INTRODUCTION

Until the early nineties, corporate financial management in India was a relatively drab and placid activity. There were not many important financial decisions to be made for the simple reason that firms were given very little freedom in the choice of key financial policies. The government regulated the price at which firms could issue equity, the rate of interest which they could offer on their bonds, and the debt equity ratio that was permissible in different industries. Moreover, most of the debt and a significant part of the equity were provided by public sector institutions.

Working capital management was even more constrained with detailed regulations on how much inventory the firms could carry or how much credit they could give to their customers. Working capital was financed almost entirely by banks at interest rates laid down by the central bank. The idea that the interest rate should be related to the creditworthiness of the borrower was still heretical. Even the quantum of working capital finance was related more to the credit need of the borrower than to creditworthiness on the principle that bank credit should be used only for productive purposes.

Firms did not even have to worry about the deployment of surplus cash. Bank credit was provided in the form of an overdraft (or cash credit as it was called) on which interest was calculated on daily balances. This meant that even an overnight cash surplus could be parked in the overdraft account where it could earn (or rather save) interest at the firm’s borrowing rate. Effectively, firms could push their cash management problems to their banks.
Volatility was not something that most finance managers worried about or needed to. The exchange rate of the rupee changed predictably and almost imperceptibly. Administered interest rates were changed infrequently and the changes too were usually quite small. More worrisome were the regulatory changes that could alter the quantum of credit or the purposes for which credit could be given.

The last few years of financial reforms have changed all this beyond recognition. Corporate finance managers today have to choose from an array of complex financial instruments; they can now price them more or less freely; and they have access (albeit limited) to global capital markets. On the other hand, they now have to deal with a whole new breed of aggressive financial intermediaries and institutional investors; they are exposed to the volatility of interest rates and exchange rates; they have to agonize over capital structure decisions and worry about their credit ratings. If they make mistakes, they face retribution from an increasingly competitive financial marketplace, and the retribution is often swift and brutal.

3.1 FINANCIAL SECTOR REFORMS

Financial sector reforms are at the centre stage of the economic liberalization that was initiated in India in mid 1991. This is partly because the economic reform process itself took place amidst two serious crisis involving the financial sector:

- The balance of payments crisis that threatened the international credibility of the country and pushed it to the brink of default; and
- The grave threat of insolvency confronting the banking system which had for years concealed its problems with the help of defective accounting policies.

Moreover, many of the deeper rooted problems of the Indian economy in the early nineties were also strongly related to the financial sector:
The problem of financial repression in the sense of McKinnon-Shaw (McKinnon, 1973; Shaw, 1973) induced by administered interest rates pegged at unrealistically low levels;

- Large scale pre-emption of resources from the banking system by the government to finance its fiscal deficit;

- Excessive structural and micro regulation that inhibited financial innovation and increased transaction costs;

- Relatively inadequate level of prudential regulation in the financial sector;

- Poorly developed debt and money markets; and

- Out dated (often primitive) technological and institutional structures that made the capital markets and the rest of the financial system highly inefficient.

Over the last few years, much has been achieved in addressing many of these problems, but a lot remains to be done. The following sections review the progress of financial sectors in some key areas.

3.2 EXCHANGE CONTROL AND CONVERTIBILITY

One of the early successes of the reforms was the speed with which exceptional financing was mobilized from multilateral and bilateral sources to avert what at one stage looked like a imminent default on the country's external obligations. Subsequently, devaluation, trade reforms and the opening up of the economy to capital inflows helped to strengthen the balance of payments position. The significant reforms in this area were:

- Exchange controls on current account transactions were progressively relaxed culminating in current account convertibility.

- Foreign Institutional Investors were allowed to invest in Indian equities subject to restrictions on maximum holdings in individual companies.
Restrictions remain on Investment in debt, but these too have been progressively relaxed.

- Indian companies were allowed to raise equity in international markets subject to various restrictions.
- Indian companies were allowed to borrow in international markets subject to a minimum maturity, a ceiling on the maximum interest rate, and annual caps on aggregate external commercial borrowings by all entities put together.
- Indian mutual funds were allowed to invest a small portion of their assets abroad.
- Indian companies were given access to long dated forward contracts and to cross currency options.

