Chapter III

An Overview of Capital Structure and Profile of the Service Sector in India

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AN OVERVIEW OF CAPITAL STRUCTURE AND PROFILE OF THE SERVICE SECTOR IN INDIA

3.1 CAPITAL STRUCTURE

The term 'capital structure' represents the total long-term investment in a business firm. It includes funds raised through ordinary and preference shares, bonds, debentures, term loans from financial institutions, etc. Decision regarding the type of capital structure of a company plays a critical role since capital impacts on profitability and solvency. Small companies often do not plan their capital structure. The capital structure is allowed to develop without any formal planning. These companies may do well in the short run; however, sooner or later they have to face many considerable difficulties. The unplanned capital structure does not permit a fiscal use of funds for the company irrespective of its size. A company should therefore plan its capital structure in such a way that it derives maximum advantage out of it and should easily adjust to the changing conditions. Instead of following any scientific procedure to find an appropriate proportion of different types of capital, which will minimize the cost of capital and maximise the market value, a company may either follow other comparable companies do regarding the capital structure or may consult some institutional lender and follow their advice.

3.2 IMPORTANCE OF CAPITAL STRUCTURE

Theoretically, a company should plan an optimum capital structure in such a way that the market value of its shares is maximum. The value will be maximised when the marginal cost of each source of funds is the same. In general, the discussion on the issue of optimum capital structure is highly theoretical. The determination of an optimum capital structure in practice is a formidable task, and it has to go beyond the theory. The decision about capital structure plays a crucial role in all companies. Two similar companies may have different capital structures, if the decision makers differ in their judgment about the significance of various factors. These factors are highly psychological, complex and qualitative and do not always follow the accepted theory. Capital markets are not perfect and the decision has to be taken with imperfect knowledge and consequent risk. Companies might have become interested in identifying some of the important factors, which influence the planning of the capital structure in practice. For any organization financial strategy is of utmost importance. By financial strategy, one means the broad corporate financial decisions that are made by the corporates' management committee or above. i.e. Board of management. These are not specific decisions, such as the decision to undertake a project or not. It might even involve decisions regarding the rate of interest at which funds need to be borrowed. Broadly, three kinds of policies come under the purview of financial strategy. They are capital structure policy, dividend policy and capital budgeting policy. All three policies are important in their own way and are interlinked. Ignoring any of them in corporate financing decision-making is very difficult.

3.3 COMPONENTS OF CAPITAL STRUCTURE

The funds requirement of a business organisation for long - term investment is raised either through the ownership securities, namely, equity shares and preference shares, or creditor ship securities, namely, debentures and bonds. These are the components of capital structure. A firm has to maintain a proper mix of both these types of securities in a manner that the cost and the risk are minimum. Therefore the task of determining the prudent mix of components of capital structure is essential in order to maximise the wealth of shareholders and increasing the value of the firm.

3.4 DETERMINANTS OF CAPITAL STRUCTURE

The determination of capital structure in practice involves further considerations in addition to the concerns about Earning per Share value and Cash Flow. A firm may have enough debt servicing ability but may not have assets to offer as collateral. Attitudes of firms with regard to financing decisions may also be quite often influenced by their desire of not losing control, maintaining operating flexibility and have convenient timing and cheaper means of raising funds. Some of the most important considerations are discussed below.

Debt equity ratio

The debt to equity ratio measures how much fund a firm should securely be able to borrow over a long period of time. It does this by comparing the firm's total debt including short-term and long-term obligation and dividing it by the amount of owner's equity. The result after dividing debt by equity is the percentage of the company that is indebted (or "leveraged"). The normal level of debt to equity has changed over time and depends on both economic factors and society's general feeling towards credit.

Tangibility

The process of borrowing also imposes some limitations, putting assets as collateral is one of them. In case of business borrowing, firms with higher fixed assets have higher choices of debt financing, and hence they are more oriented towards committing their assets. This ratio of higher fixed assets serves creditors as guarantee of repayment. An increase in assets of the firm results in an increase in debt financing. Other set of opinions drives another relation which claims that tangibility and leverage are negatively related. Those firms with fewer fixed assets are more likely to depend upon external financing. It is have calculated tangibility with the division of fixed assets by total assets.

