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# **CHAPTER-1**

## **INTRODUCTION**

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# Executive summary

A sound financial management is the crux of the efficient management of a business enterprise. There are four important finance decisions that should be taken by every financial manager. Financing decision is the second important function to be performed by the financial manager. Broadly, he or she must decide when, where from and how to acquire funds to meet the firm's investment needs. The central issue before him or her is to determine the appropriate proportion of equity and debt. The mix of debt and equity is known as the firm's capital structure. The financial manager must strive to obtain the best financial mix or the optimum capital structure of the firm. The firm's capital structure is considered to be optimum when the market value of shares is maximized. The use of debt affects the return and return of share holders; it may increase the return on equity funds, but it always increases risk as well.

Capital structure refers to the mix of long-term sources of funds, such as, debentures, long-term debts, preference share capital and equity share capital including reserves and surplus. An appropriate capital structure or target capital structure can be developed only when all those factors, which are relevant to the company's capital structure decision, are properly, analyzed and balanced. The capital structure should be planned generally keeping in view the interest of the equity shareholders and financial requirements of the company.

**National small industries corporation (NSIC)**, AN ISO 9001:2015 certified company and a govt. of India enterprise has been working to fulfill its mission of promoting, aiding and fostering the growth modernization, up gradation of technology, quality consciousness, strengthening linking of micro, small & medium enterprises in the country. Over a period of five decades of transition, and development, NSIC has proved its strength within the country and abroad by promoting growth with large and medium enterprises and enhancing exports-projects from small industries.

The present study has been carried out with the following objectives to analyze the pattern of capital structure, to assess the long-term solvency, to ascertain the justification for the use of debt, to study the problems or limitations if any and to offer feasible solutions to the company.

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## **1.1 IMPORTANCE OF CAPITAL STRUCTURE**

It is known that financial structure of a firm significantly impacts its stock price, but the results are not consistent and it varies from industry to industry and economy to economy. This study is mainly to explore the dependence of stock price on the financial structure of the firm in the Indian construction industry by developing a model that determines the influence of debt component in the financial structure on the stock returns.

The main Need of the study is

1. To study the impact the capital structure of a firm has on its stock price performance.
2. The study is focused on investigating the impact of number of key variables in industrial company value in India, which may help finance and investment decision makers to their accuracy of their decision.

## **1.2 OBJECTIVES OF STUDY**

The objectives of the study are as under:

- To analyze the pattern of capital structure in NSIC.
- To assess the long term solvency of the company.
- To ascertain the justification for the use of debt in NSIC.
- To study the problems or limitations if any and to offer feasible solutions.

### **1.3 SCOPE OF THE STUDY**

- Different independent variables are used under this study such as debt equity ratio , solvency ratio , interest coverage ratio, earning per share , long term debt to capital , net worth , degree of financial leverage , EBIT , earnings after tax , rate of return on investment , firms income gearing ratio.
- One dependent variable i.e..... debt to equity is undertaken
- The data used in the study is secondary in nature.
- Study covers 5 years data which is extracted from financial statement of the company
- By using statistical tools i.e. correlation, regression and descriptive statistics.
- The goal of the study is to test the relationship between the dependent variable and Independent variables

### **1.4 RESEARCH METHODOLOGY**

- The information for the study has been gathered mainly from the secondary data comprising the balance sheets, bulletins and manuals of the company and text books, magazines and journals.
- Five years balance sheets i.e. from 2014 to 2019 have been considered for the study.
- Some amount of primary data is also collected from the company executives and employees.



### **1.5 LIMITATIONS OF THE STUDY**

- The tools which are used in the study is restricted to debt equity ratio, solvency ratio, interest coverage ratio, earning per share , long term debt to capital , net worth , degree of financial leverage , EBIT , earning after tax , rate of return on investments , firms income gearing ratio.
- The study is prescribed to 5 monetary years from 2014-2015 to 2018-2019
- The study is confined to NATIONAL SMALL INDUSTRIES CORPORATION.
- The study is analyzed with the assistance of correlation and regression.
- The analysis was restricted to the information available in financial records of NATIONAL SMALL SCALE INDUSTRIES [NSIC].

## **PROFILE OF NATIONAL SMALL INDUSTRIES CORPORATION (NSIC):**

To collect and disseminate both domestic as well as international marketing intelligence benefits of MSMEs. This cell, in addition to spreading awareness about various programmers/schemes for MSMEs, will specifically maintain database and disseminate information on the following. National small industries corporation (NSIC), AN ISO 9001: 2015 certified company and a govt. of India enterprise has been working to fulfill its mission of promoting, aiding and fostering the growth of micro, small & medium enterprises in the country. Over a period of five decades of transition, growth and development, NSIC has proved its strength within the country and abroad by promoting modernization, up gradation of technology, quality consciousness, strengthening linking with large and medium.

Enterprises and enhancing exports-projects from small industries. NSIC operation through country wide network of 123 offices and technical centre's in the country. In addition, NSIC has 48 training cum incubation centers& with a large professional manpower; NSIC provides a package of services as per the needs of MSME sectors. To manage operations in African countries, NSIC operates from its office in Johannesburg, South Africa. In stepping up its efforts to markets the products MSMEs, NSIC has set up a specialized marketing intelligence cell to collect and disseminate both domestic and international marketing intelligence in coordination with other relevant department / agencies.

This cell provides a single point contact to collect database relating to bulk buyers in government, public and private sectors, the detail of exporters, international buyers and technology suppliers. Besides, the information on trade leads and products wise buyers

and sellers as well as database relating to DGS & D suppliers with prices of their products, shall also be provided by this NSIC marketing intelligence cell to help MSMEs in getting appropriate information at one place and at the right time which will enable MSMEs in enhancing their ability to gauge and be at par with the global demand. In the current era of globalization, MSMEs need marketing information about the

changing patterns of fashions /tastes in the domestic and international market besides information about the trends in exports and potential for exports. These are vital inputs for making MSMEs aware about their marketing strategy. MSMEs need to be provided with market related information, new avenues for their products, new business practices, both domestically as well as overseas.

MSMEs are handicapped because of non availability of information pertaining to central government / state government policies and programs, the support schemes and services of central /state PSUs availability of new technologies, international and national tenders, opportunities available in various countries for products and project exports. The NSIC marketing intelligence cell will integrate the available information at one strengthen their efforts in focused manner.

### **Schemes of NSIC:**

The national small industries corporation limited an ISO 9001: 2008 certified company established in 1955, has been working to fulfill its mission of promoting, aiding and fostering the growth of micro and small enterprises in the country. NSIC carries forward its mission to assist micro and small enterprises with a set of specially tailored schemes designed to put them in a competitive and advantageous position. The scheme comprises of facilitating marketing support, credit support, technology support and other support services.

Marketing is a strategic tool for business development and survival of the enterprises in today's Competitive era. NSIC acts as a facilitator to promote micro and small enterprises products and has devised a number of schemes to support in their marketing efforts both in the outside the country. Some of the schemes are briefly described an under:

**Single point registration for government purchase:**

Government is the largest buyer of product from micro and small enterprises. In order to meet its requirement of purchase, NSIC operation a single point registration scheme under the government purchase program, where in NSIC issue registration to eligible micro and small enterprises for the purpose of suppliers to the government departments. The registration is par with DGS & D; the unit registration under this gets the following facilities.

- ❖ Issue of tender sets free of cost
- ❖ Exemption from payment of earnest money
- ❖ Waiver of security deposit up to the money limit for which the unit is registered
- ❖ Issue of competency certificate in case the value of an order exceeds the monetary limit, after due verification.

**Infomediary services:**

Information plays a vital role in the success if any business. Keeping in mind the information needs to micro and small enterprises. NSIC has launched its infomediary services. A one stop, one window bouquet for aids that will provide information on business, technology, finance and also

exhibit the core competence of Indian micro and small enterprises in terms of price and quality internationally as well as domestically.

**Some important services provided are:**

- ❖ Tender information in your e-mail box and web based browsing
- ❖ Banner display on NSIC'C website
- ❖ Accesses to wide range of technologies from India and abroad
- ❖ Joint venture opportunities and information on of trade and events
- ❖ Comprehensive information on government policies rules, regulations, schemes and incentives
- ❖ Access to industrial database and member directory
- ❖ Availability of wide range of escort services, example product design, credit and support rating, development catalogues and product literature, energy and environment audit, introduction of information (IT)solution in business operations.
- ❖ Skill up gradation training, monitoring, common facility at NSIC technical services center(s), banners display on websites and market studies.

**Raw material assistance:**

NSIC extends short term financial assistance to micro and small enterprises for procurement of raw material on need basis.

The salient features

- ❖ Financial assistance for procurement of raw material up to 90 days
- ❖ MOU with NALCO, HCL, SAIL, RINL FOR supply of bulk materials
- ❖ Easy and quick disbursement
- ❖ Flexibility of repayment

### **Tender marketing:**

The corporation participates in bulk global tender enquiries and local tenders of central & state government and public sector enterprises on behalf of micro and small enterprises. It is aimed to assist micro and small enterprises with ability to manufacture quality products with brand equity & credibility or have limited financial capabilities.

### **Benefits:**

NSIC will provide all financial support depending upon the unit's individual requirements like purchase of raw materials and financing of sale bill Enhance business volume helps micro and small enterprises to achieve maximum capability utilization. Micro and small enterprises exemption from depositing earnest money. Ensures fair margin to micro and small enterprises for their production.

### **Consortia marketing:**

Micro and small enterprises in their individual capability face problems to procure, execute bulk orders, which inhibit and restrict their growth. NSIC, accordingly adopts consortia approach and forms consortia of units manufacturing the same products, thereby easing out marketing problems of Micro and small enterprises, the corporation explores the market and secures order for bulk supply. These orders are then distributed to micro and small enterprises in tune with their production capacity.

### **Performance and credit rating scheme for micro and small Enterprises:**

To ensure micro and small enterprises to ascertain the strength and weakness of their existing operation and to take corrective measures to enhance their organization strength, NSIC is operating performance and credit rating scheme through empanelled agencies like ICRA; ONICRA, DUN & BRAD STREET, CRISIL, FITCH, CARE and SNERA. Micro and small enterprises has the liberty to choose among any of the rating agencies empanelled with NSIC. The rating agencies will charge the credit rating fee according to their policies. The benefits to small enterprises are as follows.

- ❖ An independent trusted third-party opinion on capabilities and creditworthiness of micro and small enterprises.
- ❖ Availability of credit at attractive interest.
- ❖ Recognition in global trade.
- ❖ Prompt sanctions of credit from banks financial institutions.
  