### 3.3 Banking and Credit Policy

At the beginning of the reform process, the banking system probably had a negative net worth when all financial assets and liabilities were restated at fair market values (Varma 1992). This unhappy state of affairs had been brought about partly by imprudent lending and partly by adverse interest rate movements. At the peak of this crisis, the balance sheets of the banks, however, painted a very different rosy picture. Accounting policies not only allowed the banks to avoid making provisions for bad loans, but also permitted them to recognize as income the overdue interest on these loans. The severity of the problem was thus hidden from the general public.

The threat of insolvency that loomed large in the early 1990s was, by and large, corrected by the government extending financial support of over Rs 100 billion to the public sector banks.

The banks have also used a large part of their operating profits in recent years to make provisions for non performing assets (NPAs). Capital adequacy has been further shored up by revaluation of real estate and by
raising money from the capital markets in the form of equity and subordinated debt. With the possible exception of two or three weak banks, the public sector banks have now put the threat of insolvency behind them.

The major reforms relating to the banking system were:

- Capital base of the banks were strengthened by recapitalization, public equity issues and subordinated debt.
- Prudential norms were introduced and progressively tightened for income recognition, classification of assets, provisioning of bad debts, marking to market of investments.
- Pre-emption of bank resources by the government was reduced sharply.
- New private sector banks were licensed and branch licensing restrictions were relaxed.

At the same time, several operational reforms were introduced in the realm of credit policy:

- Detailed regulations relating to Maximum Permissible Bank Finance were abolished
- Consortium regulations were relaxed substantially
- Credit delivery was shifted away from cash credit to loan method

The government supports to the banking system of Rs 100 billion amounts to only about 1.5 percent of GDP. By comparison, governments in developed countries like the United States have expended 3-4 percent of Gross Domestic Product (GDP) to pull their banking systems out of crisis (International Monetary, 1993) and governments in developing countries like Chile and Philippines have expended far more (Sunderarajan and Balino, 1991).

However, it would be incorrect to jump to the conclusion that the banking system has been nursed back to health painlessly and at low cost. The
working results of the banks for 1995-96 which showed a marked deterioration in the profitability of the banking system was a stark reminder that banks still have to make large provisions to clean up their balance sheets completely. Though bank profitability improved substantially in 1996-97, it will be several more years before the unhealthy legacy of the past (when directed credit forced banks to lend to uncreditworthy borrowers) is wiped out completely by tighter provisioning. It is pertinent to note that independent estimates of the percentage of bank loans which could be problematic are far higher than the reported figures on non-performing assets worked out on the basis of the central bank’s accounting standards. For example, a recent report estimates potential (worst case) problem loans in the Indian banking sector at 35-60 percent of total bank credit (Standard and Poor, 1997). The higher end of this range probably reflects excessive pessimism, but the lower end of the range is perhaps a realistic assessment of the potential problem loans in the Indian banking system.

The even more daunting question is whether the banks' lending practices have improved sufficiently to ensure that fresh lending (in the deregulated era) does not generate excessive non-performing assets (NPAs). That should be the true test of the success of the banking reforms. There are really two questions here. First, whether the banks now possess sufficient managerial autonomy to resist the kind of political pressure that led to excessive NPAs in the past through lending to borrowers known to be poor credit risks. Second, whether the banks' ability to appraise credit risk and take prompt corrective action in the case of problem accounts has improved sufficiently. It is difficult to give an affirmative answer to either of these questions (Varma 1996b).

Turning to financial institutions, economic reforms deprived them of their access to cheap funding via the statutory preemptions from the banking system. They have been forced to raise resources at market rates of interest. Concomitantly, the subsidized rates at which they used to lend to industry
have given to market driven rates that reflect the institutions’ cost of funds as well as an appropriate credit spread. In the process, institutions have been exposed to competition from the banks that are able to mobilize deposits at lower cost because of their large retail branch network. Responding to these changes, financial institutions have attempted to restructure their businesses and move towards the universal banking model prevalent in continental Europe. It is too early to judge the success of these attempts.

3.4 INTEREST RATE DEREGULATION AND FINANCIAL REPRESSION

Perhaps the single most important element of the financial sector reforms has been the deregulation of interest rates.

