away from this line. Values for *r* between +1 and -1 (for example, *r* = 0.8 or -0.4) indicate that there is variation around the line of best fit. The closer the value

5.5.1 Sales Growth and Dividend Payout Ratio of ONGC

Sales is the only revenue generating variable for a company and ultimate interest for all the business operation. The dividend assumed to pay a strong and positive association with the dividend declaration as the confidence of the investor grows creates many positive variable for the company. The brand name grows, word of mouth create a publicity in the market, Competitive position become more strong. To identify how stock price reacts with decoration of dividend, the data for sales growth for last ten years is collected and analysed from reliable sources, majority annul books and reports of the company. The same run parallel with the dividend payout for subsequent years by applying Pearson correlation analysis technique and the value for correlation coefficient is calculated to find our the association between dividend payout and stock price.

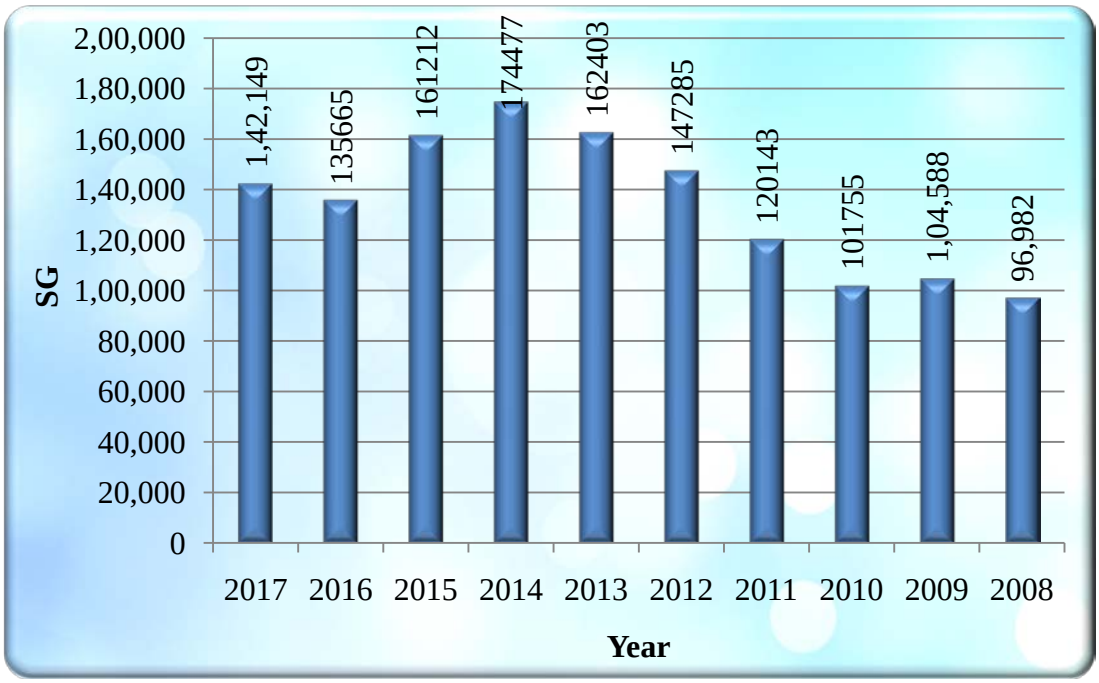
A. Descriptive analysis of Sales growth of ONGC from past years.

A descriptive analysis of sales of company from past ten years is done. The maximum sales is recorded in year 2017 valued 1,42,149 and minimum sales was recorded in year 2008, when it was valued 96,982 cr. The mean of sales for last ten year is calculated as 1,34,665 with a standard deviation of 76.70.

Table 22: Dividend Payout Ratio for Past 10 Years for ONGC

Year	Dividend Payout Ratio (In %)	Sales Growth
2017	54.3	1,42,149
2016	55.5	135665
2015	44.3	161212
2014	30.7	174477
2013	33.6	162403
2012	33.3	147285
2011	39.55	120143
2010	42.09	101755
2009	42.44	1,04,588
2008	40.98	96,982

Graph 11: Dividend Payout Ratio for Past 10 Years for ONGC



Graph 12: Sales Growth for Past 10 Years for ONGC

Table 23: Descriptive Statistics - ONGC

	N	Minimum	Maximum	Mean	Std. Deviation
Sales_ONGC	10	96982.00	174477.00	134665.8000	27676.70270
Valid N (listwise)	10				

B. Pearson correlation analysis between sales growth and dividend-ONGC

The relation between two variable is established using calculation of Pearson correlation coefficient. Data for both the variable are recorded and run for the statistical analysis and value of Pearson coefficient is calculated as .594 at a significance level of .05%.

Table 24: Correlations - ONGC

		Div_Pay_Ratio	Sales_ONGC
Div_Pay_Ratio	Pearson Correlation	1	.594
	Sig. (2-tailed)		.070
	N	10	10
Sales_ONGC	Pearson Correlation	.594	1
	Sig. (2-tailed)	.070	
	N	10	10

C. Statistical inferences.

The values for both the variable are collected and feeded in SPSS 23.0 version. Descriptive analysis for both the variable is calculated which include mean, standard deviation, variance, maximum and minimum value. N denote the number of cases considered which was 10, which was ten years for both the variable. The minimum value for dividend payout ratio is 30.70% and maximum value is 55.5-%. Standard deviation found is 76.70. Sales the minimum value is 96,982 and maximum value is 174477. The value for Pearson correlation coefficient is 0.594 which shows the dividend payout policy and corporate are positively correlate with each other.

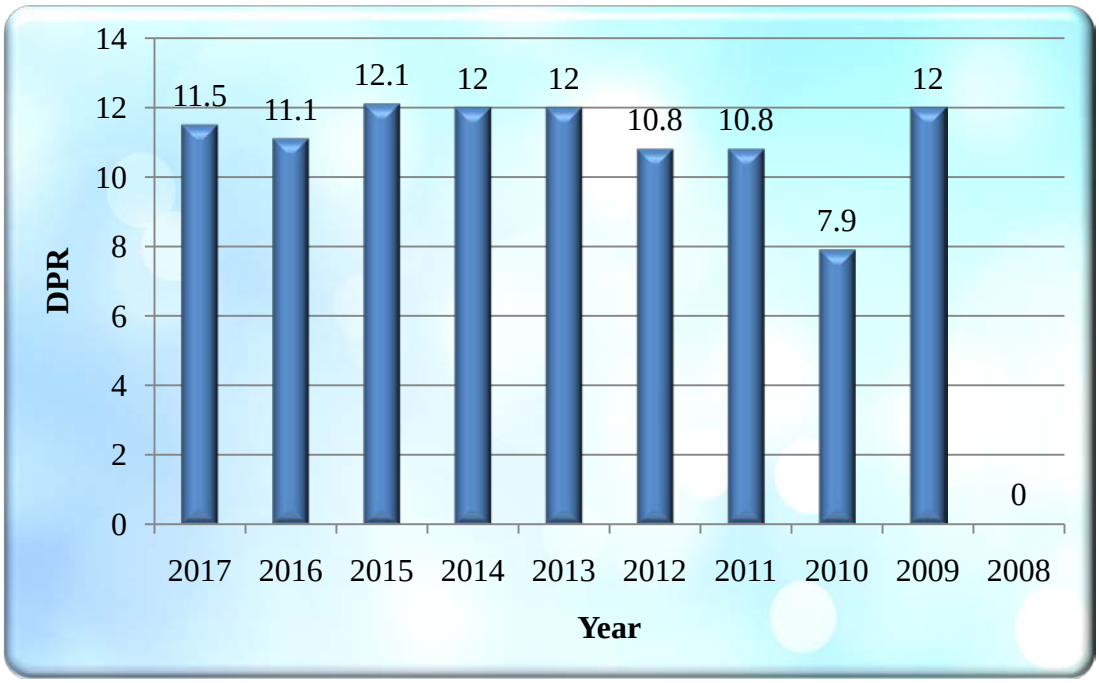
5.5.2 Sales Growth and Dividend Payout Ratio of Reliance

A. Descriptive analysis of sales growth of Reliance from past years.

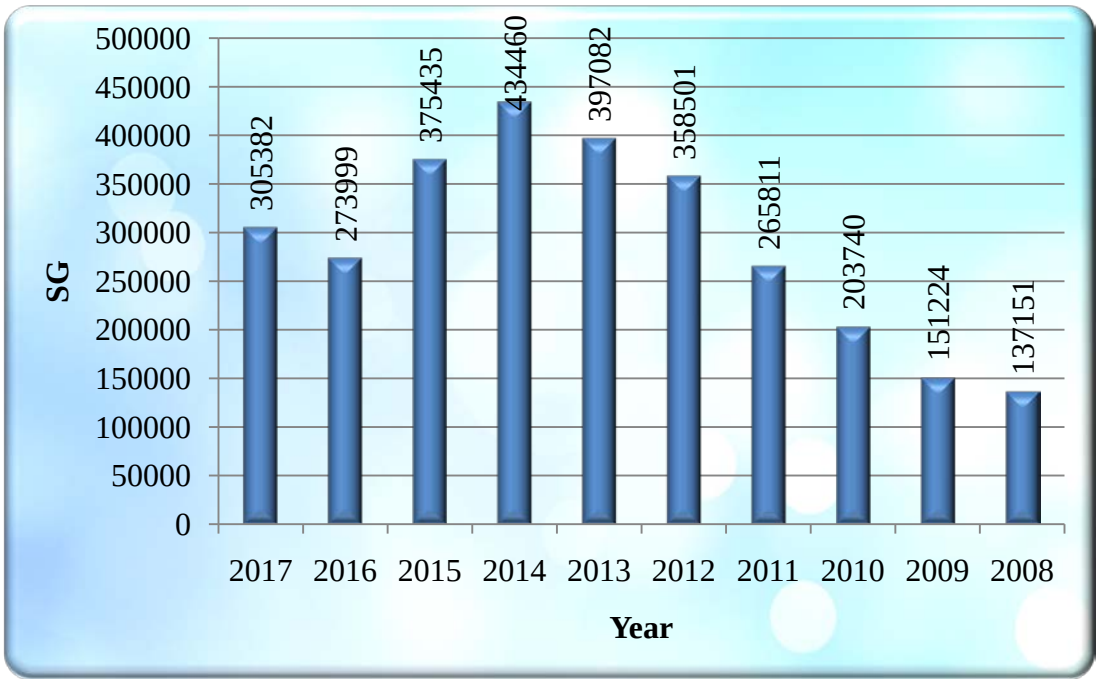
A descriptive analysis of sales of company from past ten years is done. The maximum sales is recorded in year 2014 valued 4,34,460 and minimum sales was recorded in year 2008, when it was valued 1,37,151 crore. The mean of sales for last ten year is calculated as 290278 with a standard deviation of 1,02,991.

Table 25: Dividend Payout Ratio for Past 10 Years for Reliance

Year	DPR	Corporate tax	Total Sales
2017	11.5	9,352.00	305382
2016	11.1	8,284.00	273999
2015	12.1	6,749.00	375435
2014	12	5,834.00	434460
2013	12	5,281.00	397082
2012	10.8	5,710.00	358501
2011	10.8	4,956.00	265811
2010	7.9	4,324.97	203740
2009	12	3,137.34	151224
2008	0	3,559.85	137151



Graph 13: Dividend Payout Ratio for Past 10 Years for Reliance



Graph 14: Sales Growth for Past 10 Years for Reliance

Table 26: Descriptive Statistics - Reliance

	N	Minimum	Maximum	Mean	Std. Deviation
Sales_Reiamce	10	137151.00	434460.00	290278.5000	102991.97658
Valid N (listwise)	10				

B. Pearson correlation analysis between sales growth and dividend-Reliance

Table 27: Correlations - Reliance

		DPR_Reliance	Sales_Reliance
DPR_Reliance	Pearson Correlation	1	-.407
	Sig. (2-tailed)		.276
	N	9	9
Sales_Reiamce	Pearson Correlation	-.407	1
	Sig. (2-tailed)	.276	
	N	9	10

C. Statistical inferences.

The values for both the variable are collected and feeded in SPSS 23.0 version. Descriptive analysis for both the variable is calculated which include mean, standard deviation, variance, maximum and minimum value. N denote the number of cases considered which was 10, which was ten years for both the variable. The minimum value for dividend payout ratio is 30.70% and maximum value is 55.5-%. Standard deviation found is 76.70. Sales the minimum value is 96,982 and maximum value is 1,74,477. The value for Pearson correlation coefficient is 0.594 which shows the dividend payout policy and corporate are positively correlate with each other.

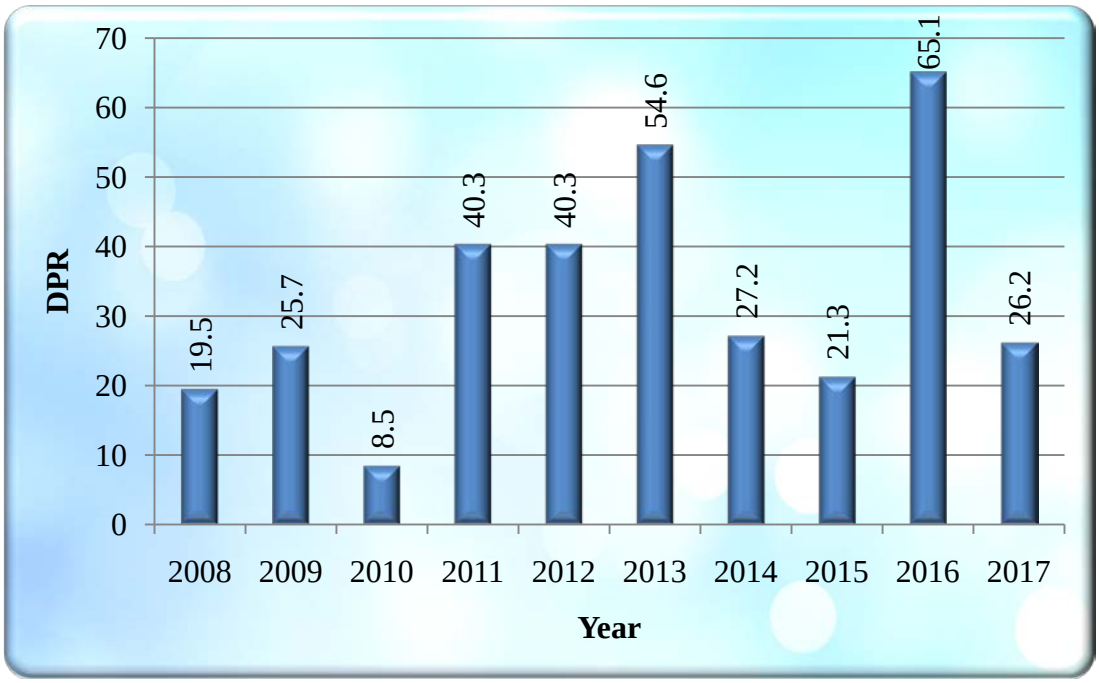
5.5.3 Sales Growth and Dividend Payout Ratio of Indian Oil

A. Descriptive analysis of Sales growth of Indian Oil from past years.

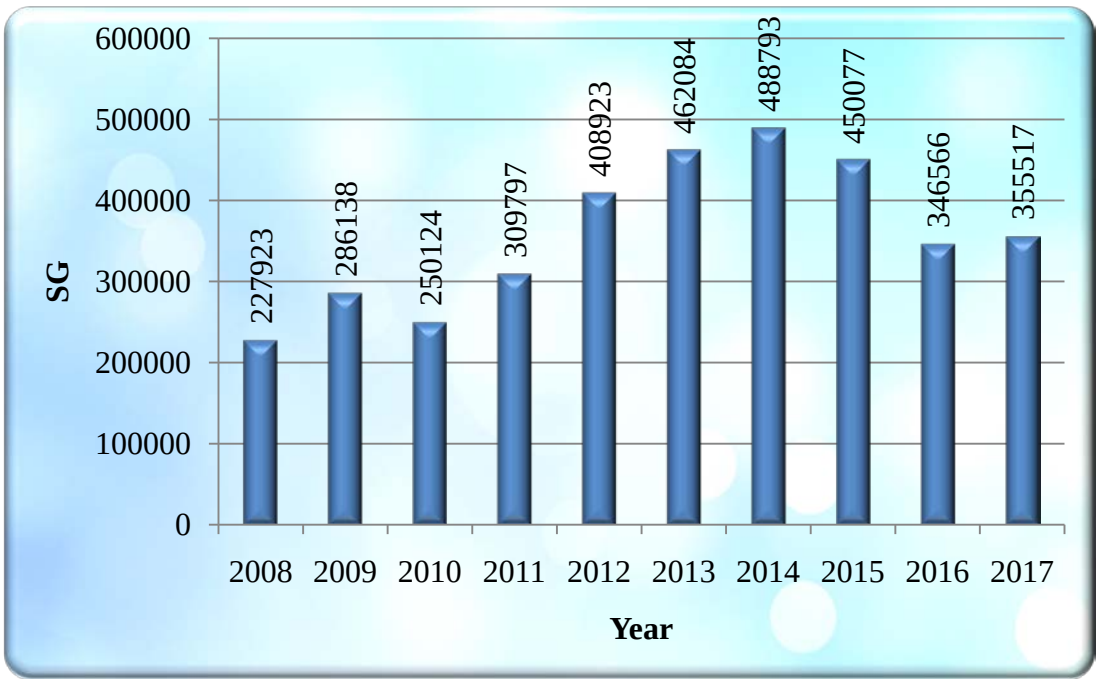
A descriptive analysis of sales of company from past ten years is done. The maximum sales is recorded in year 2014 valued 4,88,793 and minimum sales was recorded in year 2008, when it was valued 2,27,923 crore. The mean of sales for last ten year is calculated as 3,58,594with a standard deviation of 2.60.

