CHAPTER-1

INTRODUCTION
FINANCIAL PERFORMANCE - CONCEPTS AND TECHNIQUES

1.0 BACKDROP

Finance is one of the basic foundations of all kinds of economic activities. Finance is the life-line of all commercial activities. In other words, it can be said to be “heart” of an organization. It is the master key, which provides access to all the sources being employed in manufacturing. Hence, it is rightly said that finance is lifeline of any business enterprise, besides being the scarcest element; it is also the most indispensable requirement. Without finance, neither any business can be started nor successfully run. Provision of sufficient funds at the required time is the key to success of a concern. As a matter of fact, finance may be said to be the circulatory system of economic body, making possible the needed co-operation among many units of activity. Finance is omni-present in every sphere of economic and business life.
Finance is considered a critical factor in the history of a business enterprise.

Financial Performance is the process of identifying the financial strengths and weaknesses of the firm by properly establishing relationship between the items of the balance sheet and the profit and loss account. The objective is to identify any weakness in the firm’s financial health that could lead to future problems and to determine strength that the firm might capitalize upon.¹ Financial performance is measured by applying various analytical tools and techniques to the financial statements and also drawing meaningful conclusions and useful information for making predictions that may have a direct impact on the decisions made by the different users of the financial statements.²

2.0 CONCEPT OF FINANCE

Defining the term ‘Finance’, George A. Christy and Peyton Foster Roden say, “Finance may be generally defined as the study of money, its nature, creation behavior, regulation and problems. It may deal with the ways in which businessman, investors, government, financial institutions and families handle their money. An understanding of what money is and does is the foundation of financial knowledge”.³ This definition covers money as the main part of functions of finance, which may refer to its role, management, inflow and outflow of funds.

According to John Gibbs’ “Financial management may be defined as the process involved in the attempt to ensure that financial resources are both obtained and used profitably and effectively in order to accomplish the objectives of organization to which it is applied.”⁴ This
shows how the financial resources are procured and how best these resources are used in business in order to achieve the major objectives of business.

Hampton states “Financial management is the management of the flows of money through an organization, whether it is a corporation, school, bank or government agency. Finance is concerned itself with the actual flows of money as well as any claim against money. Financial management applies to any organization irrespective of its size, nature of ownership and control and whether it is a manufacturing or service organization. This shows that finance is related to money and money management and also to inflow and outflow of funds. It also focuses on the universality of management of finance.

To quote Ramesh K.S. Rao, “The two broad decisions – Investment and Financing are the responsibility of the financial manager, and the art and science of making the right decisions for the firm are called financial management”. Since financial manager has to coordinate all other departments in an organization, he requires more practical knowledge, particularly while dealing with employees’ performance – evaluation.

According to David P. Francis, “Financial Management is the use of accounting knowledge, economic models, mathematical rules and aspects of a systems analysis and behavioral science for the specific purpose of assisting management in its functions of financial planning and control”. To understand Financial Management, one must possess accounting knowledge. One must know how to record the transactions,
know also the rules of debit and credit, economic models like economic order, quantity and break-even-analysis.

Financial analysis is of two types: i) External Analysis and ii) Internal Analysis. External Analysis is performed by outsiders to the firm, such as creditors, stockholders or investors. It makes use of existing financial statements and involves limited access to confidential information. On the other hand, internal analysis is performed by the finance and accounting departments of the firm and is more detailed than the external analysis. This produces a more accurate and timely analysis by preparing proforma of financial statements.

3.0 TYPES OF FINANCIAL STATEMENTS

Financial statements are the blue prints of financial affairs. Myer stated that “the term, financial statement, as used in modern business refers to the two statements which the accountant prepares at the end of a period of time for a business enterprise. They are the balance sheet, or statement of financial position, and the income statement, or profit and loss statement”. Lawrence and Charles and McMullen added two more to the balance sheet and income statements – one dealing with the retained earnings and the other with sources and uses of funds. But the principal statements are: income statement and the balance sheet, and these primary statements are often supplemented by schedule of reserves and so forth.

3.1 The Balance Sheet

The balance sheet shows the financial condition of a business enterprise at a certain date normally at the time when the books of
accounts are closed and balanced, usually at the end of accounting year. According to Van Horne, “a balance sheet represents a snapshot of the firm’s financial position at a moment in time”.\textsuperscript{11} To quote Kennedy and McMullen, “the balance sheet reveals the financial condition or status of a business as reflected in the accounting records, at one particular moment in time, usually the close of business on the day indicated by the date of the statement”.\textsuperscript{12} According to Hasting O Pines, “balance sheet reveals the property owned by the business – the assets and the debts owned by the company – the liabilities.\textsuperscript{13} The same view was also expressed by Black and Hirt.\textsuperscript{14} The balance sheet is also known as statement of financial condition.\textsuperscript{15} Further, it can also be described as the statement of financial position, statement of assets and liabilities, and capital and statement of worth.\textsuperscript{16} To conclude, it is always presented at a definite date highlighting the bird’s eye-view of the financial condition of an enterprise. Precisely, balance sheet is a mirror of the financial position of a firm.

