Paper ID: UGC 48846-803

FINANCIAL MANAGEMENT PRACTICES IN OIL AND GAS INDUSTRY-A STUDY OF COMPARATIVE CAPITAL STRUCTURE ANALYSIS OF BHARAT PETROLEUM CORPORATION LIMITED AND ESSAR OIL LIMITED

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Abstract: The term “financial management practices” refers to the set of common methods or procedures develop for carrying out accounting, financial reporting, budgeting, financial control and other activities related to business finances. We may say it, a complete package of major three important areas like capital structure management, working capital management, accounting information system, fixed assets management and financial analysis and reporting. Every business of profit motive compulsorily needs to adopt these practices in India. The Indian oil and gas sector is one of the six core industries in India and has very significant forward linkages with the entire economy. As per industry perspective, oil and gas industry is divided into three major sectors: upstream, midstream and downstream. The upstream sector is a term commonly used to refer to exploration, recovery and production of oil and gas. The midstream industry processes, stores, markets and transports commodities such as crude oil, natural gas, and sulphur ,the downstream sector is a term commonly used to refer to the refining of crude oil and the selling and distribution of natural gas and products derived from crude oil. Financial Decision Making in the Oil and Gas Industry is to be based on three major areas of decision Investment, Financing and Dividend Decisions. The study is based on the secondary data collected from the period of last two years from the annual report of BPCL and EOL. The data collected has been tabulated, classified and compared to achieve the objectives of the study. The objectives of the study, to know the concept of Financial management practices and the Financial management practices in oil and gas Industry in India and to examine and analyse the differences of capital structure of, BPCL and EOL. From the most common tool i.e. Ratio analysis ,various capital structure ratios will be used to attain the said objective The paper conclude that the selected companies of oil and gas Industries are adopting and taking all three decisions according to theories and practices of financial management. Capital structure ratios will shows the satisfactory long term financial position of the firms and adequate funds to cover the fixed charges and dividend reserve.

Key Words: Financial management Practices, Oil and gas Industry, Capital Structure

Introduction

In the present scenario finance is defined, as arrangement and procurement of funds at the time when it is required in the business firm. Each and every firm for accomplishing its objectives required adequate finance. Every business required mainly five kind of resources financial resources, Human resources, educational resources Physical resources and emotional resources, among all financial resources are first and foremost need for running any kind of Business. Financial management is one of the basic functions practice in all organisations. It is the way forward and represents the future for best practice organisations. Through this function, bases are determined for authority levels of financial control, budgeting and processing financial resulting information. All successful small and big businesses are the result from a good idea, creative marketing plans and effective financial management practices. In

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case of start-up funding and an accounting system that works for your business are vital to a sound financial management system. The term "financial practices" refers to the set of common methods or procedures develop for carrying out accounting, financial reporting, budgeting, financial control and other activities related to business finances. Each one serves to support business policies, establish accountability and provide step-by-step instructions for completing a task or activity. **Financial management practices are defined as the practices performed by financial manager in the following areas**:

Capital structure management-The term capital structure refers to the relationship between the various long terms forms of financing such as debenture, preference share capital and equity share capital. According to Gerestenberg "Capital structure of a company refers to the composition or make up of its capitalisation and it includes all long term capital resources viz: loans, reserve, shares and bonds". We all know that Funds are needed to run and manage a company from promotional stage up to end, so the adequacy and proper management of funds are must for the entire organisation. First of all estimation of capital requirement is necessary then the financial manager should plan the optimum capital structure for the company. A variety of factors are to be considered while determining the capital structure but basically the three main basic factors i.e. **Risk, cost and control** determine the capital structure of a firm at a point of time. Features of appropriate capital structure are profitability, solvency, Flexibility, Conservatism s control.

Suitable forms of capital structure analysis are as follows:

- Raising total capital from the issue of equity shares only
- Raising total capital from the issue of equity shares and preference share
- Raising total capital through the issue of equity shares, preference shares, and debentures or bonds.