Table 28: Dividend Payout Ratio and Sales Growth in Indian Oil for 10 Years

Year	DPR	Sales
2008	19.5	227923
2009	25.7	286138
2010	8.5	250124
2011	40.3	309797
2012	40.3	408923
2013	54.6	462084
2014	27.2	488793
2015	21.3	450077
2016	65.1	346566
2017	26.2	355517



Graph 15: Dividend Payout Ratio in Indian Oil for 10 Years



Graph 16: Sales Growth in Indian Oil for 10 Years

Table 29: Descriptive Statistics - IOCL

	N	Minimum	Maximum	Mean	Std. Deviation
Sales_Indian_Oil	10	227923.00	488793.00	358594.2000	91402.60039
Valid N (listwise)	10				

B. Pearson correlation analysis between sales growth and dividend- Indian Oil

Sales and Dividend payout ratio are tested for a probable co-rrelation with each other. The value for correlation coefficient is calculated as 0.056 and cases consider are 10.

Table 30: Correlations - IOCL

		DPR_Indian_Oil	Sales_Indian_Oil
DPR_Indian_Oil	Pearson Correlation	1	.056
	Sig. (2-tailed)		.877
	N	10	10
Sales_Indian_Oil	Pearson Correlation	.056	1
	Sig. (2-tailed)	.877	
	N	10	10

****The correlation table is generated form SPSS*

C. Statistical inferences.

The values for both the variables are collected and feeded in SPSS 23.0 version. Descriptive analysis of the data is calculated whicn included mean, standard deviation, maximum and minimum value for both the variables. N denote the number of cases in to consideration, which stand at a value ten, denoting last ten years. The minimum value for dividend payout ratio was 8.5% and the maximum value of dividend payout ratio is 65. 10%. Standard deviation calculated was 17.17%.

The value for Pearson correlation coefficient is 0.056, which shows that the sales and dividend payout policy are positively co relate with each other.

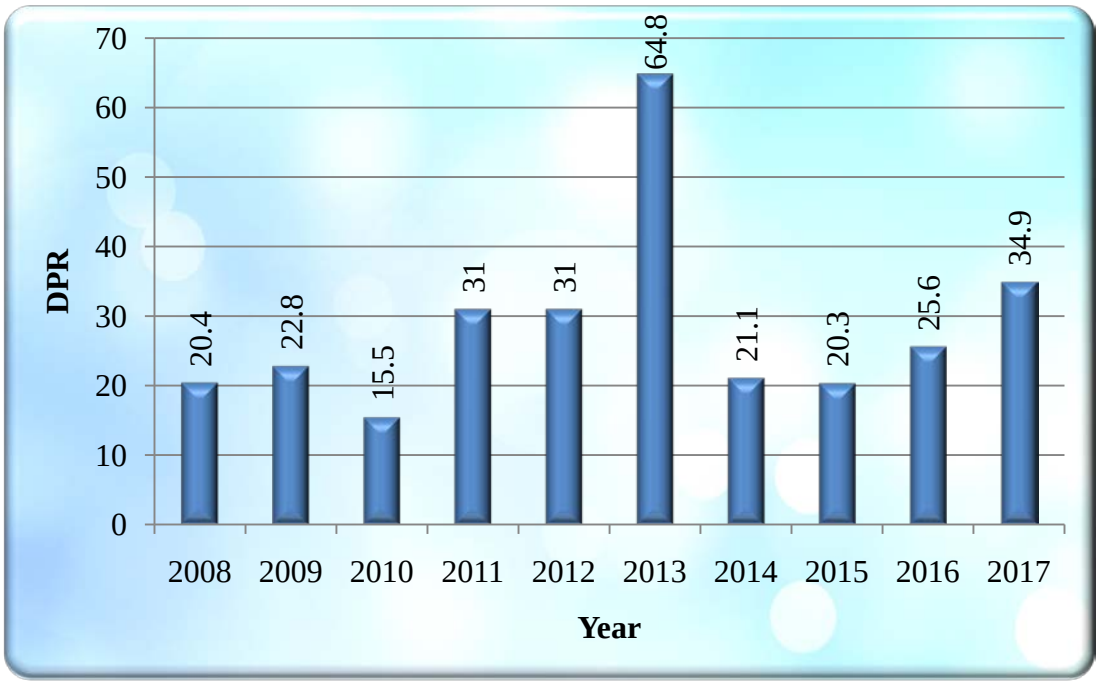
5.5.4 Sales Growth and Dividend Payout Ratio of BPCL

A. Descriptive analysis of Sales growth of BPCL from past years.

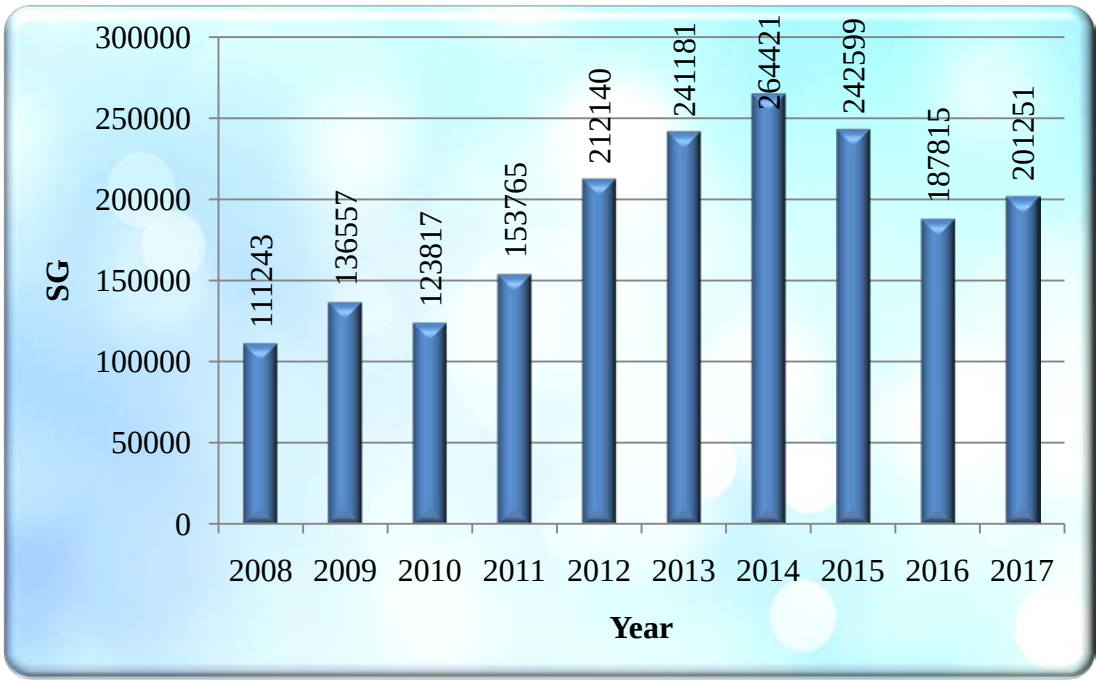
A descriptive analysis of sales of company from past ten years is done. The maximum sales is recorded in year 2014 valued 2,64,421 and minimum sales was recorded in year 2008, when it was valued 1,11,243 crore.

Table 31: Dividend Payout Ratio and Sales Growth in BPCL for 10 Years

Year	DPR	Corporate Tax	Sales
2008	20.4	1,010.00	111243
2009	22.8	261.12	136557
2010	15.5	823.75	123817
2011	31	848.21	153765
2012	31	572.9	212140
2013	64.8	1,392.79	241181
2014	21.1	1,888.10	264421
2015	20.3	2,331.00	242599
2016	25.6	3,219.30	187815
2017	34.9	3,003.49	201251



Graph 17: Dividend Payout Ratio in BPCL for 10 Years



Graph 18: Sales Growth in BPCL for 10 Years

Table 32: Descriptive Statistics - BPCL

	N	Minimum	Maximum	Mean	Std. Deviation
DRP_BPCL	10	15.50	64.80	28.7400	14.01620
Valid N (listwise)	10				

B. Pearson correlation analysis between sales growth and dividend- BPCL

The correlation between dividend payout ration and sales of the company is established using Pearson correlation coefficient. The test is rum for data recorded for both the variable for past ten years.

Table 33: Correlations - BPCL

		DRP_BPCL	Sales_BPCL
DRP_BPCL	Pearson Correlation	1	.121
	Sig. (2-tailed)		.739
	N	10	10
Sales_BPCL	Pearson Correlation	.121	1
	Sig. (2-tailed)	.739	
	N	10	10

C. Statistical inferences

The values for both the variables are collected and feeded in SPSS 23.0 version. Descriptive analysis of the data is calculated which included mean, standard deviation, maximum and minimum value for both the variables. N denote the number of cases in to consideration, which stand at a value ten, denoting last ten years. The minimum value for dividend payout ratio was 15.5 % and the maximum value of dividend payout ratio is 64.8 %. Standard deviation calculated was 14.016 %.

The value for Pearson correlation coefficient is 0.121, which shows that the sales and dividend payout policy are very slightly positively correlate with each other. Increase in dividend may increase the dividend payout ratio and decrease in dividend may decrease in sales.

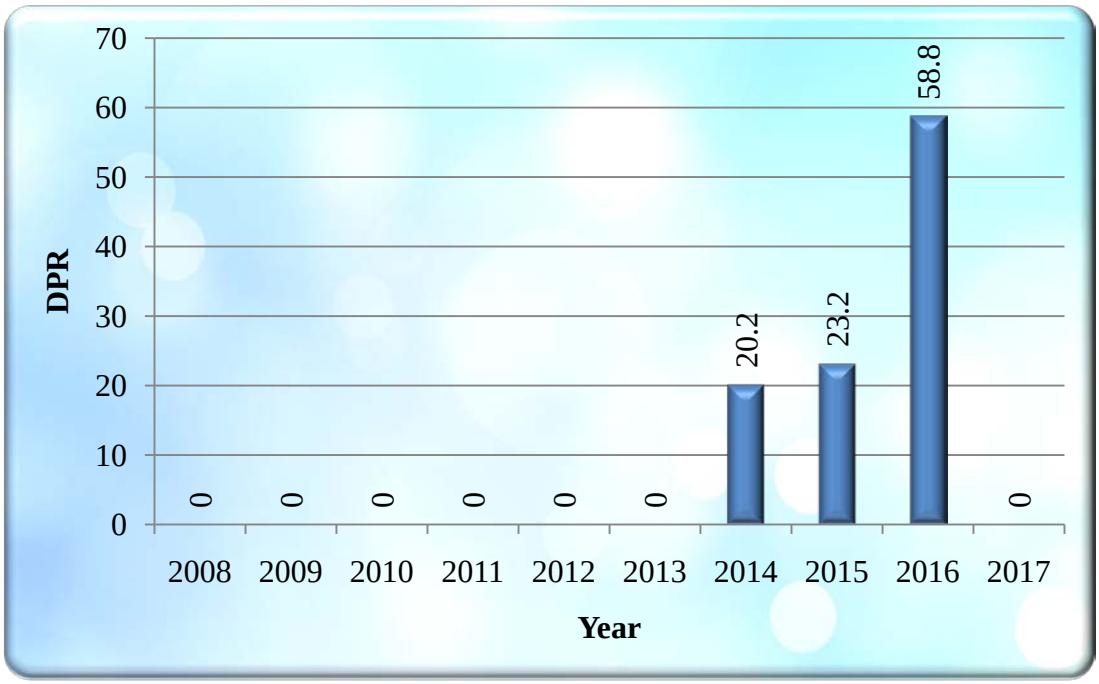
5.5.5 Sales Growth and Dividend Payout Ratio of Cairn Energy

A. Descriptive analysis of Sales growth of CAIRN ENERGY from past years.

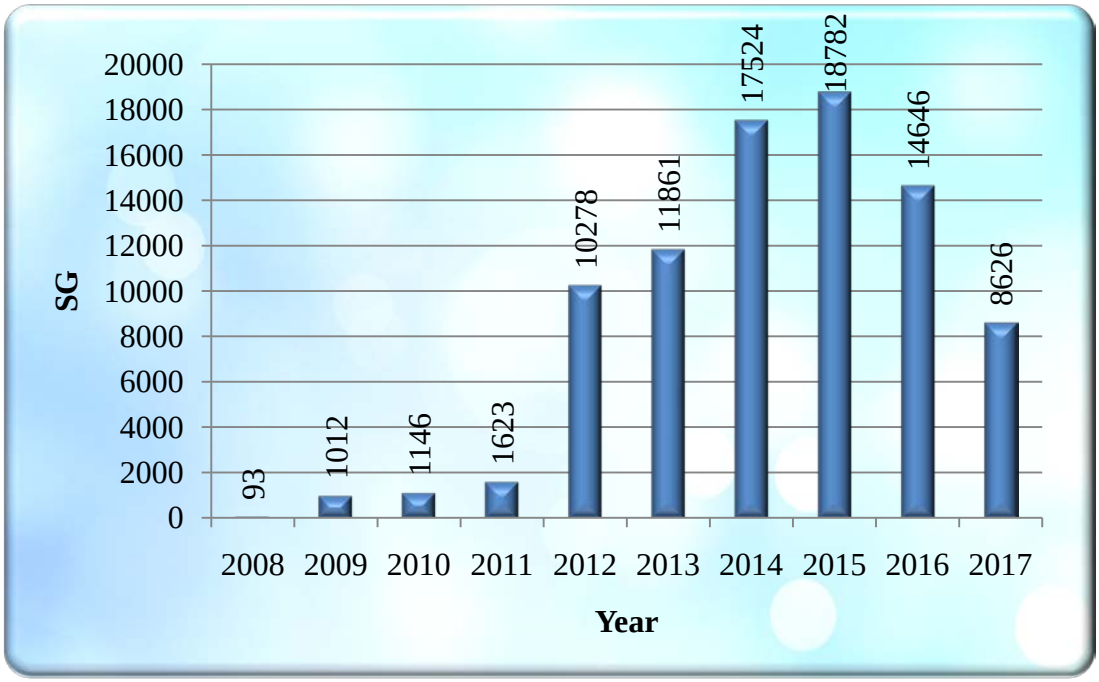
A descriptive analysis of sales of company from past ten years is done. The maximum sales is recorded in year 2015 valued 18,782 and minimum sales was recorded in year 2008, when it was valued 93 crore. The mean of sales for last ten year is calculated as 559.0 with a standard deviation of 7.14.

Table 34: Dividend Payout Ratio and Sales Growth in Cairn Energy for 10 Years

Year	DPR	Sales
2008	0	93
2009	0	1012
2010	0	1146
2011	0	1623
2012	0	10278
2013	0	11861
2014	20.2	17524
2015	23.2	18782
2016	58.8	14646
2017	0	8626



Graph 19: Dividend Payout Ratio in Cairn Energy for 10 Years



Graph 20: Sales Growth in Cairn Energy for 10 Years

Table 35: Descriptive Statistics - Cairn Energy

	N	Minimum	Maximum	Mean	Std. Deviation
Sales_Cairn	10	93.00	18782.00	8559.1000	7207.14311
Valid N (listwise)	10				

B. Pearson correlation analysis between sales growth and dividend-CAIRN ENERGY

The correlation between dividend payout ration and sales of the company is established using Pearson correlation coefficient. The test is rum for data recorded for both the variable for past ten years.

Table 36: Correlations - Cairn Energy

		DPR_Cairn_Energy	Sales_Cairn
DPR_Cairn_Energy	Pearson Correlation	1	-.603
	Sig. (2-tailed)		.065
	N	10	10
Sales_Cairn	Pearson Correlation	-.603	1
	Sig. (2-tailed)	.065	
	N	10	10

C. Statistical inferences.

The values for both the variables are collected and feeded in SPSS 23.0 version. Descriptive analysis of the data is calculated which included mean, standard deviation, maximum and minimum value for both the variables. N denote the number of cases in to consideration, which stand at a value ten, denoting last ten years. The minimum value for dividend payout ratio was 20.2 % and the maximum value of dividend payout ratio is 58.8 %. Standard deviation calculated was 19.32 %.

The value for Pearson correlation coefficient is -0.603 , which shows that the sale and dividend payout policy are slightlynegatively correlating in this company. Increase in dividend may decrease the sales and decrease in dividend decrease may increase the sales.

5.6 IMPACT OF DIVIDEND ON STOCK PRICES

Dividend remain a very important facor from investor point and majorly everyone is eyer companies and stocks, which keep on declaign dividend in stock exchanges. Oil and Gas being a vru promonent and important part of the India economy, companies remain successful in gaining the trust of investor and supporting the same, kept on declaring dividend as well.

5.6.1 Methodology

The study Endeavour to find out the impact of dividend decollation and dividend payout policies on stock prices. This become a major objective in the study. for a detailed analysis, the study is conducted for every company in to consideration. As the stock price are driven sentiment in the market, the impact is immediate. The analytical study is done for major companies in oil and gas industry in India and dividend declaration date from past 10 years is documented. With the help of secondary data available on reliable sources, the stock price of immediate previous trading day of declaration of dividend is recorded. This is data is tabulated for past ten years for final declared dividend dates.

To take the study for further execution, the stock price of next trading date after declaring of dividend is recorded for last 10 years. The same is tabulate analysed with paired sample t-test.