Size of the firm

It is generally agreed that size is positively associated with leverage. On one hand, size may be an inverse proxy for the probability of bankruptcy. Larger firms are usually more diversified and have more stable cash flow. So the probability of bankruptcy in large firms is less when compared with smaller ones. Size may also be a proxy information asymmetry between insiders and outsiders. Large firms are thought to be associated with lower degree of information asymmetry compared with smaller ones. Size of the firm measures with the natural logarithm of total assets.

Profitability

Theoretical predictions yield no consistent conclusion for the correlation between profitability and leverage. Trade-off models argue that profitable firms have greater needs to shield income from corporate tax and should borrow more, than less profitable firms. While pecking order theory suggests an inverse relationship between profitability and the level of debt. Firms are assumed to prefer internal financing to external financing in a pecking order framework. This preference leads firms to use retained earnings first as investment funds and move to external financing only when retained earnings are insufficient.

Tax Rate

The empirical analysis on determinants of capital structure has also shed some light on the impact of tax on corporate capital structure. Trade-off theory says that organization with higher tax rate should use more debt in order to get benefit from it. Conversely, some researchers are also of reverse attitude regarding tax impact on debt ratio.

Non-Debt Tax Shields

Tax shields benefit on the use of debt finance may either be reduced or even eliminated when a firm is reporting an income that is consistently low or negative. Consequently, the burden of interest payments would be felt by the firm. The non-debt tax shields are the substitute of the tax shields on debt financing. So firms with larger non-debt tax shields, are expected to use less debt in their capital structure.

Liquidity

The trade-off theory suggests that companies with higher liquidity ratios should borrow more due to their ability to meet contractual obligations on time. Thus, this theory predicts a positive linkage between liquidity and leverage. On the other hand, the pecking order theory predicts a negative relationship between liquidity and leverage, because a firm with greater liquidities prefer to use internally generated funds while financing new investments.

Growth

Different researchers have used different tools for measuring growth opportunities. Our scale for measurement of growth is percentage increase in total assets. There are also two different approaches to analyse the relationship between growth and leverage. The firms having high growth tend to have less leverage because they have stronger incentives to avoid under-investment and asset substitution that can arise from stockholder-bondholder agency conflicts. But the other side that a higher growth rate implies a higher demand for funds, and a greater reliance on external financing through the preferred source of debt.

Interest Coverage Ratio

This is one of the most traditional ratio among the leverage ratios. It is a simple ratio of EBIT to the interest charges. This ratio used to test the firm’s debt. Servicing capacity tells by how many times the interest charges are covered by the funds generated from operations. Generally a high ratio is desirable, but too high ratio indicates that the firm is very conservative in using debt. A leverage ratio indicates either an excess use of debt or lesser EBIT owing to inefficient operations.

Dividend Payout Ratio

The bankruptcy costs theory pleads for adverse relation in this theoretical relation. Between the dividend payout ratio and debt level in capital structure, the low dividend payout ratio increase in the equity base for debt capital and low probability going into insolvency. As a result of low probability of bankruptcy, the bankruptcy cost is low. According to the bankruptcy cost theory, the low bankruptcy cost implies the high level of debt in the capital structure. But the pecking order theory shows the positive relation between debt level and dividend payout ratio.

Age of the firm

Age of the firm may also proxy for lower information asymmetries. As firms grow older more information regarding their future viability becomes available. Lower information asymmetries imply higher leverage. Bondholders would be more likely to lend to firms they know more about than lending to firms they know less about. Therefore, given this conflict we do not hypothesize what effect age has on leverage

Cost of capital

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 sources of finance for a company are equity, preference share capital and debt capital. The return expected by the suppliers of capital depends upon the risk they have to undertake. While formulating a capital structure an effort must be made to minimise the overall cost of capital.