Optimum capital structure ensures minimum cost of capital and the maximum rate of return to equity share holders. The total amount of capital employed in the business or the amount of capital a firm needs is the first decision which is to be taken by financial manager, then he has to decide about the proportion of various securities in capital mix. Capital mix may include equity shares, preference share and debentures. Here we should know that using more fixed cost funds (debentures and preference share) in capital structure increases earning per share and bring wealth for share holders as well as for firm, Therefore determining the cost of capital is very crucial while designing capital structure.

When determining a company's cost of capital, the costs of each component of the capital structure are weighted in relation to the overall total amount. This calculates the company's weighted average cost of capital (WACC). The weighted average cost of capital is used to calculate the net present value (NPV) of capital budgeting for corporate projects. A lower WACC will yield a higher NPV, so achieving a lower WACC is always optimal. Overseeing the capital structure is referred to as capital structure management.

Fixed asset management-In the financial management financial manager has to take three decisions, Investment, financial and Dividend decision. Investment decision is concerned with the acquisition of assets, evaluation of their profitability and their effective utilisation. Every business concern needs two types of assets in its operations fixed assets and current assets. Acquisition of these assets having long term impact is possible through capital Investment or long term decisions or capital expenditures decisions. Assets provide infrastructure to business concern. Fixed assets like land, building, plant and machinery are vital for production. According to Finney and Miller "Fixed assets are assets of relatively permanent nature used in the operation of business and not intended for sale". Fixed

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assets management involves not only the acquisition and expansion of fixed assets but also improvements and replacements. Firstly fixed assets requirements are estimated and then those factors are taken into consideration which governs the investments in fixed assets. Management of Fixed assets consists of the following:

- Estimating fixed assets requirements
- Factors affecting investments in fixed assets
- Fixed assets acquisition decision
- Evaluation of Fixed assets investment

One of the most important functions of business managers is the function of managing fixed assets. The reasons for increasing importance of management of fixed assets are Fixed cost always having **high cost** as compare to current assets so it needs precautions while taking decision in this regard. **Risk factor** of fixed assets also becomes very high due to very long economic life of fixed assets. **Advancement of science and technology** motivates to replacement of existing machines by new ones as a part of modernization plan. **Use of machines in place of labour increases** due to new labour saving machines and new machines for replacements are invented through continuous research and development activity. An **accounting information system** (AIS) is the collection storage and processing of financial and accounting data that a business, manage, process, retrieve and report so that it can be used by accountants, consultants, business analysts, managers, chief financial officers, auditors, creditors , regulatory and tax authorities. An accounting information system is generally a computer-based method for tracking accounting activity in conjunction with information technology resources. An accounting information system combines traditional accounting practices, such as the Generally Accepted Accounting Principles (GAAP), with modern information technology resources. A number of factors influence these systems such as the type of business, the size of the business, the volume of data, the type of data management needs, and other factors. Most businesses use computerized systems, known as electronic data processing (EDP) systems. These systems handle every step in the accounting process from recording the financial transaction to preparing the financial statements. The biggest advantage of computer-based accounting information systems is that they automate and streamline reporting. Reporting is a major tool for organizations to accurately see summarized timely information.

According to Orwel (2009) states that the Accounting information systems is a system of records usually computer-based, which combines accounting principles and concepts with the benefits of an information system and which is used to analyze and record business transactions for the purpose of preparing financial statements and providing accounting data to its users.

The key components of the system are:

- The policies and procedures of collecting information
- The strong internal controls system used to ensure that information is recorded correctly.
- The system correctly Operated by trained employee to ensure that users receive correct information
- The software and integrated database used to store and process information.
- The hardware on which the software and database is stored

Working capital management-Working capital refers to that part of the firm's capital which is required for financing short term or current assets keep revolving fast and are being constantly converted into cash and this cash flows out again in exchange for other current assets. In the words of shubin "Working capital is the amount of funds necessary to cover the cost of operating the enterprise" Working capital management is concerned with the problems that arise in attempting to manage the current assets, current liabilities and the inter-relationship that exist between them. In other words we can say that, it refers to all aspects of administration of both current assets and current liabilities.