Paired sample t- Test

Paired sample t-test can used to examine if the there is a difference in mean between two set of observation. Each subject is measure twice, which result in pair of observation anf hence this is also called as paired sample t-test. This is used in before and after studies which have case control ore repeated measure design. In this approach the impact or effect of any external stimulus can measured by calculating the values of the set before and after the application of external factor.

In a quest to determine the impact of dividend on stick price, we have to set of observation of stock price, which is before and after declaration of dividend. The

mean of both the observation is calculated and observed with the help of spss 23.0 version.

Like many statistical procedures, the paired sample *t*-test has two competing hypotheses, the null hypothesis and the alternative hypothesis. The null hypothesis assumes that the true mean difference between the paired samples is zero. Under this model, all observable differences are explained by random variation. Conversely, the alternative hypothesis assumes that the true mean difference between the paired samples is not equal to zero. The alternative hypothesis can take one of several forms depending on the expected outcome. If the direction of the difference does not matter, a two-tailed hypothesis is used. Otherwise, an upper-tailed or lower-tailed hypothesis can be used to increase the power of the test. The null hypothesis remains the same for each type of alternative hypothesis. The paired sample *t*-test hypotheses are formally defined below:

- The null hypothesis ($H0$) assumes that the true mean difference (μd) is equal to zero and dividend has no impact of stock prices.
- The two-tailed alternative hypothesis ($H1$) assumes that μd is not equal to zero and dividend has an impact of share price

The mathematical representations of the null and alternative hypotheses are defined below:

- $H0$: $\mu d = 0$
- $H1$: $\mu d \neq 0$ (two-tailed)

D	=	Differences between two paired samples
di	=	The *ith* observation in D
n	=	The sample size
d	=	The sample mean of the differences
σ^	=	The sample standard deviation of the differences
T	=	The critical value of a *t*-distribution with $(n - 1)$ degrees of freedom
t	=	The *t*-statistic (*t*-test statistic) for a paired sample *t*-test
p	=	The *p*-value (probability value) for the *t*-statistic.

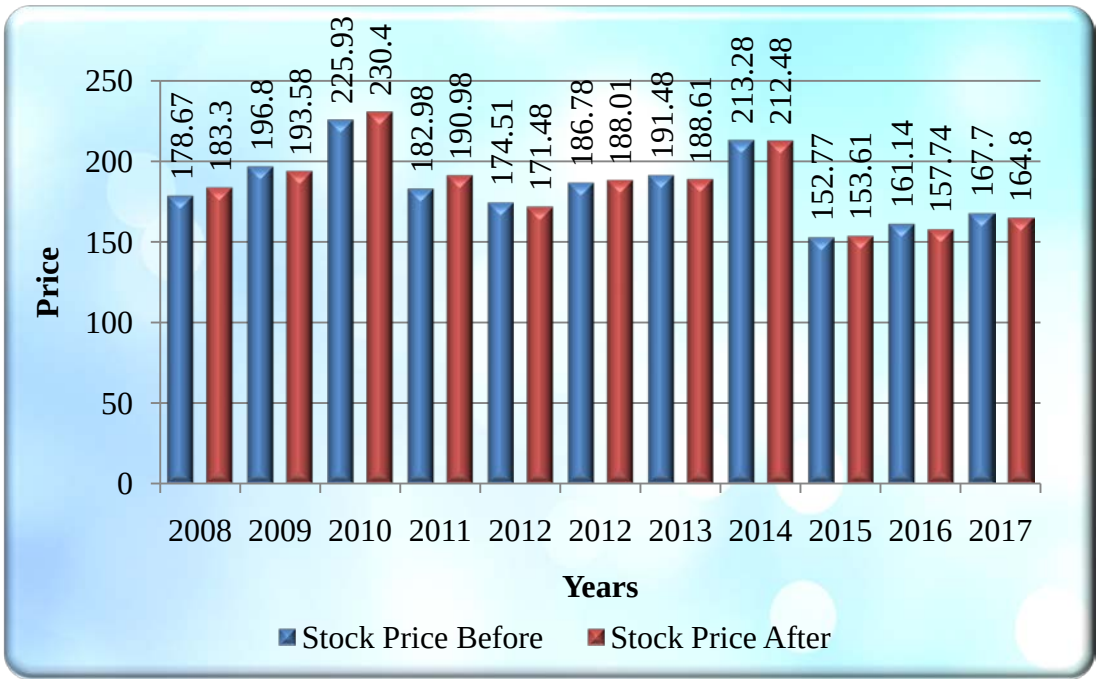
Statistical significance is determined by looking at the *p*-value. The *p*-value gives the probability of observing the test results under the null hypothesis. The lower the *p*-value, the lower the probability of obtaining a result like the one that was observed if the null hypothesis was true. Thus, a low *p*-value indicates decreased support for the null hypothesis. However, the possibility that the null hypothesis is true and that we simply obtained a very rare result can never be ruled out completely. The cutoff value for determining statistical significance is ultimately decided on by the researcher, but usually a value of .05 or less is chosen. This corresponds to a 5% (or less) chance of obtaining a result like the one that was observed if the null hypothesis was true.

5.6.2 Stock Price Movement and Dividend Impact in ONGC

Oil and Natural Gas Corporation is one of the much esteemed stock listed on BSE and NSE stock exchanges in India. The stock is trading from a long time but for analytical. The data for ten year of dividend along with the stock price before and after the dividend is tabulated as under.

Table 37: Stock Price movement and dividend impact in ONGC

Dividend Declare Date	Stock Price Before	Stock Price After
08/09/2008	178.67	183.3
11/09/2009	196.8	193.58
09/09/2010	225.93	230.4
18/08/2011	182.98	190.98
06/01/2012	174.51	171.48
14/09/2012	186.78	188.01
19/09/2013	191.48	188.61
27/03/2014	213.28	212.48
07/09/2015	152.77	153.61
31/08/2016	161.14	157.74
21/09/2017	167.7	164.8



Graph 21: Stock Price movement and dividend impact in ONGC

Table 38: Paired Samples Statistics - ONGC

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Price_Before	184.7309	11	21.72597	6.55063
	Price_After	184.9991	11	22.95635	6.92160

Table 39: Paired Samples Correlations - ONGC

		N	Correlation	Sig.
Pair 1	Price_Before & Price_After	11	.986	.000

Table 40: Paired Samples Test - ONGC

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Price_Before - Price_After	-.26818	3.94007	1.18798	-2.91516	2.37879	-.226	10	.826

The mean value for stock price of ONGC before and after declaration of dividend is calculated. The mean value for stock price for last ten year is 184.79 which was slightly less than the mean value calculated after declaration of dividend 184.99.

The p=Value is .826 is greater than critical p value 0.05, which shows that the dividend has an influence on stock prices.

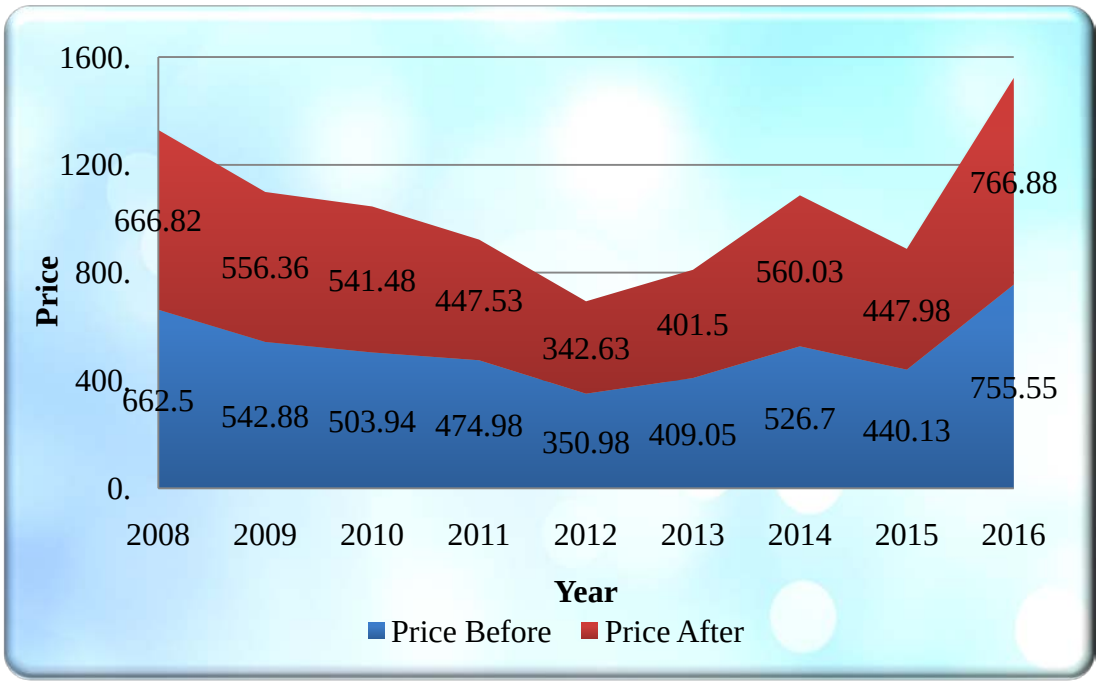
5.6.3 Stock Price movement and dividend impact in Reliance Industries

The reliance industries stock price from past 10 years is analysed from secondry sources. The final dividend declaration dates are identified and the stock price for before and after the decoration of dividend is tabulated as under.

A. Descriptive Analysis of Stock price movement and dividend declaration- Reliance industries

Table 41: Stock Price movement and dividend impact in Reliance Industries

Dividend Declaration Date	Price before declaration	Price after declaration
08/05/2008 12:00 AM	662.5	666.82
16/10/2009 12:00 AM	542.88	556.36
10/05/2010 12:00 AM	503.94	541.48
05/05/2011 12:00 AM	474.98	447.53
31/05/2012 12:00 AM	350.98	342.63
10/05/2013 12:00 AM	409.05	401.5
16/05/2014 12:00 AM	526.7	560.03
08/05/2015 12:00 AM	440.13	447.98
13/07/2017 12:00 AM	755.55	766.88



Graph 22: Stock Price movement and dividend impact in Reliance Industries

B. Compare of Mean for Reliance Industries

Table 42: Paired Samples Statistics - Reliance

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Price_Before	518.5233	9	125.43944	41.81315
	Price_After	525.6900	9	133.01384	44.33795

Table 43: Paired Samples Test - Reliance

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Price_Before - Price_After	-7.16667	20.39756	6.79919	-22.84562	8.51228	-1.054	8	.323

Table 44: Paired Samples Correlations - Reliance

		N	Correlation	Sig.
Pair 1	Price_Before & Price_After	9	.989	.000

C. *Statistical Inferences*

The number of year considered in the descriptive analysis for reliance industries are 9. The stock price before and after is considered to makemake a pair of observation and the data tabulated is analysed using paired sample t-test. The mean value for stock price before the declaration of dividend is calculated as 518.52 and mean value after declaration of dividend is calculated as 525.69.

Standard deviation for the study was 125.43 for price before dividend declaration and 133.01 for price after declaration of dividend.

The calculated p-value is 0.3 which is greater than the standard p value 0.05, make us conclude that the dividend have an impact on stock market price and reject null hypothesis states there is not impact of dividend declaration on stock market prices.

5.6.4 Stock Price Movement and Dividend Impact in BPCL

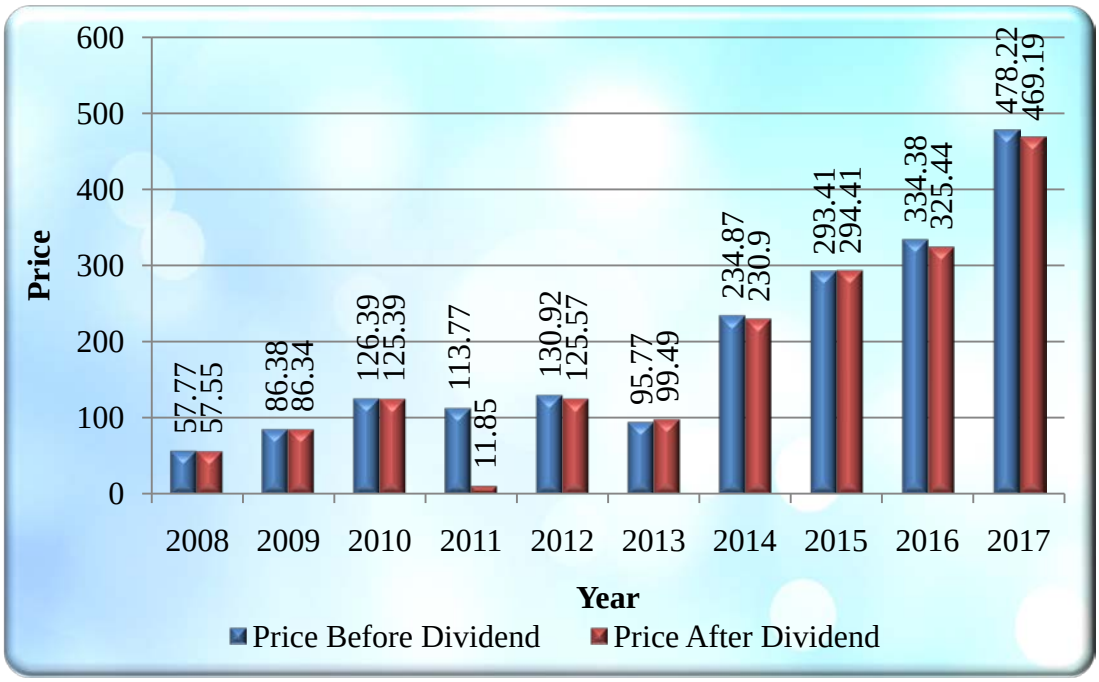
Bharat Petroleum corporation limited is trading on both the stock exchanges in India. The data is analysed from Bombay Stock Exchange. The past ten year for which the valuea re recorded showed many fluctuations in industry and the same can be observed from the movement of stock prices as well.

A. Descriptive Analysis of Stock price movement and dividend declaration-BPCL

The stock price movement from past ten year of BPCL is tabulated and presented in the for of a table as mentioned. The price before and after the declaration of declaration is represedsnted as column.

Table 45: Stock Price movement and dividend impact in BPCL

Dividend Declaration Date	Price Before Dividend	Price After Dividend
10/09/2008 12:00 AM	57.77	57.55
26/08/2009 12:00 AM	86.38	86.34
08/09/2010 12:00 AM	126.39	125.39
05/09/2011 12:00 AM	113.77	11.85
13/07/2012 12:00 AM	130.92	125.57
06/09/2013 12:00 AM	95.77	99.49
05/09/2014 12:00 AM	234.87	230.9
28/08/2015 12:00 AM	293.41	294.41
06/06/2016 12:00 AM	334.38	325.44
06/06/2017 12:00 AM	478.22	469.19



Graph 23: Stock Price movement and dividend impact in BPCL

B. Compare of Mean- BPCL

Table 46: Paired Samples Statistics - BPCL

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Price_Before	195.1880	10	136.13841	43.05075
	Price_After	192.6130	10	133.21269	42.12555

Table 47: Paired Samples Correlations - BPCL

		N	Correlation	Sig.
Pair 1	Price_Before & Price_After	10	1.000	.000

Table 48: Paired Differences - BPCL

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2 tailed)
					Lower	Upper			
Pair 1	Price_Before - Price_After	2.57500	4.20471	1.32965	-.43287	5.58287	1.937	9	.085

C. Statistical Inferences-BPCL

The number of year considered in the descriptive analysis for reliance industries are 10. The stock price before and after is considered to make a pair of observation and the data tabulated is analysed using paired sample t-test. The mean value for stock price before the declaration of dividend is calculated as 195.18 and mean value after declaration of dividend is calculated as 192.6

Standard deviation for the study was 136.13 for price before dividend declaration and 133.21 for price after declaration of dividend.

The calculated p-value is 0.085 which is greater than the standard p value 0.05, make us conclude that the dividend have an impact on stock market price and reject null hypothesis states there is not impact of dividend declaration on stock market prices.

5.6.5 Stock Price Movement and Dividend Impact in Indian Oil

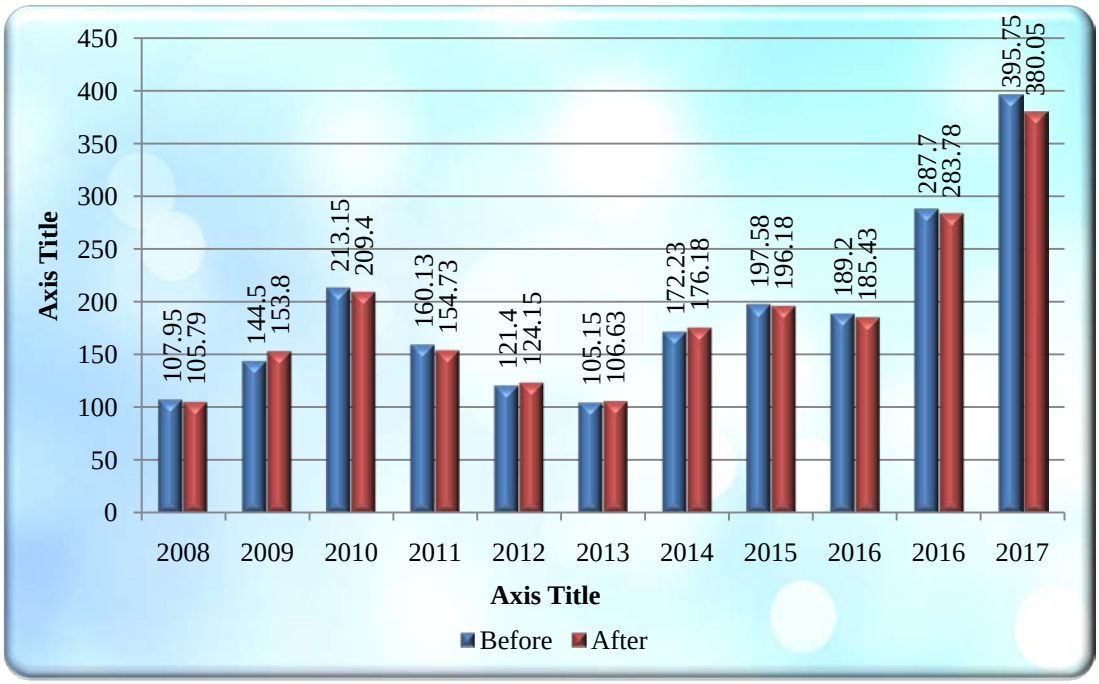
Indian Oil and Natural Gas Corporation is one of the much esteemed stock listed on BSE and NSE stock exchanges in India. The stock is trading from a long time but for analytical. The data for ten year of dividend along with the stock price before and after the dividend is tabulated as under.