3.2 The Income Statement

The income statement is usually known as profit and loss account, which depicts the net income or net loss resulting from the business operations during the period of time covered by the statement. The income statement measures the progress of a business in carrying out the function of delivering services and products to its customers for which the enterprise was launched.

Foulke defines the income statement as, “the mathematical interpretation of the policies, experience, knowledge, foresight and
aggressiveness of the management of a business, expenses, gross profit, operating profit and net profit or loss”. The final net profit or loss is the ultimate measure of the skill of active management. According to Ghutmann, “income statement signals out and summarizes those transactions in which there is a loss or gain for the owners of the business.” To quote Kennedy and McMullen, “it is a statement of activity and the results of that activity”. Similarly, Paton and Paton advocate that the income statement is accountant’s major report of activity. As an interim report, it presents a long range view of a business enterprise by depicting the direction in which the business is moving and the reason underlying it.

The balance sheet and income statement are, thus, indicators of the financial position of a business at a particular date and its operation results during a certain period of time respectively.

3.3 The Statement of Retained Earnings

‘Retained earnings’ is the sum of the earnings which has been kept by the enterprise over the years. It is an analysis of the retained earnings, accounts for the accounting period and is usually, presented with the other corporate financial statements. The statement of retained earnings indicates the magnitude and causes of changes in retained earnings of the enterprise due to the year’s activities. The statement serves as the link between the income statement and the balance sheet. The changes in the equity account, between balance sheet dates are reported in the statement of retained earnings.
3.4 The statement of changes in financial position

It is a logical adjunct to the balance sheet and income statement.\textsuperscript{22} It has only recently become a required component of published corporate reports, equal in status to the balance sheet and the income statement. The difference in the sources and uses of funds represents either net increase or decrease in working capital. According to Granof, “The statement of changes in financial position is most commonly used to indicate changes during the year in the company’s working capital position.”\textsuperscript{23} The statement of changes in financial position indicates both the sources and application of working capital. Thus, it reveals the survey from which funds have been received during the year and how these funds were used within the enterprise.

4.0 OBJECTIVES OF THE ANALYSIS OF FINANCIAL STATEMENTS

The financial statements are intended to provide an accurate picture of a firm’s financial condition and operating results in a condensed form. Financial statements are generally used to depict the financial status of a firm. Financial analysis involves the assessment of a firm’s past, present and anticipated future financial condition. To quote Hingorani and Ramanathan, “The objective of financial statement analysis is a detailed cause and effect study of the profitability and financial position”.\textsuperscript{24} Thus, the analysis helps to understand the profitability performance including financial position of the enterprise. According to Korn, and Thomas, “An analyst of financial statements attempts to interpret or draw conclusions from the statements”.\textsuperscript{25} In the words of Garrison, “Without financial statement analysis, the story that
key relationships and trends have to tell may remain buried in a sea of statements detail”. He also states that the purpose of financial statement analysis is to assist statement users in predicting the future by means of comparison, evaluation and trend analysis”.

Myer says that the analysis and interpretation of financial statements of a business enterprise usually has as its objective the formation of an opinion with respect to the financial condition of that enterprise. According to Salmonson, Hermason and Edwards, “Financial statements are issued to communicate useful financial information to interested parties.” The Financial statements should be comprehensive to investors and creditors who have a reasonable understanding of business and economic activities and who are willing to spend the time and effort needed to study the financial statements.

5.0 USES OF FINANCIAL STATEMENTS

The financial statements play a pivotal role in providing the information concerning the financial position of an enterprise and the results of its operation. The information so obtained is useful for decision making. In this context it is appropriate to quote Bierman and Drebin, “Financial statements are prepared primarily to help decision making. The statements are not an end in themselves, but must be useful in decision statement context.” To be precise, financial statements are the blueprints of the financial affairs. The most important function of financial statement is to enable the people to understand how efficiently the capital of the business is utilized, how well credit standards are observed and how financial condition has improved. In the words of
Shuckett and Mock, “Financial statements may reveal shortcomings in control or indicate major areas for changes in corporate policy.” The financial statements are constructed with a view to presenting a periodical review or report on progress by the management and deal with the position of investment in the business and the results achieved during the period under review.