The management of working capital involves managing inventories, accounts receivable and payable, and cash. There are two concepts of working capital:

- **Balance sheet Concept-**This concept is having two interpretations:
  - Gross working capital-This is the capital Invested in total current assets of the enterprise
  - Net working capital-This is the excess of current assets over current Liabilities
- **Operating Cycle Concept-**This concept is based upon the operating and working capital cycle of a firm. The cycle starts with purchase of raw material and other resources and ends with the realisation of cash from the sale of finished goods.

The goal of working capital management is to ensure that a firm is able to continue its operations and that it has sufficient ability to satisfy both maturing short-term debt and operational expenses. The policies of working capital of a firm have a great effect on its profitability, liquidity, and structural health of the organisation.

Financial reporting analysis –The term 'Financial analysis', also known as analysis and interpretation of financial statements refers the process of determining financial strengths and weaknesses of the firm by establishing strategic relationship between the items of the balance sheet, profit and loss account and other operative data. The purpose of financial analysis to diagnose the information contained in financial statements so as to judge the profitability and financial soundness of the firm. A financial analyst analysed the financial statements with various tools of analysis before commenting upon the financial health or weakness of an enterprise.

The analysis and interpretation of financial statements is essential to bring out the mystery behind the figures in financial statement data so that forecast may be made of the future earnings, ability to pay interest and debt maturities and profitability of a sound dividend policy. Financial Analysis and reporting is an integral part of overall financial analysis it depicts the financial health of any company and helps the companies to increase their financial resources and management of generated funds efficiently. It compels the business firms to remain judicious in fund allocation to different activities and sub activities and use the generated funds carefully. Financial analysis guides the companies about their future course of action.

Methodology- The proposed study would be descriptive in nature and it is purely based on secondary data. The data has been collected by readily available sources and other published data available at BPCL and EOL like Annual Reports, Schedules etc. Secondary data will also be gathered from Journals, Magazines and published research papers. The data pertaining to consecutive tenure of 2 years (2013-14 and 2014-15) would be analyzed to attain the said objective tools like Ratio analysis, would be used in the study. Excel and SPSS Software would be used for easy study and calculation of Quantitative data. Use of Graph and Charts according to the need of presentation will also be done to analyze the financial Position of the organizations and provide suitable suggestions to stake holders for upraising future policies.

Objectives of the study:

- To know the concept of Financial management practices
- To know about the Financial management practices of oil and gas Industry
- To examine the differences of capital structure of, BPCL and EOL

Limitations of the study:

- This Study is based on Secondary data.
- The reliability of data is totally depended on the audit reports available.
- This Study has specific and limited time period i.e.2014-15 to 2015-16

Financial management practices in oil and gas Industry-The Oil and Gas sector has tremendous growth potential in India. It is a well regulated industry. In spite of the slowdown in the Indian and global economy, demand for this sector has been always

consistent. Traditionally, this sector has been the domain of the Government of India. After liberalization and privatization, there has been participation from, both Domestic and foreign private entities. India imports nearly three-fourths of its requirement of crude oil from the Middle East. According to Ministry of Petroleum and Natural Gas, India ("Ministry of PNG"), India has total reserves of 760 million metric tons of crude oil and 1330 billion cubic meters of natural gas as on April 1, 2012. The US Energy Information Administration estimates that India had close to 5.7 billion barrels of proven oil reserves at the beginning of 2014. About 44% of the reserves are onshore resources. As per industry perspective, oil and gas industry is divided into three major sectors: upstream, midstream and downstream. The upstream sector is a term commonly used to refer to exploration, recovery and production of Oil and gas. .