- ❖ Subsidized rating fee structure for micro and small enterprises.
- ❖ Facilitate vendors/buyers in capacity assessment to micro and small enterprises.
- ❖ Enable micro and small enterprises to ascertain the strength and weakness of their existing operation and corrective measures.

#### **Facilitation of credit support through banks:**

Any kind of financial assistance i.e., terms loan, working capital loan, bill discounting facility and export finance can be arranged through United Bank of India, UCO bank, Oriental Bank of Commerce,

central bank of India, bank of Maharashtra, YES bank and HSDC at the most competitive interest rates.

The terms and condition of finance shall be of individual bank. NSIC will undertake the follow up the proposals with the bank selected by the unit for obtaining finance shall ensure timely disposal. Application forms of the individual banks can be had from the office of the NSIC

## **MICRO, SMALL AND MEDIUM ENTERPRISES (MSME's)**

### **INTRODUCTION:**



**Micro, Small and Medium Enterprises (MSME)** area has risen as a profoundly lively and dynamic division of the Indian economy throughout the most recent 5 decades. MSMEs not just assume urgent part in giving extensive business openings at relatively bring down capital cost than expansive ventures yet additionally help in industrialization of country and in reverse zones, in this manner, decreasing provincial lopsided characteristics, guaranteeing more impartial circulation of national wage and riches. MSMEs are integral to substantial ventures as auxiliary enterprises and this area gives gigantically to the financial advancement of the nation.

**Khadi** is the pleased inheritance of our national flexibility development and the father of the country. KVI are two national legacies of India. A standout amongst the hugest parts of KVI in Indian economy is that it makes work at a low for each capita venture. It not only serves the essential needs of handled merchandise of the huge provincial segment of the nation, yet additionally gives reasonable work to country craftsman. KVI today speak to an impeccable, legacy item, which is ‘ethnic’ and additionally moral. It has a possibly solid customer base among the centre and higher classes of the general public.

**Coir Industry** is an agro-based customary group, which started in the territory of Kerala and multiplied to the next coconut delivering states like Tamil Nadu, Karnataka, Andhra Pradesh, Orissa, West Bengal, Maharashtra, Assam, Tripura, and so on. It is a fare arranged industry and enables the capacity to upgrade sends out by esteem expansion through innovative mediations and broadened items like Coir Geotextiles and so forth. The adequacy of Coir items has expanded quickly because of its ‘condition inviting’ picture.

The Service of MSME imagine a lively MSME area by advancing development and advancement of the MSME Sector, including Khadi, Village and Coir Industries, in collaboration with concerned Ministries/Departments, State Governments and different Stakeholders, through offering help to existing ventures and empowering making of new undertakings.

**The MSMED Act** was passed in 2006 to address strategy issues influencing MSMEs and in addition the scope and venture roof of the area. The Act looks to encourage the advancement of these undertakings as likewise improve their aggressiveness. It gives the main ever legitimate structure for acknowledgment of the idea of “big business” which involves both assembling and administration substances. It characterizes medium undertakings out of the blue and looks to incorporate the three levels of these endeavors, in particular, miniaturized scale, little and medium. The Act additionally accommodates a statutory consultative component at the national level with adjusted portrayal of all areas of partners, especially the three classes of undertakings; and with an extensive variety of warning capacities.

Identification of particular assets for the advancement, improvement and upgrading aggressiveness of these ventures, notice of plans/programs for this reason, dynamic credit arrangements and practices, inclination in Government acquisitions to items and administrations of the miniaturized scale and little undertakings, more successful instruments for moderating the issues of postponed installments to smaller scale and little endeavors On 9 May 2007, ensuing to a revision of the GOI (Allocation of Business) Rules, 1961, organized Ministry of Small Scale Industries and the Ministry of Agro and Provincial Industries were converged to frame the Ministry of Micro, Small and Medium Enterprises (M/o MSME). This Ministry now plans approaches and advances/encourages projects, ventures and plans and screens their usage with a view to helping MSMEs and helps them to scale up.

## **SCHEMES& PROGRAMMES:**

The programs embraced by the Ministry look to encourage:

- ❖ adequate stream of credit from budgetary organizations/banks;
- ❖ support for innovation up gradation and modernization;
- ❖ integrated infrastructural offices;
- ❖ modern testing offices and quality accreditation;
- ❖ access to present day administration hones;
- ❖ entrepreneurship improvement and ability up gradation through fitting preparing offices;
- ❖ support for item

- ❖ improvement, plan intercession and bundling;
- ❖ welfare of craftsman's and specialists;
- ❖ assistance for better access to local and fare markets

### **Organizational Setup:**

The M/o MSME is having two Divisions called Small and Medium Enterprises (SME) Division and Agro and Rural Industry (ARI) Division. The SME Division is apportioned the work, between alia, of organization, watchfulness and managerial supervision of the NSIC Ltd., an open area Endeavour and the three self-governing national level enterprise advancement/preparing beginnings. The Division is likewise in charge of execution of the plans identifying with Performance and Credit Rating and Assistance to Training Institution, among others.

The ARI Division cares for the organization of two statutory bodies' viz. the Khadi and Village Industries Commission (KVIC), Coir Board and a recently made association called Mahatma Gandhi Institute for Rural Industrialization (MGIRI). It additionally oversees the usage of the PMEGP.

The Implementation of arrangements and different projects plans for giving framework and bolster administrations to MSME's is embraced through its appended office, in particular

- ❖ National Small Industries Corporation (NSIC),
- ❖ Khadi and Village Industries Commission (KVIC); the Coir Board, and
- ❖ Three preparing foundations viz., National Institute for Entrepreneurship and Small Business Development (NIESBUD),
- ❖ MGIRI, vardh general public enrolled under Societies Registration Act, 1860.

The National Board for Micro, Small and Medium Enterprises (NBMSME) was set up by the Government under the Micro, Small and Medium Enterprises Development Act, 2006 and Rules

made there under. It analyses the components influencing advancement and improvement of MSME, audits existing strategies and projects and make suggestions to the Government in planning the arrangements and projects for the development of MSME.

### **National Small Industries Corporation Limited (NSIC)**

NSIC has been built up in the year 1955, is going by Chairman-cum-Managing Director and oversaw by a BOD. The fundamental capacity of the Corporation is to advance, guide and cultivate the development of miniaturized scale and little ventures in the nation, for the most part on business premise.

NSIC gives an assortment of help administrations to smaller scale and little ventures taking into account their diverse necessities in the regions of crude material obtainment; item promoting; FICO assessment; procurement of advances; appropriation of present day administration rehearses, and so on.

### **Khadi & Village Industries Commission**

It was built under the act of khadi and village industries commission 1956 & it is a statutory organization occupied with advancing and creating khadi and town ventures for giving business openings in country regions, along these lines reinforcing the rustic economy. The Commission is maintaining one chairman & 10 committee members. It has been recognized as one of the significant associations in the decentralized segment for producing supportable rustic non-cultivate

work openings at a low for each capita venture. This likewise helps in checking relocation of rustic populace to urban zones looking for the business openings. The fundamental elements of the KVIC are to design, advance, arrange and aid usage of the projects/ventures/plans for age of

business openings through improvement of khadi and town enterprises. Towards this end, it embraces exercises like expertise change, exchange of innovation, examine and improvement, promoting, and so forth.

### **Coir Board**

It is a statutory body set up under the Coir Board Industry Act, 1953 for advancing general advancement of the coir business and enhancing the living states of the labour occupied with this customary industry. The exercises of the Board for improvement of coir businesses, between alia incorporate Endeavour logical, mechanical and monetary innovative work exercises; gathering measurements identifying with sends out and inward utilization of coir and coir items; growing new items and outlines; sorting out exposure for advancement of fares and inner deals; showcasing of coir and coir items .

## **INTRODUCTION OF CAPITAL STRUCTURE**

The financing decisions occupy a pivotal role in the overall finance function in a corporate firm which mainly concerns itself with an efficient utilization of the funds provided by the owners or obtained from external sources together with those retained or ploughed back out of surplus or undistributed profits. These decisions are mainly in the nature of planning capital structure, working capital and mechanism through which funds can be raised from the capital market whenever required. The financing decisions explain how to plan an appropriate mix with least cost, how to raise long term funds, and how to mobilize the funds for working capital within a short span of time. Such a financing policy provides an appropriate backdrop for formulating effective policies for investment of funds as well as management of earnings. It contributes to magnifying the earnings on equity as profitability (expressed as return on equity), to a large extent, is dependent on the degree of leverage in the capital structure. Besides, the valuation of the structure of physical assets depends fundamentally on the financing mix.

This makes it necessary for the management of a firm to pursue a well thought out financing policy, which ought to be framed initially, incorporating, among other things, the proportion of the debt and equity, types of debts and own funds to be used and volume of the funds to be raised from each source or combination of sources, to enable the firm to have a proper capitalization. In the

absence of this, the firm may face the problem of either over-capitalization or under-capitalization impeding its smooth financial functioning.

It is obvious that functioning decisions are extremely important for corporate firms. Such decisions, in management parlance, are termed as capital structure decisions. The term capital structure is used to describe the combination of various sources of finance employed to raise funds. It implies, in other words, that when a firm chooses to use a

group of sources in certain proportions the resulting pattern is referred to as capital structure of the firm. The sources of finance could be divided in terms of ownership of funds and duration of funds.

The former comprises owned and borrowed funds while the latter includes long, medium and short-term funds. Of the two, the duration-based classification is useful for preparing a plan to meet long term as well as short term capital requirements while ownership-based classification is useful for selection of specified sources, determining debt-equity ratio and analyzing impact of capital structure decisions on the earnings on equity. As the ownership-based classification suggests that there are two types of sources of finance, namely owned and borrowed funds, the capital structure represents the component relationship between owned and borrowed funds. The owned funds which are also described as equity fund may be defined as funds provided by or belonging to the share-holders. As against this, borrowed funds which are also described as debt fund may be defined as funds obtained from the outsiders as debt and repayable along with interest amount, subject to the terms and conditions to the loan agreement, during the life span of the

corporate firm. According to popular notions, only term sources of funds constitute capital structure and short-term sources of funds are excluded from its preview.

In the opinion Rajwant Singh and Br I j Kumar, the capital structure is made up of the long-term borrowings, the preferred stock and the common stock equity including all related net worth accounts.

Similarly, Morarka.R observes that the capital structure implies a degree of permanency and normally omits short term borrowings of less than one year but would include other intermediate and long-term borrowings. The financial institutions consider only long-term sources of finance for computing the debt-equity ratio of corporate firm. (Shrivallabhv.kuvalekhar, 1990).



### **DEFINITION OF 'CAPITAL STRUCTURE'**

A mix of a company's long-term debt, specific short-term debt, common equity and preferred equity. The capital structure is how a firm finances its overall operations and growth by using different sources of funds.