- Interest rates were freed on corporate bonds, most bank lending, and bank deposits above one year maturity.
- Introduction of auctions coupled with reduced pre-emption led to more market determined interest rates for government securities.
- Administered interest rates are now confined mainly to short term bank deposits, priority sector lending, and deposits of non banking financial companies.

For all practical purposes, financial repression is a thing of the past. Even on short term retail bank deposits which are still regulated, the ceiling rate is well above the historic average rate of inflation. Moreover, quite often the ceiling has not been a binding constraint in the sense that actual interest rates have often been below the regulatory ceiling.

Similarly, the prices of most other financial assets are also now determined by the more or less free play of market forces. Consequently, financial markets are increasingly able to perform the important function of allocating resources efficiently to the most productive sectors of the economy. This must count as one of the most enduring and decisive successes of the financial reforms.
3.5 CAPITAL MARKETS

The major reform in the capital market was the abolition of capital issues control and the introduction of free pricing of equity issues in 1992. Simultaneously the Securities and Exchange Board of India (SEBI) was set up as the apex regulator of the Indian capital markets. In the last five years, SEBI has framed regulations on a number of matters relating to capital markets. Some of the measures taken in the primary market include:

- Entry norms for capital issues were tightened
- Disclosure requirements were improved
- Regulations were framed and code of conduct laid down for merchant bankers, underwriters, mutual funds, bankers to the issue and other intermediaries

In relation to the secondary market too, several changes were introduced:

- Capital adequacy and prudential regulations were introduced for brokers, sub-brokers and other intermediaries
- Dematerialization of scrips was initiated with the creation of a legislative framework and the setting up of the first depository
- On-line trading was introduced at all stock exchanges. Margining system was rigorously enforced.
- Settlement period was reduced to one week; carry forward trading was banned and then reintroduced in restricted form; and tentative moves were made towards a rolling settlement system.

3.6 IN THE AREA OF CORPORATE GOVERNANCE

- Regulations were framed for insider trading
- Regulatory framework for take-over’s was revamped
SEBI has been going through a protracted learning phase since its inception. The apparent urgency of immediate short term problems in the capital market has often seemed to distract SEBI from the more critical task of formulating and implementing a strategic vision for the development and regulation of the capital markets.

In quantitative terms, the growth of the Indian capital markets since the advent of reforms has been very impressive. The market capitalization of the Bombay Stock Exchange (which represents about 90 percent of the total market capitalization of the country) has quadrupled from Rs 1.1 trillion at the end of 1990-91 to Rs 4.3 trillion at the end of 1996-97. As a percentage of Gross Domestic Product, market capitalization has been more erratic, but on the whole this ratio has also been rising. Total trading volume at the Bombay Stock Exchange and the National Stock Exchange (which together account for well over half of the total stock market trading in the country) has risen more than ten-fold from Rs 0.4 trillion in 1990-91 to Rs 4.1 trillion in period despite several ups and downs, but the increase is much less impressive in dollar terms because of the substantial depreciation of the Indian rupee. More importantly, most of the equity issues in recent months have been by the public sector and by banks. Equity issues by private manufacturing companies are very few.

3.7 STRUCTURAL DEREGULATION

In its mid-term review of the reform process (Ministry of Finance, 1993a), the government stated: “Our overall strategy for broader financial sector reform is to make a wide choice of instruments accessible to the public and to producers. This requires a regulatory framework which gives reasonable protection to investors without smothering the market with regulations. It requires the breaking up of monopolies and promotion of competition in the provision of services to the public. It requires the development of new markets such as provision of services to the public. It
requires the development of new markets such as financial instruments and commodities."

Unfortunately, this is one area where actual progress has lagged far behind stated intent. It is true that some steps have been taken to increase competition between financial intermediaries both within and across categories. Banks and financial institutions have been allowed to enter each other's territories. Fields like mutual funds, easing, and merchant banking have been thrown open to the banks and their subsidiaries. The private sector has been allowed into fields like banking and mutual funds. Nevertheless, major structural barriers remain:

- All major banks and financial institutions continue to be government owned and government managed.

- The entire mechanism of directed credit and selective credit controls built up over the years is still in place, and is being strengthened in certain areas.

- Financial intermediaries have often been compelled to set up separate arms' length subsidiaries while entering various segments of the financial services industry. This has prevented them from benefiting from economies of scope.