A. *Descriptive Analysis of Stock price movement and dividend declaration-Indian Oil*

Dividend declaration date and stock prices before and after declaration of dividend are tabulated in three columns. The data analysis for last ten year is as mentioned.

Table 49: Stock Price movement and dividend impact in IOCL

Indian oil	Before	After
9/9/2008	107.95	105.79
2/9/2009	144.5	153.8
8/9/2010	213.15	209.4
15/9/2011	160.13	154.73
5/9/2012	121.4	124.15
22/8/2013	105.15	106.63
10/8/2014	172.23	176.18
4/9/2015	197.58	196.18
23/2/2016	189.2	185.43
2/9/2016	287.7	283.78
9/2/2017	395.75	380.05



Graph 24: Stock Price movement and dividend impact in IOCL

B. Compare of Mean- Indian Oil

The lena of stock price for last ten year in Indian oil I calculated as 190.43, wherein the same mean value is changed to 188.73, after declaration of dividend. The standard deviation showed before the declaration valued 86.24 which fall down to 81.52 after the declaration of dividend.

Table 50: Paired Samples Statistics-Indian Oil

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Price_Before	190.4309	11	86.24747	26.00459
	Price_After	188.7382	11	81.52001	24.57921

Table 51: Paired Samples Correlations-Indian Oil

		N	Correlation	Sig.
Pair 1	Price_Before & Price_After	11	.999	.000

Table 52: Paired Differences - Indian Oil

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Price_Before - Price_After	1.69273	6.37373	1.92175	-2.58920	5.97466	.881	10	.399

C. Statistical Inferences- Indian Oil

The mean of price calculated as a pair is 1.69 with a standard deviation value of 6.3. The values are taken a a confidence level of 95% and .05 was level of significance.

The t value is calculated as .881 at 10 degree of freedom and calculated p-value is 0.399 which is greater than the standard p value 0.05, make us conclude that the dividend have an impact on stock market price and reject null hypothesis states there is not impact of dividend declaration on stock market prices.

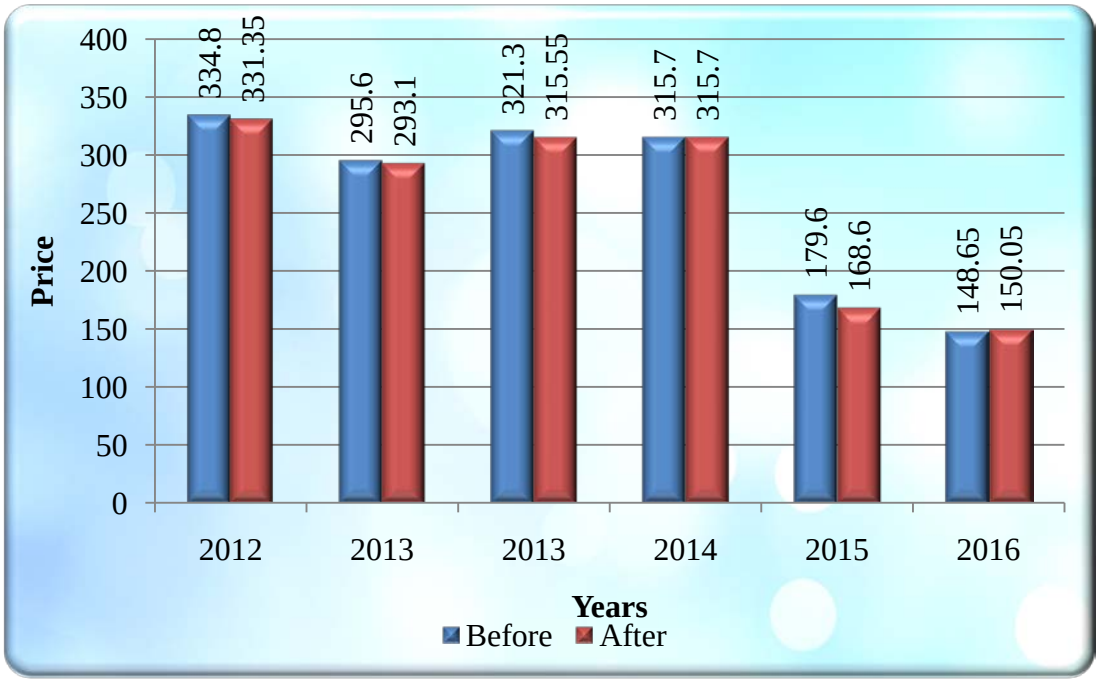
5.6.6 Stock Price Movement and Dividend Impact in Cairn Energy

A. *Descriptive Analysis of Stock price movement and dividend declaration- Cairn Energy*

CAIRN Energy is one of the much esteemed stock listed on BSE and NSE stock exchanges in India. The stock is trading from a long time but for analytical. The data for ten year of dividend along with the stock price before and after the dividend is tabulated as under. The company did not declare the dividend every year. Every company have there own policy of utilising the profit as per the business dynamics in the market. Here last ten years are considered and in this period, 6 values are considered for dividend declaration.

Table 53: Stock Price Movement and Dividend Impact in Cairn Energy

Cairn India	Before	After
5/11/2012	334.8	331.35
10/7/2013	295.6	293.1
25/10/2013	321.3	315.55
22/9/2014	315.7	315.7
8/7/2015	179.6	168.6
8/7/2016	148.65	150.05



Graph 25: Stock price movement and dividend impact in Cairn Energy

B. Compare of Mean- Cairn Energy

The paired sample t-test is applied to compare the mean of stock price before and after declaration of dividend. The mean value before is calculated as 279.73, wherein the this value is fall down to 275.39 after decoration of dividend.

The standard deviation before decoration s 82.02. Standard deviation after decoration was 81.52.

Table 54: Paired Samples Statistics - Cairn Energy

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Price_Before	279.7357	7	82.02167	31.00128
	Price_After	275.3929	7	81.52982	30.81537

Table 55: Paired Samples Correlations - Cairn Energy

		N	Correlation	Sig.
Pair 1	Price_Before & Price_After	7	.998	.000

Table 56: Paired Differences - Cairn Energy

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Price_Before - Price_After	4.34286	4.56366	1.72490	.12217	8.56354	2.518	6	.045

C. Statistical Inferences- Cairn Energy

The mean of price calculated as a pair is 4.34 with a standard deviation value of 4.56 The values are taken a a confidence level of 95% and .05 was level of significance.

The t value is calculated as 2.51 at 6 degree of freedom and calculated p-value is 0.045, which is greater than the standard p value 0.05, make us conclude that the dividend have an impact on stock market price and reject null hypothesis states there is not impact of dividend declaration on stock market prices.

Findings, Suggestions and Scope for Future Research

FINDINGS, SUGGESTIONS AND SCOPE FOR FUTURE RESEARCH

6.1 Major Findings -

1. **ONGC -** The minimum value for dividend payout ratio is 30.70% and maximum value is 55.5-%. Standard deviation found is 8.35%. For corporate tax the minimum value is 73,155 and maximum value is 88,395. The standard deviation for corporate tax is 13,191.84The value for Pearson correlation coefficient is -.845 which shows the dividend payout policy and corporate are negatively correlate with each other. Increase in corporate tax decrease the dividend payout ration and decrease in corporate tax increases the dividend payout ratio.

2. **IOCL -** the corporate tax paid by the company is varied relatively in past 10 years. Starting from 2008 when the amount was 3104 cr came down to 1364 Cr in 2009. Fluctuating which almost 200% this raised at to 3.97 in 2010 and continuously shown a decreasing trend till 2013. From 2014 the amount is increased to 2906 cr and 2722 cr in 2015. With many reforms and economics improvement in Indian oil and gas industries this valued 5440 in 2016 and highest value 7214 in 2017.

3. **IOCL -** In past ten years, the highest dividend payout ratio identified was in 2016, where this valued at 65.1% which is followed by 54.6% in 2013 and 40.3 % in 2011 and 2012. In recent last year the value is dropped to 26.2 %, slightly less than 27.2% in 2014. The ratio was 19.5% in 2008, 25.7% in 2009 and lowest 8.5% in year 2010.

4. **IOCL -** The minimum value for dividend payout ratio was 8.5% and the maximum value of dividend payout ratio is 65. 10%. Standard deviation calculated was 17.17%.

   The value for Pearson correlation coefficient is -0.067, which shows that the corporate tax and dividend payout policy are negatively co relate with each

other. Increase in corporate tax decreased the dividend payout ratio and decrees in corporate may increase in dividend payout ratio.

5. **RELIANCE INDUSTRIES LIMITED-** the corporate tax paid by the company is varied relatively in past 10 years. Starting from 2008 when the amount was 3,559 cr came down to 3,137 Cr in 2009. Fluctuating which almost 40% this raised at to 4324 CR in 2010. The corporate tax paid by the company is continuously shown an increasing trend. From 2011 the amount is increased to 4956 cr and 5710 cr in 2012.

   In 2013 the corporate tax decreased to 5281 and again increased to 5834 in 2014 and stand at 6749 in 2015. In 2016 the company paid corporate tax of 8284 crore and latest in 2017 the amount was 9352cr.

6. **RELIANCE INDUSTRIES LIMITED-** The dividend payout ratio is calculated with the help of the amount of dividend declared and number of shares flair in the market. DPR is valued 11.5 % in 2017 and 11.1% in 2016. This was slightly less than 12 and 12.1 % in 2014 and 2015 respectively. In 2009 the dividend payout ratio was 12% which was decreased to 7.9% in 2010.

7. **RELIANCE INDUSTRIES LIMITED** - The minimum value for dividend payout ratio was 7.9 % and the maximum value of dividend payout ratio is 12. 10%. Standard deviation calculated was 1.322 %.
   The value for Pearson correlation coefficient is 0.220, which shows that the corporate tax and dividend payout policy are positively correlate with each other. Increase in corporate tax may increase the dividend payout ratio and decrease in corporate tax may decrease in dividend payout ratio. The value .220 shows a small correlation.

8. **BPCL-** the corporate tax paid by the company is varied relatively in past 10 years. Starting from 2008 when the amount was 1010 cr came down to 261 Cr in 2009. Fluctuating which almost 400% this raised at to 823 CR in 2010. The corporate tax paid by the company is continuously shown an increasing

trend. From 2011 the amount is increased to 848 cr which decrease to and 572 cr in 2012.

In 2013 the corporate tax decreased to 1392 and again increased to 1888 cr in 2014 and stand at 2331 in 2015. In 2016 the company paid corporate tax of 3219 crore and latest in 2017 the amount was 3003cr.

9. **BPCL-** The dividend payout ratio is calculated with the help of the amount of dividend declared and number of shares flair in the market. DPR is valued 34.9 % in 2017 and 25.6% in 2016. This was slightly high than 21.1 and 20.3 % in 2014 and 2015 respectively. In 2013 the dividend payout ratio was at highest 64.8% in the past 10 year history. In 2012 and 2011 the dividend payout ratio remain same 31%. In 2009 the dividend payout ratio was 22.8 % which was decreased to 15.5% in 2010.

10. **BPCL-** The minimum value for dividend payout ratio was 15.5 % and the maximum value of dividend payout ratio is 64.8 %. Standard deviation calculated was 14.016 %.

The value for Pearson correlation coefficient is 0.053, which shows that the corporate tax and dividend payout policy are very slightly positively correlate with each other. Increase in corporate tax may increase the dividend payout ratio and decrease in corporate tax may decrease in dividend payout ratio. The value .053 shows a small correlation.

11. **CAIRN ENERGY-** the corporate tax paid by the company is varied relatively in past 10 years. Starting from 2009 when the amount was 32.05 cr increase to 57.83 Cr in 2010. Fluctuating highly this decrease to only 4.4 CR in 2011. The corporate tax paid by the company is was 0 in year 2012 and From 2013 the amount is increased to 3.54 cr, which increase to and 264.45 in cr in 2014, 321 in 2015, 274 in 2016 and 39.78 in 2017.

12. **CAIRN ENERGY-** The dividend payout ratio is calculated with the help of the amount of dividend declared and number of shares flair in the market.

DPR is valued 20.2 % in 2014 and 23.2% in 2015. In 2016 the company's dividend payout ratio was 58.8%.

13. **CAIRN ENERGY-** The minimum value for dividend payout ratio was 20.2 % and the maximum value of dividend payout ratio is 58.8 %. Standard deviation calculated was 19.32 %.

    The value for Pearson correlation coefficient is 0.81, which shows that the corporate tax and dividend payout policy are very positively correlate with each other. Increase in corporate tax may increase the dividend payout ratio and decrease in corporate tax may decrease in dividend payout ratio.

14. **ONGC-** The maximum sales is recorded in year 2017 valued 1,42,149 and minimum sales was recorded in year 2008, when it was valued 96,982 crore. The mean of sales for last ten year is calculated as 1,34,665 with a standard deviation of 76.70.

15. **ONGC-** The minimum value for dividend payout ratio is 30.70% and maximum value is 55.5-%. Standard deviation found is 76.70. Sales the minimum value is 96,982 and maximum value is 174477. The value for Pearson correlation coefficient is 0.594 which shows the dividend payout policy and corporate are positively correlate with each other.

16. **IOCL-** The maximum sales is recorded in year 2014 valued 4,88,793 and minimum sales was recorded in year 2008, when it was valued 2,27,923 crore. The mean of sales for last ten year is calculated as 3,58,594with a standard deviation of 2.60.

17. **RELIANCE INDUSTRIES LIMITED-** The maximum sales is recorded in year 2014 valued 4,34,460 and minimum sales was recorded in year 2008, when it was valued 1,37,151 crore. The mean of sales for last ten year is calculated as 290278 with a standard deviation of 1,02,991.

18. **BPCL-** The maximum sales is recorded in year 2014 valued 2,64,421 and minimum sales was recorded in year 2008, when it was valued 1,11,243 crore.

19. **CAIRN ENERGY-** The maximum sales is recorded in year 2015 valued 18,782 and minimum sales was recorded in year 2008, when it was valued 93 crore. The mean of sales for last ten year is calculated as 559.0 with a standard deviation of 7.14.

20. ONGC- The mean value for stock price of ONGC before and after declaration of dividend is calculated. The mean value for stock price for last ten year is 184.79 which was slightly less than the mean value calculated after declaration of dividend 184.99.

The p=Value is .826 is greater than critical p value 0.05, which shows that the dividend has an influence on stock prices.

21. **RELIANCE INDUSTRIES LIMITED-** The stock price before and after is considered to makemake a pair of observation and the data tabulated is analysed using paired sample t-test. The mean value for stock price before the declaration of dividend is calculated as 518.52 and mean value after declaration of dividend is calculated as 525.69.

Standard deviation for the study was 125.43 for price before dividend declaration and 133.01 for price after declaration of dividend.

The calculated p-value is 0.3 which is greater than the standard p value 0.05, make us conclude that the dividend have an impact on stock market price and reject null hypothesis states there is not impact of dividend declaration on stock market prices.

22. **BPCL-** The stock price before and after is considered to make a pair of observation and the data tabulated is analysed using paired sample t-test. The mean value for stock price before the declaration of dividend is

calculated as 195.18 and mean value after declaration of dividend is calculated as 192.6

Standard deviation for the study was 136.13 for price before dividend declaration and 133.21 for price after declaration of dividend.

The calculated p-value is 0.085 which is greater than the standard p value 0.05, make us conclude that the dividend have an impact on stock market price and reject null hypothesis states there is not impact of dividend declaration on stock market prices.

6.2 SUGGESTIONS

Keeping in view the above observations and other surveillances made throughout the study, the following measures are suggested.

1. It is found from the study that payment of dividend has significant effect on shareholders' wealth in Oil and Gas players in India. As the companies under the study are paying the dividend regularly with periodic enhancement, the shareholders wealth would be higher. Therefore, it is suggested that the companies under the study should continue to have policy of periodical enhancement in paying the dividend.

2. Oil and Gas players in India are suggested to implement steadily changing dividend policy. Under this policy, when a company retains earnings in good years for this purpose, it earmarks this surplus as dividend equalisation reserve. These funds are invested in current assets like marketable securities, so that they may easily be converted in to cash at the time of paying dividends in bad years.

3. Some shareholders favour dividends from the tax perspective, even though they lack the advantages associated with deferral in case of rising share price because they prefer the flexibility that come with cash dividend payment. Moreover, they evaluate retained earnings as a risky promise. Hence, it is suggested to have steady enhancement in dividend in Oil and Gas India industry in India because this liquidity allows investors to more easily manage their financial affairs.