6.0 LIMITATIONS OF FINANCIAL STATEMENTS

The financial statements embody a mass of complex data expressed in terms of absolute monetary units without providing much scope for understanding the liquidity, solvency, profitability and operational efficiency of the business concern. Both the balance sheet and profit and loss account reflect the rupee value of transactions of different dates. The rupee value is fast changing and as such the conclusions derived on these figures might be quite misleading. Further, these statements are prepared on historical cost basis and as such the impact of price level changes is completely ignored. They do not reflect many other factors which affect materially the financial conditions and the operation results because they cannot be stated in terms of money. They are constructed on the basis of certain accounting concepts and conventions. Owing to this reason the financial position as revealed by these statements may not be realistic. Financial statements are statement of accounts of the past rather than the future and, as such, are of little value for the management in its task of decision-making.
7.0 DEVICES OF FINANCIAL ANALYSIS

Financial statements prepared at the end of the year do not always convey to the reader the real significance of operating results and financial health of the business. In order to make financial statements more meaningful, there are many techniques available for analyzing the financial statements. The main objective of these techniques is to minimize the financial data collected and to use in more appropriate and understandable terms. The following are the various financial tools and techniques usually applied to evaluate the financial soundness of an organization:

- Comparative Statement
- Trend Analysis
- Common size Statement
- Ratio Analysis

These tools are derived from the financial statement and other information secured from the enterprise. It must be stated at the outset that the tools listed above do not provide solutions to the problems of financial management of the enterprise but rather indicate the weakness or the trouble spots needing further investigation and detailed analysis for taking corrective action.

7.1 Comparative Statement Analysis

Another useful technique applied in analyzing financial data is comparative financial statement analysis. Comparative financial statements are statements of financial position of a business so designed as to provide time perspective to the consideration of various elements of
financial position embodied in such a statement. Balance sheet and profit and loss account are prepared in a comparative form because they constitute the most vital statement of financial position. Comparative statements may be prepared to show:

- absolute data (rupee amounts or money values);
- increase or decrease in absolute data in terms of money value; and
- increase or decrease in absolute data in terms of percentages.

### 7.2 Trend analysis

Trend analysis technique is used to evaluate the trends and tendency of events. Trend analysis is depicting trends in the operation of the enterprise. The trend figures are index figures giving a bird’s eye view of the comparative data by presenting it over a period of time. This is a horizontal analysis of financial statements, often called ‘pyramid method’ of ratio analysis – a guide to yearly changes. The purpose of trend analysis is to ascertain the direction in which a series is moving.\(^35\)

As stated by Chowdary, “Trend analysis reveals the direction of changes or is a guide to the movement of facts and figures revealed while comparing the financial statements of different periods”.\(^36\)

Trend analysis makes it easy to understand changes in an item or group of items over a period of time and to draw conclusions regarding the changes in data. This indicates the direction in which a concern is going and on this basis, forecast for the future can be made.
7.3 Commons Size Statement

Common size analysis indicates the balance sheet and income statement data in percentages. As a result, certain insight not evident from a review of raw figures themselves becomes more apparent. In addition, the different statements can be compared both over time and across companies within the firm’s industry. According to Winton and Thomas, common size analysis is analysis useful to compare one company with another for presentation of data in percentage form, and it eliminates problems relating to differences in organization size. The trend depicted by the common size is more authentic as it shows ‘qualitative assessment’ as opposed to ‘quantitative assessment’ shown by absolute figures.

7.4 Ratio Analysis

Ratio is a measure or a system which provides a relationship between two figures – both in the form of percentage as well as quotient. In the words of Kennedy and McMullen, “The relationship of one item to another, expressed in a simple mathematical form, is known as ratio”. It is a yard-stick to evaluate the financial condition and performance of a concern.

Numerical relationships based on financial statement, when analyzed and interpreted are called ratio analysis. Ratio analysis is the only technique which makes comparison possible, doing away with the size effect. Ratio analysis has been the prominent tool to analyze financial statements since the dawn of 20th century. Foulke says, “ratio analysis points out weaknesses and indicates whether financial condition is
wholly or partly good, questionable or poor”. Ratios are useful in intra-firm analysis, where the performance of the firm is evaluated over time, or in inter-firm analysis, where the performance of firm is compared to that of other firms in the industry.