- Competition has also been hindered by the undiminished power of cartels like the Indian Banks Association (IBA). In fact, these cartels have been accorded the tacit support of the regulators. Similarly, the Securities and Exchange Board of India (SEBI) has been reluctant to permit aggressive competition among the different stock exchanges. These half hearted attempts at promoting competition raise fears about the extent to which our regulators have succumbed to regulatory capture by the organizations that they are supposed to regulate.

- Insurance continues to be a public sector monopoly. As a result,
financial products which combine the features of life insurance with those of equity related instruments have not developed. The range of insurance products (life and non-life) available in the country is also limited.

- On the technological front, progress has been slow in important areas. The payment system continues to be primitive despite the central bank’s attempts to create an Electronic Fund Transfer System (EFTS). Archaic elements of the telecom regulations have prevented the financial services industry from benefiting from the confluence of communications and computing technologies.

3.8 MONETARY POLICY AND DEBT MARKETS

In the early nineties, the Indian debt market was best described as a dead market. Financial repression and over-regulation were responsible for this situation (Barua et al., 1994). Reforms have eliminated financial repression and created the pre-conditions for the development of an active debt market:

- The government reduced its pre-emption of bank funds and moved to market determined interest rates on its borrowings. Simultaneously, substantial deregulation of interest rates took place as described earlier.

- Automatic monetization of the government’s deficit by the central bank was limited and then eliminated by abolishing the system of ad hoc treasury bills.

Several operational measures were also taken to develop the debt market, especially the market for government securities:

- Withdrawal of tax deduction at source on interest from government securities and provision of tax benefits to individuals investing in them
• Introduction of indexed bonds where the principal repayment would be indexed to the inflation rate.

• Setting up of a system of primary dealers and satellite dealers for trading in government securities

• Permission to banks to retail government securities

• Opening up of the Indian debt market including government securities to Foreign Institutional Investors.

Meanwhile a spate of well subscribed retail debt issues in 1996 and 1997 shattered the myth that the Indian retail investor has no appetite for debt. While only Rs 6 billion was raised through public debt issues in 1994 and Rs 11 billion in 1995, the amounts raised in 1996 was Rs 56 billion. Debt accounted for more than half of the total amount raised through public issues in 1996 compared to less than 10 percent two years earlier. In 1997, public issues of debt fell to Rs 29 billion, but with the collapse of the primary market for equity, the share of debt in all public issues increased to 57 percent. Meanwhile, private placement of debt (which is a much bigger market than public issues) has grown very rapidly. Private placement of debt jumped from Rs 100 billion in 1995-96 to Rs 181 billion in 1996-97; in the first half of 1997-98, it grew again by over 50 percent with Rs 136 billion mobilized in these six months alone.

India is perhaps closer to the development of a vibrant debt market than ever before, but several problems remain:

• The central bank has repeatedly demonstrated its willingness to resort to micro-regulation and use market distorting instruments of monetary and exchange rate policy rather than open market operations and interventions (Varma and Moorthy, 1996). For example, as late as 1996, the central bank was relying on moral suasion and direct subscriptions to government securities (devolvement’s) to complete the government’s
borrowing programme. The RBI’s response to the pressure on the rupee in late 1997 and early 1998 also reveal an undiminished penchant for micro-regulation.

- Some of the vibrancy of debt markets in 1996 and 1997 was due to the depressed conditions in the equity markets.

- Little progress has been made on the major legal reforms needed in areas like bankruptcy, foreclosure laws, and stamp duties.

3.9 IMPACT ON CORPORATE SECTOR

Corporate governance

In the mid nineties, corporate governance became an important area of concern for regulators, industrialists and investors alike. Indian industry considered the matter important enough for them to propose model corporate governance code (Bajaj, 1997). However, the major pressure for better corporate governance came from the capital markets (Varma, 1997).

Capital markets have always had the potential to exercise discipline over promoters and management alike, but it was the structural changes created by economic reform that effectively unleashed this power. Minority investors can bring the discipline of capital markets to bear on companies by voting with their wallets. They can vote with their wallets in the primary market by refusing to subscribe to any fresh issues by the company. They can also sell reforms set in motion several key forces that made these forces far more potent than in the past:

- Deregulation: Economic reforms have not only increased growth prospects, but they have also made markets more competitive. This means that in order to survive companies will need to invest continuously on a large scale. The most powerful impact of voting with the wallet is on companies with large growth opportunities that have a constant need to approach the capital market for additional funds.
• **Disintermediation:** Meanwhile, financial sector reforms have made it imperative for firms to rely on capital markets to a greater degree for their needs of additional capital. As long as firms relied on directed credit, what mattered was the ability to manipulate bureaucratic and political processes; the capital markets, however, demand performance.