Inflation

Inflation Another important economic factor which influences the management's decisions about firm's financing is the inflation rate of a nation. With the rise in the price level of different commodities, the overall costs of firms' raw materials and other facilities like fuel and energy, transportation etc. also rises and so does the capital requirement of the firms.

GDP

Gross Domestic Product refers to the total value of final goods and services which are produced in the country in a specific time period specifically measured in terms of dollars. Higher the value of GDP means economic growth of the country and economic prosperity as well. The value of GDP seems to have significant impact on the leverage decision of the firm and under the various type of developed and emerging countries, such relationship is different because of the difference in law, regulations and other compounding factors held therein.

Bank rate

Bank rates are the interest rates offered by Bank for the firms to obtain loans from financial intermediaries (like banks). A sudden rise or fall in the percentage of interest rate affects the debt policy and financial decisions of the firms. If the interest rate is high investment falls, a low rate of interest lead to increase in investment activity. Increased investment may imply use of more debt.

3.5 CAPITAL STRUCTURE THEORIES

The different kinds of theories have been propounded by different authors to explain the relationship between capital structure, cost of capital and value of the firm.

The important theories of capital structure are:

- Net income approach(NIA)
- Net operating income approach(NOIA)
- Traditional approach(TA)
- Modigliani and miller approach(MMA)

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 states that a company can increase its value and decrease the overall cost of capital by increasing the proportion of debt in its capital structure. Under the NI approach, the firm can lower its cost of capital and raise its total market value through the addition of debt capital. The proportion of debt financing in capital structure will increase, it decrease the overall cost of capital leading to an increase in the value of the firm. A firm that finances its assets by equity and debt is called a levered firm. A firm that uses no debt and finances its assets entirely by equity is called unlevered firm. It is based on the following assumptions:

1) The cost of debt is less than the cost of equity.
2) There are no taxes.
3) The risk perception of investors is not changed by the use of debt.

2) Net Operating Income Approach

This theory suggested that an another extreme of the effect of leverage on the value of the firm. It is diametrically opposite to the net income approach .It states that change in the capital structure of the 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 is equal. Thus, there is nothing as an optimal capital structure and every capital structure is the optimal capital structure. The increased use of debt increases the financial risk of the equity shareholders and hence the cost of equity increases and on the other hand the cost of debt remains constant with the increasing proportion of debt as the financial risk of the lenders are not affected and the firm is also not affected by the financial mix. It presumes that,

1) The market capitalisation the value of the firm as a whole.
2) The business risk remains constant at every level of debt equity mix
3) There are no corporate taxes.

3) Traditional Approach

The traditional approach is also known as international approach, the value of the firm can be increased initially or the cost of capital can be decreased by using more debt is a cheaper source than equity so that the optimum capital structure is reached, the cost of equity increases because increase debt increases the financial risk of the equity shareholders. The cost of debt capital, return on debt, remains more or less constant up to a certain degree of leverage but rises thereafter at an increasing rate. The cost of equity capital, return on equity, remains more or less constant or rises only gradually up to a certain degree of leverage and rise sharply thereafter. The average cost of capital, return on asset, as a consequence of the above behaviour of return on equity and return on debt, (i) decreases up to a certain point; (ii) remains more of less unchanged for moderate increases in leverage thereafter; and (iii) rises beyond a certain point.

4) Modigliani and Miller Approach

M&M hypothesis is identical when taxes are ignored and when corporate taxes are assumed to exist it is similar to net income approach. It is based on certain assumptions such as

1) There are no corporate taxes.
2) There is a perfect market.
3) Risk of investors depends upon the random fluctuation of earnings based on the possibility of variables.

a) In absence of taxes

This theory proves that cost of capital is not affected by changes in the capital structure or the debt-equity mix is not affected by changes in the total value of the firm. It is argued that the debt is cheaper to equity with increased use of debt as a source of finance, the cost of equity increases and the advantage is the low cost of debt. Thus the financial leverage affects the cost of equity, the overall cost of capital remains constant, the firms operating income is a determinant of its total value. It states that after a certain limit of debt, the cost of debt increases but the cost of equity falls with the balancing cost.

b) When corporate taxes are assumed to be

The value of the firm will increase or the cost of capital will decrease with the use of debt with the deductibility of interest charges of the tax purpose. The optimum capital structure can be achieved by maximising the debt mix in the equity of the firm. The proposition that the value of the firm is independent of the firm's capital structure a firm's cost of equity capital is a positive linear function of the firm's capital structure.