Herbert has divided financial ratios into the following four categories: (i) Liquidity ratios, (ii) Profitability ratios, (iii) Activity ratios, and (iv) Leverage ratios. Helfert comments that, “ratios are not ends in themselves, rather, on a selective basis they may help to answer significant questions”. Ratio analysis, therefore, helps the user to have a clearer perception of the financial statements than by merely going through the absolute data alone.

The statements of financial performance statements are, thus, an important aid to financial analysis. The first task of the Financial Analyst is to select the information relevant to the decisions under consideration from the total information contained in the financial statements.

RESEARCH DESIGN AND METHODOLOGY

8.0 STATEMENT OF THE PROBLEM

The financial performance of Indian Iron and Steel industry is severely affected by several problems such as acute shortage of working capital, uncertainties in raw material availability, its fluctuating price, high cost of production, low profitability and managerial incompetence, lack of research and development, lack of skilled manpower, inabilities to meet interest commitments, non-repayment of loans, obsolete technology, the need for modernization, exports and taxation. Unfortunately, in certain cases, the entire net worth has been completely
wiped out due to continued operating losses. Majority of the companies are in peripheral financial crisis and for them, securing additional funds is becoming almost impossible. There is a rigorous increase in excise duties, interest and other taxes in the state. While imposing taxes the Government does not make a distinction between highly profitable and low profit making industry. The imposition of taxes affects the capital structure of the company and also its profits. Profitability of the Iron and Steel industry is low due to the high cost of production. All these problems make a financial management of the industry complicated. How do all these problems affect the profitability? How are profits managed? There are other related questions which surface while examining the financial performance of the Indian Iron and Steel Industry. The present study is an attempt in that direction.

9.0 REVIEW OF LITERATURE

Books are life-giving materials for all academic activities, more so for research activities. Further, the present study involves collection of a number of articles, reports, published or unpublished theses and journals on financial and non-financial literature.

Alam And Hossain44 (2000) found that the capital structure and management of Khulne Shipyard Ltd. (KSL) was in a poor shape because the interest coverage ratio was negative, as there is the possibility of non-payment of interest charges to creditors.

Rajeshwari45 (2000) conducted a study to evaluate the liquidity management of Tamil Nadu Cement Corporation Ltd. The study concluded that the liquidity position of the company was highly
volatile and also not at all satisfactory during the period under study.

Chundawat and Bhanawat\textsuperscript{46} (2000) conducted a comparative study to assess the influence of working capital management practices on liquidity of IDBI assisted tube and tyre companies in India. The analysis and interpretation of different liquidity ratios indicated that the short term liquidity position of the IDBI assisted tube and tyre companies in India was not at all satisfactory. However, compared with the industry standard, the liquidity status of the companies as a whole was healthier.

Prasad\textsuperscript{47} (2001) in his paper examined the position of the working capital management of paper industry in India. The study dealt with the capital management of 21 large, medium and small scale paper mills. This study reported that all sample firms made huge investment in current assets and that the working capital in most of the paper mills was not properly utilized. This study revealed that top-level management of the sample units failed to trade off between liquidity and profitability.

Sathish Andre varshney\textsuperscript{48} (2001) has made a case study on trade credit and company liquidity with special reference to Steel Authority of India Limited and TATA Iron and Steel Co., to find out how more liquid companies give relatively more net trade credit in these years. Ratio analysis and multiple regression analysis have been employed. He has inferred a positive correlation of very high degree among the variables chosen. The impact of average change in net trade credit and change in
stick in relation to liquidity has also been measured and a significant linear relationship is found to be existent.

**Mazumder and Ghoshal**\(^{49}\) (2003) examined the strengths and weaknesses of Indian steel industry. They prepared a SWOT analysis and identified major strengths, weaknesses, opportunities and threats in Indian steel industry. Major strengths, according to their study, included the availability of iron ore and cheaper labour. Weaknesses included higher cost of capital and low labour productivity. Opportunities included wider domestic market, growth of allied sectors while major threats included substitutes and technological changes. The study concluded that if the threats and weaknesses are overcome, there will be a turnaround in the Indian steel industry.

**Bardia**\(^{50}\) (2004) made an attempt to examine the liquidity position of Steel Authority of India Ltd., (SAIL) and this study also analyzed the relationship between profitability and liquidity of the company. The analysis and interpretation of important liquidity ratios showed that SAIL was not in a comfortable position to meet its current obligation on time in most of the years under study. The study revealed that the performance of inventory management of the company was moderately satisfactory whereas the position of credit management was alarming during the study period. A positive correlation between liquidity and profitability was observed in the company during the period under study.