4. Retained earnings act as an important factor in determining the shareholders' wealth in Oil and Gas industry in India. The increase in retained earnings leads to increase in net worth (Book Value of equity) of the shareholders. There would be large volume of shareholders inflow for which they would be prepared to repurchase the shares by paying premium. Therefore, young and aggressive Oil and Gas companies in India should have low payout ratios and plough back their profits for growth because they have adequate profitable investment opportunities to earn at a higher rate than what the investors expect.

5. With a view to help in decision making whether to distribute or retain the profit, Oil and Gas players in India are suggested to calculate the ratio of rupee profits, the business expects to earn (Ra) to the rupee profits that the shareholders can expect to earn outside (Re) i.e. Re/Ra. If the ratio is less than one, it is a signal to distribute dividend and if it is more than one, the distribution of dividend will be discontinued.

6. With a view to improve corporate governance in Oil and Gas industry in India by offering investors clear signal about a company's future financial health and by imposing discipline on corporate manager; Oil and Gas players in India are suggested to maintain proper combination of the share price and dividend payment because retention of earnings would adversely affect the market price of the shares.

6.3 SCOPE FOR FURTHER RESEARCH

Every attempt has been made to make the study intensive but due to lack of time and resources there exists certain gaps in the present study. Therefore, further work may be under taken to bridge the gap so as to enhance the scope of analysis. The coverage of this study is limited to selected companies. It can further be extended. Data for the purpose of analysis have mainly been collected from secondary resources having certain own limitations. Further research work in abovementioned areas would be of great practical significance and would throw more light on the operation of Oil and Gas players in India. The present study has

examined the effect of dividend policy in Oil and Gas players in India. The analysis has produced some meaningful inferences and results and one possibility for future research is to extend the investigation to other sector and among the cross section. It may be interesting to conduct a similar study in order to determine whether importance of retained earnings on shareholders' wealth has increased over a period of time. Further study can be conducted to o the impact of market value on shareholders' wealth and dividend policy on market value too.

Bibliography

BIBLIOGRAPHY

BOOKS:

Agarwal, R.N. (2010). Corporate Investment and Financing Behaviour- An Econometric Analysis of Indian Automobile Industry. Delhi, India: Commonwealth Publishers.

Banerjee, B. (2005). Financial Management and Management Accounting (6th ed.). Calcutta: The World Press Pvt. Limited.

Banerjee, S.K. (2004). Financial Management. New Delhi: S. Chand & Co. Ltd. Brealey, R.A. & Myers, S.C. (2003). Principles of Corporate Finance (7th ed.). New York: McGraw Hill Companies.

Brittain, John A. (1995). Corporate Dividend Policy. Washington, D.C.: The Brooking Institution.

Chandra, P. (2015). Financial Management: Theory and Practice (6th ed.). New Delhi: Tata McGraw-Hill Publishing Company Ltd.

Dobrovolsky, S.P., (1951). Corporate Income Retention, quoted from NBER, (1974) Economics of Corporate Finance. Delhi: Tata McGraw Hill Pvt. Ltd.

Hampton J. J. (2011). Financial Decision Making: Concepts, Problems and Cases. New Delhi: Prentice Hall of India Pvt. Ltd.

Khan, M.Y. & Jain, P.K. (n.d.). Basic Financial Management (2nd ed.). New Delhi: Tata McGraw-Hill Publishing Company Limited.

Khurana, P.K. (1985). Corporate Dividend Policy in India. New Delhi: Panchsheel Publications.

Kuchhal S. C. (2012). Corporation Finance – Principles and Problems. Allahabad: Chaitanya Publishing House.

Mazumdar, H.K., (1959). Business savings in India: An Estimate and an Analysis in Relation to Profitability and the Growth of the National Saving Rate. Holland: J.B. Walters Publishing Company.

Ohja, P.R. (1978). Corporate Dividend Policy in Indian Cotton Textile Industry. India, Allahabad: Kitab Mahal.

Pandey I. M. (n.d.). Financial Management (8th ed.). New Delhi: Vikas Publishing House Pvt. Ltd. 225

Sharma, R. (1986). Corporate Financial Policy and Dividend Decisions. India, New Delhi: Deep and Deep Publications.

Sur D. & Sarkhel J. (2013). An Introduction to Financial Management Kolkata: Books Syndicate Pvt. Limited.

Van Horne, J.C. (2016). Financial Management and Policy (11th ed.). New Delhi: Prentice Hall of India Pvt. Ltd.

PAPERS/ ARTICLES

Aivazian, V.A., Booth, L.D. & Cleary, A. (2013). Do Emerging Market Firms Follow Different Dividend Policies from U.S. Firms? The Journal of Financial Research, 26(3), 371-387.

Amidu, M. & Abor, J. (2016). Determinants of Dividend Payout Ratios in Ghana. The Journal of Risk Finance, 7(2), 136-145.

Anand, M. (2014). Factors Influencing Dividend Policy Decisions of Corporate India. ICFAI Journal of Applied Finance, 10(2), 5-16.

Anil, K. & Kapoor, S. (2008). Determinants of Dividend Payout Ratios-A Study of Indian Information Technology Sector. International Research Journal of Finance and Economics, Issue 15, 63-71. Retrieved from http://www.eurojournals. com/IRJFE%20issue%2015.htm

Bansal, R. & Bansal, V. (2012). A Research Paper on Determinants of Corporate Liquidity in India. International Journal of Marketing and Technology, 2(4), 103-117. Retrieved from http://www.ijmra.us/project%20doc/IJMIE_APRIL2012

Barker, H. K., Veit, E.T., & Powell, G.E. (2015). Factors Influencing Dividend Policy Decisions of Nasdaq Firms. The Financial Review, 36 (3), 19-38.

Bhat, R. & Pandey, I.M. (1994). Dividend Decision: A Study of Managers' Perceptions. Decision, Jan-June, 67-83. Bhatia, B.S. & Singh, R. (1978). Dividend Policy of Indian Enterprises. Indian Journal of Commerce, 31(3), 16-24.

Bhayani S.J. (2014). Dividend Policy of Indian Corporate Firms: An Analysis. Asia Pacific Journal of Research in Business Management, 2(6), 102-134.

Bodla, B.S. & Kumar, R (2014). Emerging pattern of dividend in India since 1991. The Journal of Indian Management & Strategy 8M, 14(1), 33-43. Retrieved from http://www.jimsindia.org/8M_journal.aspx 226

Darling, P.G. (1957). The Influence of Expectations and Liquidity on Dividend Policy. Journal of Political Economy, 65(3), 209-224.

Garg, M.C., Nagpal, S. & Verma, H.L. (1996). Factors Determining Dividend Payments in Textile Industry in India. Journal of Accounting & Finance, Spring, 144-156.

Gupta, A & Banga, C. (2014). The Determinants of Corporate Dividend Policy. Decision, 37(2), 63-77.

Jaidev, M. (1992).Determinants of Dividends-Some Empirical Observations. Indian Journal of Finance and Research, 2(2), 45-60.

Jain, P.K. & Kumar, M. (1997). Dividend Policy and Practices in Select Corporate Firms of India and South-East Asia: A Comparative Study. Vision, 1(2), 11-20.

Kania, S.L & Bacon, F.W (2014). What Factors Motivate the Corporate Dividend Decision? ASBBS E-Journal, 1(1), 97-107.

Krishna Moorthi M. & Ramesh M. (2013). An Empirical Analysis of Corporate Dividend Performance in Selected Pharmaceutical Companies in India. International Journal of Exclusive Management Research, 1(3). Retrieved from http://exclusivemba.com/ijemr/Augustissue.htm

Krishnamurty, K. & Sastry, D.U. (1974). Dividends and External Finance: An Analysis of the Corporate Sector in India". Indian Economic Review, 9(2), 155-182.

Lintner, J. (1956). Distribution of Incomes of Corporations among Dividends, Retained Earnings and Taxes. American Economic Review, 46(2), 97-113.

Lloyd, W.P, Jahera, J. S. & Page, D.E. (1985). Agency Costs and Dividend Payout Ratios. Quarterly Journal of Business and Economics, 24 (3), 19-29.

Mahapatra, R.P. & Panda, B.K. (1995) Determinants of Corporate Dividend Policy & the Target Pay-out Ratio. Productivity, 36(2), 284 – 292.

Mahapatra, R.P. & Sahu, P.K. (1993). A Note on Determinants of Corporate Dividend Behaviour in India-An Econometric Analysis. Decision, 20(1), 1-12.

Mallik A.K. & Sur. D. (2016). Business and financial risks in Indian corporate sector: An empirical analysis in the post- liberalization Era. The ICFAI Journal of Applied Finance, 15(4) 53-68.

Mehata, A. (2012). An Empirical Analysis of Determinants of Dividend Policy-Evidence from the UAE Companies. Global Review of Accounting and 227 Finance, 3(1), 18-31. Retrieved from http://wbiaus.org/MARCH2912_GRAF% 20issue.htm

Mistry, D.S. (2014). Factors Affecting Dividend Decision of Indian Cement Industry. Management Insight, VII (1), 23-30.

Mohanraj, V. & Deepa, N. (2012). Determinants of Corporate Dividend Policy in Select Private Sector Cement Companies in Tamil Nadu - An Empirical Analysis. International Journal of Research in Commerce and Management, 3(7), 107-109.

Parua A. and Gupta A. (20). Dividend history and determinants in selected Indian companies: a study during 1993-94 to 2004-05. Australasian Accounting Business and Finance Journal, 3(4), 45-83. Retrieved from http://ro.uow.edu.au/aabfj/vol3 /iss4/4/

Rafique, M. (2012). Factors Affecting Dividend Payout: Evidence from Listed Non-Financial Firms of Karachi Stock Exchange. Business Management Dynamics, 1(11), 76-92. Retrieved from http://bmdynamics.com/recent_issue. php?id=14

Rozeff, M. S. (1982). Growth, Beta and Agency Costs as Determinants of Dividend Payout Ratios. Journal of Financial Research, 5 (3), 249-259.

Sarma, L.V.L.N. and Kuin, K. L. (2014). Corporate Dividend Behavior in Emerging Markets: A Study of the Malaysian Corporate Sector. The ICFAI Journal of Applied Finance, 10(7), 56-70.

Singhania M. (2015). Trends in Dividend Payout: A Study of Select Indian Companies. Journal of Management Research, 5(3), 129-142.

Singhania M. (2007). Dividend Policy of India Companies. The Icfai Journal of Applied Finance, 13(3) 5-30.

Singhania, M. (2008). Determinants of Equity Share Prices in Indian Chemical Industry: An Empirical Study. AIMA Journal of Management, 2(4/4).

Sur, D. & Chakraborty, K. (2011). Efficiency of Working Capital Management in Indian Corporate Sector: An Emperical Analysis in the Postliberalisation Era. GITM Journal of Management, 8(3), 119-138.

Sur, D. & Gupta, A. (2012). Dividend payout Trends in Indian Pharmaceutical Industry: A Cross-sectional Analysis. IBSA Journal of Business Studies, 1(1&2), 40-54. Sur, D. & Majumdar, A. (2012). Dividend Policy of Indian Corporate Sector: A Study of Select Companies during the Post-liberalisation Regime. Asia Pacific Journal of Management Research and Innovation, 8(2), 173-191. 228

Sur, D. (2005). Dividend pay out trends in post-liberalisation era: A case study of Colgata Palmolive (India) Ltd. The Management Accountant, March, 201 - 205. Sur, D. (2005). Dividend pay out trends in post-liberalisation era: A case study of Colgate Palmolive (India) Ltd. The Management Accountant, March, 201-206.

OTHERS :

Aivazian, V, and Booth, L, *"Do emerging firms follow different dividend policies from US firms.?"*, Journal of Financial research, vol.26 No.3,pp.371-87,2003.

Alangar, S. and Bathala, C.T., *''The effect of institutional interest on the information content of dividend-change announcements''*, Journal of Financial Research, vol. 22, pp. 429-48,1999.

Allen Franklin and Michael Roni , *"Payout Policy"*, North-Holland handbook of Economics and Finance, Wharton Financial Institutions center,April 2002.

Allen, F. and Michaely, R., *''Dividend policy''*, in Jarrow, R.A., Maksimovic, V. and Ziemba,W.T. (Eds), Finance, Elsevier, Amsterdam, New York, NY, 1995.

Ambarish, R., John, K. and Williams, J., *''Efficient signaling with dividends and investments''*, Journal of Finance, vol. 42 No. 2, pp. 321-43,1987.

Amihud, Y. and M. Murgia Dividends, *"Taxes, and Signaling: Evidence from Germany"*, The Journal of Finance vol. LII, 397-408, 1997.

Andre, P., Mathieu, R., Zhang, P., *"A note on capital adequacy and the information content of term loans and lines of credit"*. Journal of Banking and Finance ,vol.25, pp.431-/444.,2001

Bagwell, L. S. and J. B. Shoven *"Cash Distributions to Shareholders"*, Journal of Economic Perspective 3(3), 129-140, 1989.

Bajaj, M. and Vijh, A., *''Dividend clienteles and the information content of dividend changes''*, Journal of Financial Economics, vol. 26, pp. 193-219, 1990.

Baker, H.K., *"Dividend policy issues in regulated and unregulated firms: a managerial perspective"*, Managerial Finance, vol. 25 No. 6, pp. 1-19, 1999.

Baker, H.K., Farrelly, G.E. and Edelman, R.B., *"A survey of management views on dividend policy"*, Financial Management, vol. 14 No. 3, pp. 1007-34.

Bardhan, P., 1997. *"Corruption and development: A review of issues"*. Journal of Economic Literature 35,1320_/1346.

Bar-Yosef, S. and Huffman, L., "The Information Content of Dividends: A Signalling Approach", Journal of Financial and Quantitative Analysis, vol. 21, No. 1, 1986.

Bar-Yosef, S. and Venezia, I., *''Earnings information and the determination of dividend policy''*, Journal of Economics and Business, vol. 43, pp. 197-214, 1991.

Berger, P., Ofek, E., Yermack, D., *"Managerial entrenchment and capital structure decisions"*. Journal of Finance, vol.52, pp.1411-/1438,1997.

Bhat, R. and I. M. Pandey *"Dividend decision: A Study of Managers' Perceptions"*, Decision, vol. 21, pp.67-86, January-June 1994.

Bhushan, R., *''Firm characteristics and analyst following''*, Journal of Accounting and Economics, vol. 4, pp. 255-74, 1989.

Bond, M.T. and Mougoue, M., *''Corporate dividend policy and the partial adjustment model''*, Journal of Economics and Business, vol. 43, pp. 165-77, 1991.

Booth, L., Aivazian, V., Demirguc-Kunt, A., Maksimovits, V., *"Capital structure in developing countries"*. The Journal of Finance, vol.56, pp.87-131, 2001.

Brav, A., Graham, J.R., Harvey, C.R. and Michaely, R., *''Payout policy in the 21st century''*, Journal of Financial Economics, vol. 77, pp. 483-527, 2005.

Brickley, J., *''Shareholder wealth, information signaling and the specially designated dividend''*, Journal of Financial Economics, vol. 12, pp. 187-209, 1983.

Britain, John A.. *"The Tax Structure and Corporate Dividend Policy,"* American Economic Review, vol. 54 (3), pp. 272-287, 1964.

Cattell R B., *"Extracting the Correct Number of Factors in Factor Analysis,"* Educational and Psychological Measurement, vol. XVIII, pp. 791-838,1958.

Chandra, P. *"Dividend Policy: Practical Aspects"* in Financial Management: Theory and Practice, Fourth Edition,Chapter 15, New Delhi: Tata McGraw Hill, 1997.

Chang, S.J. and J. Hong, , *"Economic performance of group-affiliated companies in Korea: Intragroup resource sharing and internal business transactions"*, Academy of Management Journal, vol.43(3),pp. 429-448, 2000.

Chaturvedi H O, *"Half Yearly Financial Results and Behavior of Share Prices in India"*, Finance India, vol. 14, pp. 537-545, 2000.

Chen, N.F., Grundy, B. and Stambaugh, R.F., *''Changing risk, changing risk-premiums, and dividend yield effects''*, Journal of Business, vol. 63, pp. S51-S70, 1990.

Christie, A., Nanda, V., *"Free cash flow, shareholder value and the undistributed profits tax of 1936 and 1937"*. Journal of Finance, vol. 49, pp.1727-/1754, 1994.

Cleary, S., *"The relationship between firm investment and financial status"*. Journal of Finance, vol.54, pp.673-/692, 1999.

Collins, M.C., Saxena, A.K. and Wansley, J.W., *"The role of insiders and dividend policy: a comparison of regulated and unregulated firms"*, Journal of Financial and Strategic Decisions, vol. 9 No. 2, pp. 1-9, 1996.

Dakshinamurthy D. and Narasimha Rao , *"Speed Adjustment (Dividend) Model: Some Empirical Evidence from Indian Chemical Industry 1960-73"*, The Chartered Accountant, December, pp. 457-460, 1978.

DeAngelo, H. and DeAngelo, L., *''Dividend policy and financial distress: an empirical investigation of troubled NYSE firms''*, Journal of Finance, vol. 45, pp. 1415-31, 1990.

DeAngelo, H., DeAngelo, L. and Skinner, D.J., *''Dividends and losses''*, Journal of Finance,vol. 47, pp. 1837-63, 1992.

DeAngelo, H., L. DeAngelo, and D. J. Skinner, *"Reversal of Fortune Dividend Signaling and the disappearance of sustained earnings growth"*, The Journal of Financial Economics, vol.40, pp.341-371, 1996.