Debt comes in the form of bond issues or long-term notes payable, while equity is classified as common stock, preferred stock or retained earnings. Short-term debt such as working capital requirements is also considered to be part of the capital structure.

Capital structure means the mixture of share capital and other long-term liabilities. In capital structure, we include equity share capital, preference share capital, debenture and long-term debt.

Some of companies want to become smart. They slowly decrease equity share capital and increases loan excessively which may be very risky because these company has to pay fixed cost of interest and has to manage repayment of loan after some time. Some mistake in it, may be risky for its solvency. So, decision relating to capital structure is very important for company.

### **NEED FOR CAPITAL STRUCTURE PLANNING**

For the real growth of the company the financial manager of the company should plan an optimum capital for the company. The optimum capital structure is one that maximizes the market value of the firm. In practice the determination of the optimum capital structure is a formidable task and the manager has to perform this task properly, so that the ultimate objective of the firm can be achieved.

There are significant variations among industries and companies within an industry in terms of capital structure. Since a number of factors influence the capital structure decision of a company, the judgment of the person making the capital structure decisions play a crucial part. A totally theoretical model can't adequately handle all those factors, which affects the capital structure decision in practice. These factors are highly psychological, complex and qualitative and do not always follow accepted theory, since capital markets are not perfect and decision has to be taken under imperfect knowledge and risk.

An appropriate capital structure or target capital structure can be developed only when all those factors, which are relevant to the company's capital structure decision, are properly analyzed and balanced. The capital structure should be planed generally keeping in view the interest of the equity shareholders and financial requirements of the company. The equity shareholders being the owner of the company and the providers of risk capital (equity), would be concerned about the ways of financing a company's operations.

However, the interest of other groups, such as employee, customers, creditors, society and government, should be given reasonable consideration when the company lays down its objective in terms of the shareholders wealth maximization, it is generally compatible with the interest of other groups. Thus, while developing an appropriate capital structure for a company the finance manager should inter alia aim at maximizing the long-term market price per share.

Theoretically, there may be precise point or range within which the market value per shares is maximum. In practice, for most companies within an industry there may be a range within which there would not be great differences in the market value per share. One way to get an idea of this range is to observe the capital structure patterns of company's vis-a-vis their market prices of share.

The management of companies may fix its capital structure near the top of this range in order to make maximum use of favorable leverage, subject to other requirements such as flexibility, solvency, control and norms set by the financial institutions- The Security Exchange Board of India (SEBI) and Stock Exchanges.

### **PATTERN OF CAPITAL STRUCTURE**

In case of new company, the capital structure may be of any of the following four patterns:

- \_ Capital structure with equity shares only
- \_ Capital structure with equity as well as preference shares
- \_ Capital structure with equity shares and debt capital
- \_ Capital structure with equity shares, preference shares and debt capital.

## **IMPORTANCE OF CAPITAL STRUCTURE**

The term ‘capital structure’ refers to the relationship between the various long-term forms of financing such as debenture, preference share capital and equity share capital.

Financing the firm’s assets is a very crucial problem in every business and as a general rule there should be a proper mix of debt and equity capital in financing the firm’s assets.

The use of long-term fixed interest-bearing debt and preference share capital along with equity shares is called **financial leverage or trading on equity**. (Sharma, 2006)

## **THEORIES OF CAPITAL STRUCTURE**

Different kinds of theories have been propounded by different authors to explain the relationship between capital structure, cost of capital and the value of the firm. The main contributors to the theories are Durand, Ezra, Solomon, Modigliani and Miller.

The important theories are discussed below:

1. Net Income Approach
2. Net Operating Income Approach.
3. The Traditional Approach.
4. Modigliani and Miller Approach.
- 1. Net Income Approach.** According to this approach, a firm can minimize the weighted average cost of capital and increase the value of the firm as well as market price of equity shares by using debt financing to the maximum possible extent. The theory propounds that a company can increase its value and decrease the overall cost of capital by increasing the proportion of debt in its capital structure. This approach is based upon the following assumptions:
  - (i) The cost of debt is less than the cost of equity.
  - (ii) There are no taxes.
  - (iii) The risk perception of investors is not changed by the use of debt.
- 2. Net Operating Income Approach.** This theory as suggested by Durand is another extreme of the effect of leverage on the value of the firm. It is diametrically opposite to the net income approach. According to this approach, change in the capital structure if a company does not affect the market value of the firm and the overall cost of capital remains constant irrespective of the method of financing.

It implies that the overall cost of capital remains the same whether the debt- equity mix is 50:50 or 20:80 or 0:100. Thus, there is nothing as an optimal capital structure and every capital structure is the optimum capital structure. This theory presumes that:

- (i) The market capitalizes the value of the firm as a whole.

- (ii) The business risk remains constant at every level of debt equity mix;
- (iii) There are no corporate taxes.

3. **The Traditional Approach.** The traditional approach, also known as *intermediate approach*, is a compromise between extremes of net income approach and net operating income approach. According to this theory, the value of the firm can be increased initially or the cost of capital can be decreased by using more debt as the debt is a cheaper source of funds than equity. Thus, optimum capital structure can be reached by a proper debt-equity mix. Beyond a particular point, the cost of equity increases because increased debt increases the financial risk of the equity shareholders.

The advantage of cheaper debt at this point of capital structure is offset by increased cost of equity. After this there comes a stage, when the increased cost of equity cannot be offset by the advantage of low-cost debt.

Thus, overall cost of capital, according to this theory, decreases up to a certain point, remains more or less unchanged for moderate increase in debt thereafter; and increases or rises beyond a certain point. Even the cost of debt may increase at this stage due to increased financial risk.

4. **Modigliani and Miller Approach.** M&M hypothesis is identical with the Net Operating Income approach if taxes are ignored. However, when corporate taxes are assumed to exist, their hypothesis is similar to the net income approach.

- (a) **In the absence of taxes. (Theory of Irrelevance)** The theory proves that the costs of capital is not affected by changes in the capital structure or say that the debt-equity mix is irrelevant in the determination of the total value of a firm. The reason argued is that though debt is cheaper to equity, with increased use of debt as a source of finance, the cost of equity increases. This increase in cost of equity offsets the advantage of the low cost of debt.

Thus, although the financial leverage affects the cost of equity, the overall cost of capital remains constant. The theory emphasizes the fact that a firm's operating income is a determinant of its total value. The theory further propounds that beyond a certain limit of debt, the cost of debt increases (due to increased financial risk) but the cost of equity falls thereby again balancing the two costs. In the opinion of Modigliani & Miller, two identical firms in all respects expect their capital structure cannot have different market values or cost of capital because of **arbitrage process**. In case two identical firms expect for their capital structure have different market values or cost of capital, arbitrage will take place and the investors will engage in 'personal leverage' (i.e. they will buy equity of the other company in preference to the company having lesser value) as against the 'corporate leverage'; and this will again render the two firms to have the same total value.

**The M&M approach is based upon the following assumptions:**

- (i) There are no corporate taxes
- (ii) There is a perfect market.
- (iii) Investors act rationally.
- (iv) The expected earnings of all the firms have identical risk characteristics.
- (v) The cut-off point of investment in a firm is capitalization rate.
- (vi) Risk to investors depends upon the random fluctuations of expected earnings and the possibility that the actual value of the variables may turn out to be different from their best estimates.
- (vii) All earnings are distributed to the shareholders. (R.P.Rustagi)

## **CAPITAL STRUCTURE PLANNING & POLICY**

Estimation of capital requirements for current and future needs is important for a firm. Equally important is the determining of capital mix. Equity and debt are the two principle sources of finance of a business. But what should be the proportion between debt and equity in the capital structure of a firm? How much financial leverage should a firm employ? This is a very difficult question. To answer this question, the relationship between the financial leverage and the value of



the firm or cost of capital has to be studied. Capital structure planning, which aims at the maximization of profits and the wealth of the shareholders, ensures the maximum value of a firm or the minimum cost of capital. It is very important for the financial manager to determine the proper mix of debt and equity for his firm. In principle, every firm aims at achieving the optimal capital structure but in practice it is very difficult to design the optimal capital structure. The management of a firm should try to reach as near as possible of the optimum point of debt and equity mix.

### **ESSENTIAL FEATURES OF A SOUND/OPTIMAL CAPITAL MIX**

A sound or an appropriate capital structure should have the following essentials features:

1. Maximum possible use of leverage.
2. The capital structure should be flexible so that it can be easily altered.
3. To avoid undue financial/business risk with the increase of debt.
4. The use of debt should be within the capacity of a firm. The firm should be in a position to meet its obligations in paying the loan and interest charges as when due.
5. It should involve minimum possible risk of loss of control.
6. It must avoid undue restrictions in agreement of debt.
7. It should be easy to understand and simple to operate to the extent possible.

8. It should minimize the cost of financing and maximize earnings per share. (Sharma, 2006)

### **FRAMEWORK FOR CAPITAL STRUCTURE: The FRICT Analysis**

A financial structure may be evaluated from various perspectives. From the owner's point of view, return, risk and value are important considerations. From the strategic point of view, flexibility is an important concern. Issue of control, flexibility and feasibility assume great significance. A sound capital structure will be achieved by balancing all these considerations:

**Flexibility:** the capital structure should be determined within the debt capacity of the company, and this capacity should not be exceeded. The debt capacity of a company depends on its ability to generate funds cash flows. It should have enough cash to pay creditor's fixed charges and principal sum and leave some excess cash to meet future contingency. The capital structure should be flexible. It should be possible for a company to adapt its capital structure with a minimum cost and delay if warranted by a changed situation. It should also be possible for the company to provide funds whether needed to finance its profitable activities.

**Risk:** the risk depends on the variability in the firm's operations. It may be caused by the macroeconomic factors and industry and firm specific factors. The excessive use of debt magnifies the variability of shareholders' earnings, and threatens the solvency of the company.

**Income:** the capital structure of the company should be most advantageous to the owners (shareholders) of the firm. It should create value; subject to other considerations, it should generate maximum returns to the shareholders with minimum additional cost.

**Control:** the capital structure should involve minimum risk of loss of control of the company. The owners of closely held companies are particularly concerned about dilution of control.

**Timing:** the capital structure should be feasible to implement given the current and future conditions of the capital market, the sequencing of sources of financing is

important. The current decision influences the future options of raising capital.

The FRICT (flexibility, risk, income, control and timing) analysis provides general framework for evaluating a firm's capital structure. The particular characteristics of a company may reflect some additional specific features. Further the emphasis given to each of these features will differ from company to company.