• **Globalization:** Globalization of our financial markets has exposed issuers, investors and intermediaries to the higher standards of disclosure and corporate governance that prevail in more developed capital markets.

• **Institutionalization:** Simultaneously, the increasing institutionalization of the capital markets has tremendously enhanced the disciplining power of the market. Large institutions (both domestic and foreign), in a sense, act as the gatekeepers to the capital market. When they vote with their wallets and their pens, they have an even more profound effect on the ability of the companies to tap the capital markets. Indian companies that opened their doors to foreign investors have seen this power of the minority shareholder in very stark terms. International investors can perhaps be fooled for the first time about as easily as any other intelligent investor, but the next time around, the company finds that its ability to tap the international markets with an offering of Global Depository Receipts (GDRs) or other instrument has practically vanished. In the mid-90s, company after company in India has woken up in this manner to the power that minority shareholders enjoy when they also double up as gatekeepers to the capital market.

• **Tax reforms:** Tax reforms coupled with deregulation and competition have tilted the balance away from black money transactions. It is not often realized that when a company makes profits in black money, it is cheating not only the government, but also the minority shareholders. Black money profits do not enter the books of account of the company at all, but usually go into the pockets of the promoters.
The past few years have witnessed a silent revolution in Indian corporate governance where managements have woken up to the disciplining power of capital markets. In response to this power, the more progressive companies are voluntarily accepting tougher accounting standards and more stringent disclosure norms than are mandated by law. They are also adopting more healthy governance practices. Nevertheless, it is still true that the state of corporate governance in India remains pathetic. It is this more than anything else that lies behind the prolonged slump in the primary market today.

3.10 RISK MANAGEMENT

In the days when interest rate were fixed by the government and remained stable for long periods of time, interest rate risk was a relatively minor problem. The deregulation of interest rates as a part of financial sector reform has changed all that and made interest rates highly volatile. For example, the rate of interest on short term commercial paper was about 12-13 percent at the end of 1994, rose to about 17 percent by the end of 1995, peaked at about 20 percent in April 1996, dropped back to about 13 percent by the end of 1996, continued to fall through 1997 reaching about 8 percent in November 1997 before climbing back to double digits by the end of the year.

Companies which borrow short term to fund their new projects may face difficulties if interest rates go up sharply. It may turn out that at the higher cost of finance, the project is not viable at all. Worse, companies may find it difficult to refinance their borrowings at any price in times when money is tight. Many companies which borrowed in the Inter Corporate Deposit (ICD) market in 1994 to finance acquisitions and expansions faced this difficulty in 1995 and 1996 when the ICD market dried up. Large scale defaults (euphemistically described as rollovers) took place during this time.

On the other hand, companies which issue long term bonds may start regretting the decision when they find interest rates coming down. In the last
few years, companies have tried to protect themselves from this risk by introducing a call provision in their bonds by which they can redeem the bonds prematurely under certain conditions. Of course, such call options make the bonds more expensive (in terms of a higher coupon rate) or more difficult to sell.

Companies have also tried to make the bonds more attractive to investors by giving them a put option to seek premature redemption of the bonds. This may make the bond easier to sell, but it exposes the issuing company to interest rate risk. If interest rates rise, many investors will exercise the put option, and the company will have to borrow from elsewhere at high cost to meet the redemption requirements. Put and call options do make a big difference to the pricing of some of these bonds (Varma 1996a) making the design of these instruments quite complex. In the next few years, many of these companies would also be faced with the decision of the optimal exercise of the call options on the callable bonds that they have issued in recent years.

In the post reform era, corporate have also been faced with high volatility in foreign exchange rates. The rupee-dollar rate has on several occasions moved up or down by several percentage points in a single day as compared to the gradual, predictable changes of the eighties. Indian companies have found to their dismay that foreign currency borrowings which looked very cheap because of a low coupon rate of interest can suddenly become very expensive if the rupee depreciates against the currency in which the bond is denominated.