**Eljelly**\(^{51}\) (2004) points out, that efficient liquidity management involves planning and controlling current assets and current liabilities in
such a manner that eliminates the risk of inability to meet due short-term obligations and avoids excessive investment in these assets. The study found that the cash conversion cycle was of greater importance as a measure of liquidity than the current ratio that affects profitability.

**Reddy and Kameswari** (2004) in their study examined the performance of working capital management of Cipla Ltd., a pharmaceutical company. The length of the operating cycle, the working capital ratios and the liquidity position of the company were analyzed in this study. The empirical evaluation of important ratios revealed the healthy liquidity position of the company during the period under study.

**Bardia** (2004) in his study highlighted the liquidity position of TISCO. The necessary data were collected from the annual reports of the company. The study depicted that the liquidity position of TISCO was satisfactory and efficient enough during the study period. The company maintained better inventory management as compared to the industry average whereas the credit management of the company was found to be not satisfactory at all. The study concluded that there was no significant correlation between liquidity and profitability in the company. The study claimed more efficiency in debt collection policy as well as inventory management policy in order to achieve the desired level of liquidity.

**Hamsalakshmi and Manickam** (2004) have studied the financial performance of software companies with special focus on examining the structure of liquidity position, leverage and profitability. The study has
revealed a favorable position of liquidity and working capital in software companies. The study has also pointed out that the companies relied more on internal financing and the overall profitability had been increasing at a moderate rate.

**Jack Glen and Ajit Singh**\(^{55}\) (2004), in their study, present time series analysis of corporate profitability in seven leading developing countries using the common methodology as the persistence of profitability studies and systematically compare the results with those for advanced countries. Surprisingly, both short and long term persistence of profitability for developing countries is found to be lower than that for advanced countries. The paper concentrated on economic explanation for these findings. It also reports the results on the persistence of the two components as profitability – capital output ratio and profit margins. These two raise important general issues of economic interpretation for persistence of profitability studies which are outlined.

**Kolluru**\(^{56}\) (2005) conducted a study of performance of Indian steel companies during 1992-2003. The objective of this study was to measure an overall index of performance across the Indian steel companies based on eleven financial ratios including the profit ratio for each company by using the globally popular method – The Taxonomic Method. The empirical results showed that, overall composite index would serve as a better performance indicator than the conventional stand-alone operating profit margin.

**Bardia**\(^{57}\) (2006) made a comparative study regarding the liquidity status of the two giant steel making companies i.e., Tata Iron and Steel
Co. Ltd. (TISCO) and Steel Authority of India Ltd. (SAIL). This study reflected that the liquidity policies pursued by both SAIL and TISCO were efficient enough. However, the liquidity management of TISCO was far better in quantity and quality as compared to that in Sail.

Vishnani and Shah\textsuperscript{58} (2006) empirically examined the relation between liquidity and profitability in Indian Consumer Electronics Industry for a period of ten years. For this study, 23 listed companies of the Indian consumer electronic industry were selected. Out of 23 companies, nine companies showed negative association between liquidity and profitability whereas the remaining companies registered a positive association between two variables. The in-depth study further revealed the fact that a dull positive relationship between liquidity and profitability remained in most of the companies under study.

Jafar and Sur\textsuperscript{59} (2006) studied the efficiency in management of working capital in the National Thermal Power Corporation Ltd. during the period 1983-81 to 2002-03. The researchers have applied financial tools and statistical techniques and revealed that the company has managed its working capital efficiently during the post-liberalization era by adapting itself to the new environment resulting from liberalization, globalization and competitiveness.

Bhunia\textsuperscript{60} (2007) made an assessment of management of working capital of Steel Authority of India Limited and Indian Iron and Steel Company Limited from 1991-92 to 2002-03 with the help of financial tools and statistical techniques. Finding reveals that both the companies
have maintained inadequate working capital, poor liquidity, and managed inventory and receivables inefficiently during the period of study.

**Pandey and Upadhyay** (2007) had undertaken the study to evaluate the efficiency of management of working capital in the Bokaro Steel Plant during the period, 1999 to 2005. Results show that position of payment of liability was satisfactory but the management of inventory and receivables was good.

**Kannadhasan** (2007) in his paper reviewed the working capital management of Titan Industries. The necessary data were collected from the published annual reports of the company. The study uncovered the fact that the liquidity position of the company was good and effective and the performance of both credit management and inventory management of the company, were highly satisfactory. The study concluded that there was a negative relationship between liquidity and profitability in the company.

**Bhunia** (2007) in his study assessed the efficiency of the liquidity management of Sponge Iron India Ltd. by collecting necessary data from the published annual reports of the company. The study concluded that the liquidity position of the company was volatile during the study period. However, the liquidity of the company was found better as compared to the industry average.