### **APPROACHES TO ESTABLISH TARGET CAPITAL STRUCTURE**

The capital structure should be planned initially when a company is incorporated. The initial capital structure should be designed very carefully. The management of the company should set a target capital structure and the subsequent financing decisions should be made with a view to achieve the target capital structure. The company needs funds to finance its activities continuously. Every time when funds have to be procured, the financial manager weighs the pros and cons of various sources of finance and selects the most advantageous sources keeping in view the target capital structure and financial manager deals with existing capital structure. Thus, the capital structure decision is a continuous one and has to be taken whenever a firm needs additional finances.

Three common approaches to decide about a firm's capital structure

**EBIT-EPS approach** for analyzing the impact of debt on shareholders' return and risk.

**Valuation approach** for determining the impact of debt on the shareholders' values

**Cash flow analysis** for analyzing the firm's ability to service debt and avoid financial distress.

### **FACTORS DETERMINING THE CAPITAL STRUCTURE**

The capital structure of a concern depends upon a large number of factors such as leverage or trading on equity, growth of the company, nature and size of business, the idea of retaining control, flexibility of capital structure, requirements of investors, costs of flotation of new securities, timing of issue, corporate tax rate and the legal requirements. It is not possible to rank them because all such factors are of different importance and the influence of individual factors of a firm change over a period of time. Every time the funds are needed, the financial manager has to study the pros and cons of the various sources of finance so as to select the most advantageous capital structure. The factors influencing the capital structure are discussed as follows:

**1. Financial Leverage or Trading on Equity:** The use of long-term fixed interest-bearing debt and preference share capital along with equity share capital is called financial leverage or trading on equity. Effects of leverage on the shareholders' return or earnings per share have already been discussed in this chapter. The use of long-term debt increases/magnifies the earnings per share if the firm yields a return higher than the cost of debt. The earnings per share also increase with the use of preference share capital but due to the fact that interest is allowed to be deducted while computing tax, the leverage impact of debt is much more. However, leverage can operate adversely also if the rate of interest on long-term loans is more than the expected rate of earnings of the firm. Therefore, it needs caution to plan the capital structure of a firm.

**2. Growth and Stability of Sales:** The capital structure of a firm is highly influenced by the growth and stability of its sales. If the sales of a firm are expected to remain fairly stable, it can raise a higher level of debt.

Stability of sales ensures that the firm will not face any difficulty in meeting its fixed commitments of interest payment and repayments of debt. Similarly, the rate of growth in sales also affects the capital structure decision.

Usually greater the rate growth of sales, greater can be the use debt in the financing of firm. On the other hand, if the sales of a firm are highly fluctuating or declining, it should not employ, as far as possible, debt financing in its capital structure.

**3. Cost of Capital:** Every rupee invested in a firm has a cost. Cost of capital refers to the minimum return expected by its suppliers. The capital structure should provide for the minimum cost of capital. The main suppliers of capital depend upon the risk they have to undertake. Usually, debt is a cheaper source of finance compared to preference and equity capital due to

- (a) Fixed rate of interest on debt;
- (b) Legal obligation to pay interest;
- (c) Repayment of loan and priority in payment at the time of winding up of the company.

On the other hand, the rate of dividend is not fixed on equity capital. It is not a legal obligation to pay dividend and the equity shareholders undertake the highest risk as they cannot be paid back except at the winding up of the company and that too after paying all other obligations.

Preference capital is also cheaper than equity because of lesser risk involved and a fixed rate of dividend payable to preference shareholders. But debt is still a cheaper source of finance than even preference capital because of tax advantage due to deductibility of interest

. While formulating a capital structure, an effort must be made to minimize the overall cost of capital.

**4. Risk:** There are two types of risk that are to be consider while planning the capital structure of a firm viz;

(a) Business risk and

(b) Financial risk.

Business risk refers to the variability of earnings before interest and taxes. Business risk can be internal as well as external. Internal risk is caused due to improper product mix, non-availability of raw materials, incompetence to face competition, absence of strategic management etc., Environment thrust upon it. External business arises due to change in operating conditions caused by conditions thrust upon the firm which are beyond its control e.g., business cycles, governmental controls, changes in business laws, international market conditions etc.

Financial risk refers to the risk of a firm that may not be able to cover its fixed financial costs. Financial risk is associated with the capital structure of a company. A company with no debt financing has no financial risk. The extent of financial risk depends on the leverage of the firm's capital structure.

When a firm uses more and more of debts in its capital mix the financial risk of the firm increases. It may not be able to pay the fixed interest charges to the suppliers of debt and they may force to

liquidate. Thus, a firm has to reach a balance between the financial risk and the risk of non-employment of debt capital to increase its market value.

**5.Cash Flow Ability to Service Debt:** A firm which shall be able to generate larger and stable cash inflows can employ more debt in its capital structure as compared to the one which has unstable and lesser ability to generate cash inflows .Debt financing implies burden of fixed charge due to the fixed payment of interest and the principal. Whenever a firm wants to raise additional funds, it should estimate, project its future cash inflows to ensure the coverage of fixed charges. Fixed charges coverage ratio and interest coverage ratio may be calculated for this purpose.

**6. Nature and Size of a Firm:** Nature and size of a firm also influence its capital structure. All public utility concern has different capital structure as compared to other manufacturing concern. Public utility concerns may employ more of debt because of stability and regularity of their earnings. On the other hand, a concern which cannot provide stable earnings due to the nature of its business will have to rely mainly on equity capital; similarly, small companies have to depend mainly upon owned capital as it is very difficult for them to raise long-term loans on reasonable terms and also cannot issue equity and preference shares at ease to the public.

**7. Control:** Whenever additional funds are required by a firm the management of the firm wants to raise the funds without any loss of control over the firm. In case the funds are raised through the issue of equity shares, the control of the existing shareholders is diluted. Hence, they might raise the additional funds by way of fixed interest-bearing debt and preferences share capital. Preferences shareholders and debenture holders do not have the voting right.

Hence, from the point of view of control, debt financing is recommended. But, depending largely upon debt financing may create other problems, such as, too many restrictions imposed upon by

the lenders or suppliers of finance and ultimate bankruptcy of the firm due to heavy burden of interest and fixed charges.

This may result into even a complete loss of control by way of liquidation of the company.

**8. Flexibility:** Capital structure of a firm should be flexible, i.e., it should be such as to be capable of being adjusted according to the needs of the changing conditions. It should be such as to be capable of being adjusted according to the needs of the changing conditions. It should be possible to raise additional funds, whenever the need be, without much of difficulty and delay. A firm should arrange its capital structure in such a manner that it can substitute one form of financing by another. Redeemable preference shares and convertible debentures may be preferred on account of flexibility. Preference shares and debentures which can be redeemed at the discretion of the firm offer the highest flexibility in the capital structure.

**9. Requirements of Investors:** The requirement of investors is another factor that influences the capital structure of a firm. It is necessary to meet the requirements of both institutional as well as private investors when debt financing is used. Investors are generally classified under three kinds, i.e. bold investors, cautious nature, and prefer capital gains and control and hence equity share capital is best suited to them. Investors who are over cautious and conservative prefer safety of investment and stability in returns and hence debentures would satisfy such overcautious investors. Investors which are less cautious in approach will prefer preferences share capital which provides stability in returns.

**10. Capital Market Conditions (Timings):** Capital market conditions do not remain the same forever. Sometimes there may be depression while at other times there may be boom in the market.



The choice of the securities is also influenced by the market conditions. If the share market is depressed and there are pessimistic business conditions, the company should not issue equity shares as investors would prefer safety. But in case there is boom period, it would be advisable to issue equity shares. Proper timing of issue of securities also saves in costs of raising funds.

**11. Assets Structure:** The liquidity and the composition of assets should also be kept in mind while selecting the capital structure. If fixed assets constitute a major portion of the total assets of the company, it may be possible for the company to raise more of long-term debts.

**12. Purpose of Financing:** If funds are required for a productive purpose, debt financing is suitable and the company should issue debentures as interest can be paid out of the profits generated from the investment.

However, if the funds are required for unproductive purpose or general development on permanent basis, we should prefer equity capital.

**13. Period of Finance:** The period for which the finances are required is also an important factor to be kept in mind while selecting an appropriate capital mix. If the finances are required for a limited period of, say, seven years, debentures should be preferred to shares.

Redeemable preference shares may also be used for a limited period finance, if found suitable otherwise. However, in case funds are needed on permanent basis, equity shares capital is more appropriate.

**14. Costs of Floatation:** Although not very significant, yet costs of floatation of various kinds of securities should also be considered while raising funds. The cost of floating a debt is generally less than the cost of floating equity and hence it may persuade the management to raise debt financing. The costs of floating as a percentage of total funds decrease with the increase in size of the issue.

**15. Personal Considerations:** The personal considerations and abilities of the management will have the final say on the capital structure of a firm. Managements which are experienced and are very enterprising do not hesitate to use more of debt in their financing as compared to the less experienced and conservative management.

**16. Corporate Tax Rate:** High rate of corporate taxes on profits compel the companies to prefer debt financing, because interest is allowed to be deducted while computing taxable profits. On the other hand, dividend on shares is not an allowable expense for that purpose.

**17. Legal requirements:** The Government has also issued certain guidelines for the issue of shares and debentures. The legal restrictions are very significant as these lay down a framework within which capital structure decision has to be made. For example, the controller of capital issues, now SEBI grants his consent or capital issue when

1. The debt equity ratio does not exceed 2:1 (for capital intensive projects a higher debt-equity ratio may be allowed).
2. The ratio of preference capital to equity does not exceed 1:3 and
3. Promoters hold at least 25% of the equity capital. (Sharma, 2006)

## **PRINCIPALS OF CAPITAL STRUCTURE DECISIONS**

The capital structure decisions are influenced by a variety of factors discussed above. From these factors, we can summaries the main principals of capital structure decisions as follows:

1. Cost principal
2. Risk principal
3. Control principal
4. Flexibility principal
5. Timing principal

All these principals have already been explained while discussing factors determining the capital structure.

## **CHANGES IN CAPITALISATION OR CAPITAL STRUCTURE**

No scheme of capitalization or capital structure can be said to be of permanent character or of static nature in the fast-changing world of business. The initial patterns of capitalization, however planned, can never fully anticipate the efforts of these changes in the economy. The scheme of capitalization may become outmoded with the changing conditions of the financial markets. Thus, it may become necessary to make changes in the scheme of capitalization to suit the present needs of a company. A sound capital structure is one which can be adjusted accord capitalization and reorganization etc. The changes in the capitalization scheme may either be voluntary or compulsory and may be implemented either in the form of recapitalization or readjustment of capital structure.