The midstream industry processes, stores, markets and transports commodities such as crude oil, natural gas, natural gas liquids (liquefied natural gas such as ethane, propane and butane) and sulphur ,the downstream sector is a term commonly used to refer to the refining of crude oil and the selling and distribution of natural gas and products derived from crude oil. In spite of considerable domestic potential, India imports more than half the requirement of crude oil. India was the fourth largest consumer of oil and consumed 4% of the total consumption in the world. Even the global slowdown has not impacted the oil consumption in India and in fact India's demand for oil and gas continues to be highly fuelled by a rapidly growing automobile industry. Recently Union Budget lined up a plan to set up two more strategic oil reserves in Odisha and Bikaner in Rajasthan.

Financial Decision-Making in the Oil and Gas Industry As we all know there are three main areas of decision-making within the domain of finance. Every firm, of small and big size needs to make these decisions. These were presented in the core Finance course and will be discussed briefly in terms of the oil and gas industry below:

Investment decision-Investment decision relates to the careful selection of assets in which funds will be invested by the firm. The purpose of investment decision is to invest financial resources for setting up new business or for expansion. There are two types of decisions to be taken, capital budgeting decision and short term Investment decision or working capital decision. Capital budgeting is the process of making investment decision in capital expenditure. Short term Investment decision relates to the allocation of funds as among cash and cash equivalents receivables and inventories. This is a difficult decision for oil and gas companies as investments are typically capital intensive and take a number of years to start generating cash. The investment decision is a particularly difficult one in the upstream industry where cash flows are subject to considerable risk. Therefore a good understanding of sensitivity analysis, sound capital rationing and use of the correct investment appraisal technique are all contaminate by the manager in the oil and gas industry.

Financing decision-Financing Decision relates to the composition of relative proportion of various sources of finance. It involves deciding the proportion of equity and debt in capital structure. Sources of financing are analysed in the light of cost as well as financial risk involved. This decision determines the overall cost of capital and the financial risk of the enterprise. The purpose of financing decision is to decide about the sources from which funds should be raised to finance the Investment decision. The decision is to be taken in financing decision like proportion of equity and debt in the capital structure, from which sources the equity should be raised by equity or preference share, from which sources the debt should be raised by issue of debentures or raising long term loans. Companies have three options they can borrow funds from capital markets, use retained earnings, and issue equity

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shares. There are number of factors affecting this selection, but there in the oil and gas industry fully conversant and efficient manager required. According to capital structure theories and the advantages and disadvantages of each type of financing affects the financing decision. Most of the very large oil and gas companies in India have a very low level of debt in their balance sheet due to avoiding debt burden and have faith in equity share capital.

Dividend Decision-The term dividend refers to that part of profits of a company which is distributed by it among its shareholders This is the third major decision relates to the disbursement of profits back to investors who supplied capital to the firm. This is concerned with the quantum of profits to be distributed among share holders. The higher rate of dividend may raise the market price of shares and thus maximise the wealth of share holders. This is known as payout decision which is concerned with how to return and how much to return cash to shareholders. This is depending on both the previous decision areas. In oil and gas companies that decide to invest all of its free cash flows and borrow to fund a large project will have little left to return to the shareholders. The manager will take decision on the basis of dividend policy and they must be aware of the options available to them in payout policy and how these decisions affect shareholder wealth. These decisions have to be made by all companies in the oil and gas industry, no matter which part of the chain they operate in. Therefore it is essential to the managers within companies that they should have a good working knowledge of the financial concepts involved in the decision-making process.

Comparative Capital Structure analysis of Bharat Petroleum Corporation limited and Essar oil limited

Company Profile: Bharat Petroleum Corporation limited There are 254 public enterprises in India among them 7 are having Maharatna status, 17 having Navratna status and 73 are recognized as Miniratana companies of public sector. Bharat petroleum Corporation is India's 'best performing' Navratna Public Sector, oil and Gas Undertaking, Around 1860's, companies historical journey began as Burma Oil Company. BPCL is the most admired global energy company leveraging talent and technology. Company is providing excellent quality services to customer and exploit profitable growth opportunities outside energy to give back to society and environment. Company is the role models for Health **Safety, Security and Environment** initiatives. The businesses of BPCL are fuel &services, Bharat gas, Max Lubricants, Aviation, Refineries, and Gas. Company have investor's friendly