**Vanitha and Selvam** (2007) critically evaluated the financial performance of Indian manufacturing companies during pre- and post-merger. The study was carried out by taking into consideration the performance of 58 manufacturing companies which had undergone
mergers and acquisitions. The data were taken from secondary sources. While evaluating their performances, it was found that the liquidity of merged companies during pre- and post- merger periods was more or less uniform.

**Sudipta Ghosh**\(^{65}\) (2008) has conducted a case study on Liquidity Management of Tata Iron and Steel Company (TISCO). During the period of the study, it was found that the liquidity position of the company, on the basis of current ratio as well as quick ratio, was not satisfactory. It was suggested that to maintain overall control of liquidity position, the company should give special attention to the management of current assets. He found that the degree of influence of liquidity on its profitability was low and insignificant.

**Azhagaiah and Gangadevi**\(^{66}\) (2008) studied the leverage and financing decision for the selected 30 electronic companies for the five years period ranging from 1998 to 2003. In his study he found that the company has a high operating leverage. He suggests that it should be kept low financial leverage and vice-versa. So, it is desirable that a company has low operating leverage and a high financial leverage.

**Bardia S.C**\(^{67}\) (2008) stated that companies which earn higher return than overall cost of capital generate value for their shareholders while those which earn lower return than overall cost of capital are deemed destroyers of shareholders value. His research paper examines whether the selected companies have been able to create value for their shareholders. To evaluate this, some important traditional performance
measures such as Return on Capital Employed and other tools have been used.

**Dheenadhyalan V. and Kanda Samy S.** (2009) concluded that the financial health of any business organization decides its future. Analyzing the financial statements through financial ratios of an organization provides not only a clear picture of the present financial position of the firm, but also all futuristic dimensions of its business. The financial ratios are more useful to the stakeholders, investors and to the entrepreneur.

**Lee** (2009) examined the capital structure. In this investigation, he made use of return on assets and the return on sales as the performance benchmarks. They concluded that there is negative and harmonious relationship between the financial performance and leverage and the short-term debt ratio. Thus Chinese companies utilize the short-term debt much less than those of other nations.

**Srinivasan, K. and others** (2009), in their study, Financial Performance of FDI Pharmaceutical Units in India, suggest that the capital has been efficiently used in gearing profits, but the slight decline in return on equity due to over utilization of outsiders’ capital is the major reason for showing negative effects. The liquidity position and short term solvency positions have improved. Because of this the sales have increased but the leverage effects were not found favorable for certain units.

**Mandal and Goswami** (2010) in their study assessed the impact of working capital management on liquidity, profitability and
non-insurable risk of ONGC. The data were taken from the published annual reports of ONGC. The study follows that the short-term debts capability of the company was satisfactory during the study period. However, a notable finding of the study was that the company maintained its bank balances at a higher level as compared to other components of current asset. The study reflected that the company possessed a high degree of positive correlation between liquidity and profitability.

Ramesh Kumar Dhuman and Sunder Kumar Guptha\(^{72}\) (2010) in their research paper find that the post-financial performance of Suven Life Science Ltd has deteriorated as compared to that of the industry as a whole and statistically improved as compared to the group average value for all financial measures.

Barad\(^{73}\) (2010) in his thesis conducted a study of liquidity management of Indian steel Industry. The study was aimed at exploring analysis of liquidity performance of steel industry in India. The analysis describes that the need for the liquidity to run day-to-day business activities can’t be over emphasized.

Burange and Yamini\(^{74}\) (2010) studied the performance of Indian iron and steel industry and competitiveness of the firms. The paper examines the performance of Indian iron and steel industry in the pre and post-liberalization periods. It is deduced that the industry has grown manifold in all the aspects, especially after the liberalization of the economy except in the field of employment, which shows a substantial
fall during post-liberalization when competition among the Indian manufacturing firms increased.

Joshi and Gairola\textsuperscript{75} (2010) in their study carried out a comparative analysis of the working capital management of Tata Steel (TISCO) and Rashtriya Ispat Nigam Ltd. (RINL). The relevant data were extracted from the annual reports of both the companies. The study mainly focused on current assets management of both companies. The liquidity position of the both companies was analyzed with the help of current ratio, quick ratio and super quick ratio. The study concluded that RINL was more conservative about liquidity as compared to TISCO.

Bhunia\textsuperscript{76} (2010) A study has been conducted on private sector steel companies of India to test the short term liquidity trend of the companies and its effect on the financial performance. The study shows that the inventory and receivables management requires special attention and proper control over inventory. The investment in loans and advances should be minimized to the extent possible. A balanced and proper amount of working capital should be maintained in the business for smooth running of the same. The management of the companies should adopt a viable and proficient payment policy. At the same time maximization of assets and minimization of liabilities should be preserved the help Indian steel companies to grow further.