The following are the main reasons necessitating change in capitalization:

1. To restore balance in the financial plan: if the financial structure of a company has become top heavy with fixed cost bearing securities resulting into a great strain on the financial position of the company ,the company may readjust its capital structure by redeeming the preference shares or debentures out of the proceeds of new issue of equity shares. This will lead to easing out the tension or reduce the strain and restore the balance in the financial plan.
2. To simplify the capital structure: when a company has issued a variety of securities at different points of time to raise funds at difficult terms, it may need to consolidate such securities to simplify the financial plan as and when the market conditions are favorable.
3. To suit investor needs: a company may have to change capitalization to suit the needs of its investors. The companies often resort to split up of its shares to make these more attractive especially when the market activity in the company's share is limited due to high face value and wide fluctuations in its market prices.

4. To fund current liabilities: sometimes, the companies feel they need working capital on permanent basis. In such circumstances, the companies would prefer to convert their short-term obligations into long-term by taking advantage of favorable market conditions.
5. To write off the deficit: In case a company has not been doing well and book value of its assets is overvalued as compared to their real worth or when there are accumulated losses ,it is better for the company to reorganize its capital by reducing book value of its liabilities and assets to their real values such reorganization is also necessitated, because, otherwise the company cannot legally pay dividends to its shareholders even in future when it makes profits without writing off the losses.
6. To capitalize retained earnings: changes in capitalization may take place due to capitalization of retained earnings by the issue of bonus shares. To avoid over capitalization, maintain a balance between preference shares and equity shares and equity shares and debentures; a company may prefer to issue bonus shares out of its accumulated profits and resources without affecting their liquidity.
7. To clear default on fixed cost securities: when a company is not in a position to pay interest on debentures or repay the debentures on their maturity , it may be forced to offer them certain securities(equity shares, preference shares or new debentures) to clear the resulting into a change in the capitalization of the company.
8. To fund accumulated dividend: if a company has not been able to pay fixed dividends to its preference shareholders and the same have been accumulating or when preference shares are due for redemption and the company does not have necessary funds to pay for the same, the company may prefer to issue new shares in lieu thereof resulting in a change in its capitalization.

9. To facilitate merger and expansion: in the same manner, to a facilitate merger and expansion; the intending companies may be required to readjust capital structure. Such a change is generally required to equate the shares of different companies.
10. To meet legal requirement: changes in capitalization may also be necessitated to meet the changes in various legal requirements as and when those take place. (Sharma, 2006)

## **ASSESSMENT OF LONG-TERM SOLVENCY**

Leverage ratios indicate the extent to which the firm has used its long-term solvency by borrowing funds. The short-term creditors, like bankers and suppliers of raw material, are more concerned with the firm's current debt-paying ability. On the other hand, long-term creditors, like debenture holders, financial institutions etc. are more concerned with the firm's long-term financial strength. In fact, a firm should have a strong short-term as well as long-term financial position. To judge the long-term financial position of the firm, financial leverage, or capital structure ratios are calculated. These ratios indicate mix of funds provided by owners and lenders. As a general rule, there should be an appropriate mix of debt and owner's equity in financing the firm's assets. The leverage or capital structure ratio include for the purpose of analysis:

- \_ Debt-equity ratio
- \_ Debt to total fund ratio
- \_ Interest coverage ratio

## **DEBT - EQUITY RATIO**

The main object of calculating the debt-equity ratio is to measure the relative interest of owners and creditors in the firm. From the creditors' point of view, it measures the extent to which their interest is covered by owned funds. A standard debt-equity norm for all industrial units is neither desirable nor practicable. Different standard debt-equity ratios are used for different industry groups. However, in less developed countries, such standards cannot be accepted. Therefore, this ratio depends upon industry, circumstances, and prevailing practices and so on. The generally accepted standard norm of debt-equity ratio is 2:1. The ratio may be calculated in terms of the relative proportion of long-term debt i.e. borrowed funds and shareholders' equity i.e. net-worth. This is a vital ratio to determine the efficiency of the financial management of business undertakings (Roy Choudhary).

Debt - equity ratio is calculated by using the following formula:

$$\text{Debt – Equity Ratio} = \text{Long Term Debt} / \text{Net Worth.}$$

### **DEBT TO TOTAL FUND RATIO**

Several debt ratios may be used to analyze the long-term solvency of a firm. The firm may be interested in knowing the proportion of the debt in the financial structure. It may, therefore, compute debt to total fund ratio by dividing total debt by total fund. Total debt will include short term funds plus long-term debt i.e. borrowed funds. Total fund will include total debt plus net worth. A high ratio means that claims of creditors are greater than those of owners. A high level of debt introduces inflexibility in the firm's operations due to the increasing interference and pressures from creditors. Debt to total fund ratio is calculated by using the following formula:

$$\text{Debt to Total Fund Ratio} = \text{Total Debt} / \text{Total Fund}$$

### **INTEREST COVERAGE RATIO**

The interest coverage ratio is used to test the firm's debt-servicing capacity. The use of debt in any business undertaking is justified, provided, the coverage for fixed interest charges is adequate. It indicates the number of times the fixed interest charges (debenture interest, interest on loans) is covered by the net profit (net profit before interest and tax). The interest coverage ratio shows the number of times the interest charges are covered by funds that are ordinarily available for their payment.

The lender will be interested in finding out whether the business would earn sufficient profits to pay the interest charges and interest being paid periodically. Cost of debt is the percentage of interest paid on debt. The interest on debt, being a prior charge on profits affects profitability of a concern. The capital structure of a firm, therefore,

affects its profitability. In order to accomplish this objective, the interest coverage ratio of the

ARBL is computed. The higher the coverage, the better will be the position of debenture holders or loan creditors regarding their fixed payment of interest, the greater will be the profitability, and the better will be the position of debenture holders or loan creditors regarding their fixed payment of interest, the greater will be the profitability, and the better will be the management efficiency (Paul). The universal standard of Interest Coverage Ratio is around 7 to 8 times.

The ratio Indicates the extent to which the earnings may fall without causing any embarrassment to the firm regarding the payment of fixed interest charges. Interest coverage ratio is calculated by using the following formula:



**Interest Coverage Ratio = EBIT / Interest.**

YEAR	DEBT	EQUITY	RATIO
2014-15	11012.26	50964.68	0.2160
2015-16	11461.23	69086.6	0.16
2016-17	11523.33	75907.34	0.1518
2017-18	11369.02	82911.36	0.1371
2018-19	12659.12	94805.87	0.1335

TABLE: 4.1 DEBT EQUITY RATIO

FORMULA:

$$\text{DEBT EQUITY RATIO} = \frac{\text{DEBT}}{\text{EQUITY}}$$

The above table 4.1 shows the relation between the debt and equity of the firm for a period of five year i.e.; from 2013-14 to 2017-18. The debt-equity ratio is calculated by dividing debt by equity. It is observed that the ratio is declining year by year from 2013-145 to 2017-18.The ratio is 0.2160 in the year 2013-14 which is highest among all the years and is minimum in the year 2017-18 which is 0.1335.The over all ratio shows a declining trend. The debt equity ratio is less than one indicates that the company equity is more than the debt which is not good for the compan

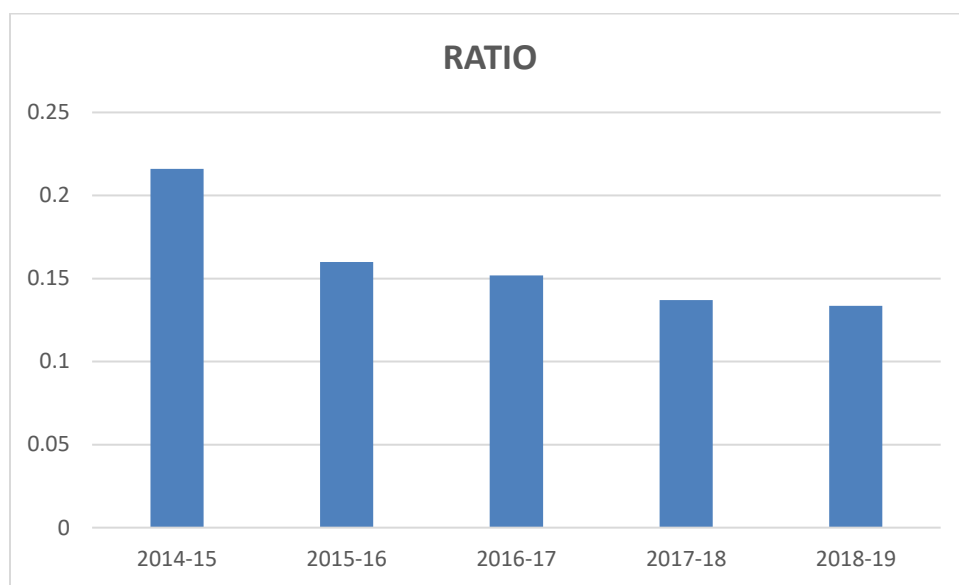


TABLE: 4.2: SOLVENCY RATIO

FORMULA

$$\text{SOLVENCY RATIO} = \frac{\text{LONG TERM LIABILITIES}}{\text{TOTAL ASSETS}}$$

YEAR	LONG TERM LIABILITIES	TOTAL ASSETS	RATIO
2014-15	11012.26	264775.32	0.0416
2015-16	11461.23	324946.21	0.0353
2016-17	11523.33	355319.37	0.0324
2017-18	11369.02	353267.53	0.0322
2018-19	12659.12	350267.91	0.0361

The above table 4.2 shows the relation between the long term liabilities of the firm for a period of five year i.e.; from 2014-15 to 2018-19. The solvency ratio is calculated by dividing long term liabilities by total assets. It is observed that the ratio is declining year by year from 2014-15 to 2018-19. The ratio is 0.0416 in the year 2014-15 which is highest among all the years and is minimum in the year 2018-19 which is 0.0322.

The long term liabilities are increased from 11012.26 in the year 2014-15 to 350267.91 in the year 2018-19.

