INTRODUCTION

This chapter presents the general introduction, which is introductory, deals with nature and relative importance, sources of financing, factors affecting capital structure, and presents the comprehensive theoretical and empirical literature review including variables over the capital structure theme. This chapter signifies the rational of this study.
CHAPTER- I

INTRODUCTION

1.1 BACKGROUND

Finance plays such a vital role in modern enterprises that it is often said to be life and blood of the business. Every enterprise, whether public or private, large or small, profit making or non-profit making has a financial concern as it’s every decision involves finance. The success or failure of any business depends, to a great extent, on the quality of its financial decisions. Finance managers should decide on how they will increase the capital in their business. It is possible to mention about various capital sources for business organizations. These are: short term bank credits, long term private sector bonds, issuing of shares and preferences shares (rao1989, 4).

The assets of a company can be financed by debt fund or equity fund. The proportionate relationship between debt and equity of a firm’s total capitalization is known as it’s capital structure. Generally used the combination of equity and long term debts to finance the long term assets of companies is called as Capital Structure. It consists of permanent current liabilities, preference share capital and equity share capital.

The financial Structure is sometimes used as synonymous with capital structure. Though, financial structure is more understandable than that of capital structure in the sense that former refers to aggregate an amount of total short term debt, long term liabilities, preferential stock and equity i.e., total of liabilities side of the balance sheet. Therefore, capital structure is only a part of financial structure and refers mainly to the permanent sources of the firm’s financing. This type of fund necessity firm’s obligation for a well designed capital structure policies to the lesson the hurdles of raising financing for its project. For it’s investment in project, the firm can choose either of the sources or combination of different sources in different forms but the underlying question arising in this regard is which source or the combination is better to develop the value of the firm. So, the capital structure should be tested from the viewpoint of its impact on the value of the firm.
The optimal capital structure maximizes the value of the firm which is the combination of debt and equity. In this view, the structure of capital can be interpreted in terms of target capital structure to strike a balance between risks and returns for increasing the firm value. By using more debt will increase the firm’s risk in the stream of earnings. Generally, a higher debt ratio gives rise to a higher estimated rate of return. The higher risk leads to lower a stock price. Yet a higher expected return gives raise and it drives in the direction of equilibrium. Approximately, from the perspective of the firm the funds can be divided into two prime categories, like equity and debt. These two capitals hold inherent assets. The investors are provided by the equity capital to control over the firm as owners.

However, the firm may not able to use only equity financing because the rational objective is to maximize the value of the firm. The cost of new equity would come across higher than existing one and as the risk pattern is more than the higher expected earning rate leads to sell equity in the market at lower price. Besides, the investors are provided by the debt capital at certain fixed return and right to first claim over the liquid assets. Increasing the debt capital is also profitable to the firm in several ways. Primarily, the interest is deducted from the tax, which is lesser on the cost of debt. Secondly, debt holders are limited to a fixed return. Therefore, the shareholders cannot get any share in the profits if the business does have excess profit. Thirdly, the debt holders cannot participate in voting. So the business can be controlled by shareholders however they are investing less money than required money. So, the number of capital structure theories depends on the equity and debt sources because of the attitude of the stockholders, managers and the debt holders respectively.

1.1.1 SOURCES OF FINANCING

Today, the challenge of attracting the capital to start or to expand a business remains most entrepreneurs, especially those in less glamorous industries or those just starting out face difficulty in finding outside sources of financing. Many banks stay away from making loans to start-ups and venture capitalists have become more risk averse, shifting their investments away from start-up companies to more established business.
Private investors have grown cautious, and making a public stock offering remains a viable option for only a handful of promising companies with good track records and fast-growth futures. The result has been a credit crunch of entrepreneurs looking for small to moderate amounts of start-up capital. Rather than rely primarily on a single source of funds as they have in the past, managers must piece together capital from multiple sources, a method known as layered financing. They have discovered that raising capital successfully requires them to cast a wide net to capture the financing they need to launch their business.

Becoming a successful manager requires one a skilled fund-raiser, a job that usually requires more time and energy than most business founders realize. In start-up companies, raising capital can easily consume as much as one-half of the manager’s time and can take many months to complete. In addition, many managers find it necessary to raise capital constantly to fuel the hefty capital appetites of their young, fast growing, and fast growing companies. Most of the entrepreneurs or managers find this seed money depend on the nature of the proposed business and on the amount of money required. Although both entrepreneurs and managers might approach some of the same types of lenders or investors, each would be more successful targeting specific sources of funds best suited to their particular financial needs. Every business enterprise normally uses two kinds of finances for their financial needs named as equity finance and debt finance.

**Equity financing** represents the personal investment of the owner in a business and is sometimes called risky capital because these investors assume the primary risk of losing their investments if the business fails. Entrepreneurs or managers are most likely to give up significant amounts of equity in their businesses in the start-up phase than in any other. To avoid having to give up majority control of their companies early on, entrepreneurs/managers should strive to launch their companies with the smallest amount of money possible.

It is usually in the form of new shares issuance, utilization of retained earnings and issuance of bonus shares. Basically, there are two types of shares that would be issued by a firm, i.e., common shares and preference shares. Common shares provide control right to the shareholders in the form of voting rights. Common shareholders are residual owners of the firm. Preferred shares, which is less frequently used, usually has pre-determined dividend
rate. The claim of these stockholders for a firm’s assets at the event of default falls between that of common share and debt.

**Debt financing** is an external source of financing, where the firm would borrow money from outsiders, namely from capital market or financial institutions. Types of debt financing include bonds, commercial papers, term-based financing or short term financing. Debt holders would have priorities in setting their portion of obligation at any event of default of the firm. The debt holders usually charge interest on the firm and this expense is tax deductible for the firm. Debts are disadvantaged by the bankruptcy costs as against advantage of lower cost of interest and retention of ownership rights. Debt management involves the development of priority choices, which assesses these simultaneous considerations influencing the issue and redemption of debt besides its traditional role of raising funds.

When a firm decides to use debt financing for its operations, it is faced with a financial risk and it is referred to as a levered firm. Brigham & Houston, (2007) defined financial risk as that additional risk placed on common stock holders as a result of the decision to finance using debt. Financing risk is the probability that the earnings of the firm will not be projected because of the method of financing. He also continues by saying that financing risk arises because debt has a fixed financing obligation usually in the form of interest which must be met when the obligation falls due before the shareholders can share in the retained earnings.

### 1.1.1.1 SOURCES OF EQUITY FINANCING

#### 1.1.1.1.1 Personal Savings

The first place, entrepreneurs should look for start-up money, is in their own pockets. It is the least expensive source of funds available. Entrepreneurs see the benefits of self-sufficiency; the most common source of equity funds used to start a small business is the entrepreneur’s pool of personal savings.

Lenders and investors expect entrepreneurs to put their own money into a business start-up. If an entrepreneur is not willing to risk his or her own money, potential investors are not likely to risk their money in the business either. In addition, failing to put up sufficient
capital of to risk their own money that entrepreneurs must either borrow an excessive amount of capital or give up a significant portion of ownership to outsiders, to fund the business properly. Excessive borrowing in the early days of a business puts intense pressure on its cash flow, and becoming a minority shareholder may dampen a founder’s enthusiasm for making a business successful.

1.1.1.1.2 Friends and Family Members

Although most entrepreneurs see to their own bank balances first to finance an enterprise, few have sufficient resources to start their business alone, after that second place is to friends and family members who might be willing to invest in a business enterprise with a reason for their relationships with the entrepreneur, those people are most likely to invest. Often, they are more patient other than outside investors and are less meddlesome in a business’s affairs than many other types of investors.

Investments from family and friends are an excellent source of seed capital and can get a start-up far enough along to attract money from private investors or venture capital companies. Inherent dangers lurk in family business investments, however. Unrealistic expectations or misunderstood risks have destroyed many friendships and have ruined many family reunions. To avoid such problems, an entrepreneur must honestly present the investment opportunity and the nature of the risks involved to avoid alienating friends and family members if the business fails. Smart entrepreneurs treat family members and friends who invest in their companies in the same way they would treat business partners. Some investments in start-up companies return more than friends and family members ever could have imagined.

1.1.1.1.3 Angels

After dipping into their own pockets and convincing friends and relatives to invest in their business ventures, many entrepreneurs still find themselves shortage of the seed capital their requirement. Regularly, the next stop on the road to business financing is private investors. These private investors (“angels”) are wealthy individuals, often entrepreneurs themselves, who invest in business start-ups in exchange for equity stakes in the companies.
Angel investors have provided much-needed capital to entrepreneurs for many years. Today, angel capital is the largest source of external financing for companies in the seed and start-up phases.

In many cases, angels invest in businesses for more than purely economic reasons for example, they have a personal interest or experience in a particular industry and they are willing to put money into companies in the earliest stages long before venture capital firms and institutional investors jump in. Angel financing is ideal for companies that have outgrown the capacity of investments from friends and family but are still too small to attract the interest of venture capital companies.

Angel financing is vital to the nation’s small business sector because it fills this capital gap in which small companies need investments. Angels are a primary source of startup capital for companies in the embryonic stage through the growth stage, and their role in financing small businesses is significant. Angels fill a significant gap in the seed capital market. Entrepreneurs in search of capital quickly learn that the real challenge lies in finding angels.

Most angels have substantial business and financial experience, and many of them are entrepreneurs or former entrepreneurs. Because most angels frown on “cold calls” from entrepreneurs they don’t know, locating them boils down to making the right contacts. Networking is the key. Asking friends, attorneys, bankers, stockbrokers, accountants, other business owners, and consultants for suggestions and introductions is a good way to start. Angels also look for businesses they know something about, and most expect to invest their knowledge, experience, and energy as well as their money in a company. In fact, the advice and the network of contacts of those angels bring to a deal that can sometimes be as valuable as their money.

1.1.1.4 Partners

Entrepreneurs can take on partners to expand the capital foundation of a business. Entrepreneurs must consider the impact of giving up some personal control over operations and of sharing profits with others. Whenever entrepreneurs give up equity in their businesses,
they run the risk of losing control over it. As the founder’s ownership in a company becomes increasingly diluted, the probability of losing control of its future direction and the entire decision-making process increases.

1.1.1.1.5 Corporate Venture Capital

Large corporations have gotten into the business of financing small companies. Today, about 300 large corporations across the globe, approximately 20 percent of all venture capital invested comes from corporations. Young companies not only get a boost from the capital injections large companies give them, but they also stand to gain many other benefits from the relationship.

The right corporate partner may share technical expertise, distribution channels, and marketing know-how and provide introductions to important customers and suppliers. Another intangible yet highly important advantage an investment from a large corporate partner gives a small company is credibility. Doors that otherwise would be closed to a small company magically open when the right corporation becomes a strategic partner.

Venture companies are private, for-profit organizations that assemble pools of capital and then use them to purchase equity positions in young businesses they believe have high-growth and high-profit potential, producing annual returns of 300 to 500 percent within five to seven years. More than 1,300 venture capital firms operate across the United States today, investing billions of dollars in promising small companies in a wide variety of industries. Several venture capital companies invested money, experience, and advice across several stages of growth.

Most venture capitalists prefer to let the founding team of managers employ its skills to operate a business if they are capable of managing its growth. However, it is quite common for venture capitalists to join the boards of directors of the companies they invest in or to send in new managers or a new management team to protect their investments.
1.1.1.6 Sale of Stock to Public

In some cases, entrepreneurs can “go public” by selling shares of stock in their corporations to outside investors. In an initial public offering (IPO), a company raises capital by selling shares of its stock to the general public for the first time. A public offering is an effective method of raising large amounts of capital, but it can be an expensive and time-consuming process filled with regulatory nightmares.

Once a company makes an initial public offering, nothing will ever be the same again. Managers must consider the impact of their decisions not only on the company and its employees, but also on its shareholders and the value of their stock. Going public isn’t for every business. In fact, most small companies do not meet the criteria for making a successful public stock offering. It is extremely difficult for a start-up company with no track record of success to raise money with a public offering.

1.1.2 SOURCES OF DEBT FINANCING

Debt financing involves the funds that the small business owner borrows and must repay with interest. Lenders of capital are more numerous than investors, although small business loans can be just as difficult to obtain. Although borrowed capital allows entrepreneurs to maintain complete ownership of their businesses, it must be carried as a liability on the balance sheet as well as be repaid with interest at some point in the future.

In addition, as small businesses are considered to be greater risks than bigger corporate customers, they must pay higher interest rates because of the risk–return tradeoff: the higher the risk, the greater is the return demanded. Most small firms pay the prime rate; the interest rate banks charge their most creditworthy customers, plus two to three percentage points. Still, the cost of debt financing often is lower than that of equity financing. Because of the higher risks associated with providing equity capital to small companies, investors demand greater returns than lenders. In addition, unlike equity financing, debt financing does not require an entrepreneur to dilute his or her ownership interest in the company.

Entrepreneurs seeking debt capital are quickly confronted with an astounding range of credit options varying greatly in complexity, availability, and flexibility. Not all of these
sources of debt capital are equally favorable, however. By understanding the various sources of capital both commercial and government lenders and their characteristics, entrepreneurs can greatly increase the chances of obtaining a loan. We now turn to the various sources of debt capital.

1.1.1.2.1 Bank Loans

Commercial banks are the very heart of the financial market for small businesses, providing the greatest number and variety of loans to small companies. These funds typically are used to replenish the working capital account to finance the purchase of more inventories, boost output, finance credit sales to customers, or take advantage of cash discounts. As a result, an entrepreneur repays the loan after converting inventory and receivables into cash. There are several types of short-term loans.

1.1.1.2.1.1 Traditional Bank Loans

A basic short-term loan is the commercial bank’s specialty and terms usually require repayment as a lump sum within three to six months. Two types of commercial loans exist: secured and unsecured. A secured loan is one in which the borrower’s promise to repay is secured by giving the bank an interest in some asset (collateral). Although secured loans give banks a safety cushion in case the borrower defaults on the loan, they are much more expensive to administer and maintain.

With an unsecured loan, the bank grants a loan to a business owner without requiring him or her to pledge any specific collateral to support the loan in case of default. For both secured and unsecured commercial loans, an entrepreneur is expected to repay the total amount of the loan at maturity. Sometimes the interest due on the loan is prepaid deducted from the total amount borrowed.

1.1.1.2.1.2 Lines of Credit

One of the most common requests entrepreneurs make of banks and commercial finance companies is to establish a commercial line of credit, a short-term loan with a pre-set limit that provides much needed cash flow for day-to-day operations. With a commercial line
of credit, a business owner can borrow up to the predetermined ceiling at any time during the year quickly and conveniently by writing himself or herself a loan.

Banks set up lines of credit that are renewable for anywhere from 90 days to several years, and they usually limit the open line of credit to 40 to 50 percent of a firm’s present working capital, although they will lend more for highly seasonal businesses. Bankers may require a company to rest its line of credit during the year, maintaining a zero balance, as proof that the line of credit is not a perpetual crutch. Like commercial loans, lines of credit can be secured or unsecured. A business typically pays a small handling fee plus interest on the amount borrowed usually prime plus three points or more.

1.1.1.2.1.3 Medium and Long Term Loans

Small companies often face a greater challenge for medium and long-term loans because of the increased risk to which they expose to the bank. Commercial banks grants long term loans for constructing a plant, purchasing real estate and equipment, expanding a business, and other long-term investments. These loans repayments are normally made monthly or quarterly. One of the most common types of medium term loans is an installment loan, which banks make to small firms for purchasing equipment, facilities, real estate, and other fixed assets.

Another common type of loan banks make to small businesses is a term loan. Typically unsecured, banks grant these loans to businesses whose past operating history suggests a high probability of repayment. Some banks make only secured term loans, however. Term loans impose restrictions on the business decisions an entrepreneur makes concerning the company’s operations. For instance, a term loan may set limits on owners’ salaries, prohibit further borrowing without the bank’s approval, or maintain certain financial ratios.

1.1.1.2.2 NON BANK SOURCES OF DEBT CAPITAL

Although they are usually the first stop for entrepreneurs in search of debt capital, banks are not the only lending game in town. We now turn our attention to other sources of debt capital that entrepreneurs can tap to feed their cash-hungry companies.
1.1.1.2.2.1 Asset Based Lenders

Asset-based financing is a powerful tool, particularly for small companies that have significant sales opportunities but lack the track record to qualify for traditional bank loans. These are usually smaller than commercial banks, commercial finance companies, or specialty lenders, allow small businesses to borrow money by pledging otherwise idle assets such as accounts receivable, inventory, or purchase orders as collateral.

These type of financing works especially for manufacturers, wholesalers, distributors, and other companies with significant of inventory or accounts receivable. Even unprofitable companies whose financial statements could not convince loan officers to make traditional loans can get asset-based loans.

These poor cash but asset-rich companies can use normally unproductive assets such as accounts receivable, inventory, fixtures, and purchase orders to finance rapid growth and the cash crises that often accompany it. Like banks, asset-based lenders consider in a company’s cash flow, but they are more interested in the quality of the assets pledged as collateral. A company pledging high-quality of accounts receivable as collateral, however, may be able to negotiate up to an 85 percent advance rate. The most common types of asset-based financing are discounting accounts receivable and inventory financing.

1.1.1.2.2.2 Discounting Accounts Receivables

The most common form of secured credit is accounts receivable financing. Under this arrangement, a small business pledges its accounts receivable as collateral; in return, the lender advances a loan against the value of approved accounts receivable. The amount of the loan tendered is not equal to the face value of the accounts receivable, however. Even though the bank screens the firm’s accounts and accepts only qualified receivables, it makes an allowance for the risk involved because some will be written off as uncollectible. A small business usually can borrow an amount equal to 55 to 80 percent of its receivables, depending on their quality.
1.1.1.2.2.3 Inventory Financing

Here, a small business loan is secured by its inventory or raw materials, work in process, and finished goods. If an owner defaults on the loan, the lender can claim the pledged inventory, sell it, and use the proceeds to satisfy the loan. Because inventory usually is not a highly liquid asset and its value can be difficult to determine, lenders are willing to lend only a portion of it’s worth, usually no more than 50 percent of the inventory’s value. Most asset-based lenders avoid inventory-only deals; they prefer to make loans backed by inventory and more secure accounts receivable. The key to qualifying for inventory financing is proving that a company has a plan or a process in place to ensure that the inventory securing the loan sells quickly.

1.1.1.2.2.4 Vendor Financing

Many small companies borrow money from their vendors and suppliers in the form of trade credit. Because of its ready availability, trade credit is an extremely important source of financing to most entrepreneurs. When banks refuse to lend money to a start-up business because they see it as a high credit risk, an entrepreneur may be able to turn to trade credit for capital. Vendors and suppliers often are willing to finance a small business’s purchases of goods from 30 to 60 days, interest-free. Usually is much easier for small businesses than obtaining bank financing.

1.1.1.2.2.5 Equipment Suppliers

Most equipment vendors encourage business owners to purchase their equipment by offering finance to the purchase. This method of financing is similar to trade credit but with slightly different terms. Usually, equipment vendors offer reasonable credit terms with only a modest down payment, with the balance financed over the life of the equipment (often several years). In some cases, the vendor will repurchase equipment for salvage value at the end of its useful life and offer the business owner another credit agreement on new equipment. Some companies get equipment loans to lease rather than to purchase fixed assets. Start-up companies often use trade credit from equipment suppliers to purchase equipment and fixtures such as counters, display cases, refrigeration units, machinery, and
the like. It pays to scrutinize vendors’ credit terms, however; they may be less attractive than those of other lenders.

1.1.1.2.2.6 Commercial Finance Companies

Commercial finance companies are second only to banks in making loans to small companies, and they are willing to tolerate more risk in their loan portfolios. Of course, their primary consideration is collecting their loans, but finance companies tend to rely more on obtaining a security interest in some type of collateral, given the higher-risk loans that make up their portfolios. Because commercial finance companies depend on collateral to recover most of their losses, they are able to make loans to small companies with very irregular cash flows or to those that are not yet profitable.