3.6 SERVICE SECTOR

Every economy consists of three sectors. They are primary sector (agriculture), secondary sector (manufacturing) and the tertiary sector (service sector). Economies tend to follow a developmental progression that takes them from a heavy dependence on primary, toward the development of manufacturing sector and finally towards a more service based structure. Historically, manufacturing sector tended to be more open to international trade and competition than services. As a result, there has been a tendency for the first economies to industrialize to come under competitive attack by those seeking to industrialize later. The resultant shrinkage of manufacturing in the leading economies might explain their growing reliance on the service sector. In India, having a huge size of population, services sector has its huge potential. Development of services sector can transform this burden of large size of manpower into an asset by its proper utilizations and thereby can generate a huge size of income for the nation as a whole. The current situation in India is that the growth rate of services has overtaken both agriculture and manufacturing sector and the contribution of service sector to GDP is 54.3 per cent (CSO). In the future, service sector will be a dominating sector in the economy.

The study is confined to the non-financial service sector in India. Initially, eight service industries like communication, courier, healthcare, hotels, software, recreational, transport and miscellaneous are identified. The following parameters are taken for selection of sample under service sector. Parameters like the public companies should have continuous financial data for the period of 15 years commencing from 2002-03 to 2016-17 and companies which had debt equity ratio for continuous 15 years. The companies has been selected based on the above parameters are classified in the following table:

Classification of companies by Existence

Service Sectors	Total No of Firms	Year of Existence			
		Above 50 Yrs	50-25 Yrs	25-15 Yrs	Below 15 Yrs
1. Communication	11	3	2	4	2
2. Courier	17	4	2	5	6
3. Healthcare	324	73	62	74	115
4. Hotels	226	56	67	23	80
5. Software	701	24	37	234	406
6. Recreational	72	21	14	24	13
7. Transport	417	34	57	103	223
8. Miscellaneous	203	47	35	52	69

Among the incorporated companies listed above are limited based on the 15 years continuous data availability. Finally, based on that parameter the companies identified across 4 service industries namely healthcare, hotels, software and transport are selected for the study. The companies are classified into large, mid and small based on the market capitalisation of the companies. The classification is listed below:

Sectors	Large cap	Mid cap	Small cap
1. Healthcare	5	5	12
2. Hotels	5	8	20
3. Software	12	28	54
4. Transport	16	13	14

From the above table five companies have been selected in each group under each category of service sector since five companies only have required data for the period of the study in healthcare under large & mid cap and hotels under large cap . Hence for the present study, 5 companies under each cap 15 companies have been selected in each sector. Totally 60 companies have been selected across 4 service industries namely healthcare, hotels, software and transport are considered for this study and each services details are listed below.

3.7 PROFILE OF THE SERVICE SECTOR

The performance of the service sectors are chosen for the study. The development of the country is determined by the major sources of service sectors. So a defined analysis of components and determinants of capital structure is done on the following service industries.

3.7.1 Healthcare Industry

Healthcare has become one of India’s largest sectors - both in terms of revenue and employment. Healthcare comprises hospitals, medical devices, clinical trials, outsourcing, telemedicine, medical tourism, health insurance and medical equipment. The Indian healthcare sector is growing at a brisk pace due to its strengthening coverage, services and increasing expenditure by public as well private players.