K. Srinivasan\textsuperscript{77} (2010) in his thesis with the title “Financial Performance of Foreign Direct Invested Pharmaceutical Units in India,” suggested that the mark of FDI assisted pharmaceutical units for
different ratios report a positive direction throughout the study and enhanced the strength of Indian economy for the future.

Ramaratnam and Jayaraman (2010) used financial ratios in terms of liquidity, profitability, variability and sustainability to measure the financial performance of Indian steel industry. Their study reveals that the critical situation faced by the Indian steel industry is due to over capacity and demand slowdown resulting in price cuts. U.S and many European countries imposed the anti-dumping duties on Indian Steel due to this demand supply mismatch in the market.

Amalendu Bhunia (2011) in his paper analyzed the association between the liquidity management and profitability of 230 Indian private sector steel companies obtained from CMIE database. In his study he found that liquidity and solvency position is very satisfactory and relatively efficient liquidity management is found but liquidity position has no impact on profitability. Multiple regression tests confirm a lower degree of association between the liquidity management and profitability.

Cespades et al. (2010) in another study examined the relationship between the capital structure and the ownership structure in seven countries of Latin America and concluded that there is a positive relationship between leverage and the ownership concentration. Furthermore, the results achieved by this investigation indicate a positive relationship between leverage and the profitability. The bigger companies have more tangible assets.

Setayesh et al. (2010) examined the factors that have an effect on the Capital Structure of the companies registered in Tehran Stock
Exchange in their studies. The purpose of this research was to study the relationship between the Capital Structure and institutional ownership along with all other factors that affected such relationship in Tehran Stock Exchange. The results of this investigation indicated that all factors except institutional ownership shows an impact on the capital structure in all the companies under study.

Pal (2011) A study has been conducted on the Indian steel companies to measure the profitability of the selected companies which is of major importance to the internal and external stakeholders to determine the earning capacity together with the credibility of the companies to remain in the competition.

S.K. Khartik Titto Varghese (2011) found that profitability more or less depends upon the better utilization of resources and manpower. It is worthwhile to increase production capacity and use advanced technology to cut down cost of production and wage cost in order to increase profitability, not only against the investment, but also from the point of view investor’s return.

Amalendu Bhunia (2011) in his study reveals that the liquidity position is found to be strong in case of both the selected companies thereby reflecting the ability of the companies to pay short-term obligations on due dates and they relied more on external funds in terms of long-term borrowings thereby providing a lower degree of protection to the creditors.

Bhargav H. Pandya (2012), in his study on financial analysis of Tata Steel Limited, reveals that Tata steel performed well in terms of
return available to all the investors measured as return on average capital employed. It also revealed that Tata Steel offered a higher return to equity shareholders measured in terms of return on equity and earnings per share during the reference period. However, declining return on average net worth on yearly basis is a cause for concern for TSL. Beside this, it was also found that debt policy of the company is very conservative as it uses lower degree of risk to avoid financial risk and insolvency risk.

Padmini K. 86 (2012) in her paper makes an attempt to study the “Capital Structure (Debt-Equity) of Indian Pharmaceutical Industry”. To this end, 12 Pharmaceuticals Companies have been chosen and categorized into three distinct groups. From the study, it is found that two groups depended on equity financing, whereas one group relied on debt financing. Justification for the use of debt is valid as interest charges are fully met out of profits.

Khatik S.K. and Amit K.R Nag87 (2013) in their study on analysis of profitability operational and financial efficiency of a limited company concluded that if a huge amount of assets is not properly utilized, it will reflect on the profitability of the firm.

Maheswar Reddy D88 (2013) argued that if Return On Capital Employed is much less than the industry average, it will show the ineffective utilization of resources. Debtors’ turnover ratio of the company reflects efficient collection management.

S Sivakumar89 (2013) focused in his study on the financial performance of large and medium and small scale industry of India. In
the course of the analysis the study came out that since there is greater demand for the steel products at the global level, increasing the level of output and the productivity is essential. This can be done through increasing the level of investment in steel industry particularly the small scale units. These measures would go a long way in increasing the efficiency of the steel industry.

**Binaya Bhusan Acharya** (2013) in his study made an attempt is made to investigate the liquidity position and its impact on the profitability of Tata Steel Ltd. and Steel Authority of India Ltd for a period of ten years i.e. from 2004 to 2013. By applying various accounting ratios and statistical techniques, such as multiple correlations, multiple regression analysis and ‘t’ test it is found that liquidity position has a positive impact on the profitability of a firm.