1.1.1.2.2.7 Savings and Loan Associations

Savings and loan associations (S&Ls) specialize in loans for real property. In addition to their traditional role of providing mortgages for personal residences, savings and loan associations offer financing on commercial and industrial property. In the typical commercial or industrial loan, the S&L will lend up to 80 percent of the property’s value with a repayment schedule of up to 30 years. Most S&Ls hesitate to lend money for buildings specially designed for a particular customer’s needs. S&Ls expect the mortgage to be repaid from the company’s future profits.

1.1.1.2.2.8 Stock Brokerage Houses

Stockbrokers also make loans, and many of the loans they make to their customers carry lower interest rates than those from banks. These margin loans carry lower rates because the collateral supporting them the stocks and bonds in the customer’s portfolio is of high quality and is highly liquid. Moreover, brokerage firms make it easy to borrow. Usually, brokers set up a line of credit for their customers when they open a brokerage account.

Typically, there is no fixed repayment schedule for a margin loan; the debt can remain outstanding indefinitely as long as the market value of the borrower’s portfolio of collateral meets minimum requirements. There is risk involved in using stocks and bonds as collateral.
on a loan. Brokers typically require a 30 percent cushion on margin loans. Stockbrokers have been adding traditional loans to their line of small business financial services, but start-up companies rarely meet their stringent standards. For established companies, however, these loans can be an important source of funds.

1.1.1.2.2.9 Insurance Companies

Life insurance companies can be an important source of business capital. Insurance companies offer two basic types of loans: policy loans and mortgage loans. Policy loans are extended on the basis of the premiums amount into the insurance policy. It usually takes about two years for an insurance policy to accumulate enough cash surrender value to justify a loan against it. Policy loans typically offer very favorable interest rates, often at or below prevailing loan rates at banks and other lending institutions.

Only insurance policies that build cash value that is, combine a savings plan with insurance coverage offer the option of borrowing. These include whole life, variable life, universal life, and many corporate-owned life insurance policies. Term life insurance, which offers only pure insurance coverage, has no borrowing capacity. Insurance companies make mortgage loans on a long-term basis on the value of the real property being purchased. The insurance company will extend a loan of up to 75 or 80 percent of the real estate’s value and will allow a lengthy repayment schedule over 25 or 30 years so that payments do not strain the firm’s cash flows excessively.

1.1.1.2.2.10 Credit Unions

Credit unions, nonprofit financial cooperatives that promote saving and provide loans to their members, are best known for making consumer and car loans. However, many are also willing to lend money to their members to launch businesses. Credit unions don’t make loans to just anyone; to qualify for a loan, an entrepreneur must be a member. Lending practices at credit unions are very much like those at banks, but they usually are willing to make smaller loans. Entrepreneurs around the globe are turning to credit unions to finance their businesses, sometimes borrowing tiny amounts of money.
1.1.1.2.2.11 Bonds

Bonds, which are corporate IOUs, have always been a popular source of debt financing for large companies. Few small business owners realize that they can also tap this valuable source of capital. Although the smallest businesses are not viable candidates for issuing bonds, a growing number of small companies are finding the funding they need through bonds when banks and other lenders say no. Because of the costs involved, issuing bonds usually is best suited for companies.

Although they can help small companies raise much-needed capital, bonds have certain disadvantages. The issuing company must follow the same regulations that govern businesses selling stock to public investors. Even if the bond issue is private, the company must register the offering and file periodic reports with the SEC. Small manufacturers needing money for fixed assets have access to an attractive, relatively inexpensive source of funds in industrial development bonds (IDBs), which were created to give manufacturers access to capital at rates lower than they could get from traditional lenders.

1.1.1.2.2.13 Private Placements

We saw how companies can raise capital by making private placements of their stock (equity). Private placements are also available for debt instruments. A private placement involves selling debt to one or a small number of investors, usually insurance companies or pension funds. Private placement debt is a hybrid one between a conventional loan and a bond. At its heart, it is a bond, but its terms are tailored to the borrower’s individual needs, as a loan would be.

Privately placed securities offer several advantages over standard bank loans. First, they usually carry fixed interest rates rather than the variable rates banks often charge. Second, the maturity of private placements is longer than most bank loans: 15 years rather than 5. Private placements do not require hiring through expensive investment bankers. Finally, because private investors can afford to take greater risks than banks, they are willing to finance deals for fledgling small companies.
SBICs, created in 1958 when Congress passed the Small Business Investment Act, are privately owned financial institutions that are licensed and regulated by the SBA. SBICs provide both debt and equity financing to small businesses because of SBA regulations affecting the financing arrangements an SBIC can offer, most SBICs extend their investments as loans with an option to convert the debt instrument into an equity interest later. The most common forms of SBIC financing are a loan with an option to buy stock, a convertible debenture, a straight loan, and preferred stock.

Debt- Equity Ratio is an important tool of financial analysis to appraise the financial structure of the firm. It has important implications from the view point of creditors, owners and the firm itself. A high ratio shows a large share of financing by creditors of the firm a low ratio implies a smaller claim of the creditors. If the debt equity ratio is high the owners are putting up relatively less money of their own. It is the danger signal for creditors. Moreover, the owners behave irresponsibly and indulge in speculative activity. A low debt-equity ratio has just opposite effect on the owners of the firm. It implies sufficient safety margin and substantial protection against shrinkage of assets, for companies also. The servicing of debt is less burdensome and consequently its credit worthiness is not adversely affected, its operational flexibility is not jeopardized and it will be able to raise additional funds easily.

A high debt ratio has equally serious implications from firms’ point of view. A high proportion of debt in financial structure would lead to inflexibility in the operations of the firm as there will be pressure and interference from the creditors. Secondly, such firms would be able to borrow only under very restrictive terms and conditions. When there was decrease in profits, the firms would have to face heavy burden of interest payments. Ultimately, the firm will face several difficulties in raising funds in future. Apart from considering the risk and return of financial and non-financial factors, and also likely to be very decisive in designing the capital structure of the corporate firm. In other words, corporate finance Manager while deciding about debt equity mix considers certain internal and external parameters, which seem to influence the capital structure decision of the firm.
1.1.2 FACTORS AFFECTING THE CAPITAL STRUCTURE DECISION

In the area of corporate finance, the capital structure decision is at the center of many other decisions. One of the main aims of a corporate financial manager is to ensure low cost of capital and thus maximize the wealth of shareholders. The decision on capital structure not only influences the wealth of the shareholder but also affects the market value of the share. Hence, to manage the cost of capital, capital structure is one of the effective tools of management. When the cost of the capital is minimal, the capital structure reaches to an optimum level. Any change in the capital structure will not only affect the debt equity mix primarily and the weighted average cost of the capital (WACC) but also the firm value. In the same way, policy of the capital structure and dividend policy are interrelated and in turn, re-linked to financing decisions of a firm.

The dividend policy affects the profits available for investment. Retention of profits for reinvestment strengthens the shareholders equity position. In briefly to say the variables such as the cost of capital, net earnings per share, dividend payout ratio and liquidity of the firm are interlinked with one other, determine the value of a firm. In fact, the determination of capital structure in practice involves multiple considerations in addition to the concerns about E.Ps and cash flows. Attitudes of managers with regard to capital structure decisions are influenced by many factors and are divided as follows:

1.1.2.1 Factors Affecting the Decision to Issue Common Stock

i. Dilution of earnings per share / cash earnings per share
ii. Magnitude of equity undervaluation / overvaluation
iii. Advantage during boom in the capital market
iv. Employee stock option schemes operative and to be operational
v. Maintaining target / optimal debt to equity ratio
vi. Dilution of promoter’s holdings / ownership rights
vii. Creditors’ interest in ownership stakes
viii. Cash with the firm / liquidity concerns
ix. Industrial practices in which a firm operates
x. High credit rating with low debts
xi. Low market accessibility to funds other than equity (especially private)  
xii. Ability to take future cash obligations  
xiii. Investors’ taxes on equity income  
xiv. Intra firm investment to support risky projects; new markets, innovations  
xv. Analyst’s review and follow up on the stock  
xvi. Liquidity on the firm’s stock  
xvii. Takeover threats on the firm  
xviii. Promoters stake in the shareholding  
xix. Widely held or closely held company (organizational structure)  
xx. Rewards to the shareholders (dividend policy)  
xxi. Capitalization of retained profits  
xxii. Tax policy on distribution of profits  
xxiii. Attributes of the subsidiary units  
xxiv. Division between ownership and control  
xxv. Capital market regulation requirement on ownership  
xxvi. Corporate governance on transparency and accountability of a firm  
xxvii. Conservative attitude on cash outflows and leverages  
xxviii. Cushion on credit availability  
xxix. Acceptability to innovative instruments  
xxx. Goodwill creation through profit distribution

1.1.2.2 Factors Affecting the Decision to Issue Debt

i. Financial flexibility  
ii. Firm wise, industry wise and country wise ratings of the credit  
iii. Earnings and cash flow volatility  
iv. Insufficient internal funds  
v. Interest rate levels in the domestic and international economy  
vi. Interest tax saving  
vii. Transaction costs and fees  
viii. Equity undervaluation / overvaluation  
ix. Comparable firm debt level  
x. Bankruptcy / distress cost
xi. Customer / supplier comfort on debt exposures
xii. Volatility of firm stock prices
xiii. Underinvestment concerns
xiv. Debt retirement markets
xv. Debt issuance cost
xvi. Liquidity in debt markets
xvii. Support of institutional framework
xviii. Depth of the financial markets
xix. Signaling effect of debt issue
xx. Investor taxes on interest income
xxi. Reduce attractiveness of a firm as a takeover target
xxii. Production threat of rivals
xxiii. Position of the firm for committing free cash flows
xxiv. Accumulation of profits
xxv. Bargaining chip with employees
xxvi. Bargaining capability with lenders
xxvii. Compensation of the top management linked with performance
xxviii. Aggressive attitude of the management
xxix. Leverage buy outs
xxx. Cost of monitoring and bank liaison
xxxi. Competitive pressure of performance
xxxii. Penalty structure for failures
xxxiii. Presence of informal financial markets
xxxiv. Status of creditors’ rights
xxxv. Court settlement period
xxxvi. Collateralization process of loans
xxxvii. Risk taking attitude of debt providing institutions / banks / NBFCs.

1.1.2.3 Factors Affecting the Decision to Issue Foreign Debt

i. Providing for natural hedge to foreign operations incomes
ii. To keep source of funds near use of funds
iii. Favorable foreign tax treatment / benefits
iv. Low interest rates in international markets  
v. Foreign regulations and operations require foreign debt  
vi. Presence of correspondent banks domestically and internationally  
vii. Country specific financial liberalization  
iii. Exchange rate parity  
ix. Education / knowledge to firm’s management  
x. Collateral / guarantee requirement on loans

On the other hand, we see constant innovations in the design of securities and in new financing schemes. Innovation proves that financing does matter. If new securities or financing tactics never added value then there would be no incentive to innovative. However, given the size and vision of the firm the priority of raising funds, reducing weighted average cost of capital or choosing financial flexibility are time variant. The firms used hybrid instruments to hedge various risks and circumvent its firm / industry and country specific constraints.

1.1.2.4 Factors Affecting the Decision to Issue Hybrids

i. Inexpensive way to issue “Delayed” / common stock  
ii. Firms stock may be currently undervalued  
iii. Ability of a firm to “call” / force conversion if / when necessary  
iv. To avoid short term equity dilution  
v. To attract investors unsure about riskiness  
vi. Less expensive than straight debt or equity  
vii. Other industry firms successfully use the instruments  
viii. To protect bondholders against the unfavorable  
ix. Management and stakeholders attitude  
x. Avoid principal cash outflows which are a large amount  
xi. Hedge against interest rate fluctuations and exchange rate fluctuations  
 xii. Hedge against any unforeseen business eventuality  
xiii. Hedge against a highly risky project operations
Hybrid such as warrants, bonds of zero coupon, notes of secured premium, deep discount bonds, carrot and stick bonds, and premium put bonds and swap bonds are load influenced by such considerations. Innovations in capital structure have been wide spread and influence the overall decision making process. To further complicate matters, off-balance sheet items support capital structure decision. Options such as leasing, hire purchase, factoring, venture financing, securitizations and derivatives and also short term debts like commercial paper, structured financial products provide for a limitless level of financing. The influencing factors of maturity structures of instrument of financing of a firm are:

i. Matching maturity structure between liabilities and assets  
ii. Financing fixed assets through long term borrowings  
iii. Expectations hypothesis on yield curves  
iv. Follow up on investments or to maintain signaling effect of investments / debt  
v. Improvement on credit worthiness  
vi. Asset substitution concerns

The holistic picture is much wider. It incorporates features of financial flexibility, financial prudence, risk management and scope for future expansion with organizational choices. The choice of an instrument would depend upon the resources constraint on the decision maker together with the expectations of stakeholders.

1.2 LITERATURE RELEVANT TO THE STUDY

This section examined the literature relevant to the study. It followed the conceptual framework, incorporate scholarly works and theories. The rationale of the study was to ascertain the role capital structure played in determining financial performance. The literature under review was obtained from journal articles, websites and text books and the procedure followed in reviewing the literature begun with looking at Indian industries, the independent variable, capital structure theories, the moderating variable, the dependent variable and the relationships.

Many theories of capital structure have been developing depending on theoretical framework. The previous empirical studies have been doing great service in this regard,
which provides basic foundations to this study. This section presents the comprehensive theoretical and empirical literature review over the capital structure theme. This section has been organized into four sub-sections. Sub-section 1.2.1 covers theoretical literature review, section 1.2.2 covers theoretical prediction of variables which the researcher included in the study that have been found by large number of studies, section 1.2.3 reviews of earlier studies including in India.

1.2.1 THEORETICAL LITERATURE REVIEW

Most influentially, the Modigliani and Miller (1958) work has given the theoretical foundation for further enquiry into the capital structure theory. The financial economists and the researchers have contributed in new way theories of capital structure, and by consider corporate taxes (Modigliani and Miller, 1963), bankruptcy costs (Stiglitz, (1972); Kraus and Litzenberger, (1973); Titman, (1984), agency cost (Jensen and Meckling, (1976); Myers, (1977); Jensen, (1986), personal taxes (Miller, (1977) and information asymmetries (Ross, (1977); Myers, (1984); Myers and Majluf, (1984). This part of the section gives inspiration to look into the theories of previous researchers such as Modigliani and Miller’s (1958). Independent hypothesis is developed by Modigliani and Miller. Tax, bankruptcy cost and agency cost aspect are discussed under the tradeoff theory and information asymmetry approaches are dealt under pecking order theory.

1.2.1.1 Independent Hypothesis of Modigliani and Miller

Modigliani and Miller’s (1958) seminar paper on corporate capital structure is founded upon a certain assumptions such as perfect capital market, no tax world, exceptions of homogeneous and risk class of homogeneous, riskiness debt, and perpetual cash flows, Modigliani and Miller proposition I states that the firm value is independent to the market value of leverage in its capital structure and is given by capitalizing it’s expected return at the rate $K$ appropriate to its class. By the same token, the average cost of capital to any firm is completely independent of its capital structure and is equal to the capitalization rate of a pure equity stream of its class. Under the Proposition II, they further state that the expected yield of a share of stock is equal to the appropriate capitalization for a pure equity stream and financial risk premium i.e., the expected rate of return on the stock of any company
belonging to the same class is a linear function of leverage. Therefore, from the composite picture of MM Propositions I and II, stated that the value of the firm and weighted average cost of capital are independent of its capital structure. So there is no relation to the capital structure with the firm value and overall cost of capital.

1.2.1.2 Trade-Off Theory

According to trade-off model, the optimum capital structure does exist. The trade-off theory of the capital structure suggests that a firm’s target leverage is driven by three competing forces: taxes, bankruptcy costs, and the conflicts of agency. The tax advantage and possible financial distress and conflicts of agency are balanced by the firm’s debt level. So, a firm puts optimum leverage ratio and gradually moves toward it.

1.2.1.2.1 Impact of Tax on Capital Structure

After five years, Modigliani and Miller brought out a second article with corporate tax in 1963. No tax world assumption was given relaxation by them. They also stated that a firm’s value would be increased by leverage with introducing of taxes. It is because of the tax free interest on debt. The value of the firm is increased by the increasing leverage ratio. As per the M M hypothesis II, the value of levered firm and the value of the unlevered firm are equal that is the value of tax saving as a result of interest payment on debt capital.

Miller (1977) extends his work, deriving an expression for the gain from leverage when different tax rates are applied to corporate gains, personal profits from stocks and interest on personal gains. Miller encourages the debt finance with the corporate gains and personal profits to finance completely through debt disappear under a variety of tax regimes. He states that 'even in a world in which interest payments are fully deductible in computing corporate taxes, the firm value, in optimal can still be independent of its leverage. Miller also advises that clientele effects (whereby firms attract those investors that suit their degree of leverage) may reduce or negate the tax related gains from leverage for any single firm.

DeAngelo and Masulis (1980) emphasize that the tax-induced gains from leverage are reduced if a firm's expected earnings, eventhough there is free interest expenses than the total interest expenses of the firm. Particularly, they state that the presence of deductions from
taxable earnings except payments of interests decreases the expected gains of debt finance. These deductions of non-interest tax are normally called as non-debt tax shields.

### 1.2.1.2.2 Impact of Bankruptcy Costs on Capital Structure

The use of debt in one hand provides the debt tax shield but by the same time the higher level of use of debt increases both bankruptcy and financial distress cost. The works of Stiglitz (1972), Kraus and Litzenberger (1973) and Kim (1978) are regarded as prominent in bankruptcy cost aspect of capital structure theory. The theory of capital structure of bankruptcy aspect was proposed by them. By their theory, if a firm increases debt to capital its activities then it affects the debt. When the debt finance increases in the capital structure, bankruptcy will also be increased. However, it is not bankruptcy perse that is the problem, if the payments on bonds are not paid to them they will become defaults of the bond payments, and the bond holders will easily get the authority on the firm.

However, there are ‘dead weight’ costs that arise in the case of corporate bankruptcy which come in form of direct and indirect dead weight costs. Direct out-of-pocket expenses for the administration of the bankruptcy process (legal fees and management time) are relatively small compared to the firm market values. When compared to large firms with the small firms, there is less importance of bankruptcy costs. Even though, there are economies of scale to direct costs of bankruptcy.

Once the firm runs into financial problems, it is clear that the changes in policies of firm’s investment, it decreases the value of the firms very clearly the firm can decide on short sighted cutbacks in development of research, maintenance expenditure, advertising expenses, and educational expenditures that finally results in lower firm values. Even though, bankruptcy hampers conduct with customers. Customers usually lost faith because of both fear of impaired service and loss of trust.

### 1.2.1.2.3 Impact of Agency Costs on Capital Structure

In search of optimal capital structure, beside the tax and bankruptcy cost aspect, Jensen and Meckling (1976) explore on the aspect of agency costs. The cost of agency is used by them to argue that the probability distribution of cash flow provided by the firm is not
independent of it’s structure of ownership. Their ownership of corporate theory is based on the assumptions that the firm size and outside financing are stable. Thus, the firm’s actual value is the function of the agency cost incurred.

Jensen and Meckling (1976) identify two types of conflicts because of the incentive problem associated with issuance of new debt and new external equity. They argue that the conflicts between shareholders and managers arise because managers hold less than 100% of the claim of residual. Thus, the entire gain is not capture by them from their earnings of encouraging activities, yet they can with stand these activities at entire cost. Conflict between debt holders and equity holders arise because the debt contract gives equity holders an incentive to optimally invest. The consequences of these conflicts are overinvestment (risk shifting), underinvestment (assets substitution) problem and residual claim.