Indian healthcare delivery system is categorized into two major components - public and private. The Government, i.e. public healthcare system comprises limited secondary and tertiary care institutions in key cities and focuses on providing basic healthcare facilities in the form of primary healthcare centres (PHCs) in rural areas. The private sector provides majority of secondary, tertiary and quaternary care institutions with a major concentration in metros, tier I and tier II cities.

There is a significant scope for enhancing healthcare services considering that healthcare spending as a percentage of Gross Domestic Product (GDP) is rising. Rural India, which accounts for over 70 per cent of the population, is set to emerge as a potential demand source.

Types of Healthcare

Every individual has required different care depending upon their health problem like some require normal care and some require extra special care. So on the basis of patient condition healthcare divides into various types. Following types of healthcare are explained below:

Primary Healthcare : Primary health care mainly focuses on health equity producing social policy beyond the traditional healthcare system. Its main aim is to provide local care to a patient because professionals related to primary care are normal generalists, deals with a broad range of psychological, physical and social problems rather than specialists in any particular disease area. Primary care services rapidly increasing in both the developed and developing countries depending upon the increasing number of adults at greater risk of chronic non communicable disease like diabetes, asthma, back pain, hypertension, anxiety, depression etc.

Secondary Healthcare : This healthcare is provided by the medical specialists and other health problems who do not have direct contact with a patient like urologists, dermatologists, cardiologists etc. According to National health system policy, the patient required primary care professionals referral to proceed further for secondary care. Depends on countries to countries, the patient cannot directly take secondary care because sometimes health system imposed a restriction of referral on a patient in terms of payment.

Tertiary Healthcare : This type of healthcare is known as specialized consultative healthcare usually for inpatients and on referral from primary and secondary healthcare for advanced medical investigation and treatment. Following examples of tertiary care services are plastic surgery, burn treatment, cardiac surgery, cancer management, neurosurgery, complex medical and surgical interventions etc.

3.7.2 Hotel Industry

Indian hotel industry has been booming business and has also given a boast to tourism business in the country. Indian hotel industry holds a special place in the international world of hospitality. India is culturally the country which would be very well having the most diverse places in the world. It serves as a vivid kaleidoscope of landscapes, magnificent historical sites and royal cities, misty mountain retreats, colourful people, rice cultures, and festivities. Luxurious, hot and cold, chaotic and tranquil, ancient and modern India's soothing extremes rarely fail to leave a lasting impression. In India, hospitality is a long running tradition. Whether it might be the majestic Himalayas and the stark deserts of Rajasthan, or the beautiful beaches and lush tropical forests, to idyllic villages and bustling cities, Indian land offers unique opportunities for every individual preference.

In recent years the Indian government has taken several steps to boost travel & tourism which have benefited the hotel industry in the country. The initiatives by the government include the abolishment of the inland air travel tax, reduction in excise duty on aviation turbine fuel and removal of a number of restrictions on outbound chartered flights, including those relating to frequency and size of aircraft. There is tremendous opportunity for India as a destination for hotel chains looking for growth.

Categorization of Hotels in India

The basic division in India according to the location is as follows:

Heritage hotels : These types of hotels reflect the old glory and grandeur of India, they are mostly the old havelis and mansions of ancient times which have been turned into heritage hotels, and these provide tourists with an opportunity to experience royal pleasure in traditional ambiance. They mostly concentrate in the princely states of Rajasthan, Delhi and Madhya Pradesh.

Luxury Hotels : These hotels are equipped with world class infrastructural amenities, they offer the tourists with a fine lodging and dining experience. They extend a warm welcome to the customers catering primarily to the upper class executives.

Budget Hotels : These kinds of hotels are like home away from home, they accommodate customers from upper middle and middle class. Mostly named as Economy class Hotel, Business Hotels and discount hotels, the budget hotels supports the modern infrastructure facilities for a comfortable and pleasant stay.

Resorts : Resorts hotels in India are mostly found in hill stations and sea side tourist destinations. These are located amidst natural scenic beauty, they the ideal place to enjoy some valuable time with family and friends or in solitude.