**10.0 NEED FOR THE STUDY**

Adoption of unsound financial principles, policies, priorities and control and inadequate attention to financial management have been responsible for the financial crisis faced by Iron and Steel industry in India. Better results can be achieved by the industry if sound financial management canons are adopted. The present study, therefore, tries to evolve norms for better financial performance in Iron and Steel Industry in general, and select firms in particular. The present study is designed to examine the ability of the industry to meet its currently maturing obligations; the extent to which the industry has used its long-term solvency by borrowing funds; the efficiency with which the industry utilized assets so as to generate sales revenue; and the overall operating
efficiency and financial performance. Further, the intra-sectoral and inter-sectoral analysis has been carried out so as to assess the financial performance of sample units.

11.0 OBJECTIVES OF THE STUDY

The specific objectives of the study are:

i) to examine the financial structure of Indian Iron and Steel Industry;

ii) to analyze the utilization of fixed assets;

iii) to assess the efficiency in the use of working capital funds;

and

iv) to scan the profitability performance.

12.0 HYPOTHESES

Null hypothesis is framed in the present study i.e. there is no significant difference between the industry’s financial performance and individual iron and steel units in the country. In order to test the four variables of financial analysis viz., solvency, liquidity, operational efficiency and profitability, the following are employed:

(i) there is no significant difference in the debt-equity ratio between individual iron and steel units and iron and steel industry at the aggregate level;

(ii) there is no significant difference in the current ratio between individual iron and steel firms and industry;

(iii) there is no significant difference in the working capital turnover ratio between individual units and industry;
(iv) there is no significant difference in the fixed assets to net worth ratio between individual companies and industry; and  
(v) there is no significant difference in the ratio of ROI between individual units and industry.

13.0 SAMPLE DESIGN

According to the Ministry of Steel website\textsuperscript{91}, Government of India, the universe for the study consists of 20 Iron and Steel industrial units spread over public (9) and private (11) sectors in India. Out of them, two units from public sector and three units from private sector are conveniently selected. The sample, therefore, constitutes five iron and steel industrial firms. Specifically, Steel Authority of India Limited and Rashtriya Ispat Nigam Limited belong to public sector while Essar Steel Limited, Jindal Steel and Power Limited and Tata Steel Limited to private sector.

14.0 SOURCES OF DATA

The present study is based on the secondary data only. The sources include:

(i) Annual Reports of Indian iron and steel industrial units;
(ii) Reports published by the Ministry of Steel;
(iii) Published and unpublished reports of Iron and Steel Industry;
(iv) Website of iron and steel industry;
(v) Journals, magazines, periodicals and theses.
15.0 PERIOD OF THE STUDY

In order to carry out time series analysis, the industrial units with ten years of existence are brought into the sample frame. Therefore, a ten year period commencing with the financial year 2003-04 and ending with 2012-13 has been adopted.

16.0 SCOPE AND LIMITATIONS OF THE STUDY

The present study is confined to the financial performance in terms of solvency, liquidity, operational efficiency and profitability. The study, therefore, excludes non-financial areas such as production, marketing and human resource. The present study may not be free from limitations. The figures taken from the annual reports have been rounded off to two decimals of rupees in crores. Secondary data have been collected from more than one source. Hence, there may be slight divergence between one source and another on the same variable. Nevertheless, these in no way act as a deterrent in drawing effective and meaningful inferences.

17.0 TOOLS OF ANALYSIS

The data culled from different sources are synthesized, tabulated, analyzed and interpreted with the help of various financial tools and techniques such as ratio analysis, trend analysis, common size analysis and comparative financial statement analysis. Further, various statistical tools like co-efficient of correlation, t-test, ANOVA and least squares method are applied to analyze the data. Graphs and diagrams are presented to illustrate facts and figures at appropriate contexts.
18.0 CHAPTER PLAN

The present study is organized into Seven Chapters.

Chapter 1: Introduction.


Chapter 3: Study of Financial Structure.

Chapter 4: Analysis of Fixed Assets Performance.


Chapter 6: Evaluation of Profitability Performance.

Chapter 7: Summary of conclusions and suggestions.
REFERENCES


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38. Ibid. P.296.


86. Padmini, K., **Capital Structure (Debt-Equity) of Indian Pharmaceutical Industry – A Study**, International Journal of Research in Commerce and Management, 3(8), 2012, Pp 70-73.


91. Annual Reports of Ministry of Steel, Government of India.