The risk shifting or bondholder expropriation hypothesis asserts that stockholders have the incentive to exploit bondholders once by the issued of debt. The final duties of the managers are to increase of the investment of the shareholders in its firm. By the increase of the wealth of the shareholders automatically the firm’s overall value will be increased. Generally, the managers will be ready to face the risk of negative net present value in view of getting equity as a call option in which the value decrease consists of a decrease in the debt value and a smaller increase in the equity value also called as problem of overinvestment.

The underinvestment problem refers to the tendency of managers to avoid safe positive net present value projects in which the value increase consists of an increase in the value of debt and a smaller decrease in the value of equity. Myers (1977) demonstrates that there is a rational basis for this shortsightedness when stockholders have no chance to receive any proceeds of a valuable project when the due of debt comes.

Further, Easterbrook (1984) and Jensen (1986) argue that for companies that largely consist of assets-in-place and that produce stable operating cash flow high leverage can add value by improving discipline of the managers’ financial matters. The excess amount of cash that is required for funding all projects has positive net present values. When there is excess amount cash, automatically the differences between stockholders and managers arise.
The problem is to change the attitude of managers to give away excess funds rather than investing it below the cost of capital or wasting it on organizational faults. The managers don’t pay any attention for the benefit of the firms but change the resources for their own benefits. The managers don’t want to invest in lower income projects but they pay cash freely to grow dividends and for stock re-purchasing.

However, leverage is a more effective means for addressing the free cash flow problem. This is because contractually obliged payments of interest and principal are a more credible signal than discretionary dividend payments or share repurchases in giving back excess capital to investors. The firms can be taken by bondholders into bankruptcy court if managers do not maintain their promise to make the interest and payment of principal amount. The agency cost is reduced by debt of free cash flows for mature companies by reducing the cash flow available for spending at the discretion of managers.

Therefore the agency cost theories imply that corporate leverage is chosen, in another complex fashion, to reduce the capacity of shareholders to act in manner contrary to the welfare of bondholders and to reduce managers' capacity to act in a manner contrary to interest of the shareholders'. The trade-off theory poses that there is an optimal leverage ratio. The duty of the firm is to equalize the benefits of the tax of higher leverage and the cost associated with bankruptcy and agency problem.

1.2.1.3 Pecking Order Theory

Capital structure theory has become yet another dimension with the explicit modeling of private information in the theory of finance. There are two main strands in the literature of asymmetric information. In his first attempt, advised by Ross (1977), debt is regarded as a means to signal confidence to the investors of the firm. In his second attempt, advised by Myers and Majluf (1984) argued that the capital structure decision of investment caused by information asymmetries is designed to mitigate distortions. When available internal source of finance, firms prefer to use from the least to the most expensive source of finance in the following order: internal financing, bank debt, bond market debt, convertible bonds, preference capital, and common equity i.e., pecking order.
1.2.1.3.1 Signaling with Proportion of Debt

Ross (1977) developed the proposition of signaling effect on debt finance. They assume that managers can distribute of firm returns to stockholders, but investors are not accepted these things. The researcher argues that a signal to the investors interpret larger levels of leverage. The firm near his argument is the debt and equity that differ in the way of inside information for signaling effect. Debt finance is a critical source of finance to pay interest on debt regularly and repay the principle amount after certain period of time without fail to these payments can go to bankruptcy and managers may lose their jobs.

In contrast, managers have more discretion and can cut them in times of financial distress while shareholders expect higher dividends to be maintained. An increase of debt capital in the capital structure can be indicated as a credible signal of high future cash flows and managers’ confidence. A lower signaling firm shall not imitate the larger signalling firms by issuing more debt because they have higher bankruptcy costs at any level of debt. They conclude that investors take larger levels of debt as a signal of higher quality and that profitability and leverage are thus positively related.

1.2.1.3.2 Pecking Order Hypothesis

The Pecking Order hypothesis is an alternative model to the trade-off theory. It deals with the corporate leverage emerged based on asymmetric information problems. Myers and Majluf (1984) assume that managers are better informed than anyone else to know the 'true' future value of the firm and of any projects that it might undertake and managers are assumed to act in the interest of the existing shareholders and they are assumed to be passive in the sense that they do not actively change their portfolio to undo the decisions of management.

Myers and Majluf (1984) point out that the capital structure can help to mitigate inefficiencies in a firm’s investment program that are caused by information asymmetries when if the firm uses its available liquid assets to finance positive net present value of the projects. Firms holding more liquid assets would be a good reason in this aspect. When they are overpriced the liquid assets, the managers use private information to issue of risky debt. It involves an interaction with investment and financing decisions. Therefore, the capital
market conditions cannot provide separate information about new projects whether the firms equity is over or under valued would be mispriced by market conditions.

A firm is required to finance for new projects by issuing equity. So severe that new investors capture more than the new project net present value, this will be resulting in a net loss to shareholders. A positive net present value project also will be rejected, goes to another underinvestment problem i.e., the cost associated information with debt and equity issues has led. Myers (1984) argues that a firm’s capital structure reflects the accumulation of past financial requirements. Myers (1984) has outlined hierarchies of business financing as follows:

- Firms prefer internal finance.

- They exist with their investment opportunities to their target dividend payout ratios; although dividends are sticky and target payout ratios are only gradually adjusted to shifts in the extent of valuable investment opportunities.

- Sticky dividend policies, plus unpredictable fluctuations in profitability and investment opportunities, indicate that internally generated funds may be more or less than investment outflows. If internally generated funds may be less than the firms’ first uses it’s cash balance or marketable securities portfolio.

- In the beginning, the safest security is issued by the firms, if it is needed finance externally, the firms began with debt finance like convertible bonds and also they use equity finance as a final resort. In the article, the target debt equity mix is not defined well as two classes of equity like the internal equity as top of pecking order theory and external equity as the bottom of pecking order theory. Briefly, the cumulative requirements of external finance are reflected by firms, observed as debt ratio. When there is availability, the business adhere to a hierarchy of financing sources prefer internal finance according to the pecking order theory. If outsider funds are needed, debt is better than equity for finance requirement.
1.2.2 THEORETICAL PREDICTION OF VARIABLES

In the previous sub-section, we presented the theoretical framework and empirical evidence of the most influential theories of capital structure are; the pecking order theory and the trade-off theory. In general, the existing empirical research on the issue of capital structure choice has analyzed the role of firm specific characteristics that represent taxation, bankruptcy costs, agency costs, information asymmetries. However, the extent empirical research in this field has been restricted to the US and other developed countries, and received little attention in developing countries where capital markets are small, less developed, less competitive and suffering from the lack of compatible regulations and sufficient supervision. The lessons learned from one business environment cannot be generalized to countries with different legal and institutional framework, increasing the need to address the issue of determinants of capital structure in small and less developed countries.

An investigation of determinants of capital structure choice in developing countries helps determine whether the capital structure choice in these countries is related to factors similar to those influencing the capital structure choice in developing countries. This may also indicate how much more severe the market frictions are in developing countries. Furthermore, while the extent empirical research has focused on the suggestions of the trade-off theory in interpreting the results obtained regarding the determinants of capital structure, an obvious extension to this study is to introduce the possible explanations that might be relevant in the context of pecking order theory, which may provide reasonable explanations as to why the previous empirical studies vary in the variables sign.

India provides an ideal ground for examining the most influential capital structure theories are the trade-off theory and the pecking order theory, and their implications for the developing countries. The Indian capital market has recently adopted an advanced trading pattern. It also seeks to model itself as regional capital market. Moreover, extensive efforts and measures have been taken to move toward the free market and integrate this market into the world market. As a result, substantial transformation of the institutional set-up within which firms have been operating, has given more flexibility to the Indian financial managers in choosing the capital structure of the firm.
Titman and Wessels (1988); Harris and Raviv (1991); Rajan and Zingales (1995); Bevan and Danbolt (2000, 2004); Chen (2004); Booth et al (2001); and Eriotis, (2007), amongst others research has been carried out on the determinants of capital structure. For the purpose of this analysis, this study measure leverage as the total long term debt divided by total assets. In fact various capital structure theories have not specified which leverage measurement but Rajan and Zingales, (1995) should be used this leverage measurement.

However, many of the exact researches on the issue of capital structure choices have employed this measure for leverage. In what method follows, we explain the theoretical relationship between leverage and the variables that suggested in literature as determinants of the optimal leverage ratio. Most of the empirical studies employ models which involve the regression of the observed leverage ratio against a number of explanatory variables. Typically, the explanatory variables include: profitability, firm size, asset tangibility, growth opportunities, non-debt tax shield (depreciation), business risk and liquidity of the assets.

1.2.2.1 Profitability

Capital structure theories have different views on relationship between leverage and profitability. In their seminar paper, Modigliani and Miller (1963) argue that firms should consider tax benefits and prefer debt capital. Profitable firms should prefer more debt than equity because increase of debt equity ratio would increase the tax shield on their debt. In addition tax advantage of debt, agency and bankruptcy costs may encourage highly profitable firms to have more debt in their capital structure. This is because highly profitable firms are less likely to be subjected to bankruptcy risk because of their increased ability to meet debt repayment obligations. Thus, they will demand more debt to maximize their tax shield at more attractive cost of debt.

Moreover, managers of highly profitable firms may have excess cash to consume more prerequisites, or to invest in less profitable projects for the firm, but more in their own interests (Jensen and Meckling (1976) and Jensen, (1986). High debt may reduce the agency costs of free cash flow because the interest burden reduces the amount of funds available under management control. For these considerations, the trade-off theory predicts appositive relationship between leverage and profitability.
However, the pecking order theory of Myers and Majluf (1984) and Myers (1984) predicts the opposite. It predicts a negative association between leverage and profitability because high profitable firms will be able to generate more funds through retained earnings and then have less leverage. Compared with both retained earnings and debt and equity capital has no adverse selection problem, and hence, they are selecting the cheapest source of finance. However, when outside funds are needed, companies prefer debt than equity because of the issue of debt is associated with lower information costs. We test these two predictions by examining the relationship between leverage and profitability of Indian industries. Following Titman and Wessels (1988), Rajan and Zingales, (1995), we use the ratio of earnings before interest and taxes to the total assets as a measure of profitability.

1.2.2.2 Size of the Firm

Size of firm is one of the most common variable used to be tested as an explanatory factor for capital structure. Trade-off theory lays down that large firms are expected to have a higher debt capacity given the fact that large firms tend to be well diversified and lesser probability to be financially distressed which may lead to insolvency and bankruptcy cost. As a firm becomes more diversified, the exposure to higher transactional cost reduces (Chen, 2004). The most obvious explanation relies on the bankruptcy costs which are related to the firm size Warner, (1977), argues that there are “scale economies” regarding bankruptcy costs, such that these costs constitute a larger proportion of the firm’s value as that value decreases. Consistent with this view, Titman and Wessels (1988) argue that large firms are more diversified and less susceptible to bankruptcy than smaller ones.

This suggests that the larger firms have higher debt capacity and can borrow at more favorable risk-adjusted interest rates than smaller firms and firm size is an inverse proxy of the probability of bankruptcy. Consequently, the trade-off theory predicts a positive relationship between leverage and size of firm. Size can be regarded as proxy for information asymmetry between managers and outside investors. Kadapakkam et al., (1998) stated that large firms are subjected to more news than small firms because of the investment opportunities would be more concerned with gathering and providing information about large firms. This makes large firms more closely observed by analysts and less subject to
information asymmetry than small firms. Thus they should be more capable of issuing equity which is more sensitive to information asymmetry and have lower debt (Rajan and Zingales, (1995). This suggests a negative association between leverage and the size of firm. We test these two contradicting predictions of the trade-off and pecking order theories in the Indian market by examining the relationship between leverage and the size of firm. Following Titman and Wessels (1988) and Rajan and Zingales, (1995), we use the natural logarithm of total assets as a proxy for the size of the firms.

1.2.2.3 Tangibility

The tangibility of assets represents the effect of the collateral values of the firm’s leverage level. The underlying argument behind the use of tangible assets as collateral for debt is the higher liquidation value of these assets in the event of financial distress or bankruptcy (Rajan and Zingales, (1995). The risk of lending to firms with more tangible asset is expected to be low and hence, lenders will demand a low risk premium. Furthermore, firm’s opportunities to engage in asset substitution can be reduced by issuing secured debt.

As Jensen and Meckling (1976) and Myers (1977) point out, shareholders of levered firms may have an incentive to invest sub-optimally in order to expropriate wealth from the firm’s bondholders which gives rise to conflict between shareholders and debt-holders. If the debt can be collateralized, the borrower is restrained or limited to use the funds for a specified project, reducing the agency costs of asset substitution and hence, the costs of debt. Therefore, the trade-off theory predicts a positive relationship between leverage and the tangibility of assets.

In their asymmetric information approach, Myers and Majluf, (1984) conclude that avoids the costs associated with issuing shares, and issuing debt secured by property. This suggests that firms with more collateralized assets (fixed assets) will be able to issue more debt at an attractive rate as debt may be more readily available. This results in a positive association between leverage and tangibility. We test the predictions of the trade-off theory and pecking order theory in the Indian market by investigating the relationship between leverage and tangibility. Following Rajan and Zingales (1995) and Bevan and Danbolt, (2004), we use the ratio of fixed assets to total assets as a measure of tangibility.
1.2.2.4 Growth Opportunities

Growth opportunities represent the expected growth of firm’s intangible assets that is created by managerial skills, goodwill and acceptance. Since these assets have no collateral value and decline rapidly in value if bankruptcy or financial distress occurs, this will lower the ability of firms to raise their debt financing and consequently, going toward equity financing as suggested by Titman and Wessels, (1988) and Rajan and Zingales (1995). Furthermore, the agency costs are higher for growing firms because they have more flexibility in choosing their future investments and thus to expropriate wealth from banks and bondholders (Titman and Wessels (1988). As a result, lenders will demand higher risk premium if the debt is not collateralized, making debt more expensive. For these considerations, the trade-off theory predicts a negative relationship between leverage and growth opportunities.

However, the pecking order theory of Myers and Majluf (1984) and Myers (1984) predicts that leverage and growth are positively related. For growing firms, internally funds may be insufficient to be in need of external funds their positive investment opportunities. According to the pecking order theory, if external funds are required, firms will prefer debt to equity because of lower information costs associated with debt issues. This results in a positive relationship between leverage and growth opportunities. We test the two conflicting predictions of the trade-off theory and pecking order theory by investigating the relationship between leverage and growth opportunities. Following Rajan and Zingales, (1995) and Bevan and Danbolt (2002, 2004), we use the ratio of market to book value as a proxy for growth opportunities.

1.2.2.5 Risk (Volatility)

Firms with high earnings volatility face a risk of the earnings level, dropping below their debt servicing commitments, thereby incurring a higher cost of financial distress (Bhaduri, (2002). Accordingly, these firms should reduce their leverage level to avoid the risk of bankruptcy or to rearrange their funds at high cost. Therefore, the trade-off theory predicts a negative relationship between leverage and volatility of a firm’s earnings. The pecking order theory allows the same prediction, but the reasoning is different.
In the context of this theory, firms with high earnings volatility try to accumulate cash during good years to avoid under-investment problems in the future (Myers (1977). As DeAnglo and Masulis (1980) point out, an adverse selection problem is more severe to firms with highly volatile earnings. To avoid adverse selection problems, firms with financial surplus should retire debt or invest in cash or marketable securities, to preserve their debt capacity for future financing needs or to avoid issuing equities at higher costs (Myers (1984). This results in a negative association between leverage and earnings volatility.

We test the prediction of both theories in the Indian market by examining the relationship between leverage and earning volatility. Following Titman and Wessels (1988), we use the standard deviation of return on assets as measure of volatility of earnings (risk), where the return on assets for each year is measured by the ratio of earnings before interest and taxes to the total assets.

1.2.2.6 Non-Debt Tax Shields

The trade-off theory suggests that the main advantage of borrowing is the tax advantage of interest payment. Therefore, firms that are subjected to corporate tax will increase their leverage in order to reduce their tax bill (Modigliani and Miiler (1963). However, firms with other tax shields, such as depreciation and investment tax credit deductions, will have less incentive to increase leverage for tax considerations. This is because these deductions are independent of the way a firm chooses to finance it’s investments, whether it uses debt or not (Ozkan (2001). Therefore, firms with tax deductions for depreciation and investment tax credits can consider these deductions as a substitute for the tax shield.

Furthermore, the existence of non-debt tax shields makes leverage more expensive because the marginal tax savings from an additional unit of debt decreases with increasing non-debt tax shields (DeAnglo and Masulis (1980). This is because of the probability of bankruptcy increases with leverage, which makes the marginal benefit low. Ross (1985) supports this view. To test the prediction of trade-off theory in the Indian market, we test the hypothesis that leverage and non-debt tax shields are negatively related. Following Titman
and Wessels (1988) and Ozkan (2001), we use the ratio of annual depreciation to total assets as a proxy for non debt tax shield.

1.2.2.7 Liquidity

There are two different opinions in the association between liquidity and capital structure: First view implies a positive significant relation that is consistent with Trade off Theory. Companies with more liquidity (more current assets) tend to use more external borrowing, because of their ability in paying off their liabilities. Second view points to a negative significant relation that is consistent with the pecking order theory, arguing that companies with more liquidity will decrease external financing, relying on their internal funds. Thus, liquidity ratios may have a mixed effect on the capital structure decisions. It is calculated as: Liquidity (LIQ) = current assets / current liabilities.

Table 1.1 summarizes the predictions of trade-off theory and pecking order theory for the relationship between leverage and the variables which are suggested as determinants of optimal leverage as if can be seen, Pecking Order Theory and Trade-Off Theory have no common predictions for most of the proxy variables.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Trade-off theory</th>
<th>Pecking order theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability</td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>Size</td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>Tangibility</td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>Growth opportunities</td>
<td>Negative</td>
<td>Positive</td>
</tr>
<tr>
<td>Risk (Volatility)</td>
<td>Negative</td>
<td>Negative</td>
</tr>
<tr>
<td>Non-Debt tax shields</td>
<td>Negative</td>
<td>Negative</td>
</tr>
<tr>
<td>Liquidity</td>
<td>positive</td>
<td>Negative</td>
</tr>
</tbody>
</table>

**This table is constructed depending on the theoretical discussion of the variables including the model (1.2.1) as presented in section (1.2.1)**
1.2.3 REVIEW OF EARLIER STUDIES

Capital structure is one of the most continuously explored subjects of finance. Many of the empirical studies have been done on the works of Miller and Modigliani (1958). Since 1970s, the determinants of capital structure have been receiving due to the researcher’s attention. Many authors have tested the capital structure determinants from different views. This section provides the remarkable and the relevant empirical studies carried out in foreign countries and in India till 2013 have been reviewed briefly.

Gorden (1962) found that as gearing increased with size, return on investment was negatively related to debt ratio. He also confirmed the negative association between operating risk and debt ratio.

Baxter (1967) reported that leverage would depend on the variance of net operating earnings. Since a business with relatively stable income streams are less subjected to the possibility of risk, and to compare heavily on debt financing than equity. While, firms have risky income sources, they are less able to assume fixed charge sources of finance. Hence, it is concluded negative association between variance of net operating earnings (EBIT) and leverage.

Gupta (1969) analyze the industry effect and the growth effect on the financial structural relationship of American Manufacturing Enterprises for the year 1961-62. The author found that total debt ratios were positively related to growth and negatively related to size. They found significant industry effect on debt ratio. They attributed this to the very high cost of outside equity funds for smaller companies and the various psychological factors associated with their management which resulted in their being reluctant to take in new equity. However, since smaller-sized corporations faced almost the same difficulties in obtaining long-term debt as they faced with respect to outside equity, the maturity composition of their debt structure was likely to be shorter than that of their larger-corporations.