3.7.3 Software Industry

India is home to some of the finest software companies in the world. The software companies in India are reputed across the globe for their efficient IT and business related solutions. The Indian Software Industry has brought about a tremendous success for the emerging economy.

India, the world‘s largest democracy and home for nearly 1.25 billion people is quietly but quickly emerging as a leader in the field of software engineering and development. The Indian software industry is having a phenomenal compounded growth of about 60 per cent per annum. The software industry is for main component of the Information technology in India. The technological revolutions has brought about tremendous and unexpected opportunities in the field of information technology which lead to the remarkable success story of Indian software industry. It has grown more than 30 per cent over last 20 years. India exports software services to more than 95 countries.

Indian software industry has built up valuable brand equity for itself in the global market. The software firms quickly moved up the value chain, from performing low cost programming abroad to providing comprehensive software development services from India for overseas clients an abundant pool of Indian technical manpower, created a series of elite technical and management institution that responded to serve global shortage of technical manpower.

Classifications of software industry

Software Services : Software Services can further be categorized into Information Services (IS) outsourcing, packaged software support and installation, systems integration, processing services, hardware support and installation and software training and education.

Engineering services : Engineering Services include Industrial Design, Mechanical Design, Electronic System Design (including Chip/Board and Embedded Software Design), Design Validation Testing, Industrialization and Prototyping.

ITES BPO : IT Enabled Services are services that use telecom networks or the Internet. For example, Remote Maintenance, Back Office Operations, Data Processing, Call Centers, Business Process Outsourcing, etc.

3.7.4 Transport Industry

The relationship between economic growth and infrastructure investment is very evident. The faster the economy grows, more the need for faster and reliable mode for transport for movement of goods and people. High growth of Indian economy is driving the demand for transportation industry. The transport industry classified into roads, railways, airways and waterways has gained tremendous pace in the last few years. The Transport sector in India is expected to grow at a compounded annual growth rate of 5.9 per cent, thereby becoming the fastest growing area of the country's entire sector.

In order to create a world class infrastructure, the government has laid significant emphasis on expanding and developing the sector across the country through several initiatives like the Bharatmala project on national highway road development, electrification of railway tracks, focus on high-speed trains, the Sagarmala programme on waterway development and by actively working on e-mobility solutions for clean and cost- effective mobility of the population.

Classification of Transport Industry

Roads : India has the one of largest road network across the world, spanning over a total of 5.5 million km. Road transportation has gradually increased over the years with the improvement in connectivity between cities, towns and villages in the country. The road sector has attracted private investments with new measures like the Hybrid Annuity Model (HAM), Toll-Operate-Transfer (TOT) model, and improved land acquisition process, the launch of masala bonds and Infrastructure Investment Trusts besides other initiatives.

Railways : India's railway network is recognised as one of the largest railway systems in the world under single management. The railway network is also ideal for long-distance travel and movement of bulk commodities, apart from being an energy efficient and economic mode of conveyance and transport. Indian Railways was the preferred carrier of automobiles in the country with loading from automobiles traffic growing 16 per cent in 2017-18.

Airways : India is currently considered the third largest domestic airways in the world and is expected to overtake UK to become the third largest air passenger market by 2024. According to data released by the Department of Industrial Policy and Promotion (DIPP), FDI inflows in India's air transport sector (including air freight) reached US$ 1,817.23 million between April 2000 and December 2018. The government has 100 per cent FDI under automatic route in scheduled air transport service, regional air transport service and domestic scheduled passenger airline. However, FDI over 49 per cent would require government approval.

Waterway : The Indian ports and shipping industry plays a vital role in sustaining growth in the country's trade and commerce. India is the sixteenth largest maritime country in the world, with a coastline of about 7,517 km. The Indian Government plays an important role in supporting the ports sector. It has allowed Foreign Direct Investment (FDI) of up to 100 per cent under the automatic route for port and harbor construction and maintenance projects. It has also facilitated a 10-year tax holiday to enterprises that develop, maintain and operate ports, inland waterways and inland ports.