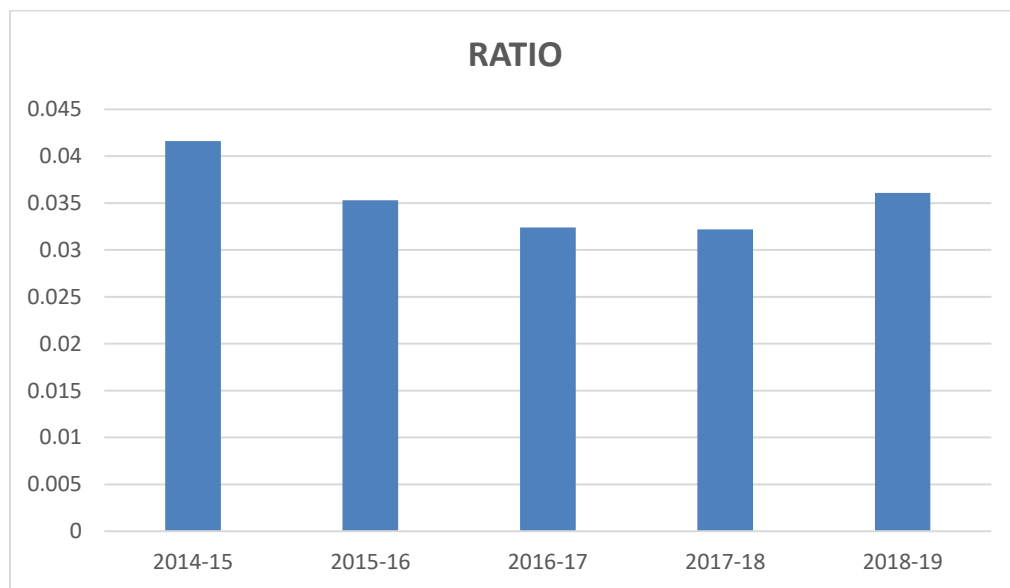


TABLE: 4.3: INTEREST COVERAGE RATIO

FORMULA

$$\text{INTEREST COVERAGE RATIO} = \frac{\text{EBIT}}{\text{INTEREST}}$$

YEAR	EBIT	INTEREST	RATIO
2014-15	23881.15	7648.7489	3.1222
2015-16	28680.72	5765.3285	4.9746
2016-17	31728.03	5976.44	5.3088
2017-18	30387.84	5036.8259	6.0331
2018-19	53281.51	5508.8696	9.6719

The above table 4.3 shows the relation between the Earnings before interest and tax [EBIT] and interest of the firm for a period of five year i.e.; from 2014-15 to 2018-19. This ratio determines how easily a company can pay its interest expenses on outstanding debt. The interest coverage ratio is calculated by dividing companies' earnings before interest and tax [EBIT] by the companies' interest for the same period. It is observed that ratio is increasing year by year from 2014-15 to 2018-19. The ratio is 9.6719 in the year 2018-19 which is highest among all the years and is minimum in the year 2014-15 which is 3.1222.

The EBIT of the company increased in all the years. The interest paid by the company is decreased from 7648.7489 in the year 2014-15 to 5508.8696 in the year 2018-19.

The interest coverage ratio increased from 3.1222 in 2014-15 to 9.6719 in 2018-19. The overall ratio shows an increasing trend.

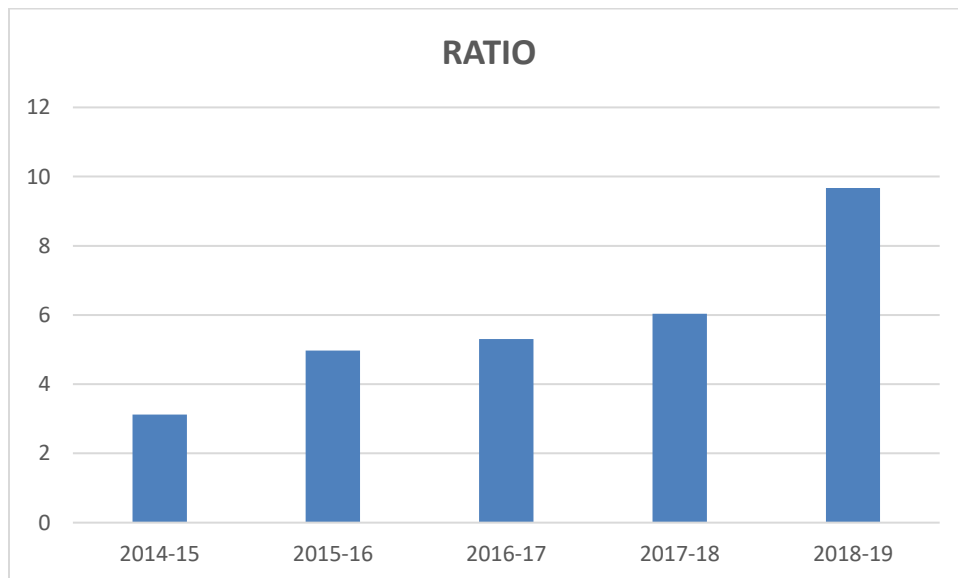


TABLE: 4.4: EARNINGS PER SHARE

FORMULA

NET PROFIT AFTER TAX

EARNING PER SHARE =

NO. OF SHARES

YEAR	NET PROFIT AFTER TAX	NO.OF SHARES	EARNING PER SHARE
2014-15	7593.80	463.0366	16.4000
2015-16	8859.97	533.0909	16.6199
2016-17	10146.44	532.9013	19.0399
2017-18	10639.84	533.0581	19.9600
2018-19	9940.66	533.0113	18.6500

The above table 4.4 shows the earning per share of the firm of the firm for a period of five year i.e.; from 2014-15 to 2018-19. The earnings per share of the company is calculated by dividing net profit after tax by no. of shares. The net profit after tax of the company was increased from 7593.80 in 2014-15 to 9940.66 in 2018-19. It is observed that the earning per share is fluctuating year by year from 2014-15 to 2018-19. The earning per share is 19.1996 in the year 2017-18 which is highest among all the years and is minimum in the year 2014-15 which is 16.4000. The over all earning per share shows a fluctuating trend.

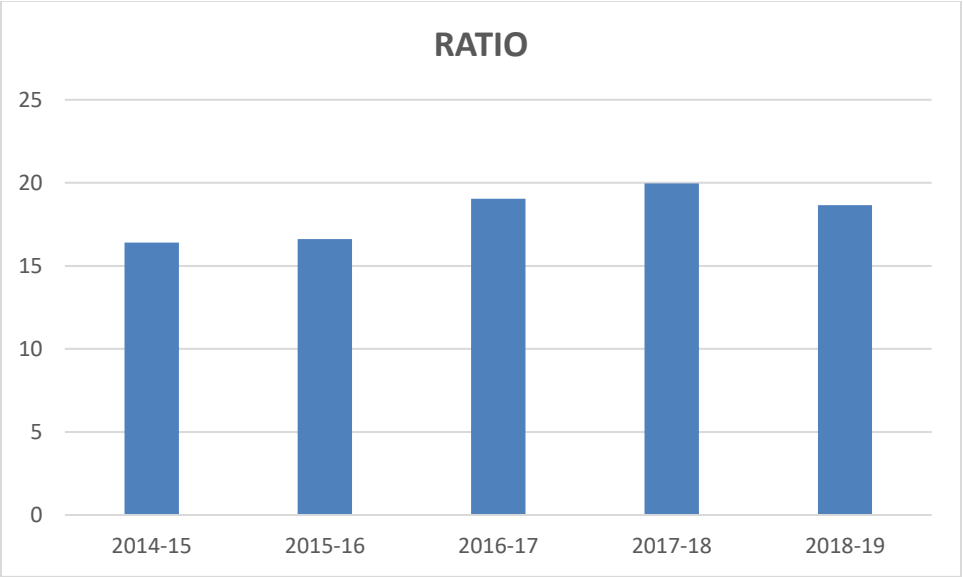




TABLE: 4.5: LONG TERM DEBT TO CAPITAL

FORMULA

$$\text{LONG TERM DEBT TO CAPITAL} = \frac{\text{LONG TERM DEBT}}{\text{CAPITAL}}$$

YEAR	LONG TERM DEBT	CAPITAL	RATIO
2014-15	11012.26	68976.84	0.1596
2015-16	11461.23	80547.83	0.1422
2016-17	11523.33	87430.67	0.1317
2017-18	11369.02	94280.38	0.1205
2018-19	12658.92	107464.99	0.1177

The above table 4.5 shows the relation between the long term debt and capital of the firm for a period of five year i.e.; from 2014-15 to 2018-19. The long debt to capital ratio is calculated by dividing long term debt by capital. It is observed that the ratio is declining year by year from 2014-15 to 2018-19. The ratio is 0.1596 in the year 2014-15 which is highest among all the years and is minimum in the year 2018-19 which is 0.1177.

The long term debt of the company was increased from 11012.26 in 2014-15 to 12658.92 in 2018-19. The capital of the company is also increased from 68976084 in 2014-15 to 107464.99 in 2018-19. The overall ratio shows a declining trend.

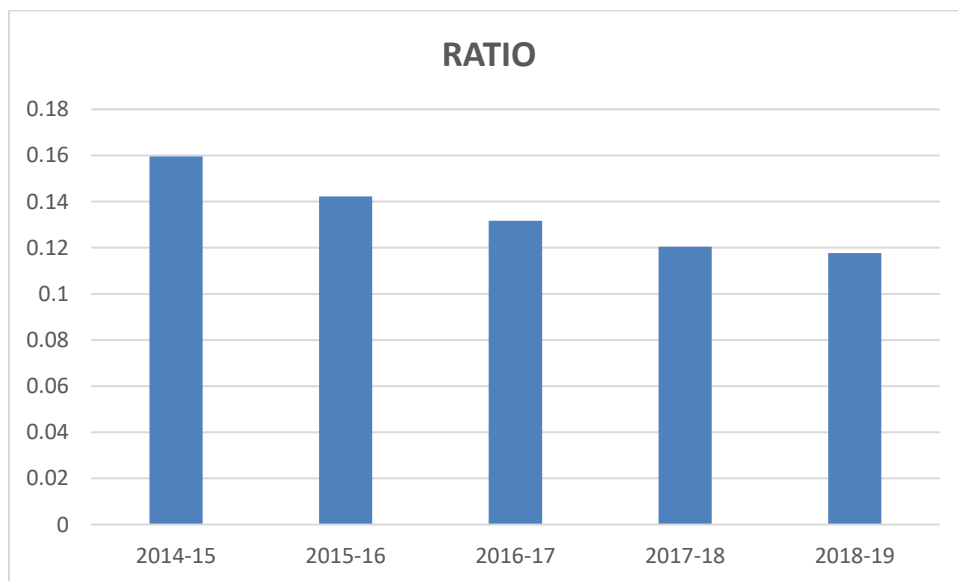


TABLE: 4.6: NET WORTH

FORMULA

$$\text{NETWORTH} = \text{SHARE CAPITAL} + \text{RESERVES AND SURPLUS}$$

YEAR	SHARE CAPITAL	RESERVES AND SURPLUS	NETWORTH
2014-15	46298.80	4665.88	50964.68
2015-16	53298.80	15787.80	69086.60
2016-17	53298.80	22608.54	75907.34
2017-18	53298.80	29612.56	82911.36
2018-19	53298.80	41507.07	94805.87

The above table 4.6 shows the net worth of the firm for a period of five year i.e.; from 2014-15 to 2018-19. The net worth of the firm was calculated by adding share capital and reserves. It is observed that the net worth of the firm is increasing year by year from 2014-15 to 2018-19.