Sharma and Rao (1969) tested the M.M model using cross sectional analysis for 30 Indian engineering companies. They found that the value of a firm to be independent of its
capital structure after allowing for tax advantage. But, these results should not be generalized as the homogeneous. They are concluded that the cost of capital is influenced by debt, because of it’s tax advantages.

Toy et al (1974) reported that higher operating risk companies showed higher debt ratio. They found that debt ratios were positively related to growth, typically measured as sales growth and return on investment was negatively related to debt ratio. They also concluded that the corporation size and the industry class do not appear to be determinants of debt ratio.

Chakrabarty S K (1977) investigated debt-equity ratio in the private corporate sector in India. The author tested the relationship of debt-equity ratio as a dependent variable and age of the firm, retained earnings, profitability of the firm, total assets of the firm and capital intensity as independent variables. The author also discussed environmental factors influencing corporate debt-equity ratio and the cost of capital in India. They found that retained earnings, firm profitability, and age of the firm were negatively correlated with leverage, while capital intensity and total assets were positively related to debt-equity ratio.

Taggart (1977) presented an integrated model of the pattern of corporate finance. This study was conducted on non-financial firms during period from 1957 to 1972. The researcher used the stock-adjustment model and found that the sales level had positive influence on liquid assets, and timing considerations have a significant influence on corporate financing decision. The author suggests that when the leverage ratio is lined in target, firms use more bonds on capital and less on stock. Eventhough, permanent capital is lined in the target; firms use more of both bonds and stock.

They concluded that bonds are substituted for equity issue when the stock market is depressed and market value of debt-equity ratio is determinants of long-term debt capacity. Firms mostly base on their stock and bond issue decision on the need of permanent capital and their long-term debt capacity. The study was more concerned with financing decision of how and when firm issues corporate securities. The author further concluded that bonds are substituted for equity issue when the stock market is depressed and market value of debt-
equity ratio is determinants of long-term debt capacity. Therefore, the study has not shed light on capital structure determinants.

**Carelton and Siberman (1977)** found that higher the variability in rate of return on investment capital, lower will be the degree of financial leverage adopted. Hence, it is the variance, not the rate of return that is the ultimate determinant leverage. They also found return on investment to be negatively related to debt ratio.

**Ferri and Jones (1979)** investigated the relationship between a firm’s financial structure and its determinants factors are industrial class, industrial size, income variability, and operating leverage. They found that the industry class has positively related to leverage but not insignificant and also found that firm’s usage of debt is related to it’s size, but the income could not be shown to be associated with the firm’s leverage. While, operating leverage it does influence the debt equity ratio in a firm’s financial structure and the relationship between those two types of leverage firms similar to the negative linear form which suggest financial theory.

**Bhatt (1980)** has conducted a study on 62 engineering industry sector companies and also used the multiple regression models. The author examine that the impact of firm size, growth opportunities, volatility (risk), dividend payout ratio, profitability of the firms, debt service capacity and operating leverage on the leverage ratio of the firm. The author found that business risk, profitability, dividend payout and debt service capacity are significant determinants of the leverage.

**Masulis (1980)** conducted the study of a sample containing 106 leverage-increasing and 57 leverage-decreasing exchange offers during the period 1962-1976. The author directly examined a sample of 18 nonconvertible debt issues without any covenants to protect against the issuance of new debt with equal seniority. The author concentrated to exchange offers, or swaps are one type of the securities is interchanged one and another and it does not effect on the assets structure because of no cash transactions. The researcher observed that 3.3 percent two-day announcement return for a sample of 43 preferred-for-common stock exchange offers, and 3.6 percent return for 43 debt-for-preferred exchange offers.
The author found highly significant announcement effects on the leverage i.e., 7.6 percent for leverage-increasing exchange offers and the return was -5.4 percent for leverage-decreasing exchange offer and it was statistically significant. The researcher concluded that stock prices are positively related to leverage because a gain in value induced by debt tax shield and a positive signaling effect; and leverage increases induced wealth transfers across security classes with the greatest effect on unprotected convertible debt.

The findings were consistent with capital structure theories which explain that there is a valuable tax shield on increased leverage; debt holders' wealth is being expropriated by shareholders in leverage-increasing offers; and higher leverage is a signal of management's confidence in the future of the firm, but these empirical studies were not strongly supported the bondholder expropriation hypothesis.

Agarwal (1981) found that growth opportunities, profitability of the firm, and international risk are not adequate factors to determine the capital structure choice, and some important variables such as industry type has been ignored. He adds "country-effect" as another important variable in determining firm's capital structure.

Marsh, (1982) focused on choice of firms' issues of equity and debt financing instruments and used a sample of 748 UK companies over the period 1959-70. The author introduces the descriptive statistical model of the choice between long-term debt and equity and the coefficients of the models were estimated by using log. The author focused on the number of interesting capital structure issues such as target debt ratio; operating risk, capital market conditions, size of the company, company's assets structure and retention rate.

The researcher used three proxy variables for determinants of target debt ratio, size (logarithm of Sales). They observed that positive relation between firm size and debt ratio and fixed assets and leverage ratio and negative relation between risk and debt equity ratio. The author concluded that the market condition and timing debt ratio are different from debt and equity issues. The firm's past history and market condition heavily influence the choosing between debt and equity financing. This study was more concerned with supply side of capital structure.
Venkatesan (1983) analyzed the relationship between seven variables: industry class, firm size, debt coverage ratio, operating leverage, coverage of cash flow, business risk, growth ratio, and financial structure of the firms. They found that only debt coverage ratio was found to be important variables significantly affecting the financial structure of the firm.

Pandey’s (1984) study says that the corporate managers’ attitude towards the use of borrowings in India revealed that the practicing managers generally preferred to borrow instead of using other sources of funds because of low cost of debt due to the interest tax deductibility and the complicated procedures for raising the equity capital.

Bradley et al. (1984) study was more directed to the issue of capital structure determinants. In their study, they had taken the sample of 851 firms (regulated and non-regulated) and tested three firm specific attributes (volatility, non-debt tax shield and intensity of R&D and adventure expenditure) for their impact on debt equity ratio. They measured the risk with standard deviation of the first difference in annual earnings before interest, taxes and depreciation (EBITDA) scaled by the average value of the firm's total assets, the non-debt tax shield was measured by the sum of annual depreciation charge and investment tax credit divided by the sum of annual EBITDA and the research and development intensity and adventure expenses was calculated as sum of annual advertising and R&D expenses divided by the annual net sales.

They found that the volatility (risk) and intensity of R&D and advertisement expenditure were inversely related to leverage ratio while non-debt tax shield was positively related to leverage and industry class was found very significant factor for debt-equity ratio. However their findings for volatility and financial distress cost were consistent to capital structure theory but the finding of non-debt tax shield was somewhat puzzling. In this regard, the authors said 'non-debt tax shields are an instrumental variable for the sociability of the firm's assets, with more securable assets leading to higher debt equity ratio. The author does not use the proxy of the profitability determine the debt-equity choice.

Jalilvand and Harris (1984) find a significant adjustment of coefficient, which they interpret as evidence that firms optimize debt ratios. They report a rate of adjustment of 55.7 per cent year which suggests that US firms back quickly to their target leverage ratio when
their leverage ratios deviate from their target leverage ratio. Furthermore, they find that besides the costs and benefits of target revision, the firm size, interest rates and stock price level have a significant impact on the speeds of adjustment toward the target.

**Myers and Majluf (1984)** find that the firm size has a positive relation with capital structure while profitability may have either a negative or positive relation. A positive relation between profitability and capital structure is consistent with the static trade off theory. Where as it’s negative relation supports the pecking order theory.

**Taggart (1985)** examines that how the US firms establish their own capital structure. The study findings revealed that debt financing varies constantly with capital expenditure relative to available internal funds, suggesting that debt only is used to accommodate the desired investment level. They find that capital structure in these firms is determined in response to the need to finance new investment opportunities with available internal funds. They conclude that the comparative costs of available financing sources induce firms to use internally generated funds as a first choice before turning to raise funds externally. However, they argue that when external funds are needed, firms turn firstly to debt funds before using equity funds. They attribute this behavior to the transaction costs as well as to the asymmetric information costs which are usually associated with raising funds externally. Finally, his findings are consistent with the suggestion of pecking order theory which predicts that leverage is negatively related to a firm’s profitability.

**Pandey (1985)** examine that the 743 companies in 18 industrial groups, trend and volatilities of leverage and impact of size, profitability and growth of leverage, over the period from 1973-74 to 1980-81. The author found that about 72 to 80 percent assets of sample companies were financed by external debt including current liabilities, companies trade credit as much as bank borrowing. They revealed that the tendency of large size companies to concentrate on the higher level of leverage. The author concludes that profitability and growth have positive related with the degree of leverage. The majority of the profitability and growth groups of companies were concentrated with narrow bands of leverage.
Shrestha (1985, 1993) study of listed companies found that most of the companies were more levered. She observed that there were low capital gearing and even unbalanced pattern of capital structure in PEs. However the profitability was negative and interest payment on debt was serious issue. She concluded that most of the PEs has no transparent capital structure and company’s adhockly managers determined their capital structure without realistic parameters.

Kester (1986) found a negative significant relationship between profitability and debt ratio, which supports the pecking order theory, by preferring internal funds to external borrowing. He also considers variables such as risk, growth, size, as well as industry type, and discovers noticeable differences among the sample countries.

Storey et al (1987) found for small enterprises: greater variability in profits and in size (unlike for large firms where the reverse was the case) and that the age of an enterprise was an important factor with younger enterprises being more likely to be more profitable and grow more quickly.

Titman and Wessels (1988) analyze the financial data of 469 U.S. publicly listed manufactory firms from 1972 to 1982 by applying the linear regression model method. Their study consider eight main influencing factors that may affect the enterprises’ debt-equity choice, namely collateral value of assets, profitability, firm size, growth opportunity, non-debt tax shields, uniqueness of the product, industry classification and earnings volatility. However, their results find no evidence to support that collateral value of firm assets, non-debt tax shields; future growth and earnings volatility have an effect on business debt finance choice.

Friend and Lang, (1988) examined 984 NYSE firms from 1979 to 1983 which were examined in managerial self interest on capital structure decision. They hypothesized that closely held corporations of equal management would have higher unique risk than in publicly held firms and would have less constraints on its heavier so that a more negatively significant impact of its making debt capital. The author categorised the sample into two equal-size groups one is closely held and another is publicly held corporations depending upon the managerial insiders of stock owned firms. The author further classified these groups
(closely held and publicly held corporations) into two subgroups; one with non managerial principal investors and another without non managerial principal investors.

The researcher incorporated asset structure (fixed to total asset ratio); profitability (EBIT/ total assets); size (natural logarithm of total assets); volatility (standard deviation of EBIT/total assets); market value of equity held by dominant managerial insider; fraction of equity held by dominant managerial insider having more than 10% share; and fraction of equity held by dominant non managerial stockholder who holds more than 10% share but not the officer or director as independent variables. The authors examined that the debt ratio of 'close held' and 'publicly held' corporation with non-managerial principal were found 26% and 25% respectively as opposed to 22% and 22% respectively in 'close held' esters. They also found profitability and size were found positively related to leverage and risk was negatively related to leverage. They further observed that in 'close held' operations, there was negative impact of market value and the fraction of equity held by dominant managerial insider and the fraction of equity held dominant to the leverage. In 'publicly held' corporations these statistics were found less negatively related.

The authors concluded that management of 'close held' corporations have higher ability and desire to adjust debt ratio according to it’s own interest despite the existence of non managerial investors. The level of debt decreases as the level of management investment in the firm increases, which reflects that, the greater the non diversifiable risk of debt to management then to public investors for maintaining a low debt ratio. The average debt ratio is significantly higher than in those with no principal stockholders, then result the corporations have large non managerial investors, this result suggests that the existence of large non-managerial stockholders might make the interests of managers and public stockholders coincide.

Baskin (1989) (US) found that the pecking order theory is a descriptor of corporate finance behavior in US. The author reported that a negative relationship between leverage and profitability and the positive association between leverage and past growth as a support for pecking order theory against trade-off theory. The researcher argues that although bankruptcy costs of debt do restrict the firm’s ability to borrow, the supply of debt funds is
more elastic than that of equity funds. The author attributes the reasons to the hierarchy behavior in US firms to the transaction costs, information cost, and control considerations.

**Allen and Mizuno (1989),** tested on both market and book value of Japanese corporations. They found that there is a significant negative relation between profitability and capital structure.

**Kuvalkar SV (1990)** analyzed the capital structure of manufacturing central Public Enterprises taking a sample of 95 PEs has done a micro analysis period of (on or before) March 31, 1976. They concluded that the pattern of capital structure in all manufacturing PEs was not uniform irrespective of their industry class, industry size and profitability.

**Mayer (1990)** examines the source of industry finance in eight developed countries such as Canada, Finland, France, Germany, Italy, Japan, UK, and USA and reveals a number of stylized facts regarding corporate financing behavior, which supports the existence of financing hierarchies. They find: (1) retentions are the dominant source of financing in all countries; (2) the average firm in any of these countries does not raise substantial amounts of financing from securities markets in the form of short term securities, bonds, or equity; (3) small and medium size firms are considerably more reliant on external finance than large firms; and (4) the majority of external financing comes from bank loans in all countries. The author found evidence that bank loans are the primary source of external finance for firms in developed countries. They interpret that firms perform a central function in eliminating asymmetric information in financial markets by playing a vital role in collecting and processing information that markets are unable to do or only do so at high cost.

**Harris and Raviv (1991)** examine that an empirical study on corporate capital structure of US firms, summarize and verify the similar findings as other specialists that corporations. They found that leverage has positive correlation with tangibility; non-debt tax shields, growth opportunities and firm size, but negatively correlated with business risk, profitability, bankruptcy costs, uniqueness and advertising expenditure.
**Matthew (1991)** found that where the management’s stake is high, the leverage will be low and vice-versa and there exists a significant relationship between ownership structure and financial structure of companies.

**Israel (1991)** pointed out that the optimum debt level balances, a decrease in the profitability of acquisition against a higher share of the synergy for the target shareholders.

**Al-Khouri and Hmedat (1992)** investigated the effect of the earnings variability on capital structure of Jordanian corporations listed in ASE over the period from 1980 to 1988. They use three measures of leverage: long term debt over total assets, short term debt over total assets, and short term debt plus long term debt over total assets. The independent variables are the standard deviation of the earnings variability and the size of the firm. They conclude that the size of the firm is considered to be a significant factor in determining the capital structure of the firm, and an insignificant relationship is found between the earning variability and the financial leverage of the firm. Finally, the type of industry is not considered to be a significant factor in determining the capital structure choice of the firm.

**Diranyeh (1992)** investigates the determinants of capital structure in a sample of 24 Jordanian industrial firms. The author uses assets as in collateral ratio, non-debt tax shield, firm size, earning fluctuations, firm profitability, firm growth, and uniqueness of the firm as explanatory variables. They conclude that a significant relationship appears between capital structure of the firm on one hand, and asset collateral ratio, fluctuation in earnings, firm profitability, firms size, and uniqueness of the firm on the other hand. However, the author does not explain why the capital structure of the firm is related to both the non-debt tax shield and the growth of the firm.

**Chung-Chang (1992)** found that the leverage can be used as an instrument to transfer wealth between investors and employees. The transfer can go either direction.

**Allen (1993)** in Australia tests the prediction of pecking order theory that there should be a negative relationship between debt ratios and profitability. They attribute that to the performance of firm to build its reserve debt capacity by generating funds internally if it was profitable. They argue that in the presence of asymmetric information and the resulting
market misevaluation of equity, firms will avoid equity issuance and turn to debt which is less subjected to the adverse selection.

**Bennett and Donnelly (1993)** examine in UK firms. They found that non-debt tax shields, asset structure, size and profitability are the direct affect on the capital structure choice decision.

**Pradhan and Ang (1994)** focused on finance functions, various sources and categories of financing, tax effect on financing decision, dividend policy, and financial distress. They used a sample size of 78 major Nepalese enterprises. The authors found that working capital function was the most important than the agency relation function followed by capital structure decision function. They further found that retained earnings and bank loan were the two most widely used sources of financing. The retained earnings were most preferred source of financing because of its lower cost. The average debt ratio was observed 38%. The authors also observed that there was no definite time to borrow and issue stock; however the enterprises preferred to bank loan at lower level of debt because of flexibility in interest rate and loan covenant and that enterprise would increase the debt capital which also will be increased in tax rate and it is signaled for target debt ratio. The enterprises use a major source of finance as the bank loan because of shortage of cash. In their study, the author stated that 14 percent of the Nepalese enterprises default in probability.

**Kunt and Maksimovic (1994)** investigated the capital structure in a sample of the largest publicly companies in ten developing countries; Indian, Pakistan, Thailand, Malaysia, Zimbabwe, Brazil, Turkey, Jordan and Korea. They found variables that are suggested by agency theory explained more of the variation than those suggested by tax based theory. Moreover, for both short term and long term debt in most countries, they found that asset structure; liquidity and industry effects had more explanatory power than firm size, growth and tax effects. Leverage is found to be negatively related to net tangible assets, it is indicated that long term debt markets do not works effectively in the developing countries.

**Singh (1994)** investigated how the top hundred largest listed firms in 10 less developed countries (India, Brazil, Mexico, South Korea, Jordan, Pakistan, Thailand, Malaysia, Turkey, and Zimbabwe) financed their investment during the period 1980-1990. The author suggests
that capital structure in developing countries is largely affected by equity timing considerations and the cost of the debt. The main reason is that the relative cost of equity capital fell significantly during the 1980s due to large increase in stock prices. Together with an increase in the cost of debt, equity issue becomes relatively more attractive for financing corporate investment.

The author generally finds that firms in these countries rely heavily on external funds and new share issues to finance the growth of their investment. However, he emphasizes that these conclusions refer only to large firms in these 10 less developed countries and are unlikely to be valid for smaller firms. This situation may be applicable now to the Jordanian market, where stock prices on ASE have witnessed a considerable increase and Jordanian banks have adopted conservative credit policies. In addition, the internal and external demand for equities rose recently in response to the government’s promotional policies for stock market expansion, since foreigners are allowed to own up to 100 per cent of the stocks of all listed firms.

K.C. (1994) studied on the 37 large and medium size joint stock companies and found that a significant positive relationship of long-term debt ratio with growth opportunities, assets structure and age of firm.

Poudel (1994) studied on 15 listed companies and 20 Public Enterprizes during the period from 1983 to 1992. The author found that size and growth were positively related to leverage and risk, profitability and assets structure were negatively related to leverage for both listed companies and Public Enterprizes. They concluded that size, profitability, growth, assets structure and cash flow variability have the influence on the capital structure.

Cosh and Hughes (1994) conducted a survey that small enterprises have lower equity financing ratios than large enterprises in both manufacturing and non-manufacturing industry from 1987 to 1989. The author found the equity financing ratio initially increased and then declined as firm size increased. Internal equity from partners and working shareholders was the main source of equity finance for the small enterprises. Small enterprise also displayed lower divided payout ratios enhancing the use of internal funding.
Rajan and Zingales (1995) attempts to investigate whether the factors affect the capital structure of U.S. firms have similar influences on other countries. They mainly focus on the non-financial corporation’s of the G-7 countries during the period of 1987-1991. Since the legal and institutional structures and environments, such as tax rate and business risk, between the countries are fairly different, using the international data samples to compare the capital structure choices cross countries is essential and significant to the empirical research. They made the necessary accounting differences adjustments to compute the more comparable measures and applied both book value and market value of equity to calculate the leverage in different countries. They found that the firm leverage level across these countries is relatively similar even though their institutional structures are different. Moreover, they analyze four factors of capital structure mentioned as “profitability, asset tangibility, size of the firm, and the market-to-book ratio of investment opportunities”, except that leverage declines with the market-to-book ratio.