Essar Oil Limited (EOL) is an Indian company was incorporated in 1989 with the objective of engaging in the exploration and production of oil and natural gas, refining of crude oil, and marketing of petroleum products. It is a part of the Essar Group based in Mumbai. This is a fully integrated oil & gas company of international scale with strong presence across the hydrocarbon value chain from exploration & production to refining and oil retail. It has a portfolio of onshore and offshore oil & gas blocks with about 1.7 billion barrels of oil equivalent in reserves & resources. Essar Oil owns India's second largest single site refinery at Vadinar, Gujarat, having a capacity of 20 MMTPA, or 405,000 barrels per day. Vadinar Refinery has a complexity of 11.8, which is amongst the highest globally and which made it the second largest non-state refiner in India in 2009. There are more than 2,800 Essar-branded oil retail outlets in various parts of India, with another more 2,300 in various stages of commissioning.

Data Analysis and Interpretation

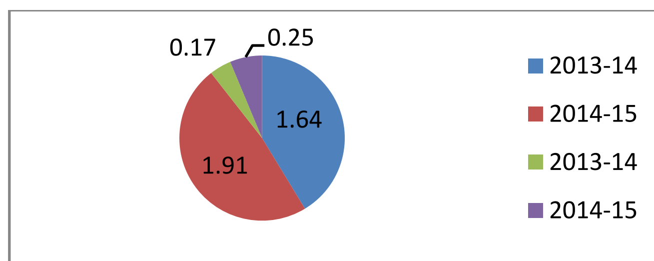
Capital Structure Ratios-The term capital structure refers to the relationship between various long- terms forms of financing such as debenture. Preference share and equity share capital including reserves and surplus

Capital Gearing Ratio-The term capital gearing is used to describe the relationship between equity share capital including reserves and surpluses to preference share capital and other fixed interest bearing loans. If preference shares and other fixed assets bearing debts exceed the equity share capital including reserves, the firm is said to be highly gear. The firm is said to be low geared if equity share capital and reserves are more than the preference share and other fixed interest bearing loans.

$$\text{Capital Gearing Ratio} = \frac{\text{Equity share capital+ Reserve \&surplus}}{\text{Preference Capital +long- term debt bearing fixed interest}}$$

Rs. In crores

Company	Year	Equity share Capital +Reserves & Surplus	Preference share +Debenture	Capital Gearing Ratio
BPCL	2013-14	19,458.76	11,808.36	1.64 (low gear)
	2014-15	22467.48	11737.01	1.91 (low gear)
EOL	2013-14	2430.63	14284.55	0.17 (High gear)
	2014-15	3911.8	15,240.51	0.25 (High gear)



Interpretations-As we have seen that, in **BPCL** in the year 2013-14 capital gearing ratio is 1.64 i.e. low gear and in the year 2014-15, also it is low gear i.e. 1.91.we can say that company's dividend payout is very high or equity share holders had received higher rate of dividend and fixed cost of capital by way of fixed dividend on preference shares and interest on debentures is low. Whereas in the **EOL** the ratio is 0.17 in the year 2013-14 and 0.25 in 2014-15 in both the year company is having high gear ratio which shows that fixed cost of capital is higher leaving lesser divisible profits for the equity share holders.

Debt Equity Ratio- This ratio is measured to calculate the relative measure of outsiders and owners against the firm assets. The basic two components are outsiders fund and shareholders fund.

$$\text{Debt equity Ratio} = \frac{\text{Outsiders Fund}}{\text{Shareholders' Funds}}$$

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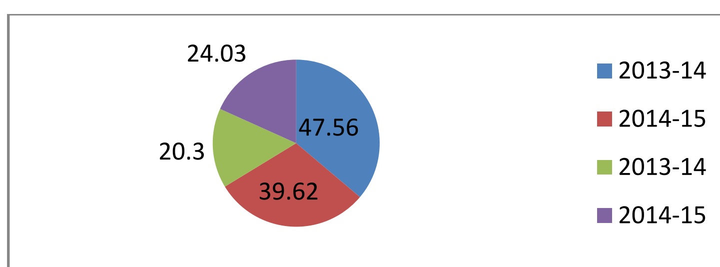
Rs in crores