Foreign currency convertible bonds issued by many Indian companies in 1993 and 1994 illustrate the devastating effects of volatility in interest rates, foreign exchange rates and stock prices. At the time of issue, the bonds carried a low coupon rate (often only 2 or 3 percent in US dollars), and were convertible into stock at prices which were at a modest premium (5 to 10
percent over the then prevailing stock price. Issuers thought of them as deferred equity and found the instruments very attractive because they allowed equity to be priced at a premium to the market prices and offered the benefit of a low coupon till the conversion date. As it turned out, stock prices fell during 1995 and 1996, and investors chose not to convert the bonds. Issuers then realized that they would have to redeem the bonds in dollars, and that the depreciation of the rupee has increased their effective borrowing cost substantially. To make worse, investors exercised put options wherever they had them, and companies had to raise money in the domestic markets to pay off the foreign bondholders. In some cases, this happened at a time when Indian monetary policy was extremely tight and interest rates were very high. In this case, volatility in three different markets combined to make things difficult for the companies concerned.

**3.11 GROUP STRUCTURE AND BUSINESS PORTFOLIO**

Indian business groups have been doing serious introspection about their business portfolios and about their group structure. Under the influence of academics like C. K. Prahalad, Indian business groups which have traditionally been involved in a wide range of businesses have been contemplating a shift to a more focused strategy. At the same time, they have been trying to create a group organizational structure that would enable the formulation and implementation of a group wide corporate strategy. Group financial structures are also beginning to change as the existing complex web of inter locking shareholdings slowly gives way to more transparent ownership patterns. But all these changes in group structure and strategy have been quite slow. In many cases, they have not gone beyond a statement of intent. By contrast, in a country like South Africa where the group structures were even more labyrinthine to begin with, restructuring of holdings and refocusing of business portfolios (unbundling as it is referred to in that country) have taken place at a rapid pace.
3.12 WORKING CAPITAL MANAGEMENT

Working capital management has been impacted by a number of the developments discussed above - operational reforms in the area of credit assessment and delivery, interest rate deregulation, changes in the competitive structure of the banking and credit systems, and the emergence of money and debt markets. Some of the important implications of these changes for short term financial management in the Indian corporate sector are:

- **Creditworthiness:** The abolition of the notion of maximum permissible bank finance has given banks greater freedom and responsibility for assessing credit needs and creditworthiness. Similarly commercial paper and other disinter mediated forms of short term finance are very sensitive to the company’s credit rating and perceived creditworthiness. Companies are suddenly finding that their creditworthiness is under greater scrutiny than ever before. Over a period of time, companies will have to strengthen their balance sheets significantly to ensure a smooth flow of credit. In the meantime, many borrowers’ especially small and medium businesses have seen their source of credit dry up.

- **Choice:** Top notch corporate borrowers are seeing a plethora of choices. The disintegration of the consortium system, the entry of term lending institutions into working capital finance, and the emergence of money market borrowing options gives them the opportunity to shop around for the best possible deal. Some borrowers indeed appear to have moved to a highly transaction oriented approach to their bankers. Over the time, however, it would be probably the re-emergence of relationship banking in a very different form.

- **Maturity Profile:** The greater concern for interest rate risk makes choice of debt maturity more important than before. Short term borrowings expose borrowers to roll-over risk and interest rate risk.
• **Cash Management:** Cash management has become an important task with the phasing out of the cash credit system. Companies now have to decide on the optimal amount of cash or near-cash that they need to hold, and also on how to deploy the cash. Deployment in turn involves decisions about maturity, credit risk and liquidity. In the mid-nineties, many corporate found that they had got these decisions wrong. During the tight monetary policy of this period, some companies were left with too little liquid cash, while others found that their “cash” was locked up in unrealizable or illiquid assets of uncertain value.

The Volatility which was not something that most finance managers worried about was made to worry after the financial reforms. More worrisome were the regulatory changes that could alter the quantum of credit or the purposes for which credit could be given.

The last few years of financial reforms have changed all this beyond recognition. Corporate finance managers today have to choose from an array of complex financial instruments; they can now price them more or less freely; and they have access (albeit limited) to global capital markets. On the other hand, they now have to deal with a whole new breed of aggressive financial intermediaries and institutional investors; they are exposed to the volatility of interest rates and exchange rates; they have to agonize over capital structure decisions and worry about their credit ratings. If they make mistakes, they face retribution from an increasingly competitive financial marketplace, and the retribution is often swift and brutal.