Deb (1995) analyzed 196 companies including 143 domestic, and 53 foreign controlled companies with an agency theoretic perspective during the period 1981-90. The researcher concludes that the funding pattern was broadly consistent with the peaking order hypothesis than the agency theoretic explanation.

Rajeswara Rao and Sadanandam R (1995) analyzed the impact of capital structure decisions on state enterprises of A.P on their operating performance, for this purpose, data of twenty state enterprises and three selected units Vizag, Hyderabad and Allwyn. AP steels and Nizam sugars were analyzed. The behavior of the selected operating performance variables and debt equity ratio is examined by computing index numbers of the relevant data for ten years. They found state enterprises, the increase in debt-equity ratio, followed by a decrease in EBIT/ capital employed ratio, indicating poor profitability and possibility of capital erosion and in case of Hyderabad and Allwyn, since it’s debt-equity ratio recorded any increasing trend, it might run into a greater risk, if the return on capital employed continues to below.

Raj S Dhankar and Ajit S Boora (1996) studied on a sample of 26 widely held Indian private sector companies from top 300 large scale companies was taken. The sample is not
homogeneous as the companies are taken from 15 different industry groups. They covered the period from 1981-82 to 1990-91. The author used both primary and secondary data source from the Bombay stock Exchange directory. They found no significant relationship between change in capital structure and the value of a firm, at the micro level. Many of the factors like the promoter's reputation, company management, conditions of economic and political, role of bulls and bears, government policies etc are not measurable as they are qualitative in nature. They also found that Indian companies do not employ a specific mode for computing the cost of capital and have no significant model for determining their target capital structure. They concluded that like perfect capital markets are imperfect, companies have no definite way of determining their optimal capital structure.

**Baral (1996)** study on capital structure and cost of capital of PEs, by using Pearson's correlation analysis and found a positive relationship of leverage with growth opportunities, profitability, non-debt tax shield (statistically not significant), interest coverage ratio, and operating cash flows; and negative relationship of leverage with business risk. They concluded that the capital structures of public enterprises are not sound; debt capital has not been raised to reap advantages of leverage. Besides this, some authors have examined the relationship of capital structure and cost of capital, by using econometric models, of particular firm or comparative study across the firms or the industries.

**Chittenden et. al. (1996)** looked at the determinants of capital structure for a sample of small enterprises which included both quoted and unquoted firms. Their results showed that profitability, asset structure, size, age and access to capital market did affect the capital structure of small firms while growth did not significantly affect because of the combination of rapid growth and lack of access to capital market. Access to capital market itself appeared to be a major factor determining the capital structure of small firms. Once flotation had been achieved, long term debt became available and collateral became less important. The POF emerged as a good explanation of small unlisted firm’s capital structure with a heavy reliance on internally generated funds being the key feature. Agency theory also provided explanations which stood up to empirical testing. The use of collateral, especially for unlisted small firms appeared to be wide spread and was consistent with its being used as a way of dealing with agency problems in lending to small firms.
Asgharain (1997) (Sweden) study of Swedish into the determinants of capital structure has been undertaken using both samples of small and large firms. They apply a cross-sectional analysis to a sample of 176 firms. The result shows that growth, size, collateral value of the assets and managers shaves holding positively affect firm leverage, while profitability affects leverage negatively.

Jordon et. al. (1998) looking at size growth, profitability, asset structure and other financial variables as determinants of capital structure, consider the impact of variables related to corporate strategy. Their results strongly supported the propositions that; both financial and strategic factors are necessary to explain corporate debt levels; industry effects are not important in explaining the capital structure of small firms; Profitability, asset structure, risk, cash flows, innovation strategy are negatively related to debt and effective tax rates is positively related to debt.

Sahu et. al. (1997) Studied on the debt financing in Indian Corporate sector, use a sample size of 170 companies for the period from 1979-80 to 1990-91. The author found that the volume of debt funds over the volume of net worth and on average debt funds constituted 71.5% of total fund sources of sample companies during 1979-91. Thus, heavy reliance by the total sample companies on debt funds.

Adedeji (1998) conducted a study with supporting the pecking order theory in the UK firms. They investigate the possible interaction among investment, leverage and dividend payout ratio. They found that paying dividend will reduce the amount of internal funds available for financing, implying a negative relationship between dividend payout and investments. However, firms with more profitable projects may tend to reduce dividend to get enough funds for financing which reduce the need for raising debt. They suggest a negative relationship between dividend payout and investments and a positive relationship between dividend payout and leverage. There is no significant interaction between leverage and investment. The author concludes that the nature of relationship between leverage either to dividend or to investment is influenced by the way a firm responds to it’s earning shortage.

Titman and Wessels (1998) demonstrated that the cross-sectional correlation between the book value and market value of debt is very large. They discuss six measures of financial
leverage in their study of the choice of the capital structure: short-term, long-term and convertible debentures divided by market and book values of equity rather than market value of equity.

**Hutchinson et. al. (1998)** revealed that “influences on total debt were found to be the net effect of opposite influences on long and short-term debt for some variables. They used three depending variables to examine influences on the maturity structure of the debt as well as the total debt was significantly correlated with leverage.

**Chen L.H , Robert Lensink and Elmer Sterken (1998)** studied the determinants of capital structure choice of Dutch firms. They found that market to book ratio is positively related to book value of leverage but negatively related to leverage of market value. The relation between market to book ratio and leverage of book value is positive whereas the negative relationship between market to book ratio and leverage of market value. They conclude that Dutch firms seem to have a preference of internal financing to external financing and debt financing to equity financing.

**Babu and Jian (1999)** studied on the determinants of the capital structure of non-financial firms in India for pre-liberalization (1990-1992) and post-liberalization (1997-1999) periods and a comparative analysis is done. They found that tax effect and signaling effect play an important role in financing decisions whereas agency costs effect financing decision of big business houses and foreign firms. They revealed that size of the firm and business risk became significant factors influencing the capital structure during post-liberalization period.

**Suresh Babu T.K (1999)** studied the capital structure practices of foreign controlled companies in India with the domestic companies during the period 1980-1994. The study inter-alia examines the components of debt, risk factors of the corporate firms. The author found that the debt equity ratio is positively correlated with financial risk and negatively associated with debt service capacity of the firm.

**Ram Kumar Kakani (1999)** Studied on the capital structure that has been concentrated in developing countries such as India. They should be taken as a sample of the
top 400 firms (by sales) listed on Bombay stock Exchange official directory. Then a sample of 100 firms was drawn from the population by using simple random sampling without replacement technique. The sample of firms was used in both the periods of study i.e. 1984-89 and 1991-95.

The study provides a) an empirical examination to be widely held in existing theories on the determinants of corporate capital structure and their maturity and b) attempts to develop and test a new theory on capital structure for large manufacturing firms in developing economies such as India, for the different empirical implications in regard to different periods of debt instruments.

They analyzed the measure of short term and long term debt rather than only an aggregate measure of total debt and the capital structure determinants of the firm and their implications of liberalization of the Indian economy. They found that the leverage ratio is positively related with the collateral value of the assets, size of the companies and that it is negatively related with the profitability and non-debt tax shields.

Wald (1999) applied theories of capital structure to cross-country comparisons. They examine the capital structure choices in France, Germany, Japan, the United Kingdom, and the United States during the period 1991 to 1992. The author emphasizes on firm characteristics that are not similarly correlated with each country firm’s leverage. They observe that variations in firms and agency problems in each country could contribute to the decision of capital structure choice.

Ghimire (1999) observed that a negative relationship of average cost of capital with the leverage, size, growth, payout ratio and positive relationship with earning variability and liquidity in trading and manufacturing sector. The author further observed that a positive relationship of average cost of capital with leverage, growth, earning variability and liquidity and negative relation with size and payout ratio in banking and financial sections but all the variables have statistically insignificant.

They suggest that most of the determinants of capital structure presented by the theory of finance including size, age, profitability, growth, business risk, asset tangibility, stock-turnover ratio and debtors turnover as independent variables and an effect on both long-term and short-term debt ratio of U.K. SMEs. They used long, short, total debt and liquidity. Short-term debt increases during economic recession. They found that size, past growth, future growth opportunities, operating risk, asset structure, stock turnover, non-debt tax shields and net debtors all seem to have a positive effective on the level of debit in small firms.

This study showed that small firms with rapidly growing rates were likely to lack enough earning to finance all of their growth internally. Small business owners do not willing to issue of equity shares, due to control considerations, asymmetric information costs problems, and the relatively higher flotation costs. The authors conclude that fast growing firms are likely to issue more debt. Moreover, a high fixed asset level and high inventory level were shown to result in high levels of leverage.

Hall et. al. (2000) conducted a study on the capital structure of SMEs from six former Soviet-Bloc countries and compared it with that of SMEs in 13 Non-Former Soviet-Bloc European countries. They observed in capital structure (long-term and short-term debt) between the two groups and this led to analysis of the determinants of capital structure such as; profitability, asset structure, future growth potential, growth rate, company size, company age, non-debt tax shields, stock-levels and risk. The results indicated that whole some of the differences in capital structure can be explained by variations in the determinants, some can’t this implies that other economic and social/ political factors are at play.

Banerjee et. al. (2000) examined that the determinants of optimal capital structure in the UK market, such as variability of earning, tangibility of assets, firm size and profitability, non-debt tax shield, uniqueness and industry classification. They found that all explanatory variables used as determinants of optimal capital structure were as hypothesized in the UK (signs), except growth, where a limited support is found for a positive effect arising from growth opportunity on the leverage. This result implies that little debt is available to finance growth in the UK.
Lopez-Gracia and Aybar-Arias (2000) examined the financial behavior of small and medium sized Valencia companies influenced by size and business sector. They find that size influences a company’s self financing strategies and that the business sector influences short-term financial policy.

Berger et. al. (2000) studied the growth and control aversion among 81 Swedish SMEs during the period from 1996 to 1998. They look to accept outside control in the firm in order to grow. They indicate that technology development, financial weakness, growth, size and bank loan applications are negatively correlated to control aversion, affecting the attitudes of firms, while the results observed in studies of the determinants of the capital structure of larger firms are very important; they may not be specifically applicable to SMEs.

Bevan and Danbolt (2000) found significant differences in the determinants of short-term and long-term debt. In particular, the short-term debts like trade creditors, and bank overdraft, and average payable accounts for more than 62 percent of total debt of the U.K. companies, the results are particularly sensitive to whether such debt is included in the leverage measures. Hence, their findings reveal that the analysis of corporate structure is incomplete without a detail.

Bhole (1980, 2000): has shown that leverage ratio is positively related with tax deductibility, supply factor, cost of equity, growth rate, financial balance and inflation rate and it’s negatively related with profitability and cost of borrowings.

Manos, Green and Murinde (2001) study comparing the capital structure of group affiliated firms and independent firms in India. They found that group affiliation has a strong affect on the leverage decisions of group-affiliated firms. The authors also find that neither size nor growth matters for the capital structure of group-affiliated firms; these factors are critical for the capital structure decisions of independent firms. Only liquidity has a positive impact on the capital structure decisions of group-affiliated firms while intangibility and profitability, group debt and group sizes have a negative effect.

Ram Kumar Kakani, Biswatosh Saha and V.N Reddy (2001) found that size, market expenditure and international diversification of a firm had a positive effect with its
shareholders value. An increase in size probably increases a firm’s financial clout and its market power while an increase in the marketing spending by a firm probably increases its market share.

**Casser and Holmes (2001)** found that equity accounted for 43 percent of the financing of 2030 Australian firms in the Business Longitudinal Study (BLS) over the period 1995-1998. They found a positive relationship between long-term debt and firm size but no size-related relationship for other forms of debt financing. Equity financing was positively to return on assets suggesting a preference for using retained earnings when available.

**Ozkan (2001)** studied that determinants of target capital structure of 390 non-financial and non-regulated UK firms during the year from 1984-1996 and the adjustment process towards the target level. The author observed that the effect of the profitability, growth opportunities, non-debt tax shield and liquidity have negative relation to the leverage whereas the size is positively related to leverage with limited support. The author concluded that firms have long-term target leverage ratios and they adjust to the target ratio impacts that the costs associated from their target ratios and the cost of adjustment are equally important for firms.

**Al-Hayjneh (2001)** examines the determinants of capital structure in 12 Jordanian industrial firms. The author uses asset collateral ratio, non-debt tax shield, and financial leverage, uniqueness of the firm, firm size, operating risk, and ownership of the firm as determinants of capital structure. They found that a significant relationship appears between capital structure of the firm on one hand, and asset collateral ratio, fluctuation in earnings, firm profitability, firm’s size, and uniqueness of the firm on the other hand. However, the author does not explain why the capital structure of the firm is related to both the non-debt tax shield and the growth of the firm. The author concludes that Jordanian industrial firms depend on two ways of financing; internal financing from retained earnings, and external financing from long term debt. However, internal financing had the bigger share in the firm’s capital structure which represented 75 percent of the firm’s capital structure, and only 25 percent lifted for long term debt.

**Heshmati A. (2001)** examines the significant heterogeneity associated with the size of firms, indicating that micro and small enterprises (MSE’s) need to be analyzed independently
of larger companies. While the relationship between leverage and variables such as growth, tangibility, size, profitability, non-debt tax shields and age were found to be consistent with conventional capital structure theory, and other variables such as income variability and uniqueness produced insignificant results. He found the expected growth; size and profitability have negative effects on leverage.

Pandey I M (2001) examined that the determinants of Malaysian companies over the period from 1984 to 1999. They found that growth and size of variables have a significant positive relationship with all types of debt ratios and profitability has a significant negative relationship. Risk is negatively related with long term debt ratio and positively with short term debt ratios and also found tangibility has a negative association with book value and market value of short term and long term debt ratios. This relationship with book value long term debt is insignificant. The author reveals that profitability; firm size, volatility and asset structure variables are a significant impact on short term and total debt ratios. Profitability is the most persistent variable that has a significant negative influence on all types of debt ratios.

Bevan and Danbolt (2002) tested the determinants of capital structure in the UK non-financial firms by using the measures of leverage such as non-equity debt ratio, total debt ratio, adjusted debt ratio. All these measures were regressed on market to book value, natural logarithm of sales (size), profitability, and tangibility of assets. They found that determinants of gearing were significantly changed with respect to each measure of debt used.

Ravinder Vinayek and Ravi Kumar Gupta (2002) conducted a study on capital structure of corporate giants in India by analyzing short term, long-term and total debt of firm and the extent to which different firm specific factors could explain variations in the corporate debt ratios. The researchers used a sample data drawn from the corporate data base (prowess) of the centre for monitoring Indian economy [CMIE] & the Bombay stock Exchange official directory and annual reports of the companies. They found that the negative relationship between return on investment and short-term debt and higher sales growth rates were associated with a stronger negative impact of return on assets on the use of both short-term and long-term debt. Firm size was positively associated with debt ratios.
Dividend payments, asset composition and operating leverage were not found to be related to use debt.

**Bradely, Jarrel and Kim (2002)** found that debt to asset ratio is negatively related to both the volatility of annual operating earnings and advertising and Research & development expenses.

**Bhaduri and Saumitra N (2002)** investigated the Indian corporate sector from 1989 to 1995. They found that the coefficients on the growth factor were significant positive to the total borrowings, it indicates the fact that growth opportunities add value to the firm and thus increase leveraging capacity while, collateral value and size have a negative but insignificant relationship with borrowing. Finally, there was strong evidence supporting industry effects in explaining observed variations in capital structure across firms.

**Bhaduri (2002a)** found that large size Indian firms depend more on the long term debt, and the small firms depend more on short term borrowing. Cash flows and uniqueness of firm are found to be negatively related to leverage. Finally, a positive association appeared between growth factor and leverage. The author concludes that assets structure, growth, uniqueness, firm size, and cash flows played an important role in determining the optimal capital structure of Indian firms.

**Pradhan et. al. (2002)** analyzed on financial distress cost in Nepalese public sector. The authors collected data from 1997 to 1999 and used portfolio analysis and econometric analysis. The authors observed that more than 50% public enterprises were in loss; labor productivity and debt coverage ratios were deteriorated by increased financial distress; the profitability and liquidity were lower in financially distressed enterprises; and the return on equity, liquidity, labor productivity and debt capacity were also lower in financially distressed enterprises. The authors further found that there was lack of legal frameworks to corporate restructuring. However, these studies were focused on financial distress (bankruptcy) aspect of capital structure; other aspects of capital structure remained unexplored.
Chen Long-Qi and Wen Yue-Fang (2002) investigated Taiwanese listed corporations with traditional determinations. The authors found that size, competitions levels, and growth were positively relevant to total debt ratio. Large firms tended to be more diversified and as a resulting had more risk diversifications; therefore, they could reduce the probability of bankruptcy. However, business risk, profitability, repayment ability and non-debt tax shields appeared to be negatively related to total debt ratio. While facing less business risk, firms that had a better capacity to bear financial risks were more willing to borrow funds. Moreover, similar to the pecking-order theory, the results showed that firms with more profit will use internal funds instead of external debt. For non-debit tax shields, this could result in some benefits and could offset debit shield; therefore, firms with more non-debt tax shield tended to leverage less.

Adrian Zoppa and G.P.M.C. Mohan (2002) found that growth opportunities, size were positively correlated to capital structure and firm age, asset-structure are negatively correlated with capital structure (leverage).

Mohanty (2002) found that leverage is negatively related with profitability and value of the firm both within an industry as well as within the Indian economy and also found that companies spend a large sum of money on advertising and research and development expenditure are the least levered.

Enard Mutenheri and Christopher Green (2002) found that a negative relation between firm size and leverage. Asset tangibility and growth rate are positive and significantly related to the debt ratio. Tax rate is a significant negatively correlated to the debt ratio. Firm risk and bank liquidity are significant positive relation with the debt ratio. They suggest that firm size, asset tangibility, tax rates, cash flows, earnings volatility and bank liquidity are important determinants of corporate capital structures in the post-reform era but profitability, dividends, cash flows, stock market development and inflation rate are not significant determinants of corporate financing decisions. They conclude that listed firms rely heavily on external finance, especially short term bank financing while long term bank loans make little contribution to financing of the corporate sector.
Rajan and Zingales (2002) found that the extent to which firms are leveraged is fairly similar across the G-7 countries, with only United Kingdom and Germany being relatively less levered.

Hall (2002) found that the industry debt to equity norms are significantly more negative than returns for the firms moving closer to these norms.

Casser and Holmes (2003) suggested that asset structure, profitability and growth were important determinants of capital structure. An asset structure is significant impact on the capital structure (or) financing measure employed.

Philippe, et al., (2003) analyzed the determinants of the capital structure for a panel of 106 Swiss companies listed in the Swiss stock exchange for the period of 1991-2000 and found that the firm size, assets tangibility and business risk have positively associated with leverage but profitability and growth opportunities are negatively associated with debt ratio. These relations are consistent that both the pecking order theory and trade off hypothesis of capital structure of Swiss companies, although to validate the latter theory.

Narasimhan and Vijaya Lakshmi's (2003) study carried out from 1989-2002 of ten major industries found that business risk has increased from 1996-97 and found a decline in ROCE in industries where there was more competition. When firms needed more finance to their business, to decide whether to raise capital or not while debt rate it’s lower than equity it has preference over equity. Firms, which expect higher growth in the future, use less debt capital initially. In this study, the author found that firms are not aware of business risk. They were increasing the debt when ROCE was declining and the dividend pay-out ratio has increased in the given time period, inferring that firms were not taking steps to plough back internal capital.

Frank and Goyal (2003) proposed a model to test the pecking order theory on a broad cross-section of publicly traded firms in US. The author used a model of the pecking order theory requires new debts issuance to have a one to one relationship with all of the components of the financing deficit. The author claims that pecking order theory implies that the financing deficit should eliminate the effects of other explanatory variables. They find
that the estimated coefficient on the deficit variable is far below one and that equity issue tracks the financing deficit quite closely while debt did not do so.