Demirgue-Kunt, A., Levine, R., *"Bank Based and Market-Based Financial Systems: Cross-Country"*, 1998

Denis, D.J., Denis, D.K. and Sarin, A., *''The information content of dividend changes: cash flow signaling, overinvestment, and dividend clienteles''*, Journal of Financial and Quantitative Analysis, vol. 29, pp. 567-87, 1994.

Dielman, T. and Oppenheimer, H., *''An examination of investor behaviour during periods of large dividend changes''*, Journal of Financial and Quantitative Analysis, vol. 19, pp. 197-216, 1984.

Divecha, A. and Morse, D., *''Market responses to dividend increases and changes in payout ratios''*, Journal of Financial and Quantitative Analysis, vol. 18, pp. 163-73, 1983.

Downes, D.H. and Heinkel, R., *''Signalling and the valuation of unseasoned new issues''*, Journal of Finance, vol. 37, pp. 1-10, 1982.

Eades, K., Hess, P. and Kim, H., *''Market rationality and dividend announcements''*, Journal of Financial Economics, vol. 14, pp. 581-604, 1985.

Eades, K., P. Hess, and E. Kim. *"On Interpreting Security Returns During the Ex- Dividend Period."* Journal of Financial Economics, *vol.*13 no. 1, pp. 3–34, 1984.

Easton, S. A. and Sinclair, N. A., *"The Impact of Unexpected Earnings and Dividends on Abnormal Returns to Equity"*, Accounting & Finance, vol. 29, pp. 1-19, 1989.

Eddy, A. and Seifert, B., *''Firm size and dividend announcements''*, Journal of Financial Research, vol. 11, pp. 295-302, 1988.

Fama E F, *"Efficient Capital Markets: A Review of Theory and Empirical Work"*, Journal of Finance, vol. 25, pp. 383-417,1970.

Fama, E, French, K., *"Disappearing dividends: changing firm characteristics or lower propensity to pay?"* Journal of Financial Economics, vol.60, 2001.

Fama, E.F. and Jensen, M.C., *"Separation of ownership and control"*, Journal of Law and Economics, vol. 26, pp. 301-25, 1983.

Fazzari, S., Hubbard, R.G., Petersen, B., *"Financing constraints and corporate investment"*. Brookings Papers for Economic Activity, vol19, pp.141-195, 1988.

Feldstein, M. and J. Green, *"Why Do Companies Pay Dividends?"*, The American Economic Review, vol.73(1), pp.17-30, 1983.

Feldstein, M. S., *"Corporate Taxation and Dividend Behavior"*, Review of Economic Studies,vol. 37(1), pp.57-72, 1970.

Fenn, G. W. and N. Liang, *"Corporate payout policy and managerial stock incentives"*, The Journal of Financial Economics, vol. 60, pp.45-72, 2001.

Fukuda, A. *"Dividend changes and earnings performance in Japan"*, Paci_c-Basin Finance Journal, vol.8, pp.53-66, 2000.

Gaver, J.J. and Gaver, K.M., *''Additional evidence on the association between the investment opportunity set and corporate financing, dividend and compensation policies''*, Journal of Accounting and Economics, vol. 16, pp. 125-60, 1993.

Ghemawat, P. and T. Khanna, *"The nature of diversified business groups: A research design and two case studies"*, The Journal of Industrial Economics, vol. 46(1), pp. 35- 61, 1998.

Glen, J.D., Y. Karmokolias, R.R. Miller and S. Shah, *"Dividend policy and behavior in emerging markets: To pay or not to pay"*, IFC Discussion paper vol.26, Washington DC: International Finance Corporation, 1995.

Gorden, M. J., *"Dividends, Earnings, and Stock Prices"*, Review of Economics and Statistics, vol. 41,pp 99-106,1959.

Gugler, K. and B. B. Yurtoglu, *"Corporate governance and dividend pay-out policy in Germany"*, European Economic Review , vol.47, pp.731-758, 2003

Gugler, K., *"Corporate governance, dividend payout policy, and the interrelation between dividends, R&D, and capital investment"*, The Journal of Banking and Finance, vol. 27, pp.1297-1321, 2003.

Guillen, M.F., *"Business groups in emerging economies: A resource-based view, Academy of Management Journal"*, vol.43 (3), pp.362-380, 2000.

Gupta N.C. and Sharma G.L. , *"Dividend Behaviour in Tea Industry in India: A Case Study of Selected Firms"*, ASCI Journal of Management, vol. 20, No.4, pp. 274-283.

Gupta, L C. *"Bonus Shares"*, New Delhi: Macmillan, 1973.

Hansen, R.S., R. Kumar and D.K. Shome, *"Dividend policy and corporate monitoring:Evidence from the regulated electric utility industry"*, Financial Management, vol. 23(1), pp.16-22, 1994.

Haque, M.S., *"The fate of sustainable development under neo- liberal regimes in developing countries"*, International Political Science Review, vol. 20(2), pp.197-218, 1999.

Haw, I.M. and Kim, W.S., *''Firm size and dividend announcement''*, Journal of Accounting, Auditing and Finance, Summer, pp. 325-44, 1991.

Heinkel, R.L., *''Essays on financial markets with asymmetric information''*, PhD dissertation, University of California, Berkeley, 1978.

Holder, M.E., F.W. Langrehr and J.L. Hexter, *"Dividend policy determinants: An investigation of the influences of stakeholder theory"*, *Financial Management*, vol.27(3), pp.73-82,1998.

Howe, S.J. and Shen, Y., *‘‘Information associated with dividend initiations: firm specific or industry-wide?’’* Financial Management, vol. 27, pp. 17-26, 1998.

Hurley, W. J. and L. D. Johnson, *“Generalized Markov Dividend Discount Models”*, The Journal of Portfolio Management Fall, pp.27-31, 1998.

James, C., *“Some evidence on the uniqueness of bank loans”*. Journal of Financial Economics, vol19, pp.217-/236, 1987.

Jayaraman, N., and K. Shastri. *"The Valuation Impacts of Specially Designated Dividends."* Journal of Financial and Quantitative Analysis, vol.23, pp.301–312, 1988.

Jensen, G. R., D. P. Solberg, and T. S. Zorn, *“Simultaneous Determination of Insider Ownership, Debt, and Dividend Policies”*, Journal of Financial and Quantitative Analysis, vol. 27(2), pp.247-263, 1992.

John, K. and Kalay, A., *“Costly contracting and optimal payout constraints”*, Journal of Finance, vol. 37, pp. 457-70, 1982.

Joshi K K, *“Take-over Bid and Stock Market Discipline”*, Indian Journal of Finance and Research, vol. 1, pp. 69-74, 1991.

Jung, K., Kim, Y., Stulz, R., *“Timing, investment opportunities, managerial discretion, and the security issue decision”*. Journal of Financial Economics, vol.42, pp.159-/185, 1996.

Kaiser H F. *“The Varimax Criterion for Analytic Rotation in Factor Analysis,”* Psycometrica, vol. 23 (3), pp. 187-200, 1958.

Kao, C. and Wu, C., *‘‘Tests of dividend signalling using the Marsh-Merton model:a generalised friction approach’’*, Journal of Business, vol. 67, pp. 45-68, 1994.

Kaplan, S.N. and Reishus, D., *‘‘Outside directorships and corporate performance’’*, Journal of Financial Economics, vol. 27, pp. 389-410, 1990.

Khanna, T. and J.W. Rivkin, *“Estimating the performance effects of business groups in emerging markets”*, Strategic Management Journal, vol.22(1), pp.45-74, 2001.

Khanna, T. and K. Palepu, *"Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups"*, Journal of Finance, vol.55(2), pp.867- 890, 2000.

Khorana, A. and Servaes, H. *''The determinants of mutual fund starts''*, Review of Financial Studies, vol. 12 No. 5, pp. 1043-74, 1999.

King, R., Levine, R., *"Finance and growth: Schumpeter might be right"*. Quarterly Journal of Economics, vol.108, pp.717-/737, 1993.

Koch, Paul D and Catherine Shenoy , *"The Information Content of Dividend and Capital Structure Policies,"* Financial Management, vol. 28 (4), pp. 16-35, 1999.

Kwan, C., *''Efficient market tests of the informational content of dividend announcements: critique and extension''*, Journal of Financial and Quantitative Analysis, vol. 16, pp. 193-205, 1981.

Lakonishok, J and Lev, B. *"Stock Splits and Stock Dividends: Why, Who and When,"* Journal of Finance, September, pp 913-932, 1987.

Lalay, A. *"Stockholder-Bondholder Confliict and Dividend Constraints"*, The Journal of Financial Economics, vol.10, pp.211-233, 1982.

Lang Larry H P and Robert H Litzenberger. *"Dividend Announcements: Cash Flow Signaling vs. Free Cash Flow Hypothesis?"* Journal of Financial Economics, vol. 24,pp. 155-180, 1989.

Lasfer, M. *"Ex-Day Behavior: Tax or Short-Term Trading Effects."* Journal of Finance, vol.50, pp.875–898, 1995.

Lazo, S. *"Speaking of Dividends, How Do Corporate Leaders See Payouts?"* Barron's Online (1999)., Dow Jones & Company.

Leithner, S., and H. Zimmermann. *"Market Value and Aggregate Dividends: A Reappraisal of Recent Tests, and Evidence from European Markets."* Swiss Journal of Economics and Statistics, vol.129, pp.99–119, 1993.

Lewellen, W.G., Loderer, C. and Martin, K., *''Executive compensation and executive incentive problems: an empirical analysis''*, Journal of Accounting and Economics, vol. 9,pp. 287-310, 1987.

Lewellen, W.G., Stanley, K.L., Lease, R.C. and Schlarbaum, G.G., *''Some direct evidence on the dividend clientele phenomenon''*, Journal of Finance, vol. 33, pp. 1385-99, 1978.

Loughlin P. H., *"The Effect of Dividend Policy on Changes in Stockholders' Wealth"*, A PhD Thesis, Graduate School of Saint Louis University, 1982, USA.

Lummer, S., McConnell, J., *"Further evidence on the bank lending process and the capital market response to bank loan agreements"*. Journal of Financial Economics , vol.25, pp.99 -/122,1989.

Manos ,Ronny , *"Dividend policy and agency theory: Evidence from Indian Firms"*, South Asia Economic Journal ,vol.4(2), pp. 276-300, 2003

Manos, R., *Capital Structure and Dividend Policy: Evidence from Emerging Markets,* unpublished PhD thesis, University of Birmingham, 2001.

Manuel, T.A., Brooks, L.D. and Schadler, F.P., *''Common stock price effects of security issues conditioned by current earnings and dividend announcements''*, Journal of Business,vol. 66, pp. 571-93, 1993.

Marsh, T. A. and R. C. Merton, *"Dividend Behavior for the Aggregate Stock Market"*, The Journal of Business, vol.60(1), pp.1-40, 1987.

Masulis, R.W. and Trueman, B., *"Corporate investment and dividend decisions under differential personal taxation"*, Journal of Financial and Quantitative Analysis, vol. 23, pp. 369-86, 1988.

Mauro, P., *"Corruption and growth"*. Quarterly Journal of Economics, vol.110, pp.681-/712, 1995.

McConnell, J., and C. Muscarella. *"Corporate Capital Expenditure Decisions and the Market Value of the Firm." Journal of Financial Economics,*vol. 14 no. 3 ,pp. 399– 422,1985

Michaely, R., *''Ex-dividend day stock price behaviour: the case of the 1986 tax reform act''*,Journal of Finance, vol. 46, pp. 845-59, 1991.

Michel, A.J., *"Industry influence on dividend policy"*, Financial Management, vol. 8, Fall, pp. 22-6, 1979.

Miller, M. H. and M. S. Scholes, *"Dividends and Taxes: Some Empirical Evidence"*, Journal of Political Economics, vol.90(6), pp.1118-1141, 1982.

Miller, M.H. and Rock, K., *''Dividend policy under asymmetric information''*, Journal of Finance, vol. 40, pp. 1031-52, 1985.

Mitra, D. and Owers, J., *''Dividend initiation announcement effects and firm's information environment''*, Journal of Business, Finance and Accounting, vol. 22, pp. 551-73, 1995.

Modigliani, F., *"Debt, dividend policy, inflation and market valuation"*, Journal of Finance, vol. 37, pp. 255-73, 1982.

Mork, R., A. Shleifer, and R. W. Vishny, *"Management Ownership and Market Valuation – An Empirical Analysis"*, The Journal of Financial Economics, vol.20, pp.293-315, 1988.

Mosebach, M., *"Market response to bank's granting lines of credit"*. Journal of Banking and Finance, 1999.

Moyer, R. Charles, Ramesh Rao, and Niranjan Tripathy, *"Dividend Policy and Regulatory Risk: A Test of the Smith Hypothesis,"* Journal of Economics and Business, vol. 44, May, pp. 127-134, 1992.

Noronha, G.M., D.K. Shome and G.E. Morgan, *"The monitoring rationale for Numbers"*, Journal of Accounting Research, vol. 6, pp. 159-178,1968.

Ogden, J. P., *"A Dividend Payment Effect in Stock Returns"*, Financial Review, vol. 29, pp.345-369 , 1994.

Penman, S.H., *''The predictive content of earnings forecasts and dividends''*, Journal of Finance, vol. 38, pp. 1181-99, 1983.

Porterfield, J. T. S., *"Dividend, Dilution, and Delusion*", *Harvard Business Review*, vol.37, pp. 56-61, 1959

Poterba, J., *"Tax policy and corporate savings"*. Brookings Papers on Economic Activity, vol.18, pp.455-/503, 1987.

Poterba, J., and L. Summers. *"The Economic Effects of Dividend Taxation."*In *Recent Advances in Corporate Finance* edited by E. Altman and M. Subrahmanyam. Homewood, Ill.: Irwin, 1985.

Poterba, J.M., *''The market valuation of cash dividends – the citizens utilities case reconsidered''*, Journal of Financial Economics, vol. 15, pp. 395-405, 1986.

Pye, G. *"Preferential Tax Treatment of Capital Gains, Optimal Dividend Policy, and Capital Budgeting"*, The Quarterly Journal of Economics, vol. 86, pp.226-242, 1972.

Raghunathan V and Prabina Dass , "*Corporate Performance: Post Liberalization,"*ICFAI Journal of Applied Finance, vol. 5(2), pp. 6-31, 1999.

Rajan, R., *"Insiders and outsiders: The choice between informed and arm's-length debt"*. Journal of Finance, vol.47, pp.1367-/1400,1992.

Ramachandran, J. *"Behaviour of Stock Market Prices,Information Assimilation and Market Efficiency,"* Unpublished Doctoral Dissertation, Ahmedabad: Indian Institute of Management, 1988.

Ramcharran, H. *"An Empirical Model of Dividend Policy in Emerging Equity Markets"*, Emerging Markets Quaterly Spring, pp39-49, 2001.

Rao, Ramesh, and R. Charles Moyer , *"Regulatory Climate and Electric Utility Capital Structure Decisions,"* The Financial Review, vol. 29, February, pp. 97-124, 1994

Richardson, G., Sefcick, S. and Thompson, R., *''A test of dividend irrelevance using volume reactions to a change in dividend policy''*, Journal of Financial Economics, vol. 17,pp. 313-33, 1986.

Roy,S. Manjesh and Kapil Mahajan , *"Regulatory Oversight on Dividend payouts"*, Margin, vol 35(4), pp.19-34, 2003

Sahadevan K G and Thiripalraju M, *"Money and Stock Prices: Some Empirical Evidence on their Lead-Lag Relationship"*, Indian Journal of Finance and Research, vol. 5, pp. 10-29, 1995.

Sant, R. and Cowan, A.R., *''Do dividends signal earnings? The case of omitted dividends''*, Journal of Banking and Finance, vol. 18, pp. 1113-33, 1994.

Schellenger H. Michael, Wood D. David, Tashakori Ahmad, *" Board of Director Composition, shareholder Wealth, and Dividend Policy"*, Journal of Management , vol.15, No.3, 457-467,1989.

Schooley, D.K. and L.D. Barney Jr, *"Using dividend policy and managerial ownership to reduce agency costs"*, Journal of Financial Research, vol.1 no.3, pp.363- 373, 1994.

Shefrin, Hersh M and Meir Statman, *"Explaining Investor Preference for Cash Dividends"*, Journal of Financial Economics, pp.253-82,1984.

Short, H., K. Keasey, and D. Duxbury, *"Capital Structure, Management Ownership and Large External Shareholders: An UK Analysis"*, International Journal of The Economics and Business, vol.9,no.3, pp.375-399, 2002.

Stevens, J. L. and Jose, M. L., *"The Effect of Dividend Payout, Stability, and Smoothing on Firm Value"*, Journal of Accounting Auditing & Finance, vol. 7, pp. 195-216, 1992.

Strong, N., *''Modelling abnormal returns: a review article''*, Journal of Business, Finance and Accounting, vol. 19, pp. 533-53, 1992.

Stulz, R.M., *"Managerial discretion and optimal financing policies"*. Journal of Financial Economics, vol.26, pp.3-28, 1990.

Sur D., *"Dividend Payout Trends in the Post-liberalisation Era: A case Study of Colgate Palmolive (India) Ltd."* The Management Accountant, March, pp.201-206, 2005.

Talmor, E., *"Asymmetric information, signaling, and optimal corporate financial decisions"*, Journal of Financial and Quantitative Analysis, vol. 16, pp. 413, 1981.

Trahan E A and L J Gitman, *"Bridging the Theory-Practice Gap in Corporate Finance: A Survey of Chief Financial Officers,"* Quarterly Review of Economics and Finance, vol. 35, pp. 73-87,1995.