**3.13 CAPITAL STRUCTURE**

At the beginning of the reform process, the Indian corporate sector found it significantly over-leveraged. This was because of several reasons:

• Subsidized institutional finance was so attractive that it made sense for companies to avail of as much of it as they could get away with. This
usually meant the maximum debt-equity ratios laid down by the government for various industries.

- In a protected economy, operating (business) risks were lower and companies could therefore afford to take more risks on the financing side.
- Most of the debt was institutional and could usually be rescheduled at little cost.

The reforms changed all of this. The corporate sector was exposed to international competition and subsidized finance gave way to a regime of high real interest rates. One of the first tasks for the Indian companies was substantial deleveraging. Fortunately, a booming equity market and the appetite of foreign institutional investors for Indian paper helped companies to accomplish this to a great extent in 1993 and 1994. The downturn in the stock market that has followed since then has stopped this process from going any further and has probably left many companies still excessively levered. According to the figures compiled by the Centre for Monitoring the Indian Economy, the average debt-equity ratio of private sector manufacturing companies in India fell from 1.72 in 1990-91 to 1.05 in 1996-97, and more than half of this reduction took place in one single year - 1994-95.

Over the longer term, economic reforms have also been reshaping the control dimension of the leverage decision. Corporate control is an important consideration in the choice of debt or equity in the capital structure. An equity issue clearly involves loss of control, and as discussed under the section on corporate governance, reforms have increased the power of the minority shareholders. Equally, a debt issue also can have control implications in the form of debt covenants, rating discipline and cash flow discipline. Reforms have impacted these too, but more slowly:

- **Bond covenants:** Internationally bond covenants are quite restrictive especially for companies whose credit worthiness is less than top class.
These covenants may restrict the investment and dividend policies of the company, may mandate sinking funds, may include cross-default clauses and may contain me-too clauses which restrict the future borrowing ability of the company. Bond covenants have typically been quite lax in India. Moreover bond (and debenture) trustees have been generally very lax in the performance of their duties.

- **Rating discipline:** The most dramatic example of the power of rating discipline was demonstrated in 1996 when in the face of a constitutional deadlock between the US president and the Congress over the approval of the budget, the rating agencies threatened to downgrade US government securities to default grade. It was shown that even the most powerful borrower in the world can be subjected to rating discipline; it is believed that the raters’ threat played a role in the speedy resolution of the constitutional deadlock. Rating discipline is gradually asserting itself in India. The last couple of years have seen a series of rating downgrades as corporate balance sheets deteriorated in an environment of tight money. Rating agencies are becoming more stringent in their rating standards and are paying greater attention to key financial parameters like the interest coverage ratio (Raghunathan and Varma, 1997). Already some companies are beginning to informally sound out their rating agencies before taking major financial decisions to ensure that their rating is not adversely affected. This is standard practice in many other countries of the world where credit rating is well developed.

- **Cash Flow discipline:** Equity has no fixed service costs and year to year fluctuations in income are not very serious so long as overall enough is earned to provide a decent return to the shareholders. Debt on the other hand has a fixed repayment schedule and interest obligation. A company that is unable to generate enough cash flow to meet this debt service requirement faces insolvency or painful restructuring of liabilities. Again, Indian companies have not experienced much of this discipline in
the past because much of their debt was owed to banks and institutions that have historically been willing to reschedule loans quite generously. Institutions may be less willing to do so in future. More importantly, rescheduling is not an easy option when the debt is raised in the market from the public. Bonds are typically rescheduled only as part of a bankruptcy proceeding or a BIFR restructuring. As the next phase of economic reforms targets bankruptcy related laws, cash flow discipline can be expected to become far more stringent.