Moreover, they claim that if the pecking order theory is held, the deficit variable should overwhelm the effects of the other explanatory variables in the conventional leverage equation. However, they find that adding the deficit variable to the convention leverage regression does not change the sign and the significance of other explanatory variables, implying that the adverse selection costs is one among other factors affecting the firm’s financing behavior. Finally, they conclude that the pecking order theory is more applicable to large firms than small forms, since their sample of large firms provides more support for the pecking order than their small-sample firms.

**Hutchinson (2003)** reported that growth is not significant determinant of SME borrowing either in short-term (or) long-term. But profit, asset structure, size, and age appear to be much more important. Growth seems to play a part in determining the long-term and short-term debt in the business services industry and short-term debt in manufacturing, distribution, construction industries.

**Wolfgang Brobetz and Roger fix (2003)** use six variables like tangibility of assets, firm size, and profitability, and volatility, non-debt tax shields and uniqueness of the product. The researchers found that asset structure and firm size is positively correlated with leverage and profitability and growth negatively correlated with leverage.

**Deesomask et. al. (2004)** determined the debt-equity choice, in an Eastern Asia and Australian firm’s analysis, concerning firm size, non-debt tax shield, and liquidity and has price performance as the main influencing factors. They found that positive effect of firm size and negative effect of growth opportunities, non-debt tax shields, liquidity and share price performance on leverage. Profitability has significant influence on the capital structure of Malaysian firms and firm size has no effect on Singaporean firms.

**Bevan and Danbolt (2004)** suggested that the relationship between leverage and it’s determinants are affected by the methodology used to analyze the sample data, specifically whether it controls for firm and time specific heterogeneity or not. The authors used some
measures from market to book value, natural logarithm of sales (size), profitability and tangibility of asset as determinants of capital structure. In addition to the time invariant and firm specific heterogeneity, the focus was on the variety of long run and short run debts components rather than on the aggregate measures. The researchers found that large firms tend to use long and short term debt more than small ones. Tangibility is found to be negatively related. However, they also find that profitability firms tend to use short term debt more than less profitable one. They observe that there have been significant differences in the results of pooled data and panel data analysis.

**Sharma, Thenmozhi and Preethi (2004)** found that firms using non-traditional debt have higher leverage and presence of non-traditional debt has positive influences on financial leverage. The relationship is robust to controlling for determinants of leverage and accounting for non-traditional debt increases the ability of the model to explain cross sectional leverage. They also establish that the firm size, cash constraint, profitability, market to book ratio, volatility of earnings and bankruptcy cost discriminate firms with non-traditional debt and those without non-traditional debt.

**Bhole L.M and Jitendra Mahakud (2004)** analyzed the trends in the corporate capital structure in India in respect of public limited companies and private limited companies during 1996-2000. They showed that the impact of liberalization on the determinants of the corporate capital structure in India. They found that firm size, growth rate, collateral value of assets are positive related with the leverage ratio and profitability, liquidity, non-debt tax shields are negative related with the leverage ratios.

**Pandey I M (2004)** examined the relationship between capital structure and market structure of 208 Malaysian companies for the period from 1994 to 2000. The author found that a saucer-shaped relationship between capital structure and profitability because of the interplay of agency costs, costs of external financing and the interest/tax shield. They concluded that size and tangibility are positive and growth, risk and ownership have a negative influence on capital structure.

**Keshar J. Baral (2004)** examined the determinants of capital structure of the companies listed to Nepal stock exchange as of July 16, 2003. The author found corporate
size, business risk, growth, and degree of leverage were positively related to leverage while earning rate, dividend payout and debt service capacity are negatively related with leverage. They concluded that company size, growth of the firm and profitability play a major role in determination of the financial leverage in financial institutions and dividend payout ratio, operating risk, debt service capacity, and operating leverage do a significant role. Further, the author suggests that operating risk and debt service capacity are statistically insignificant relation with the leverage and significant associated with size and growth.

Shah Atta, and Hijazi (2004) conducted an empirical study on the determinants of capital structure of Pakistani non-financial firms. The researchers used asset structure, firm size, growth opportunities and profitability as explanatory variables. They found that asset structure and firm size are positively correlated; and profitability and growth are negatively correlated with the leverage.

Patrik Bauer (2004) analyzed the capital structure of listed companies in Vise-grad countries during the period from 2000 to 2001. They found firm size is positively correlated with leverage and profitability, tangibility and non-debt tax shields are negatively correlated with leverage and also found a negative relationship between leverage measured in market value and growth opportunities.

Chen (2004) investigated that whether and how the determinants of capital structure in Western countries are also feasible in Chinese economy. They use firm-level panel data of 77 Chinese non-financial listed companies from the year 1995 to 2000. They report that the modern capital structure theories such as the Pecking order theory and the trade off theory are less applicable to the financing choice of Chinese firms because the distinctive institutional features, transitional nature of publicly listed corporations, this leads to appear a new Pecking order theory for Chinese firms capital structure. As per the new pecking order theory, firms’ primarily should consider internal source of financing, then issuing equity and lastly issue of long-term debt. The author found that profitability has negatively related with financial leverage and growth opportunities and tangibility are positively related to financial leverage in Chinese firms.
Hovakiman et. al. (2004) found that the negative relationship between leverage and profitability is not because profitability affects the leverage level, but because of it’s effect on the deviation of leverage level from target level. They argue that the negative relationship between profitability and leverage will persist for firms that follow pecking order because these firms have no incentive to offset the effects of profitability on leverage.

Hutchison P, Hall G. and Michaelas N. (2004) found that there are strong relationships between profitability, tangibility, size of the firm and age of the firm, and leverage. Growth rate is not significant impact on capital structure except for long-term debt for medium-sized firms. Age is significantly negatively related to long-term, short-term debt for SME’s but not for small firms.

Voulgaris F. Asteriou D and Agiomirgiankis G. (2004) investigated the determinants of capital structure for both SME’s and LSE’s of Greek manufacturing sector, the sample size of 143 SME’s and 75 LSE’s for the period from 1988 to 1996. They found that profitability is major determinant of capital structure for both size groups and size and a higher fixed asset component are positively associated with higher short-term as well as long-term debt ratio.

Wan Mursyidah Binti Wan Ismail (2005) examined that the determinants of capital structure in 116 Malaysian companies during the period from 1993-2003. They found that profitability, non-debt tax shields and size are positively correlated with debt ratio and growth opportunities and asset structure are negatively correlated with debt ratio.

Sudhansu Mohan Sahoo and G Omkarnath (2005) analyzed the capital structure of the Indian corporate sector, the time period ranges from 1980-81 to 2003-04. They found that non-debt tax shield, asset structure, firm size and profitability of the LpLco’s were highly significant factor that determines firm’s total debt in capital structure, among these four variables, non-debt tax shields is negatively related to total debt, while asset structure, firm size, profitability are positively related to total debt.

Sacheendaran V (2005) studied the trends in financing pattern of non financial and non-government public limited companies in India over the period from 1984-85 to 2002-03.
They analyzed increasing trends towards internal sources in their capital structure among external sources, bank borrowing assumed greater share.

**Chandra Sekhar Misra (2005)** studied on capital structure determinants of 41 profit making manufacturing PSUs, during the period 1998 to 2003. They found that growth is positively related and tangibility and profitability are negatively related to leverage. Firms with less effective tax rate have gone more debt while non-debt tax shields, volatility and size was found to be significant. They suggest that the capital structure of the profit making PSUS is affected by asset structure, profitability and tax.

**Gaud, Philippe, Elion, Martin Hoesli, and Andre Bender (2005)** examined Swiss companies for the period of 1991 to 2000 with dynamic tests. The authors found that firm size and the existence of tangible assets are positively related to leverage. However, growth and current profitability were negatively associated with debt ratio. Firms with fewer tangible assets were more limited to asymmetric information problems and were more likely to use debt when they needed external financing. Additionally, the negative relationship between profitability and leveraging again provided support for the pecking-order theory.

**Han Suck Song (2005)** investigated that the determinants of capital structure of 6000 Swedish firms based on a panel data from 1992 to 2000. The author found that tangibility, profitability and size are positively significant related to three debt ratios and income variability, non-debt tax-shields are related to the short and long-term forms of debt, and also growth rate is not related to any of the three debt measures.

**Huang and Song (2005)** investigated the determinants of capital structure of Chinese firms. They found that profitability, growth opportunities, managerial shareholdings, and non-debt tax shield are negatively correlated to leverage while firm size and tangibility variables are positively correlated to leverage and the tax rate is positively related to long term debt ratio and total debt ratio.

**Dinesh Prasad Gajural (2005)** studied on the capital structure pattern and it’s determinants for a panel set of 20 non-financial listed in NEPSE for 1992-2004. They found asset structure and size are positively related to leverage while liquidity, risk, growth, and
non-debt tax shield are negatively related to leverage and also the macro economic factors such as GDP, inflation, and capital market influence in firm’s capital structure decisions.

**Colombage (2005)** empirically investigated on the capital structure of Sri Lankan firms. They confirmed the POT to a greater extent than predictions of information asymmetry and static trade-off considerations. They found a negative relationship between profitability, growth, and retained earnings with leverage.

**Fakher Buferna, Kenbata Bangassa and Lynn Hodgkinson (2005/08)** found that profitability has a positive relation with total debt ratio and short term debt ratio and statistically significant but significant negative relation with long term debt ratio. Growth is negatively significant with total and short term debt ratio but positively insignificant correlation with long term debt ratio. Tangibility has a positive and insignificant correlation with all types of debt ratio and finally, size has a positive sign with all types of debt ratio but statistically insignificant with long term debt ratio.

**Fattouh, Scaramiozzino and Harris (2005)** demonstrated that the proxy variables for asymmetric information cost such as firm size, non-debt tax shields, asset tangibility and profitability are significantly related to capital structure and their results are consistent with the pecking order theory.

**Sogorb-Mira (2005)** conducted a study of 6482 non-financial Spanish SMEs during period 1994-1998. They found that non-debt tax shields and profitability variables are negatively related to leverage while size of the firm, growth opportunities and asset tangibility variables are positively related to leverage.

**Narender V and Abhinav Sharma (2006)** studied on the capital structural policies adopted by the profit making central public enterprises for the period 1994-95 to 2004-05. They found that the tangibility of assets plays a significant role in determining the leverage of the PEs, but non-debt tax shield and tax, are not significant and are not utilizing debt to pay less tax, instead using their internal resources for the PEs in expansion and financing. The PEs is mobilizing long-term resources for meeting short-term requirements.
Lucey and Bhaird (2006) studied on the 299 Irish SMEs. The POT and life cycle model were reviewed to formulate testable hypothesis. They indicate relationship between determinants identified viz. age, size, ownership structure (mgt control) and growth opportunities and the use of long-term debt, external equity and internal equity. They also found the difference between age, size, sector and growth opportunities and means of collateral used to secure debt financing.

Lujie Chen (2006) found that growth rate, firm size, tax shields and asset compositions are statistically correlated to particular type of debt.

Syed Tahir Hijaji and Yasir Bin Tariq (2006) analyzed the determinants of capital structure of 16 firms in cement sector listed on the Karachi stock exchange for the period 1997-2001. They found an inverse relationship between size and profitability while tangibility and growth were positively correlated with debt ratio. The authors conclude that profitability, tangibility, and growth were statistically significant.

Yasir and Hijazi (2006) studied on the determinants capital structure in cement industry of Pakistan. They used four independent variables of size tangibility, growth and profitability. They found growth and tangibility have negatively related with leverage. Firm size and profitability is positively correlated with leverage.

Guven Sayilgan, Hakan Karabacak and Guray Kucukkocaoglu (2006) analyzed the impact of firm specific characteristics on the corporate capital structure decision of 123 Turkish manufacturing firms listed on the Istanbul stock exchange (ISE), over the period 1993 to 2002. They found that variables of size and growth opportunities in total assets have a positive association with the leverage, however; profitability, tangibility, growth of the firm and non-debt tax shields has negative relation with debt ratio.

Huang and Song (2006) exercised a new data set of both market and accounting value to analyze the capital structure models in more than 1000 Chinese listed companies over the period 1994-2000. In their research, they indicate that firms in developing countries tend to have lower long-term debt. Moreover, firm size, non-debt tax shields and tangibility are positively related to leverage of Chinese firms and profitability is negatively correlates with
leverage of Chinese firms. But, these results differ with others as that debt in Chinese firms have a negative relationship with earnings volatility.

Kim, Hyesung, Almas Heshmati, and Dany Aoun (2006) developed static, restricted dynamic and unrestricted dynamic models from Korean listed manufacturing firms. They suggested that growth had a negative relationship with debt ratio. In addition, a positive and statistically significant relation between size and leverage is interpreted as a result of larger firms having a better ability to raise debt and being less vulnerable to bankruptcy than smaller firms. Besides, profitable firms prefer to rely on internal financing rather than seeking external loans. Further, the coefficient of non-debt tax shields was negative and significant, which means the main tax shield seemed to be generated from deducting interest expressed. Furthermore, chapbook firms had more leverage than their non-chaebol competitors, even after controlling other determinants. However, we must interpret it with a caution; chaebol-affiliated firms had a high debt ratio not only because they were chaebol affiliated, but also because of other characteristics as mentioned above.

Chen, Jian, and Roger Strange (2006) attempted to discuss the determinants of the capital structure with a sample of Chinese listed companies. The final results suggested that profitability is the strongest and most highly significant predictor of financing behavior and that it appears to be negative. The negative signs indicated that firms with more profitable projects are likely to use internal funds rather than debt. In addition, firm size and tax had a significant negative effect on debt ratio. Furthermore, business risk and tax had a significant negative effect on debt ratio. Furthermore, business risk and sales growth variable had a positive, but not significant coefficient. Finally, as firms with high properties of intangible assets, they were more likely to have higher borrowing, though the coefficients were not quite statistically significant.

Xiao-Zuo-Ping (2006) investigated the determinants of financial service analysis of cross sectional data of 50 Non-financial Chinese listed SMEs. They examined firm characteristics including size, tangibility, profitability, growth, non-debt tax shields and industry. They found and suggested that profitability is negatively related to debt ratios, size,
and tangibility influence positively financial policy. While growth and non-debt tax shields do not significantly affect financial decisions.

**Qian et. al. (2007)** examined that the determinants of capital structure for Chinese listed companies over the period from 1999 to 2004. The author used static panel-data models and found that firm size, tangibility and state ownership are positively correlated with firm’s debt ratio while volatility, non-debt tax shields and profitability have a negative relationship with the debt ratio.

**Delcoure (2007)** found a positive relationship between firms’ tax rate, non-debt tax shield, and asset tangibility and leverage of the firms while a negative relation between profitability and leverage ratio. Furthermore, the relationship between firm size and earnings volatility with the leverage ratios are found to be puzzling as the significant signs change across countries and among the different dependent variables. Finally, they conclude that the trade-off theory, agency costs theory and pecking order hypothesis explain the capital structure puzzle only partially in his sample countries.

**Santi Gopal Maji and Santanu Kumar Ghosh (2007)** studied on 160 Indian companies selected from nine manufacturing sectors for a period of 14 years from 1990-91 to 2003-04. They suggested the positive relationship between equity and firm Size an inverse association between size and debt capital and this proposition. The positive association between size and debt suggests that the cost of financial distress is low and agency cost debt is inversely related firm size. Profitability is significantly negative in association with debt ratio. Tangible Assets found to be positive and statistically significant with leverage and no relationship between dividend and leverage.

**Mallikarjunappa.T and Carmelita Goveas (2007)** attempted to analyze the determinants of the capital structure of pharmaceutical companies in India during the period from 1993 to 2002. They found that debt service capacity, and liquidity have inverse relationship with the debt-equity ratio, while non-debt tax shields and business risk have direct relationship with the debt-equity ratio.
Frank and Goyal (2007) studied on publicly traded firms in the U.S. over the period 1995-2003 and evaluated the importance of 36 factors (both firm and economy-specific) on leverage. They concluded that seven factors- median industry leverage, market-to-book ratio, asset tangibility, dividend payout ratio, size of the firm, profitability and expected inflation are the most reliable ones having influence on the capital structure decision.

Joshua and Nicholas (2007) examined the effect of industry classification on the capital structure of SME`s in Ghana. They found that SME`s in Agricultural sector exhibited the highest capital structure and asset structure while the wholesale and retail trade industry have the lowest debt ratio and asset structure. Also, Agriculture, Pharmaceutical and medical industries depend on more long term and short term debt than the manufacturing sector. Information and communication, wholesale retail trade sectors are more likely to use short-term credit than manufacturing sector. Furthermore, the construction and mining industry was less likely to depend on short-term debt while hotel and hospitality depend more on long term debt and less on short-term debt. These results clearly show that industry effect is important in explaining the capital structure of SME`s and that there are variations in capital structure across the various industries.

Salawu, Rafiu Oyesola (2007) examined an empirical analysis of the capital structure of 50 non-financial quoted companies in Nigeria over the period from 1990 to 2004. They found that the profitability is negatively correlated with all type of debts. Collateral value of the asset is positively correlated with total debt and long-term debt, but negatively related to short term debts. Growth opportunity is positively related to both total debts and short term debts. The size of the companies is positively correlated with total debts and short term debts.

Attaullah Shah, Safiullah Khan (2007) studied on determinants of capital structure of the Karachi stock exchange listed non-financial firms. They found that tangibility is significantly related to debt. Size has a positive correlation with leverage but is insignificant. Growth has negatively significant relation with leverage. Profitability is significant negatively related to debt ratio and earning volatility is insignificant relation with debt.

Rasa Norvaisiene and Jurgita Stankeviiciene (2007) found a weak positive correlation between tangibility and the level of debts, an average positive correlation between
the company’s size and the level of long term liabilities and the level of financial debt and an 
average positive correlation between the growth capacities reflecting indicator Tobin Q. a 
weak negative statistically significant correlation was determined between free cash flows 
and the level of financial debts. The average negative correlation between return on assets 
and the total liabilities ratio, strong negative relationship between return on assets and the 
total debt ratio. They conclude that the dependence between the capital structure and such 
internal determinants as return on asset, tangibility, company size, growth prospects and free 
cash flows.

**Boopen et al (2007)** found that profitability, size, tangibility and liquidity are 
positively related with debt ratio and business risk, non-debt tax shields, growth 
opportunities do not seem to affect the capital structure.

**Ed Vos and Shen Yi (2007)** found that firm size has a significant and positive 
relationship with average for low-growth firms. Large firms associated with low-growth will 
use more debt to finance their business and smaller firms with low-growth will finance their 
business use more own equity and use less debt.

**Joshua (2008)** Studied on the capital structures of publicity quoted firms, large 
unquoted firms and SME’s in Ghana. They found that firm age, firm size, asset tangibility, 
profitability, volatility and ownership control are important factors that influencing the 
Capital Structure decisions of Ghanaian firms. The results did not show significant difference 
between the capitals structures of Publicity quoted, large unquoted firms. They reveal that 
short-term debt constitutes a high proportion of total debt of all the sample groups.

**Antoniou et. al. (2008)** conducted a comparative study between capital market-based 
systems (USA and UK) and bank based financial systems (France, Germany, and Japan). 
They found that in both types of financial system, leverage ratio is to be positively related to 
the tangibility and the size of the firm, while it is negatively related to the share price 
performance, growth opportunities and profitability. They conclude that there are many 
factors influencing the capital structure of a firm such as the corporate governance, tax 
system, borrower-lender relation, and level of investor’s protection.
Shanmuga Sundaram.G. (2008) found that size, growth and business risk are positively related with debt-equity ratio and profitability is negatively related with debt ratio.