Company	Year	Outsiders fund	Shareholders fund	Debt equity Ratio
BPCL	2013-14	34931.64	723.08	47.56 (Low Ratio)
	2014-15	28652.52	723.08	39.62 (Low Ratio)
EOL	2013-14	29769.47	1466.12	20.30 (Low Ratio)
	2014-15	35234.47	1466.12	24.03 (High ratio)



Interpretations- Interpretations of Debt equity Ratio primarily depends upon the financial policies of the firm and upon the nature of business. In case of BPCL, in both the years company is having low ratio. Low ratio is considered as favourable from the long term creditors' point of view because a high proportion of owner's funds provide a larger margin of safety for them. In EOL in the year 2013-14 debt equity ratios is 20.30 i.e. low ratios considered satisfactory for the shareholders, it indicates that the firm has not been able to use low cost outsiders to magnify their earnings, but in the year 2014-15 company is having high ratio i.e. 24.03 which is unfavourable and indicates the at the claims of outsiders are greater than those of owners, may not be considered by the creditors because it gives a lesser margin of safety for them at the time of liquidation of the firm.

Total Investment to long term Liabilities- This ratio is calculated by dividing the long term funds by the total long term liabilities

$$\text{Total Investment to long term Liabilities} = \frac{\text{Shareholders fund + Long term Liabilities}}{\text{Long term Liabilities}}$$

Rs in crores

Company	Year	Shareholders fund + Long term Liabilities	Long term Liabilities	Total Investment to long term Liabilities
BPCL	2013-14	783.82	60.74	12.90
	2014-15	793.11	70.03	11.32
EOL	2013-14	1704.99	238.87	7.13

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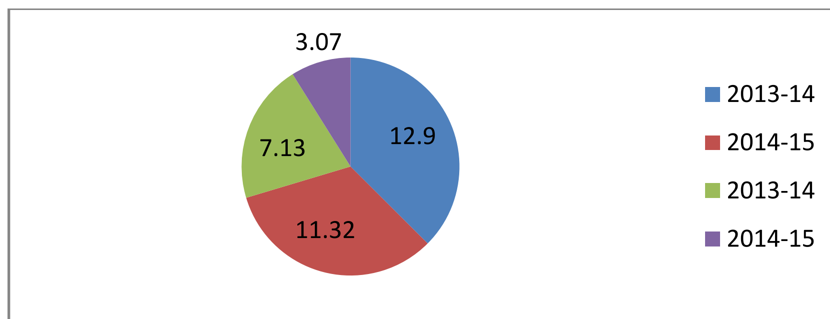
	2014-15	2172.72	706.60	3.07



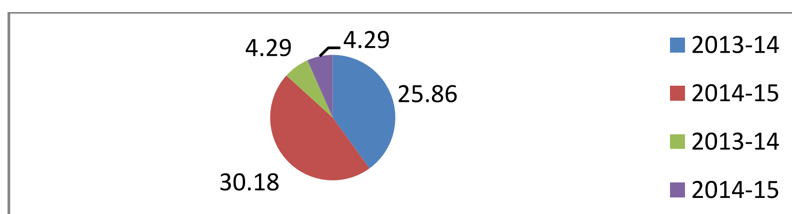
Interpretation-The Total Investment to long term Liabilities shows the proportion of long term liabilities should not be very high as compare with the total of long term funds. BPCL shows the ratio in 2014 i.e.12.90 and in the year 2015, it is 11.32, in the company EOL, the ratio was 7.13 in the year 2014 and 3.07 in the year 2015, which is satisfactory condition.