Venkatesh, P., *''The impact of dividend initiation on the information content of earnings announcements and returns volatility''*, Journal of Business, vol. 62, April, pp. 175-97, 1989.

Walter, J. E. *"Dividend Polices and Common Stock Prices"*, The Journal of Finance, vol.16, pp.29-41, 1956.

Wansley, J.N., Sirmans, C., Shilling, J. and Lee, Y., *''Dividend change announcement effects and earnings volatility and timing''*, Journal of Financial Research, vol. 14, pp. 37-49, 1991.

Wansley, J.W. and Lane, W.R., *''A financial profile of the dividend initiating firms''*, Journal of Business, Finance and Accounting, vol. 14, pp. 425-36, 1987.

Waud, R., *"Small sample bias due to misspeci_cation in the `partial adjustment' and `adapted expectations' models"*, Journal of The American Statistical Association, vol.61(316), pp.134-145, 1966.

White, F.L., *''Executive compensation and dividend policy''*, Journal of Corporate Finance, vol. 2, pp. 335-58, 1996.

William, J B. *"The Theory of Investment Value,"* Cambridge, MA: Harvard University Press.

Williams, J., *''Efficient signalling with dividends, investment and stock repurchases''*, Journal of Finance, vol. 43, pp. 737-47, 1988.

Woolridge J and C Ghosh , *"Dividend Cuts: Do They Always Signal Bad News,"* Midland Corporate Finance Journal, vol. 3, pp. 20 –32,1985.

WEBSITES

http://www.bharatpetroleum.co.in/

http://www.cairnindia.com/

http://www.iocl.com/

http://www.ril.com

http://www.ongcindia.com

Annexures

Make In India: Role of DMIC Project

[1]Dr. D.C Jain, [2]Pradyumna Sharma

[1]Professor, [2]Research Scholar, Commerce College, Kota, India

ABSTRACT

DMIC stands for delhi-mumbai industrial corridor. The project is featured in KPMG's '100 Most Innovative Global Projects'. as one of the world's most innovative and inspiring infrastructure projects.The DMIC project seeks to create a strong economic base with a globally competitive environment and state-of-the-art infrastructure to activate local commerce, enhance investments and attain sustainable development. New DMIC Cities will help to meet pressures of urbanization and also lead India's economic growth for the next 20 -30 years.The project aspires to double employment potential, triple industrial output and quadruple exports from the region in the next seven to nine years. Most importantly, the Make in India program represents an attitudinal shift in how India relates to investors: not as a permit-issuing authority, but as a true business partner.

- Dedicated teams that will guide and assist first-time investors, from time of arrival.
- Focused targeting of companies across sectors.

DMIC PHASE I

- Ahmedabad-Dholera Investment Region, Gujarat
- Manesar-Bawal Investment Region, Haryana
- Khushkhera-Bhiwadi-Neemrana Investment Region, Rajasthan
- Pithampur-Dhar-Mhow Investment Region, Madhya Pradesh
- Dadri-Noida-Ghaziabad Investment Region, Uttar Pradesh
- Dighi Port Industrial Area, Maharashtra
- Nashik-Sinnar-Igatpuri Investment Region, Maharashtra

AGENCIES

1. DMIC Development Corporation
2. Department of Industrial Policy & Promotion
3. Invest India

Corporate Governance: Need of New Corporate India [Evolution, Challenges and Recommendation]

[1]DR. D.C. Jain, [2]Pradyumna Sharma

[1]Professor, Commerce College, Kota, [2]Research Scholar, Kota

ABSTRACT

Corporate governance refers to the best set of practices to govern a corporate entity. These norms guide the management on issues of direction and controlling. It explains the procedures for object oriented flow of work in organization. It focuses on value creation for stakeholders.

The basic principles of corporate governance is integrity, unbiased, transparent and effective working. The policy framework emphasized on complete disclosures, compliance of law, ethical values and accountability.

Corporate governance is essential in current business environment due to involvement of huge corporate and individual fund, i.e. big components of debt and equity. Corporate governance norms are expected to play key role in success of the economy.

*Economic developments like **"MAKE IN INDIA", "DIGITAL INDIA", COMPANY ACT 2013, SEBI REGULATION 2015, GOODS AND SERVICE TAX, FDI AND FII POLICY will** create new challenges for regulators and manager and that will require new approach for corporate governance norms.*

The present paper aims at the Present structure, benefits, challenges and recommendation for Corporate Governance norms in India.

Introduction:

"Corporations pool capital from a large investor base both in the domestic and in the international capital markets. In this context, investment is ultimately an act of faith in the ability of a corporation's management. When an investor invests money in a corporation, he expects the board and the management to act as trustees and ensure the safety of the capital and also earn a rate of return that is higher than the cost of capital. In this regard, investors expect management to act in their best interests at all times and adopt good corporate governance practices.

"Corporate governance is the acceptance by management of the inalienable rights of shareholders as the true owners of the corporation and of their own role as trustees on behalf of

 ISBN: 978-93-83462-94-0

the shareholders. It is about commitment to values, about ethical business conduct and about making a distinction between personal and corporate funds in the management of a company.

RESEARCH METHDOLOGY:

Online database is used for the study. Search engine like EBSCO was used and publisher's databases like Elsevier and Sage Publications, Online Wiley, were also reviewed. Following journals from the field of management by various authors are also reviewed:

Academy of Management Review, Academy of Management Journal, Accounting Review, Administrative Science Quarterly, International Journal of Accounting , Journal of Accounting and Economics, Journal of Accounting Research , Journal of Business, Journal of Finance, Journal of Financial Economics, Management Science, Organization Science, Review of Economic Studies, Review of Financial Studies, and Strategic Management Journal.

We Searched "Corporate Governance" Stakeholders, and India as the key word to search in the title or abstract for articles published during the period 2000-2015. We found 1246 scholarly articles on this search. Secondary search for corporate governance in India shows the result of 301008 scholarly articles.

REVIEW OF LITERATURE:

Karim (1996) (UK); (Ramsay and Hoad, 1997 (Australia); Gupta 2003 (India); Holder-Webb et al., 2009 (US)); Studied the pattern and importance of disclosure by corporate. They studied almost 268 listed companies.

Khanna's(2000) analysis suggests that enforcement is important to the growth of stock markets, but the active civil enforcement of corporate laws may not always be critical to their initial development.

Pratip Kar(2001) has explored three dimension of corporate governance in India viz. related-party transactions; the promoter's or large shareholder's actions; and the board's nominations.

Gupta (2003) studied the corporate governance reporting practices of 30 Indian companies listed on the BSE Sensex, extracting corporate governance reporting section from the annual reports.

Khanna and Palepu(2004) have concluded that it did not appear that concentrated ownership in India was entirely associated with the ills that the literature has ascribed to it in emerging markets.

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Gupta and Parua (2006) attempted to find out the degree of compliance of the Corporate Governance (CG) codes by private sector Indian companies listed in the Bombay Stock Exchange (BSE).

EVOLUTION OF CORPORATE GOVERNANCE:

There have been several instances of spectacular business scams across the world that shook the corporate and financial world— such as the **Enron** and **WorldCom** scandals in the US, the Vivendi scandal in Europe, and the Satyam scandal in India. An analysis of the global financial crisis beginning 2007 also indicates the governance failure of corporate including the failure of gatekeepers like credit rating agencies and auditors on several counts. These corporate failures and events have underlined the importance of a proper governance mechanism even in the minimalist sense of ensuring that corporate properly and effectively do what they were established to do, and are accountable in a fair and transparent manner as they were expected to be. Internationally, there have been a number of initiatives to streamline corporate governance practices:

These include:- The Cadbury Report (1992), The Greenbury Report (1995), The Hampel Report (1998), The Turnbull Report (1999), The Higgs Report (2003), The Smith Report (2003), The Combined Code on Corporate Governance (2008) (all in the UK), and The Sarbanes-Oxley Act (2002) in the US, besides numerous other initiatives.

IN INDIA:

There have been several major corporate governance initiatives launched in India since the mid-1990s.

1. **The CII Code:** In 1997 the first draft of CII code was released addressing the issues of corporate governance.

2. **Kumar Mangalam Birla committee report and Clause 49**

The second major corporate governance initiative in the country was undertaken by SEBI. In early 1999, it set up a committee under Kumar Mangalam Birla to promote and raise the standards of good corporate governance. In early 2000, the SEBI board had accepted and ratified key recommendations of this committee, and these were incorporated into Clause 49 of the Listing Agreement of the Stock Exchanges.

3. **The Naresh Chandra committee report on corporate governance**

The Naresh Chandra committee was appointed in August 2002 by the Department of Company Affairs (DCA) under the Ministry of Finance and Company Affairs to examine various corporate governance issues. The Committee submitted its report in December 2002. It made

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recommendations in two key aspects of corporate governance: financial and non-financial disclosures: and independent auditing and board oversight of management

4. Narayana Murthy committee report on corporate governance:

The fourth initiative on corporate governance in India is in the form of the recommendations of the Narayana Murthy committee. The committee was set up by SEBI, under the chairmanship of Mr. N. R. Narayana Murthy, to review Clause 49, and suggest measures to improve corporate governance standards.

5. Government of India also constituted **J.J. IRANI COMMITTEE** in **2005** for recommendation on **Companies act. J.J. IRANICOMMITTEE** also provides suggestions on **CORPORATE GOVERNANCE** Norms.

REGULATORY FRAMEWORK:

Regulators:

- **Securities Exchange Board of India (SEBI)**
- **Ministry of Corporate Affairs (MCA)**

Regulations:-	***Statutory Bodies:***
➢ The Companies Act of 1956 ➢ The Companies Act of 2013 ➢ The Desirable Corporate Governance – a code ➢ The Naresh Chandra Committee Report ➢ The Kumar Mangalam Birla Committee Report ➢ The N R Narayana Murthy Committee Report ➢ Clause 49 of the Listing Agreement ➢ Revised Clause 49 of the Listing Agreement	➢ Institute of Company Secretaries of India. ➢ Institute of chartered accountants of India ➢ National Foundation for Corporate Governance (NFCG) ➢ Corporate Governance section from the Business Portal of India ➢ The Competition Commission of India ➢ The Competition Commission of India ➢ The Central Vigilance Commission of India ➢ Confederation of Indian Industries (CII) ➢ Institute of Internal Auditors (IIA) India ➢ Bombay Chartered Accountants Society (BCAS) ➢ Asian Corporate Governance Association (ACGA)

 ISBN: 978-93-83462-94-0

Benefits of Corporate Governance:

- Good corporate governance ensures corporate success and economic growth.
- Strong corporate governance maintains investors' confidence, as a result of which, company can raise capital efficiently and effectively.
- It lowers the capital cost.
- There is a positive impact on the share price.
- It provides proper inducement to the owners as well as managers to achieve objectives that are
- In interests of the shareholders and the organization.
- Good corporate governance also minimizes wastages, corruption, risks and mismanagement.
- It helps in brand formation and development.
- It ensures organization in managed in a manner that fits the best interests of all.

CONCLUSION

The concept of corporate governance hinges on total transparency, integrity and accountability of the management and the board of directors. The importance of Corporate Governance lies in its contribution both to business prosperity and to accountability. In the age of globalization, global competition, good corporate governance facilitate as a great tool for corporate bodies. It existed from Vedic times as the highest standards in Arthashastra to today's set of ethics, principles, rules, regulations, values, morals, thinking, laws etc as good corporate governance. Corporate governance should also have approach of holistic view, value based governance, should be committed towards corporate social uplift and social responsibility and environment protection. It also involves creative, generative and positive things that add value to the various stakeholders that are served as customers. Be it finance, taxation, banking or legal framework each and every place requires good corporate governance. Corporate Governance is a means not an end, Corporate Excellence should be the end. Once, the good Corporate Governance is achieved and the Indian Corporate Body will shine to outshine the whole world.

REFERENCES

- **Adams, D., & Tejaswi, K.** (2009). Integrity, Ethics and Governance, Charted Secretary, 153-176.

 ISBN: 978-93-83462-94-0

- **Adams, R.B. & Ferreira, D.** (2011). Corporate governance and financial regulation. Retrieved from http:// blogs.law.harvard.edu / cargo/2011.
- **Aggarwal, P. (2013).** Corporate Governance & Corporate profitability: Are they related – A study in Indian context. International journal of Scientific and Research publications, 3 (12), 8-9.
- **Barrett, A., & Young, B.** (2009). Shareholder meetings - Majority Voting for Director Elections: Not Yet Standard. Corporate Advisor, 17(1), 15-17.
- **Bruno, Valentina, Claessens, & Stijn.** (2010 October). Corporate governance and regulation: Can there be too much of a good thing? Journal of Financial Intermediation, Elsevier, 19 (4), 461-482.

 ISBN: 978-93-83462-94-0

OIL SECTOR: CURRENT PERSPECTIVE OF INDIA

CS PRADYUMNA SHARMA
[CS, NET, CA(F), M.COM]

GUIDE:-
DR. D.C. JAIN
[PRINCIPAL, JAIN DIWAKAR COLLEGE, KOTA]

"Written as research scholar of Commerce College, University of Kota."

ABSTRACT

In last 15 years main oil demand growth in Asia was driven by china. But due to rebalancing policy of China, its annual growth rate is slowing down in last 3 years. This Chinese slowdown pushed India as main player in 2015-16. In this paper we will analyses impact of low prices, policy changes and structure changes on Indian oil demand. Boost in oil demand will also trigger the per capita consumption of oil, Road construction, Infrastructure development and Promotion of manufacturing sector.

This paper aims to explore comparative study of historical demand and current demand and its driving factors and also its impact such as-Economic growth, Energy demand and Oil consumption, Growth in vehicle ownership, infrastructure development, Impact on Ecology, Manufacturing push, Make in India Policy and Trade flow impact.

KEY WORDS: - OIL SECTOR, INDIA, INFRASTRUCTURE, MANUFACTURING, DEMAND

1. INTRODUCTION:

In 2015-16, India emerged as the main driver of oil demand growth in world when international demand is growing with its strongest rate @ 1.8 million barrels per day (mb/d). However, in contrast with 2010, when demand growth was largely affected by the global financial downturn, demand growth in 2015-16 was independent of these factors, although the 25% fall in oil prices provided a significant boost to consumer demand.

In last decade the main oil demand growth was driven by USA and CHINA which accounted almost 2/3 rd of total growth rate. In era of economic slowdown and deliberate rebalancing policy a new contender has emerged: INDIA.

Previously Indian oil demand failed to compete with China due to dominant share of its services sector relative to manufacturing in GDP, and partly because a situation of 'political paralysis' over the last few years was unattractive for industrial investment. However, 2015-16 saw a 'New India' emerge, with oil demand growth jumping to 0.3 mb/d per year, a record high. India is soon likely to overtake Japan as the second-largest oil consuming economy in Asia.

The global oil price downturn shows the indication of substantial fiscal improvement and a 10% decrease in oil prices in 16-17 which will increase import of oil up to 0.5%. (World Bank Report)

In this paper we argue that in addition to the boost from low oil prices, structural and policy-driven changes are underway which could result in India's oil demand growth in a similar way to China's during the late 1990s, when Chinese oil demand was at levels roughly equivalent to current Indian oil demand. India's per capita oil consumption has increased as a result of the increased affordability of oil in various uses (on the back of the drop in the oil price) for a large section of its population who could not previously afford it; this is becoming visible in the motorization of the Indian economy. Furthermore, the Indian government's target of increasing the manufacturing sector's share of GDP to 25 per cent by the beginning of the next decade (from roughly 15 per cent at present) could lead to higher oil

consumption in manufacturing. Finally, the programme of infrastructure construction (roads and national highways) that is being partly funded through revenues from the higher taxation of oil and oil products is also likely to support oil demand growth.

2. HISTORICAL BACKGROUND:

Historically Indian oil consumption shows a steady growth rate over the past decade which roughly comes 0.15 mb/d annually. This steady growth shows that income effect beats the price effect in this decade implying a low price elasticity of demand in India. The IMF in 2011, for instance, predicted that between 2015 and 2018 the Indian economy would grow at around 6 per cent on average which matches the income elasticity of oil. In addition to this expected long-term trend, however, there was an upsurge in oil demand in India during 2014 and 2015 due to fall in prices.

This demand pattern can be better understood by a further examination of data from 2014 and 2015 as oil demand remained largely depressed during 2013 due to an economic downturn in India. It picked up in June 2014 with the strongest demand growth since January 2013, but remained relatively muted through 2014 and registered its first fall since August 2014 in October 2014. Demand rebounded from November 2014 onwards, showing a then record increase of 9.4 per cent in February 2015 the second highest growth on record at the time. Demand growth remained robust through 2015, with occasional dips due to a weakening rural sector. In September 2015 y/y demand growth reached 0.5mb/d and a record 0.62mb/d in October.

While November 2015 demand growth eased back to a more realistic 6.4 per cent (0.24mb/d), December 2015 demand growth picked back up to 0.31mb/d. Average oil demand growth from April 2014 to December 2015 was around 0.22mb/d, while average growth from January to December 2015 was 0.29mb/d, both figures being considerably higher than the historical average demand growth of roughly 0.1–0.15mb/d between 2000 and 2015. Demand stayed near record highs at 3.95mb/d in January, higher y/y by 0.45mb/d, continuing with the momentum seen in 2015.