Kuldip Kaur (2008) studied on the factors that determine the extent of debt equity mix in 70 Indian firms from three industry groups namely textile industry, engineering industry and chemical dyes and pharmaceutical industry. They analysed that the size of the firms, proportion of assets to total assets, risk involved in business and the debt servicing capacity of the firms are the important factors affecting the debt-equity mix of the firms. They found that the positive relationship between return on investment and debt-equity ratio implies that higher the return on investment and greater will be the debt equity ratio of that firm. The low debt equity ratio in large sized firms implies that these scare relying more on equity and by this they may be trying to the cost of borrowing in the form of high interest payments.

Gunasekharan M (2008) found that the major factors influencing the capital structure in Indian industries are collateral value of assets and liquid assets in aluminum industry, corporate size, liquid assets, and growth rate and liquid assets in cement industry, and business risk in automobile industry, profitability and trading on equity, asset structure and corporate size in IT industry, collateral value of assets in leather industry, liquid assets and asset structure in paper industry, asset structure, profitability and corporate taxes in pharmaceuticals industry, profitability, trading on equity and asset structure in steel industry and trading on equity, liquid assets and asset structure in sugar industry. All the components of capital structure have significant relationship with other components of capital structure.

Yau, Lau and Liwan (2008) tested the pecking order theory of capital structure for Malaysian firms from 1999-2005. They found profitability; firm size and asset tangibility are positively related to firm’s debt levels, and a negative correlation between long-term debt and external financing needs.

De Jong et. al. (2008) studied on the specific factors that determine the firm capital structure such as firm size, assets tangibility, profitability, firm risk and growth opportunities as independent variables and leverage (debt assets ratio) as dependent variable among these variables differ with other countries. They indicate that the effect of country-specific
determinant factors influence the role of specific firm determinant factors and accepting the direct, specific, usual effect of country on capital structure.

**Fan, Titman and Twite (2008)** examined the capital structure and debt maturity choices in a cross-section of 39 developed and developing countries firms. The author found that a stronger relationship between profitability and leverage.

**Azhagaiah and Gangadevi (2008)** studied that the leverage and financing decision for the selected 30 electronic companies for the five years period ranging from 1999 to 2003. In this study, they found that the company which has a high operating leverage should be kept low financial leverage and vice-versa. So, it is desirable that a company has low operating and high financial leverage.

**Balram Dorga and Shaveta Gupta (2009)** focused on the various factors influencing capital structure and their impact on the decision-making ability of the SMEs. They found that a highly significant association of capital structure with firm growth, investment level and degree of competition but not significant by owner’s qualification.

**Kaur, Raghvir; Rao, N. Krishna (2009)** found that profitability; growth opportunities, liquidity and business risk are the most important determinants while firm size and asset structure are not significant. These results are consistent with Trade-off theory rather than Pecking order theory.

**Abor J. And Bickpe N. (2009)** found that firms age, size, asset structure for Malaysian firms from 1999-2005. They found profitability. Firm size and asset tangibility are positively related to firm’s debt levels, and a negative correlation between long-term debt and external financing needs.

**Debabrata Datta and Babita Agarwal (2009)** studied on the determinants of capital structure of 76 Indian firms for the period 2003-2007. They found that Indian firms financing with internal funds, has emerged as a major feature of corporate capital structure. They conclude that the capital structure pattern on an average portends well for long term development of Indian corporate sector.
Shumi Akhtar and Barry Oliver (2009) examined that the determinants of capital structure of 360 Japanese multinational and domestic corporations over a 10-year period to 2003. They report that Japanese multinational corporations are significantly older, larger and have significantly business risks, higher agency costs, free cash flows, foreign exchange risks, growth opportunities, political risks, non-debt tax shields, and profitability is significantly lower bankruptcy risks and collateral assets than Japanese domestic corporations. They found that firm age, business risks, free cash flows, growth, non-debt tax shields, political risks and profitability are the significant variables that explain the difference in leverage between the domestic and multinational corporations in Japan.

Zaid Zurigat (2009) investigated the empirical evidence on the determinants of optimal leverage ratio for Jordanian firms listed in Amman stock exchange over the period from 1997 to 2005. They found that firm size, profitability, and tangibility were positively related with leverage and statistically significant under the partial adjustment model.

Lahcen Achy (2009) found that a negative relationship between asset tangibility and both aggregate leverage and short term debt ratio. However, there is no clear cut relationship between asset tangibility and long term debt. For short term debt, size does not appear to matter. Growth is positive on short term leverage and irrelevant for long term leverage. Profitability has a positive effect on long term leverage and a negative one on short term leverage.

Faris Nasif and Al-Shubiri (2009) examined the determinants of capital structure (age of firm, size of firm, asset structure, liquidity, business risk, growth rate, earning rate (ROA), non-tax shields as independent variables of the industrial companies listed to Amman stock Exchange from 2004-2007. They found that there is a positive significant relationship between the firm size, asset structure (tangibility), growth rate and non tax shields but there was a negative significant relationship between earning rate (ROA) while there is no significant relationship between the no. of age firm, asset structures the liability and business risks and leverage.

Amarjit Gill, Nahum Biger, Chenping Pai and Samita Bhutani (2009) found that profitability, tangibility, non-debt tax shield and size have a negatively related with debt ratio
but statistically significant to tangibility and profitability, while effective tax rate and growth opportunities are insignificant positive related to debt ratio.

Frank and Goyal (2009) found that the positive correlation between leverage and company size, the tangibility of assets, expected inflation and the industry median and negative correlation can be detected between profitability and leverage.

Ramlall (2009) explored on the capital structure for non-listed, non-financial firms Mauritius. They found that profitability, non-debt tax shields and growth do not explain leverage needs, tangibility exhibits it’s positive impact while liquidity generated it’s negatively effect on leverage and also found size is a negatively impact on leverage.

Tugba Bas et. al. (2009) found that growth, sizes are positively correlated with debt and profitability, asset structure and tax rate are negatively related with debt.

Husni Ali Khrawish and Ali Husni Ali KHaraïwesh (2010) examined the determinants of the capital structure of Jordanian industrial companies over the period of time 2001-2005. They found a positive significant relationship between size of the firm, asset tangibility, and long term debt and short term debt ratio and a negative relationship between leverage ratio and profitability of the firm. They concluded that total assets of the firm, asset tangibility and long term debt have positive correlation with long term debt ratio while, short term debt has a negative correlation with long term debt ratio.

Ramesh Jangili and Sharad Kumar (2010) studied on the determinants of private corporate investment in India covering the period from 2000-01 to 2008-09. They found that firm size, cash flow and growth rate are positively associated with debt to asset ratio, whereas dividend payout ratio and effective cost of borrowing are negatively associated with investment of the firm. Real effective exchange rate and inflation at the macro level are negatively related with the corporate investment and non food credit growth and capital market developments are positively related. They conclude that dividend payout ratio, firm size, cash flow ratio, effective cost of borrowing, and growth rates appear to the major determinants of corporate investment decisions.
Kiranjit Sett and Jaydeb Sarkhel (2010) examined that the effect of the financial system and macro economic variables on the financial leverage of the Indian non-financial private corporate sector during the period 1981-2007. They found that stock market development is negatively related to the financial leverage and banking sector development, inflation rate and corporate tax rate are positively related.

Ravinder Vinayek and Anjo Gupta (2010) examined that the determinants of capital structure of firms in Drugs and Pharmaceutical industry in pre-liberalization and post-liberalization period. They found that the variables like profitability, capital intensity and collateral value of assets are significant in the pre-liberalization period and are significant to the market value debt equity ratios in post-liberalization period. Market to book ratio and age tended to be insignificant for whole period. Size is found to be significant determinant to book value debt equity ratio in pre-liberalization period while, insignificant in post-liberalization period. Non-debt tax shield is a significant determinant to book value of debt-equity ratios in pre-liberalization period and post liberalization period but only significant to market value debt equity ratios.

Bhattachajee B J (2010) Studied on the determinants of capital structure of Indian industries covering 151 selected firms categorized 13 industrial sectors. They found that liquidity and growth in terms of the firm has significant influence on debt equity ratio.

Inder Sekhar Yadav et. al. (2010) found that cost of equity, cost of debt, firm size, assets collateral value and profitability are major capital structure determinants of corporate firms in India and also found a significant indication of a movement towards the optimal level of leverage ratio.

Sumi Khare and Saima Rizvi (2010) found profitability, liquidity, size, non-debt tax shield and risk are a significantly negative relation with leverage; while growth and asset structure are positive correlated to leverage but growth is statistically insignificant with leverage. They conclude that profitability, liquidity, asset structure and business risk are the important determinants of capital structure.
Shahjahanpour, Ghalambor and Aflatooni (2010) examined that the determinants of capital structure decisions in the Iranian companies, using a cross sectional analysis of 248 firm data. The authors found that liquidity and non-debt tax shield are a negative relation with capital structure while payout ratio and effective tax rate are positively related to capital structure.

Sinan Akdal (2010) examined the patterns and possible capital structure determinants of 202 listed UK companies for the period from 2002 to 2009. The author found that there is negative relationship between leverage and profitability, growth, non-debt tax shield, volatility and liquidity while a positive relationship between leverage ratios and size and asset tangibility. Profitability, asset tangibility and liquidity are generally significantly related to leverage and these correlations are more evident in terms of leverage at market value.

Wafaa Sbeiti (2010) found that liquidity, tangibility, and profitability are negatively and significantly related to the leverage ratio; while firm size is positively and significantly related to the leverage ratio. Finally, growth opportunities are positively related to book leverage and negatively related to market leverage.

Gurcharan (2010) investigated the determinant factors of optimal capital structure in 155 listed companies of securities exchanges in four Asian countries (Malaysia, Indonesia, Philippine, Thailand) from 2003 to 2007. They found that capability of profitability and growth opportunities have a significant negative relationship with company leverage as agency of capital structure in four investigated countries and tax shelter has significant negative relation with capital structure in the listed companies of Malaysia's stock exchange. Firm size has significant positive relation with capital structure in Indonesia and the Philippines. Stock market conditions and gross domestic product (GDP) have significant relation with capital structure while bank size and inflation don’t have such a relation. The author indicates that these effective factors that determine the capital structure in developing countries and are predictable by capital structure theories.

Raj Majumdar (2010) suggested that liquidity and leverage are the important determinants of debt maturity choice. Size and firm quality has a significant impact on debt
maturity. They concluded that effective tax rate and assets maturity have an impact on debt maturity, a possible outcome of an illiquid and underdeveloped debt market.

Ashok Kumar P (2011) analyzed the capital structure of 300 Indian private sector companies comprising of 20 different sectors for the period 1999-2000 to 2007-2008. They found that firms raised more funds through debt capital as compared to equity, due to easy & availability of cheap debt capital.

Liaqat Ali (2011) found that the variables of size, non-debt tax shields, and tangibility have highly significant positive relationship with leverage, while growth and profitability have highly significant negative relationship with debt ratio.

Mohan Raj (2011) found that tangibility is negatively related with leverage and non-debt tax shield is statistically significant of capital structure decisions and size of the firm has negatively related with leverage and the liquidity played an important role in determining the capital structure decision.

Punitharaja Nada Raja et. al. (2011) explored the determinants of capital structure of Malaysian limited companies during the period of 2001-2006. They found that liquidity, growth and ability to serve are significant negative related with family owned debt while size, and profitability is positively related with debt ratio but it’s insignificant.

Bassam Arian (2011) examined the profitability and capital structure of the Colombo stock exchange. They found that debt-equity ratio had strong relationship with earning per share, return on equity and return on assets. The author concluded that there is strong relationship between capital structure and profitability.

Amanuel Mekonnen (2011) found that positive correlation between total debt ratio and age of the firm, size of the firm and growth of the firm. On the other hand, a negative correlation between total debt ratio and tangibility, non-debt tax shields, and earning volatility. A positive relationship between short term debt ratio and non-debt tax shields, growth of the firm, profitability, size and age of the firm but tangibility and earning volatility has a negative relationship with short term debt ratio. Finally, the author disclosed that long term debt ratio has a positive relationship with the age of the firm only and the remaining
variables; tangibility, non-debt tax shields, growth, business risk, profitability, and size of the firm has a negative relationship long term debt ratio. The author concluded that assets tangibility, business risk, non-debt tax shields, profitability and size of the firm are the significant determinants of capital structure of Ethiopian manufacturing share companies (i.e. positively and negatively).

Afza, Talat; Hussain and Amer (2011) focused on the determinants of capital structure of 26 firms of Automobile sector of Pakistan. They found that the larger sized firms having good assets structure should go for debt financing to finance new projects and also find profitability, liquidity and taxes rates are statistically significant and are consistent with static Trade-off theory and Pecking order theory.

Nadeem Ahmed Sheikh, Zongjun Wan (2011) explored the factors that affect the capital structure of 160 manufacturing firms listed on Karachi stock exchange during 2003-2007. They found that profitability, liquidity and tangibility are negatively related to the debt ratio, whereas firm size is positively related to leverage. Growth opportunities and non-debt tax shields do not appear to be significantly related to the debt ratio.

Tariq Naeem Awan, Majed Rashid and Muhamonad Zia-Ur-Rehman (2011) studied on the determinants of capital structure of 31 listed Pakistan firms of sugar industry from 1996 to 2004. They found that size and profitability have a negative relationship and tangibility and growth have a positive relationship with leverage but size and growth variables are not statistically significant. They conclude that size and growth have negative or positive relationship with leverage due to their significant results. Profitability shows the negative sign and it is statistically significant. Tangibility is positively related to leverage and it is also statistically significant.

Fawad Ahmed, Juniad-Ul-Haq, Rao Umer Nasir, Mohsin Ali and Wasim Ullah (2011) studied on the determinants of capital structure of 336 non-financial Pakistani firms over the period of 2005-2009. They found that size and liquidity are negative and growth is positive relations with leverage are consisting with the pecking order theory. Similarly, the positive relation of profitability and tax are consisting with the trade-off theory. The authors concluded that size, tangibility of assets, non-debt tax shields, liquidity and payout are
statistically significant relation to leverage, these variables play an important role in determining the capital structure of Pakistani non-financial firms and the remaining three variables such as profitability, growth and tax rate are statically insignificant related with leverage.

**Sarkar and Goswami (2011)** studied on the business risk, financial risk, financial break-even point and total risk of Hindustan Construction Company Ltd., for the period from 2000-01 to 2009-10 by computing the degrees of association between the various leverage ratios with the well known profitability indicator viz., return on net worth. They concluded that the company has the higher financial risk as compared to operating risk throughout the entire study period.

**Das Mahapatra AK (2012)** studied on 626 non-government and non-financial companies across industries in India. The author reveals that operating leverage and industry class have a significant association with capital structure of the Indian firms; whereas profitability is insignificant determinants of corporate capital structure in India.

**Riyaz Ahmad K (2012)** found that dividend payout, debt service capacity, business risk are positively and statistically significant determinants of financial structure; while company size, and earning rates are statistically insignificant determinants of financial structure and show a negative influence on financial leverage. They concluded that dividend payout, debt service capacity, operating leverage are the influential determinants of capital structure and size, earning rate are not important variables in capital structure decisions.

**Amsaveni and Gomathi (2012)** found that business risk and liquidity are negatively related to debt-equity ratio and asset tangibility, growth opportunities, firm size and non-debt tax shields show a positive relation with leverage. Hence, these results are partially supportive of the pecking order and trade off theory.

**Anurag Pahuja and Anu Sahi (2012)** analyzed the determinants of capital structure of 30 listed companies in the Indian context. They found growth and liquidity are positively and significant relationship with debt-equity ratio; whereas profitability, size and tangibility are not significant impact on capital structure.
Raju Majumder (2012) found that tangibility is positive and significant correlation with leverage while growth, risk, size and age are negatively correlated with leverage but risk and age have insignificant correlation with leverage.

Poornima and Manokaram (2012) examined that the determinants of capital structure on the profitability of 34 listed financing services companies in India for a period of 15 years from 1995-96 to 2009-10. The authors suggest that the asset financing services companies in India use debt in their capital structure based on their growth rate and significant difference in the debt-equity ratio of companies based on their growth i.e., the higher growth rate of the companies use higher debt in their capital structure and also the debt equity ratio are differing significantly during period of study. The collateral value of assets, growth, liquid assets, size, asset structure, and corporate tax are influencing the debt-equity ratio of Indian private sector asset financing companies. The authors identified that the capital structure has significant influence on the profitability of asset financing services companies in India of all the different growth category of firms.

Rangitha Ajay and Madhumathi (2012) examined that the impact of diversification strategies (international market and product diversification) on the leverage decisions of 3103 companies aggregating to 2172 include 2594 domestic as well as 579 multinational manufacturing firms for the period 2004-2010 after controlling for other major determinants of capital structure. They revealed that geographic diversification shows positive and significant relationship leverage for the entire sample. Non-debt tax shield, profitability, and firm performance are significant determinants of leverage for the whole sample. Eventhough, tangibility has a significant impact on debt ratio only for MNCs while age and size variables have significance for the overall sample and more specifically in domestic companies. Agency cost has a negative relationship with leverage for the overall sample.

They use fixed effect regression model and indicate that geographic diversification is positively related to leverage for the entire sample. Product diversification does not show any significant relationship with leverage for the entire and sub samples. Profitability and performance have a negative and significant relationship with leverage for the entire sample. Only multinational firms exhibit a positive and significant relationship between tangibility,
and leverage ratio. Non-debt tax shield is positively related to leverage for the full and sub samples. Age is a positive effect on debt ratio for full sample and domestic corporations. The authors concluded that multinational and domestic firms differ from each other with the respect of tangibility, non debt tax shield, age, agency cost variables with leverage and reveals that domestic firms have higher debt in their capital structure as compared to multinational corporations.

Zuraidah Ahmad et. al. (2012) investigate the impact of capital structure on firm performance by analyzing the relationship between operating performance such as size, asset grow, sales grow and efficiency of Malaysian firms, measured by return on assets, return on equity, with short term debt, long term debt and total debt. They fond that only short term debt and total debt have significant relationship with return on assets while return on equity has significant on each level of debt.

Xicang Zhao et. al. (2012) suggested that firms are strongly advised to always compare the marginal benefit of using long term debt to the marginal costs of long term debt. They concluded that long term debt impacts positively on firm’s value just like equity capital.

Mahdi Salehi and Nazanin Bashiri Manesh (2012) studied on the capital structure determinants of 59 companies listed on Tehran stock exchange during the year from 2004 to 2011. They found that there is a significant and negative relation between profitability, firm growth and capital structure while there is a significant positive relation between firm size of the firm, size of the market, GDP growth, and inflation rate and capital structure. The authors concluded that among firm-specific parameters such as profitability, growth opportunities and firm size have the most impact on capital structure while among the macroeconomic parameters such as GDP growth, size of the firm, size of the market, and inflation rate has significant effect on capital structure.

Amal Yassin Alamajali et. al. (2012) investigated that the factors affect financial performance of Jordanian insurance companies listed at Amman stock exchange, during the period 2002 to 2007. They found that liquidity, firm size, management competence index has a positive effect on the financial performance of Jordanian insurance companies.
Khaled Ba-Abbad and Nurwati Ashikkin Ahmad- Zaluki (2012) investigated the capital structure of 19 Qatari companies that are listed on Doha securities market for the period of 2004-2008. They reveal that company size and profitability are playing an important role in the total debt ratios. Company size, asset structure and profitability are playing dominant role in the long term debt ratio. Company size plays significant role in explaining the variation in the short term debt ratio of Qatari companies.

Mahfuzah Salim and Raj Yadav (2012) investigated the impact of capital structure choice on firm performance of 237 Malaysia stock exchanges over the period from 1995 to 2011. They found that return on assets (ROA), return on equity (ROE), and earnings per share (EPS) have negative relationship with short term debt, long term debt and total debt while there is a positive relationship between the growth and firm performance for all sectors. Tobin’s Q is significant positive relationship with short term debt and long term debt and also found that total debt has significant negative impact on performance of the firm.

Chandrasekharan C V (2012) examined that the determinants of capital structure of Nigerian listed firms for a period of 10 years from 2007 to 2011. They found that size is significant and negatively related to the leverage while growth, profitability and tangibility are positively related to the leverage but only growth is significant and other two variables are not significant.