Ratio of reserves to Equity Capital- This ratio establishes between reserves and equity share capital. The ratio indicates that how much profits are generally retained by the firm for future growth

$$\text{Ratio of reserves to Equity Capital} = \frac{\text{Reserve}}{\text{Equity Share Capital}} \times 100$$

Rs in crores

Company	Year	Reserve	Equity Share Capital	Ratio of reserves to Equity Capital
BPCL	2013-14	18703.19	723.08	25.86
	2014-15	21825.42	723.08	30.18
EOL	2013-14	6296.91	1466.12	4.29
	2014-15	6291.87	1466.12	4.29



Interpretation-This higher ratio shows better position of both the firms. In the company BPCL reserve are more than equity share capital in the year 2014 and 15 i.e. 25.86 and 30.18 shows higher ratios. In the company EOL the ratios are 4.29 in both the years, shows that company is having higher ratio. This ratio interprets that the companies are having better positions.

Ratio of fixed assets to funded Debt- The ratio measure the relationship between the fixed assets and the funded debt and is very useful to long term creditors.

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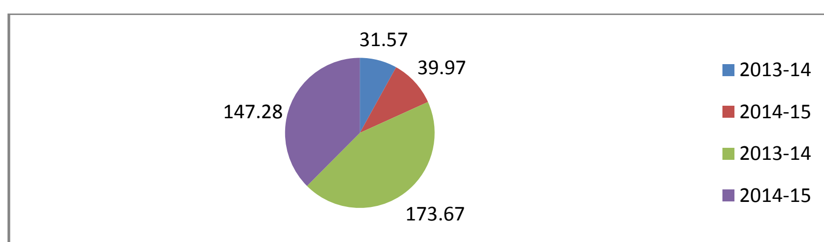
Ratio of fixed assets to funded Debt = $\frac{\text{Fixed Assets}}{\text{Funded Debt}}$

Rs in crores

Company	Year	Fixed Assets	Funded Debt	Ratio of fixed assets to funded Debt
BPCL	2013-14	22104.61	700.00	31.57
	2014-15	27980.74	700.00	39.97
EOL	2013-14	24371.58	140.33	173.67
	2014-15	25090.04	170.35	147.28



Interpretation-The ideal ratio is when fixed assets are more than the funded debt. In the analysis of both the companies fixed assets are more than funded debt in 2013-14 and 2014-15.BPCL having 31.57 and 39.97 and EOL is having 173.67 and 147.28 which shows conditions are satisfactory.

Findings & Conclusion: The study concludes that financial management practices are very crucial for oil and gas industries in India. Every company either belong to govt owner ship and private ownership are majorly adopting financial management practices which are performed by financial manager in the areas like capital structure management, working capital management, accounting information system, fixed assets management and financial analysis and reporting. Audited annual report shows that the all the companies under oil and gas Industry are adopting financial management practices on the basis of three decisions i.e. Financing decision, Investment decision and Dividend Decision. While examining one of the financial practices the capital structure management and analysis of, BPCL and EOL we found that companies rationally adopting practices. The Financial statements show that companies are taking all three decisions according to theories and practices of financial management. Capital structure ratios are calculated to test the long term financial position of the firm. Long term financial position is satisfactory in all the selected oil companies and found adequate funds to cover the fixed charges and dividend reserve during the period of study.

The overall capital structure analysis concludes the following:

- BPCL is low geared company, fixed cost of capital by way of fixed dividend on preference shares and interest on debentures is low and dividend payout is very high means equity share holders had received higher rate of dividend. While EOL is high geared company, the fixed cost of capital is higher leaving lesser divisible profits for the equity share holders. We may suggest BPCL,

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should follow the policy of high gear because company's earnings per share is high.

- Companies are following the financial policies of maintaining low Debt Equity ratio which is favourable from the long term creditors' point of view because a high proportion of owner's funds provide a larger margin of safety for them.
- During the study, Companies maintaining high reserve ratios and fixed assets which is good for future uncertainties and long term financial position.
- Comparatively, we can say the performance of BPCL was good as compare to EOL during the period of study.
- It is significant to note that the position regarding earnings per share and dividend payout ratio in both the companies during the period shows better performance and prospects from the point of view of shareholders.

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