The share capital of the company is increased from 46298.80 in 2014-15 to 53298.80 in 2018-19. the share capital of the company is more than the reserves and surplus in all the years. The net worth is 94805.87 in the year 2018-19 which is highest among all the years and is minimum in the year 2014-15 which is 50964.68. The overall net worth shows a increasing trend

## NET WORTH

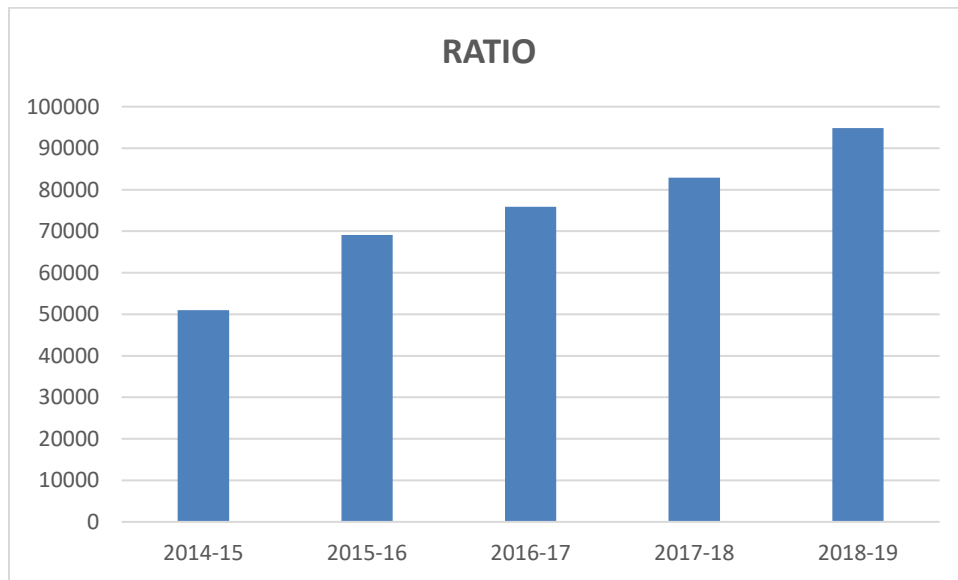


TABLE: 4.7: DEGREE OF FINANCIAL LEVERAGE

FORMULA

$$\text{DEGREE OF FINANCIAL LEVERAGE} = \frac{\text{EBIT}}{\text{INTEREST}} \times 100$$

YEAR	EBIT	EBT	DFL
2014-15	23881.15	11470.99	2.0818
2015-16	28680.72	13259.37	2.1630
2016-17	31728.03	15695.37	2.0314
2017-18	30387.84	16507.16	1.8408
2018-19	23281.51	15204.98	1.5311

The above table 4.7 shows the relation between the earnings before interest and tax [EBIT] and earnings before tax of the firm for a period of five year i.e.; from 2014-15 to 2018-19. The degree of financial leverage is calculated by dividing earnings before interest and tax by earnings before tax.

The EBIT increased from 23881.15 in 2014-15 to 53281.51 in 2018-19. The EBT increased from 11470.99 in 2014-15 to 15204.98 in 2018-19. The EBIT is more than the EBT in all the years, thus

the DFL more than 1(one) from 2014-15 to 2018-19 which indicates the company's financial performance is excellent.

It is observed that the ratio is declining year by year from 2014-15 to 2018-19. The ratio is 2.1630 in the year 2015-16, which is highest among all the years and is minimum in the year 2018-19 which is 1.5311. The overall ratio shows a declining trend.

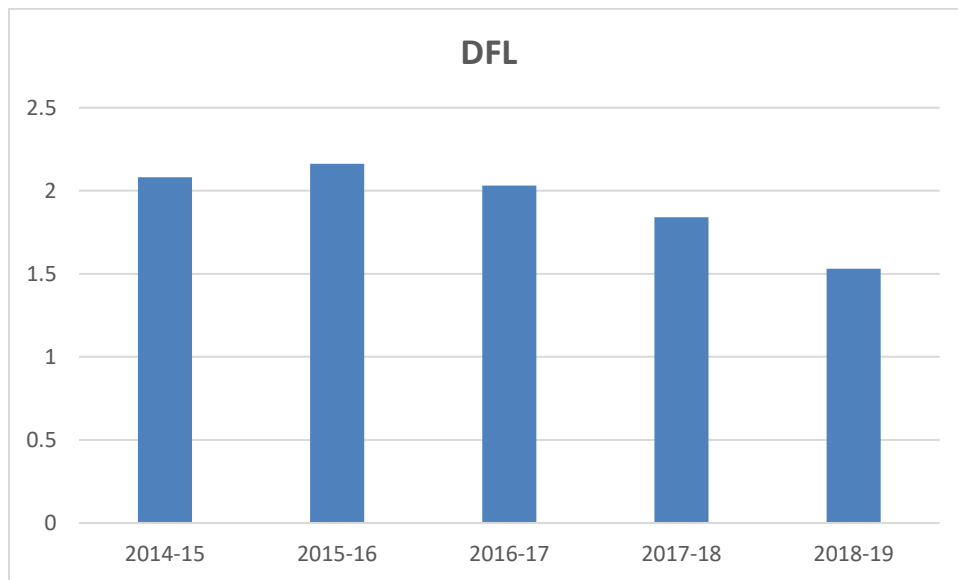


TABLE: 4.8: EARNINGS BEFORE INTEREST AND TAX [EBIT]

FORMULA

$$\text{EBIT} = \text{PROFIT BEFORE TAX} + \text{FINANCIAL CHARGES}$$

YEAR	PBT	FINANCIAL CHARGES	EBIT
2014-15	7593.80	16287.35	23881.15
2015-16	8859.97	19820.75	28680.72
2016-17	10146.44	21581.59	31728.03
2017-18	10639.84	19748.00	30387.84
2018-19	9940.66	13340.85	23281.51

The above table 4.8 shows the earnings before interest and tax [EBIT] of the firm for a period of five year i.e.; from 2014-15 to 2018-19. The earnings before interest and tax [EBIT] of the firm is calculated by adding profit before tax and financial charges.

The PBT (EBT) increased from 7593.80 in 2014-15 to 9940.66 in 2018-19. The financial charges are increased in first four years, later it was decreased to 13340.85 in 2018-19.

It is observed that the earnings before interest and tax is fluctuating year by year from 2014-15 to 2018-19..The earnings before interest and tax [EBIT] is 31728.03 in the year 2016-17 which is highest among all the years and is minimum in the year 2018-19 which is 23281.51.The over all EBIT shows a fluctuating trend.

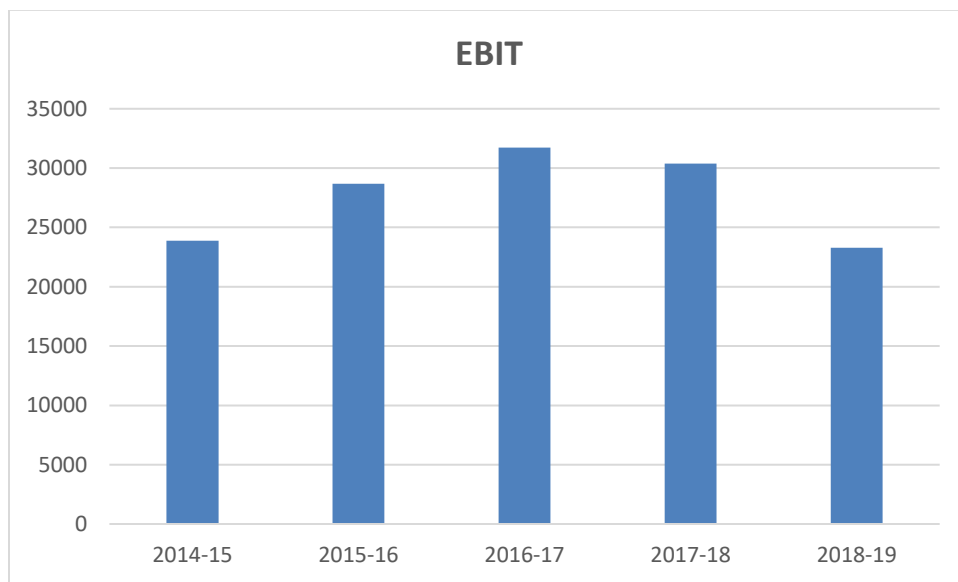




TABLE: 4.9: EARNINGS AFTER TAX [EAT]

FORMULA

$$\text{EARNINGS AFTER TAX} = \text{EARNINGS BEFORE TAX} - \text{TAX}$$

YEAR	EBT	TAX	EAT
2014-15	11470.99	3877	7593.99
2015-16	13259.37	4399	8860.37
2016-17	15695.37	5548.95	10134.44
2017-18	16507.16	5867.32	10639.84
2018-19	15204.98	5264.32	9940.66

The above table 4.9 shows the earnings after tax [EAT] of the firm for a period of five year i.e.; from 2014-15 to 2018-19. The earnings after tax [EAS] are calculated by deducting tax from earnings before tax [EBT].

The EBT is increased from 11470.99 in 2014-15 to 15204.98 in 2018-19. The tax paid by the company increased from 3877.00 in 2014-15 to 5264.32 in 2018-19.

It is observed that the earnings after tax is fluctuating year by year from 2014-15 to 2018-19. The EAT is 10639.84 in the year 2017-18 which is highest among all the years and is minimum in the year 2014-15 which is 7593.99. The overall ratio shows a fluctuating trend.