Iorpev, Luper and Kwanum, Isaac. M (2012) examined that the impact of capital structure on the performance of 15 manufacturing companies listed on the Nigerian stock exchange, covers a period of 5 years from 2005 to 2009. The authors found that there is a negative and insignificant relationship between short term debt ratio, long term debt ratio, and return on assets, profit margin; while total debt ratio is positively related with return on assets and negatively related with profit margin. Short term debt ratio is significant relation with return on assets while long term debt ratio is significant relation with profit margin.

Ogbulu, Onyemachi Maxwell and Emeni, Francis Kehinde (2012) studied on the determinants of corporate capital structure of 110 Nigerian companies listed on Nigerian stock exchange over a period from 2000 to 2005. They found that size has a positive and significant impact on capital structure while age has negative and significant influence on
capital structure. Tangibility and growth of the firm have positive and insignificant relation with leverage and also found that profitability is positive and insignificant relation to the capital structure.

**Owolabi, Sunday Ajao and Inyang, Uduakobong Ema (2012)** examined that the determinants of capital structure decisions of firms in the manufacturing industry in Nigeria. They found that tangibility, size and profitability have significant and positive correlation with leverage while dividend payout does not represent a financial approach for large firms in Nigeria.

**Taiwo Adewala Muritala (2012)** examined that the impact of capital structure on firm’s financial performance 10 listed non-financial firms in Nigeria between 2006 and 2010. The researcher found that the relationship between return on assets and asset turnover has positive relation and assets tangibility has negative relation with the leverage and it’s significance. The relationship between return on assets and firm size has positive but not significant. However, asset turnover, firm’s age and size of the firm have positive and significant relationship with return on equity while asset tangibility has insignificant positive relationship with the return on equity. The relationship between the two performance measures (ROA and ROE) and growth opportunity is positive but not significant. They concluded that asset turnover, firm size, age of the form and tangibility of assets are positively related to firm performance. The author suggests that asset tangibility should be driven factor that determine capital structure because firms with more tangibility assets are less likely to be financial constrained.

**Sorana Vatavu (2012)** analyzed the capital structure determinants of 196 manufacturing companies listed on the Bucharest stock exchange over a period of eight years from 2003 to 2010. They found that size has a significant positive relationship with all types of debt. Tangibility has negative relationship with short term debt and long term debt. Tangibility is negatively correlated to the total debt but it is statistically significant. Business risk has a direct impact on all proportions of debt but it is statistically significant only for short term debt and total debt. Inflation rate has positively and statistically significant only for the long term debt.
Supa Tonkong (2012) investigates the significant factors influencing capital structure decision of 39 Thai companies in real estate industry in the stock exchange of Thailand during the period 2002 to 2009. The author found that firm leverage has positively related to median industry leverage and also found that firm size and growth opportunity has positive relationship with firm leverage while profitability and leverage are negatively associated.

Imran Umer Chappra and Muhammad Asim (2012) investigated on the determinants of optimal capital structuring that affect growth and financing behavior of 90 textile companies across the country over the period of 2005-2010. They found that a negative relationship between size of the firm, profitability, fixed asset structure and taxes with financial leverage. They conclude that the overall textile sector has statistically significant and negatively relationship between dependent and independent variables but outcome of weaving unit showed a significantly positive relationship between dependent and independent variables.

Aurangazeg and Anwar Ul-Haq (2012) examined that the determinants of capital structure in textile industry of Pakistan on a data for the period of 2004 to 2009. The authors found that size of the firm, assets tangibility, and profitability are positively related to leverage while sales growth has negative relationship with leverage. They concluded that all independent variables such as firm size, tangibility of assets, profitability, and sales growth have significant impact on the balance of leverage.

Bundala, NtoGwa NG’Habi and Clifford G. Machogu (2012) found that company size, liquidity has a positive significant correlation with leverage. Profitability, asset tangibility has a negative correlation with leverage and statistically strong significance. Growth has a positive and insignificant relationship with leverage and finally dividend payout has a negative and statistically insignificant correlation with leverage.

Faruk Hossain and Md Ayub Ali (2012) found that the asset tangibility, profitability, managerial ownership and liquidity have significant and negative impact on leverage and positive significant relationship between growth opportunities, non-debt tax shield and leverage and also found that size, earning volatility and dividend payment are not a significant impact on leverage.
Pinkova. P (2012) examined on the determinants of capital structure medium to large sized automotive companies in the Czech Republic over the period from 2006 to 2010. Size is negatively related to total debt and short term debt, but positively related to long term debt. Tangibility is positively related with all types of debt ratio. Profitability and total debt as well as short term debt are positively related, but profitability and long term debt are negatively related. Liquidity and leverage are negatively related in all cases.

Thian Cheng Lim (2012) investigated on the determinants of capital structure of 36 A-share financial service listed companies in China over the period 2005-2009. The author found that profitability, size of the firm, business risk, non-debt tax shields, and non-circulating shares are significant factors that influencing the financial sector. Furthermore, size of the firm is positively correlated to the corporate debt ratio. The researcher observes the largely state ownerships firms do affect capital structure choices of financial industry sector that is similar to other industry.

Singh Inderjit, Mnd Harvinder S and Gill Amarjit (2012) examined that the determinants of capital structure in 100 firms in the Automobile industry listed at the Bombay Stock Exchange for the period 2006-2010. They found that firm growth, firm size, and asset tangibility are significant determinants of capital structure in the Indian automobile industry.

Ahmad Ahmadpour et al (2012) investigated that there is significant relationship between some specific features of corporate governance and capital structure of 311 listed firms in Tehran stock exchange during the year from 2005 to 2010. They found that a positive relationship between ownership concentration, board size, internal auditor, and capital structure but a negative relationship between institutional share ratio and capital structure. Moreover, there is no significant relationship between independence board, duality of CEOs, and debt-equity ratio.

Palvann and Sekhar (2013) found that the factors such as size, growth, earning risk, non-debt tax shields, business risk, debt service capacity and leverage are determined the capital structure of co-operative sugar mills and all these variables have significant impacts on debt equity.
Prabhakaran Nair V R (2013) found that age, size, risk, and tangibility are positively related to leverage while non-debt tax shield and profitability are significant negatively related to leverage.

Raju Majumder (2013) found that growth in total assets is positive and insignificant correlation with leverage while growth in sales is insignificant negative relation with leverage. Return on investment is significant negative correlation with leverage.

Sarbapriya Ray (2013) investigated that the capital structure of listed firms in the cement industry of India for the period from 1991-92 to 2011-12. The author suggests that asset structure, size and non-debt tax shields are statistically significant and positively related to debt-equity ratio and age, profitability and asset collateral have significant negative relations with leverage and the other factors such as business risk, flexibility, and growth opportunities do not show significant impact on capital structure.

Nirmala Devi and Vijaya Lakshmi (2013) identified that profitability, size and non-debt tax shields have significant positive influence on short term debt ratio and tangibility, liquidity and free cash flow to total assets have a significant negative effect on short term debt ratio and the remaining variables such as growth, business risk, cost of borrowing and tax rate have not significant impact on short term debt ratio. They found that profitability, size, and non-debt tax shield have significant positive impact on total debt ratio while liquidity, free cash flows, cost of borrowing and the tax rate have significant negative effect on total debt ratio.

Krishna Kutty, Ravesh and Chakraborty, Kiran Shankar (2013) studied that the determinants of debt capital in the capital structure of 213 listed companies of Bombay stock exchange during the period from 2002 to 2011. They found that long term debt ratio, asset structure, non debt tax shield and size are positively related to the total debt finance and financial risk is positively related to long term debt. Furthermore, the debt capacity has negatively impact on debt capital and long term leverage.

Warne D.P. and Gurnam Singh Rasoolpur (2013) studied the capital structure decisions of POL, power generation & transmission industry of the Indian corporate sector,
which covers the period of 11 years from 1995-96 to 2005-06. The researchers used measure for capital structure (Debt-equity ratio) as the ratio of total borrowings to net worth. The capital structure can be divided into thirty one ranges and further classified into four broader categories such as 0-100 percent, 100-200 percent, 200-300 percent and more than 300 percent.

The researchers observed the debt-equity norm of 2:1 for financing the firms in private sector firms are using too low or too high debt in their capital structure as compared to their own capital because debt is a cheaper source of finance and also observed that 18.63 percent companies are leveraging in more than 200 percent capital structure ranges of companies are using debt beyond the well-established standard range of 200 percent (2:1) and only a few (1.86 percent) companies in this industry are in 190 to 200 percent (1-90:1to 2.10:1) capital ranges which are approaching to the well established standard range of 200 percent (2:1) during the period of study. The authors concluded that debt capital was a cheaper source of finance, thus, the use of debt may maximize the value of wealth of shareholders.

Gurnam Singh Rasoolpur (2013) studied the determinants of capital structure of 298 out of top 500 manufacturing firms of the Indian corporate sector; over the time span of eleven years form 1995-96 to 2005-06. The author found that uniqueness and liquidity have negative relationship with the capital structure. The author concluded that earning rate, cash flow coverage ratio, size (total assets), growth of assets, non- debt tax shield, dividend payout ratio and operating leverage variables are not affecting that capital structure of the Indian corporate sector during study period.

Garima Dalal (2013) conducted a study on the relationship between capital structure and value of 30 companies listed on BSE index period of 2001-02 to 2010-11. The author found that the co-efficient of correlation between cost of capital and capital structure is negatively related. The author concludes that increase in leverage will decrease the cost of capital because debt capital is a cheaper source than equity, but it is statistically insignificant.

Sukhadev Singh and Rajni Luthra (2013) found that the debt and equity ratio was better in metal industry as compared to refinery industry. It indicates that metal industry is more using debt financing in its capital structure pattern as compared to refinery industry
because company can follow the Net Operating Income approach of capital structure. The authors conclude that companies may use both debt and equity financing as a part of their capital structure model. Moreover, the debt and equity financing is increasing in both the industries which imply that due to fear of financial risk, the companies are using debt financing also to the possible extent. But they advised to maintain a right balance between debt financing and equity financing.

**Poul Kofi Oppong- Boakye et. al. (2013)** investigated on the determinants of capital structure of 33 listed and non listed companies during the period 2003 to 2007 in Ghana. They found that profitability, size, business risk and tangibility have positive correlation with leverage while growth and tax rates are negatively correlation with the level of gearing. They conclude that profitability, firm size, tangibility of assets, tax rates and risk are statistically insignificant while growth is statistically significant.

**Khalaf Al-Taani (2013)** studied on the relationship between capital structure and firm performance across different industries using a sample of 45 manufacturing companies listed on the Amman stock exchange during the period from 2005 to 2009. The authors conclude that there is a significant negative relationship between return on assets, profit margin and short term debt, and long term debt ratio while total debt ratio was positively related with return on assets and negatively related with profit margin. Short term debt ratio is significant relation with return on assets while long term debt ratio is significant relation with profit margin.

**Amer Azlan Abdul Jamal et. al. (2013)** studied on the determinant factors that influence the capital decisions of 69 Malaysia listed companies during the period from 2007 to 2011. They found that profitability, liquidity and tangibility of assets has significant negative relationship with leverage while firm size is positively related to leverage. They conclude that profitability is the most influential factor of the capital structure of Malaysian firms.

**Oladele John Akinyomi and Adebayo Olagunju (2013)** examined that determinants of capital structure of 88 Nigerian manufacturing firms are listed in Nigerian Stock Exchange. They found that firm size, tax rate have a negative correlation with leverage and
tangibility of assets, profitability and growth have positive relation with leverage. They concluded that there is no significant relationship between size, profitability, growth of firms and capital structure while significant relationship between tangibility of assets, tax and capital structure in Nigeria.

Ishaya Luka Chechet, Sannomo Larai Gabra and Abu Senni Odudu (2013) studied that determinants of capital structure in Nigerian chemical and paints companies listed in Nigeria for a period of five years from 2005 to 2009. They observed that size and profitability are negatively significant whereas tangibility, growth and age are positively and significant relation with leverage.

Ajanthan (2013) studied the factors that affect the capital structure of 15 hotels and restaurant trading Sri Lankan companies listed on Colombo stock Exchange (CSE) during the period from 2008-2012. The author found that only profitability is negatively correlated with the debt ratios (long term: short term and total debt), while tangibility, size and growth are insignificantly correlated to the debt ratios and conclude that these results are more relevant to the pecking order theory in Sri Lankan context.

Sangeetha and Sivathaasan (2013) investigated the determinants of leverage in Sri Lanka Using a sample of 50 firms listed in Colombo stock exchange during the period from 2002 to 2007. They found that size, profitability, and growth variables are statistically significant. They conclude that size, growth rate and profitability play a major role in determination of the financial leverage in Sri Lankan firms; and tangibility, liquidity and dividend payout do not play any role.

Mahommad Reza Ebrati, Farzad Emadi, Reza Saadati Balasang and Ghorban Safri (2013) investigated the impact of capital structure of 85 firms listed in Tehran stock exchange from 2006 to 2011. They found that return on equity, MBVR, Tobin Q are significant positively associated with capital structure, while a negative correlation between capital structure and return on assets, earnings per share. They conclude that firm performance is positively or even negatively related to capital structure.
Abbas Ali (2013) studied that the influence of various firm level characteristics on the profitability of the Pakistan and Indian firms listed on the two major stock exchanges Karachi and Bombay, the time period of 2000-2010 and then results the comparison between two countries. The author found that profitability and long term leverage are negatively and significantly related to leverage in both KSE and BSE listed corporations and insider ownership is positively related to profitability and it is significant in the KSE, while insignificant in BSE. Furthermore, participation of equity is significant positively related to profitability of both KSE and BSE listed corporations. The author suggests that companies should implement effective and efficient capital structure policy which improves the performance and profitability through these results.

Mahammad Naveed et. al. (2013) investigated the capital structure determinants of leasing and insurance companies of Pakistan over the period of 10 years from 2001 to 2010. They found that return on assets has highly negative relationship with leverage; whereas, firm size, tangibility, growth and liquidity have positive relationship with leverage of leasing companies while firm size, and risk factors have positive relationship with leverage; whereas, return on assets and liquidity has significant negative relationship with dependent variables. They conclude that profitability and liquidity are predicted pecking order theory; whereas, firm size, tangibility and growth are predicted static trade off theory of insurance and leasing companies of Pakistan.

Paul Langford (2013) found that profitability and assets structure are the most consistent determinants of capital structure in all the three sectors names as textile, cement, energy. Profitability is significant negative relationship with leverage while asset tangibility is significant positive relationship with leverage. Size showed different results in different industries as it has significant negative correlation with leverage in textile industry, and positively in case of power industry and insignificant positive correlation in cement industry. Growth does not show any relation with leverage in textile and cement industry but it is positively significant correlated to leverage in power industry. Non-debt tax shield is positively correlated with leverage in all industry sectors.
Samra Kiran (2013) examined that the determinants of capital structure of three industrial sectors such as textile, fuel & energy and chemical for the year of 2001-2006. They found that a positive relationship between tangibility, non-debt tax shields, growth and leverage and all these variables are statically significant except growth in all the three sectors. The earning volatility is insignificant negative relationship with leverage. Profitability, size are negatively correlated with leverage but it’s insignificant.

Mahmmad Ali and Sobia Qayyum (2013) found that leverage is positively correlated with tangibility and negatively correlated with size, profitability, and growth. The relationship between size and leverage is insignificant while the relationship between profitability, tangibility and growth and leverage have significant correlation.

Tanveer Ashraf and Saffdar Rasool (2013) found that profitability, size, growth, tax and non-debt tax shield is positively correlated with leverage while tangibility and risk are negatively related with leverage. They suggest that size, growth, tangibility are statically significant and the remaining variables are not significant such as profitability, tax, risk and non debt tax shield.

Rheel Mumtaz et. al. (2013) found that a significant negative correlation between return on assets (ROA), return on equity (ROE), earnings per share (P/E ratio) and capital structure. Firm size is significant positive correlation with leverage. Furthermore, earning per share is negatively related to debt to equity ratio and firm’s market value is significantly and negatively associated with the debt to equity ratio, whether debt to equity ratio have a negative and significant relation with change in return on equity. The researchers suggested that financial performance of firms is significantly affected by their capital structure and their relationship is negative. Additionally, firms’ capital structure is negatively related to its market value and also increases it’s level of risk as the share of debt increases in the capital mix.

Anila Cekrezi (2013) found that tangibility, liquidity are negatively related to short term debt and positively related to long term debt and total debt. Profitability (ROA) is negatively related to short term debt, long term debt and total debt ratio. Firm size is positively related to short term debt, long term debt and total debt.
Anila Cekrezi (2013) explored the impact of firms’ specific factors on capital structure decision for a sample of 65 non listed firms in Albania, over the period 2008-2011. They found that tangibility, liquidity, profitability and size have a significant impact on leverage. They concluded that tangibility is negatively related to short term debt and positively related to long term debt and total debt ratio. Profitability is negatively related to short term debt, long term debt and total debt ratio. Firm size is positively related to short term debt, long term debt and total debt ratio. Liquidity is negatively related to short term debt and positively related to long term debt.

Ali Bayrakdaroglu, Ilhan Ege and Nusret Yazici (2013) examined the capital structure of 242 Turkish companies listed on Istanbul stock exchange over the period of 2000-2009. They suggested that the variables of firm size, growth opportunities, and non-debt tax shields were positively marked while the variables of profitability and tangibility were negatively marked and were statistically significant for all the variables.

Andreas William Hey Jensen (2013) analyzed the determinants of 106 Danish listed companies over the period from 2001-2011. They found profitability and growth opportunities are negatively related to leverage whereas asset tangibility and size are positively related to leverage. Non-debt tax shield and risks are positive sign with leverage but it is insignificant.

Abdul Basyith, Muhammad Idris and Fitriya Fauzi (2013) revealed that tangibility, growth, signaling, managerial ownership and firm size are a significant impact on total debt. They found tangibility has a positive and significant correlation with total debt and short term debt. The growth is positively and significant correlation with total debt, long term debt and short term debt. The signaling coefficient is positive and significant impact on total debt. The managerial ownership is positive and significant for total debt and short term debt. The firm size is negative and significant for total debt while positively significant for short term debt and finally, profitability is negatively significant correlation with short term debt.

Shahana Tasneem (2013) considered size, growth, profitability, liquidity and interest coverage ratio as explanatory variables and family owned firms, state owned firms and foreign owned firms as dependent variable. They found that the relationship between family-
owned firms and leverage is negative. State-owned and foreign-owned firms have positive relationship with leverage. They conclude that the role of ownership structure in the form of family ownership is insignificantly related to capital structure and other determinant variables are significant.

Chitta Ranjan Sarkar and Aniruddha Sarkar (2013) found that the values of associations between the various leverage ratios and ROE are positive for all the concerned companies except GAIL has negative influences on the earnings available to the equity shareholders. They observe that IOCL uses greater amounts of external capital in it’s capital structure and OIL uses lesser amount of external capital as compared to others in the industry. So, OIL and ONGC may employ additional amounts of external capital in their capital structure. As a result, the earnings after tax can be enriched as the rewards to the external fund providers are tax deductible expenditure which can be ultimately lead to make the equity shareholders happy and reliable on the firm’s operating as well as financing performance. On the other hand, IOCL should be maintaining a sound short-term debt paying capacity because the employment of more amounts of external funds may lead to short-term insolvency.

1.3 RESEARCH GAP

To date a number of empirical research programs have been conducted in the area of determinants of Capital structure from different countries. Based on the empirical analysis there are so many factors that determine the capital structure. But each having a different importance and influence on the capital structure depends on different countries and some other factors. Hence a need arises to conduct a fresh research on factors affecting capital structure of the Indian organizations. So, the researcher tries to bridge the gap in this area.

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