3. THE CONCEPT OF GROWTH

The concept of growth depends on three conditions. The process of economic growth as centering on a relatively brief time interval of two or three decades when an economy, and the society of which it is a part, transform themselves in such ways that economic growth is subsequently more or less automatic. The sequence of growth is taken to consist of three periods: a long period (amounting to several decades) when the preconditions for growth are established, the growth itself, defined within two or three decades, and a long period when growth becomes normal and relatively automatic. These three stages do not preclude the possibility of growth giving way to secular stagnation and decline.

The three conditions are:-

(a) A rise in the rate of productive investment from 5 per cent or less to over 10 per cent of national income or net national product.

(b) The development of one or more substantial manufacturing sectors, with a high rate of growth; and,

(c) The existence or emergence of a political, social, and institutional framework which supports sustained economic growth.

As per Rostow's theory (1956) in a developing economy like India four basic factors must be present:

i) There must be an enlarged effective demand for the product or products of sectors which have the potential to generate a rapid rate of growth in output. Historically this has been brought about by the transfer of income from consumption to productive investment, by capital imports, by a sharp increase in the productivity of current investment inputs yielding an increase in the consumers' real income expended on domestic manufactures, or by a combination of the above.

ii) There must be an introduction into these sectors of new production functions as well as an expansion of capacity.

iii) The society must be capable of generating the capital initially required to catalyses the take-off in these key sectors, and there must be a high rate of

plough-back by the state or private entrepreneurs controlling capacity and technique in these sectors, and in supplementary growth sectors.

iv) The leading sector(s) must be such that their expansion and technical transformation induce a chain of Leontief input–output requirements for increased capacity and the potential for new production functions in other sectors, to which the society progressively responds.

"Conclusively we can say that growth is a normative idea to which most developing country governments aspire and one which they consequently attempt to catalyses through specific policies."

4. PER CAPITA OIL CONSUMPTION

India's per capita oil consumption is relatively low in comparison to both the world's largest consuming economies. The wealthiest 10 per cent of its population accounts for a quarter of household energy expenditure. Furthermore, household expenditure on energy is two and a half times higher in urban areas than in rural areas, with the most affluent sectors of the urban population spending around eight times as much as the poorest, whereas in rural areas the most affluent only spend four and a half times as much as the poorest (IEA, 2015). The drop in oil prices (the price of the Indian crude oil basket has fallen from 109 US$/barrel in June 2014 to 25 US$/barrel in January 2016) has been sufficient to increase affordability for a whole new segment of the growing middle class population. The effect of prices is reflected in both higher consumption of fuels as well as a switch away from bio energy and kerosene towards commercial fuels such as LPG.

5. VEHICLE OWNERSHIP

The effect on per capita oil consumption is best observed in the transportation sector, which accounts for roughly 40 per cent of India's oil consumption. Car ownership growth rate is improved in Indian economy i.e. 3 per 1000 in 1990 to 23 per 1000 in 2015 and penetrated growth (car plus two wheeler) raised to 150 per 1000 in 2015 from 18 per 1000 in 1990.

Car sales are indicative of the effect of rising incomes and the move towards higher-end private transportation. However, two-wheeler sales are much more reflective of the number of new consumers entering the market for personal transportation, on the back of the increased affordability of oil. The purchasing of two-wheelers is therefore a closer reflection of a step up on the energy ladder towards motorization. It can be expected that much of the two-wheeler fleet will be replaced by cars, as consumers continue to climb the energy ladder on the back of rising economic growth and per capita income. India is now the world's sixth largest car market, with 26 million units sold in 2014. From 2010 to 2015, car sales have been increasing by around 2 million units annually. Percentage growth rates are misleading here, Even if the market slows down, the crucial factor for oil markets is that the vast majority of new car sales in India go to fleet expansion. That is to say, unlike developed markets (where the majority of new cars are replacing ageing vehicles that are being scrapped and overall fleet growth tends to track population growth) India, like other developing markets, is experiencing a rapid increase in the size of its vehicle fleet. Between 2007 and 2015 the size of India's vehicle fleet nearly doubled, rising from around 96 million vehicles to 200 million vehicles.

Collectively, this evidence implies that India's vehicle ownership pattern is indicative of the motorization stage, with consequent implications for oil consumption.

6. INFRASTRUCTURE AND ROAD BUILDING

Per capita consumption is taken as the primary determinant of vehicle ownership growth and saturation levels, but development of infrastructure, particularly roads in developing countries, is assumed to follow the trajectory seen in developed countries. India's government has embarked upon a massive programme of infrastructure creation, aiming to construct 30 km of highway roads per day. Highway construction has been extremely erratic during the past decade, with substantial additions seen in some years (for instance, a 13 per cent growth in length of national highways in 2004 and 2012) and no progress in others (for instance, negligible or zero growth in 2002, 2003, 2005, 2008, 2010, and 2011). Given that personal transportation (namely, the car fleet) is likely to grow in line

with per capita income levels, this expansion in national highways holds significant implications, primarily for road transportation, particularly for diesel consumption.

The broad conclusion from this is that the 'boom' in road construction, if successfully achieved, will further lift the expansion of the goods vehicle fleet and concomitantly increase diesel consumption. In a recently released 'Global Construction 2030' report, the Indian construction market is highlighted as the key driver of growth – being set to overtake Japan as the third-largest construction market within the next five years.

7. ENVIRONMENTAL FACTORS

This is largely ignored factor with regard to growth-based motorization is that of environmental constraints, imposed through policy measures on pollution, aimed at curbing particulate matter emissions from vehicles. While this constraint is unlikely to alter the trend in motorization, it will alter the demand for oil products used in enabling motorization. In India, this is likely to affect diesel demand, as diesel-powered vehicles account for over 90 per cent of SUVs, 34 per cent of small cars, and 70 per cent of large/medium cars. In December 2015, India's Supreme Court placed restrictions on the use of high-end diesel passenger vehicles (including SUVs with an engine size of 2000 cc and above) in India's National Capital Region (which includes Delhi, ranked amongst the most polluted cities in the world); these restrictions ban such high-end vehicles from new registrations until 31 March 2016. The Court has also banned diesel goods vehicles registered prior to 2005 from entering Delhi. Furthermore, all taxis in the capital must mandatorily switch to Compressed Natural Gas (CNG); this is estimated to impact around 30,000 vehicles. The impact of the ban on overall diesel demand in January 2016 was relatively small (around 10-20 thousand b/d), more than offset by higher demand from manufacturing.

Delhi's state administration has also imposed a 'green cess' on light and heavy commercial vehicles which will push up the cost of maintaining diesel vehicles. Indian policymakers are increasingly concerned about rising urban air pollution levels. In January 2016, Delhi's government carried out a 15 day pilot

programme when private cars were allowed to operate on public roads only on alternate days, depending on whether their license plates ended in an even or an odd number.

8. MANUFACTURING- IMPACT OF "MAKE IN INDIA INITIATIVE"

In September 2014, India's government announced a major policy initiative entitled 'Make in India'; this was aimed at expanding the share of manufacturing from 15 per cent of GDP to 25 per cent by the year 2022. It has been estimated that 220 million additional jobs will be required by 2025 (GoI, 2011). India's manufacturing sector currently comprises roughly 11 per cent of total employment, in contrast with the position in other emerging markets where the share of manufacturing employment ranges from 15 to 30 per cent (GoI, 2013), and the 'Make in India' policy aims to generate 100 million additional manufacturing jobs by 2022. Target annual average growth rate of 12 per cent for the manufacturing sector as a whole is expected during the Twelfth Five-Year Plan (2012–17) and until 2025.

India's push to expand its share of manufacturing in GDP implies a concomitant increase in oil consumption, subject to improvements in the energy efficiency of GDP. Manufacturing GDP in India in 2014 was estimated at US$153 billion, or roughly 15 per cent of total GDP, which is estimated at around US$1 trillion (Planning Commission Data book, 2014).

By analyzing historical data of 2007-2015, projections show a clear upward trend from 2016 onwards, with oil consumption in manufacturing in 2022 estimated at around a third higher than the figure for 2015. However, it must be stressed that this is a broad and somewhat conservative estimate, based on a set of assumptions. The actual trend could well be non-linear, and is contingent upon the effectiveness of government policy in catalyzing the required ramp-up in manufacturing GDP. Furthermore, improvements in energy efficiency could temper oil consumption growth in manufacturing.

Diesel will not be the sole beneficiary of the push toward manufacturing, as NAPHTHA AND BITUMEN consumption is also likely to increase. Indeed, naphtha demand has grown considerably since March 2015, reaching a double-digit growth figure in July 2015. Between July and November 2015, naphtha demand growth averaged 29 per cent, with November growth a massive 40 per cent. This was driven by the demand for naphtha as a gasoline blend stock, and more importantly by demand from the growing petrochemical (particularly plastics and polymers) and fertilizer sectors. As manufacturing demand grows, so will the demand for plastics (petrochemical industry), and naphtha is best placed to benefit from this, particularly given the focus of the 'Make in India' campaign.

The Indian petrochemical industry has grown rapidly in the last 10 years; capacity expansions have led to much greater self-sufficiency for major petrochemical building blocks such as ethylene, propylene, butadiene, and aromatics, amongst others. These building blocks all had surplus capacity of at least 0.5 million tons per annum (Mtpa) as of 2013. The olefinic base chemical capacity is expected to increase from 4.5 Mtpa to 8–10 Mtpa, while the aromatic base chemical capacity is expected to increase from 3.2 Mtpa to 5–6 Mtpa over the next five to six years. Robust expansions in the refining sector, together with surplus availability of naphtha as feedstock for petrochemical plants, have supported this growth. Over the next five years, the capacity expansion projects announced by all major Indian petrochemical companies will lead to a reversal of balances, with excess naphtha supplies falling sharply.

9. TRADE FLOW IMPACT

Our analysis suggests that oil consumption in India is at a potential inflection point, mimicking the THIRD stage of economic growth. It can be argued that the relationships between infrastructure creation, the push towards manufacturing, and oil consumption, generally hold true for emerging markets. A simple correlation of India's merchandise exports with its oil consumption yields a strong positive coefficient of 0.92. However, the growth in oil consumption also holds implications for trade flows, both with specific regard to India's trade balance and its recent status as an oil products exporter, as well as for international oil trade flows.

Already, oil product exports have fallen for eight of the first eleven months of 2015, with average product exports over the same period lower by over 0.1 mb/d compared to the same period in 2014.

The area where the change in trade flows has been the most apparent has been in naphtha. Indian naphtha exports have fallen by around 21 thousand b/d between January and November 2015, with the decline extending to 44 thousand b/d between September and November, as the country consumes more of its own output due to the rapid growth in demand discussed above. India has long been a key short-haul naphtha supplier for the Asian market, so the decline in exports has been felt very rapidly.

Diesel exports have also fallen, by an average of 39 thousand b/d in 2015. While part of this is tied to heavy refinery maintenance, growing demand also played a part in a trend that is likely to continue.

A growth in domestic oil demand could therefore reverse India's recently achieved status as a net oil products exporter, with significant implications for international trade flows.

10. CONCLUSION

India's oil demand has soared over the last year, reaching an average figure for oil demand growth y/y of 0.30 mb/d in 2015, compared with 0.1–0.15 mb/d over the previous decade. This jump in demand reflects a number of underlying dynamics at play, which indicate that India's oil demand may be on the verge of growth. The magnitude of this growth can be gauged by the fact that Indian oil demand is demonstrating trends that were visible in China around a decade or a decade and a half ago, during the country's industrialization 'boom'. Furthermore, an analysis of motorization, widely regarded as an acceptable metric in gauging oil consumption patterns and economic growth, shows that car ownership trends in India (per thousand population) are at around the levels which China reached a decade ago. India's per capita income on a purchasing power parity basis is also estimated to have breached the threshold beyond which motorization rapidly ensues.

While the drop in oil prices since June 2014 has aided the expansion in oil demand (the increased affordability of oil to a very large section of the population is reflected, for instance, in massive additions of two-wheelers to the total vehicle fleet over 2015-16) this paper has also shown that recent policy initiatives are likely to further lift oil demand, a process which is already apparent in the data. Specifically, this paper has estimated the impact on oil demand, and specifically on oil products such as diesel and naphtha, of the push to increase manufacturing's share within GDP from 15 per cent at present to 25 per cent by 2022. Such an increase could add at least a third to India's current demand levels, based on a broad and conservative linear estimate. A concomitant programme of road infrastructure creation targeting the addition of 30 km a day will add to this, although this paper has argued that growing environmental and air pollution concerns could constrain growth in oil demand in the transportation sector. In terms of the bigger picture: while China's oil demand growth has slowed to around 0.30mb/d since 2013 from levels of 0.50mb/d in the previous decade, India appears to not have long to go in terms of achieving the same levels of oil demand growth. This rise in demand also has implications for India's recently acquired status as a net exporter of oil products, which, as discussed, could well be reversed. Finally, the question of whether India will manage to soar to a higher plane of development and consumption is contingent to a great extent upon its ability to carry out and sustain structural reforms to support economic growth.

11. REFERENCES

1. IMF (2016). *World Economic Outlook Update*, January 2016, International Monetary Fund, Washington, D.C.
2. IEA (2015) *World Energy Outlook*, International Energy Agency, Paris.
3. BP (2015). *Statistical Review of World Energy*.
4. World Bank (2015a). 'Understanding the Plunge in Oil Prices: Sources and Implications', *Global Economic Prospects*, January 2015, The World Bank Group, Washington D.C.
5. World Bank (2015b). 'The Great Plunge in Oil Prices: Causes, Consequences and Policy Responses', Policy Research Note PRN/15/01, The World Bank Group, Washington D.C.

5. Planning Commission Databook (2014). Government of India.
6. IEA (2014) *World Energy Outlook*, International Energy Agency, Paris.
7. Economic Survey (2014). Ministry of Finance, Government of India.
8. Fattouh, B., Sen, A., and Sen, A. (2013). 'Diesel Pricing Reforms in India: A Perspective on Demand', Oxford Energy Comment, Oxford Institute for Energy Studies, August.
9. GoI (2013). 'Economic Sectors', Volume II, *Twelfth Five Year Plan (2012–17)*, Planning Commission, Government of India.
10. El Katiri, L. and Fattouh, B. (2011). 'Energy Poverty in the Arab World: The Case of Yemen', OIES Working Paper MEP 1, Oxford Institute for Energy Studies.
11. GoI (2011). 'National Manufacturing Policy', *Press Note No. 2 (2011 Series)*, Government of India, Ministry of Commerce and Industry, Department of Industrial Policy & Promotion (Manufacturing Policy Section).
12. IMF (2011). *World Economic Outlook*, International Monetary Fund, Washington, D.C.
13. Dargay, J., Gately, D., and Sommer, M. (2007). 'Vehicle Ownership and Income Growth, Worldwide: 1960–2030', *The Energy Journal*, 28 (4), 143–70.
14. Huo, H., Wang, M., Johnson, L. and Dongquan, He (2007). 'Projection of Chinese Motor Vehicle Growth, Oil Demand and CO2 Emissions through 2050'.
15. Dargay, J., and Gately, D. (1999). 'Income's effect on car and vehicle ownership, worldwide: 1960–2015', *Transportation Research*.
16. Dahl, C. (1993). 'A survey of oil demand elasticities for developing countries', *OPEC Review*, 17 (4), 399–420.
17. Rostow, W.W. (1956). 'The Take-Off into Self Sustained Growth', *The Economic Journal*, 66 (261), 25–48..

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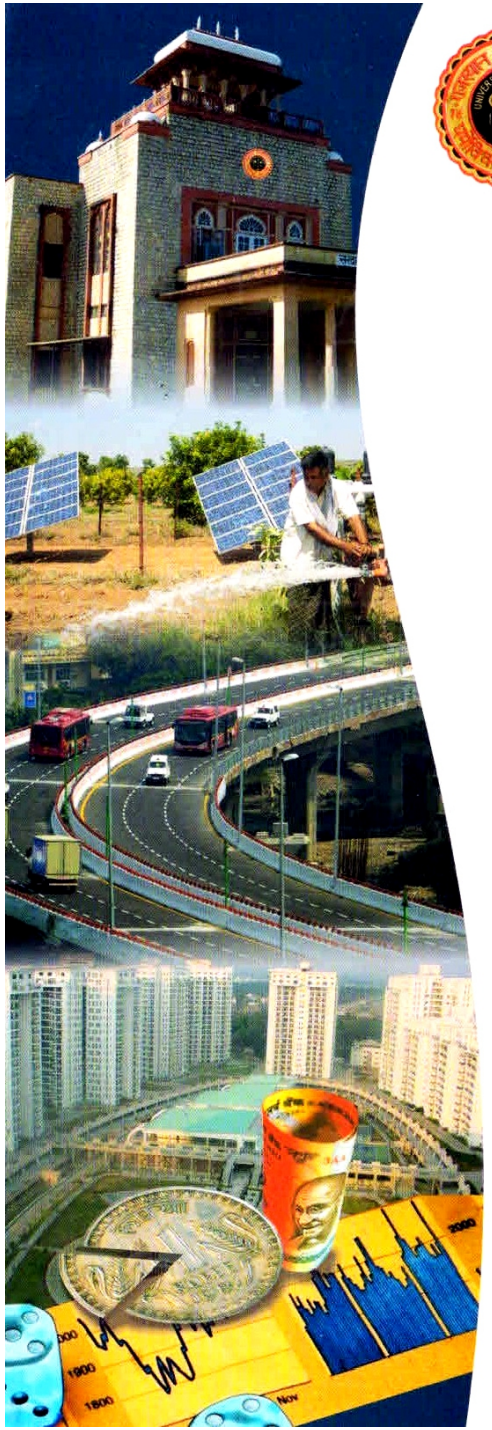

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