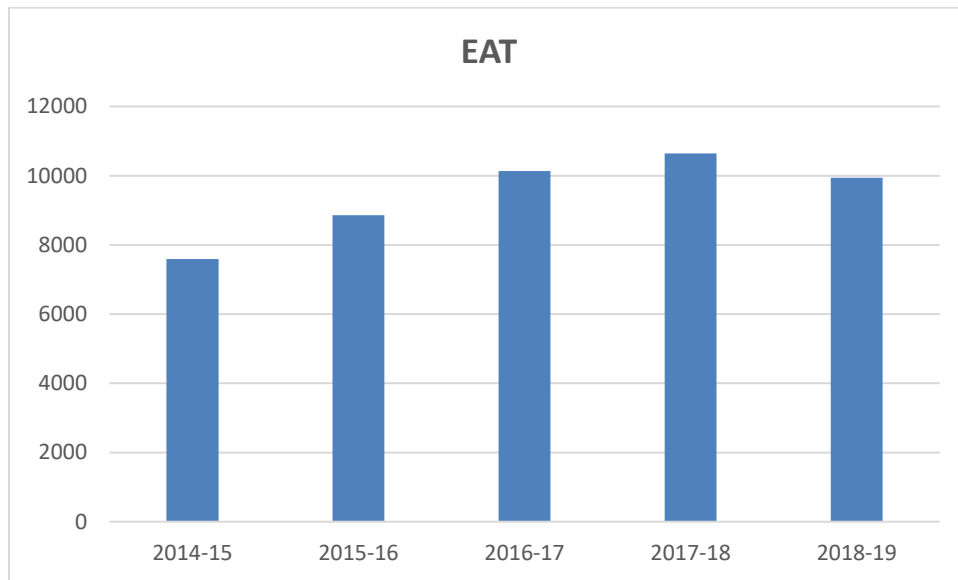


TABLE: 4.10: RATE OF RETURN ON INVESTMENT

FORMIULA

EAT

RATE OF RETURN ON INVESTMENT=

TOTAL CAPITAL

YEAR	EARNINGS AFTER TAX	TOTAL CAPITAL	RATE OF RETURN ON INVESTMENTS
2014-15	11470.99	68976.84	16.6302
2015-16	8859.97	80547.83	10.99963
2016-17	10146.44	87430.67	11.60512
2017-18	10639.84	94280.38	11.28531
2018-19	9940.66	107464.99	9.25013

The above table 4.10 shows the relation between the earnings after tax and total capital of the firm for a period of five year i.e.; from 2014-15 to 2018-19. The rate of return on investment ratio is calculated by dividing earnings after tax by total capital.

EAT was decreased from 11470.99 in 2014-15 to 9940.66 in 2018-19. The total capital was increased from 68976.84 in 2014-15 to 107464.99 in 2018-19.

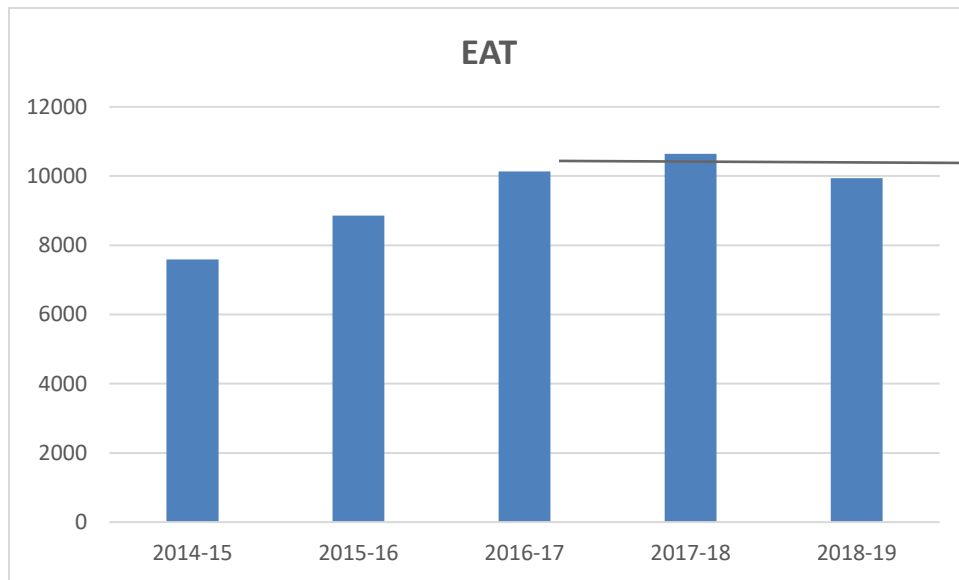


TABLE: 4.11: FIRMS INCOME GEARING RATIO

FORMULA

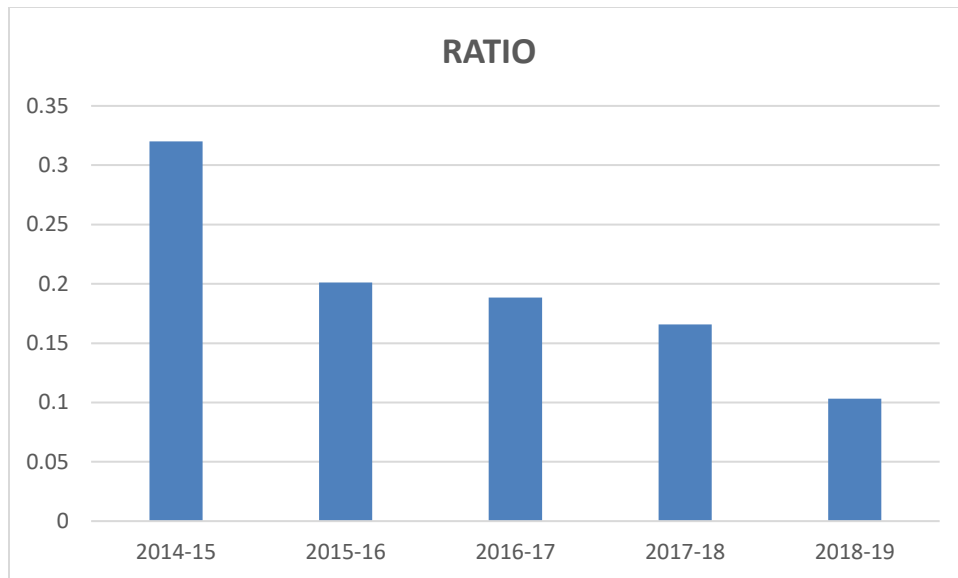
$$\text{FIRMS INCOME GEARING RATIO} = \frac{\text{INTEREST}}{\text{EBIT}}$$

YEAR	INTEREST	EBIT	RATIO
2014-15	7648.7489	23881.15	0.3202
2015-16	5765.3285	28680.72	0.2010
2016-17	5976.44	31728.03	0.18836
2017-18	5036.8259	30387.84	0.1657
2018-19	5508.8696	53281.51	0.1033

The above table 4.11 presents the firms income gearing ratio. It focuses on the capital structure of the business. It tells about the proportion of finance that is provided by debt relative to the finance provided by equity. It is concerned with liquidity and long term financial stability.

The interest paid by the company was decreased from 7648.7489 in 2014-15 to 5508.869 in 2018-19 the EBIT of the company was increased from 23881.15 in 2014-15 to 53281.51 in 2018-19

In the year 2014-15 the ratio is found to be 0.3202 and then the ratio is decreased to 0.2010 in the year 2015-16, 0.18836 in the year 2016-17 , 0.1657 in the year 2018 and 0.1033 in the year 2017-18. The ratio was showing a decreasing trend.



## **FINDINGS**

- It is found that in capital structure of the company, equity proportion is more than debt in all the years of the study i.e. from 2014-2019. The leverage position of the firm is good.
- It is observed that the solvency ratio is declining year after year from 2014-19. The ratio is 0.0416 in the year 2014-2019 which is highest among all the years and is minimum in the year 2017-2019 which is 0.0322. The overall ratio shows a declining trend.

- It is observed that the interest coverage ratio is found to be increasing widely from 3.1222 to 9.6719 from the year 2014-2015 to 2018-2019.
- EPS is found to be more in the year 2017-18 which is 19.9600 and minimum in the year 2014-15 which is 16.4000. Here EPS of 2017-18 is more than the EPS of 2014-15 due to the advantage of tax concession on interest due to debt financing.
- Long term debt to capital is showing a declining trend which is a positive sign or indicator to the company as it reduces interest interest burden and financial risk.
- Net worth of the company is found to be increasing year after year from 2014-15 to 2018-19, due to an increase in reserves and surplus. This indicates that the company is running on profitable lines.
- Degree of financial leverage is found to be decreasing during the study period. The DFL as well as risk is low in 2018-19 when compared to previous years.
- It is observed that the EBIT is 31728.03 in the year 2016-17 which is highest among all the years and is minimum in the year 2018-19 which is 23281.51. The overall EBIT shows a fluctuating trend.
- It is observed that the EAT is fluctuating year after year from 2014-15 to 2018-19. The EAT is 10639.84 in the year 2017-18 which is highest among all the years and is minimum in the year 2014-15 which is 7593.99. The overall EAT shows a fluctuating trend.
- Return on equity is found to be showing a declining trend by year after year. The ratio is 16.6302 in the year 2014-15 which is highest among all the years and is minimum in the year 2018-19 which is 9.2503. The overall ratio shows a declining trend.
- The firm's income gearing ratio is found to be in the declining trend from 0.3202 to 0.1033 from the year 2014-15 to 2018-19.

## **SUGGESTIONS**

- The debt equity ratio had shown that , this company had used very less proportion of debt in its capital structure for all the years , it was less than the standard ratio of 2:1.It was suggested that it is better to increase the debt component and take the advantage of tax shield on interest.
- The company has to evolve the optimum capital structure which is a fine blend of debt and equity that results in the minimum cost of capital.
- The company is advised to raise its funds through long term debt to make use its credit worthiness.
- It is suggested for the company to make use of tax deduction for interest paid which increases the profit after tax and EPS.



## **Conclusion**

In designing the capital structure for any firm, the first major policy decision facing the firm is that of determining the appropriate level of debt. For most of the firms, the decision involves a choice between the long- term debt and the equity. The firm's debt capacity may be best defined not as the maximum amount which the lenders or debt investors are willing to lend to the firm, but as the amount of debt that the firm should use.

A choice of an appropriate financing mix involves basically a trade-off between tax benefits and costs of financial distress. The optimal debt level depends to an important extent on the operating risk of the firm. The greater the operating risk the less should be the degree of financial leverage. The firm along with several dimensions therefore, should analyze alternative financial plans. EBIT –EPS analysis is useful for evaluating the sensitivity of the EPS to a change in EBIT under alternative financing plans.

Hence, no such standard form of capital structure can be prescribed, which takes care of all types of firms and situations. The financing mix for a particular firm must be tailored made to suit the requirements, situations and position of the firm. the operating efficiency of the firm , the capital market conditions , the expectations of different types of investors , the liquidity position of firm, and last but not the least, the legal and regulatory framework and the constraints etc. should all be factored in the evaluation of proposed capital structure.

## **5.4 BIBLIOGRAPHY**

I. M. PANDEY, FINANCIAL MANAGEMENT, 2010 (10<sup>TH</sup> EDITION) NEW DELHI: VIKAS PUBLISHING PVT LTD.

I. M. PANDEY, FINANCIAL MANAGEMENT, 2009 (9<sup>TH</sup> EDITION) NEW DELHI: VIKAS PUBLISHING PVT LTD.

JAIN, M.Y. (2012). FINANCIAL MANAGEMENT (6<sup>TH</sup> EDITION) NEW DELHI: TATA Mc GRAW HILL EDUCATION PVT LTD