3.14 CAPITAL STRUCTURE

Financial experts and authorities differ as to the composition of funds in capital structure and the financial structure are the same, and, hence, the capital structure represents both long-term and short-term sources of finance. According to Osborn. The terms ‘capital structure’ is used to mean the financial plan according to which all assets of a corporation are furnished. This capital is supplied by long and short-term borrowings, the sale of preferred and common stock and the reinvestment of earnings”. He further stated that “In analyzing the capital structure of an enterprise, short-term debt is often excluded from consideration”. Many others include only long-term sources of finance under the capital structure. Guthmann and Dougall stated that “phrase ‘capital structure’ may be used to cover the total combined investment of the bondholders, including any long-term debts, such as mortgages and long-term longs as well as total stockholders’ investment including retained earnings as well as original investment”. Both the concepts of capital structure have their own pros and cons. The latter concept is more popular widely accepted. Broadly speaking, the capital structure comprises owned funds and borrowed funds. The owned funds include the share capital and free reserves and the surplus and the borrowed funds represents debentures, long-term and medium-term loans provided by various financial institutions.
The composition of capital structure is governed by a number of factors and no uniform standard can be prescribed for all the enterprises. Sectors of industry or trade to which a particular enterprise belongs can, however, provide a broad pattern of composition. For instance, a public utility concern, such as an electricity supply company can absorb a greater proportion or borrowed funds than an enterprise in a more competitive sector of industry due to more stability in earnings in the case of former than the latter. Within these broad parameters, each enterprise will have to plan its own capital structure keeping in view both its short-term requirements and long-term expansion programme.

In the capital structure, equity and debt funds lie at the two ends of the spectrum. There are intermediate sources of funds in between the two extremes to complete the spectrum. The problem of finance manager is to develop a proper mix of the various sources of long-term funds with a view to arriving at an appropriate capital structure. If we have to check real effect of leverage on return on equity, we have to study financial leverage. Financial leverage refers to the use of debt to acquire additional assets. Financial leverage may decrease or increase return on equity in different conditions. Financial over-leveraging means incurring a huge debt by borrowing funds at a lower rate of interest and using the excess funds in high risk investments in order to maximize returns. The degree to which an investor or business is utilizing borrowed money. Companies that are highly leveraged may be at risk of bankruptcy if they are unable to make payments on their debt; they may also be unable to find new lenders in the future. Financial leverage is not always bad, however; it can increase the shareholders' return on investment and often there is tax advantages associated with borrowing.
3.15 IMPORTANCE OF CAPITAL STRUCTURE DECISION

The objective of any company is to mix the permanent sources of funds used by it in a manner that will maximize the company’s market price. In other words companies seek to minimize their cost of capital. This proper mix of funds is referred to as the optimal capital structure.

The capital structure decision is a significant managerial decision which influences the risk and return of the investors. The company will have to plan its capital structure at the time of promotion itself and also subsequently whenever it has to raise additional funds for various new projects. Whenever the company needs to raise finance, it involves a capital structure decision because it has to decide the amount of finance to be raised as well as the source from which it is to be raised.
3.16 The capital structure decision process can be represented diagrammatically as:

**Figure 3.1**

**Process of Capital Structure Decisions**

- Capital budgeting decision
- Need for long term source of finance
- Capital structure decision
  - Existing capital structure
  - Debt equity mix
  - Dividend decision
    - Effect on earnings per share
    - Effect on risk to be borne by investors
      - Effect on cost of capital
        - Value of the company

**Optimal Capital Structure**

An optimal or sound capital structure can properly be defined as that combination of debt and equity which achieves the goal of maximizing the company’s market value. The optimal capital structure is also defined as that combination of debt and equity which minimizes the company’s cost of capital. Hence, the optimal capital structure is concerned with two important factors at one time—the maximization of shareholders’ wealth as well as minimization of cost of capital.
In the wake of given objective of maximization of shareholders’ wealth, the requirement for an optimal capital structure cannot, therefore, be overemphasized. In the financial decision-making process, every company should try to design such a capital structure. But the determination of an optimum capital structure is not an easy task. It should be clearly understood that determining the precise proportion of debt that will maximize price per share is almost impractical. It is possible, however, to ascertain the approximate share of debt to be used in the capital structure in tune with the objective of maximization of shareholders’ worth. It may be mentioned that there are certain common and conflicting assets. Different companies falling under a particular industry may have much in common regarding their financial plan. But they still may exhibit different earning trends, accounting methods and practices, general future conditions and predictions about the economy and the capital market. Moreover, the management’s capability to adjust the mix of debt and equity in conformity with these conditions is restricted by the availability of the various types of funds that are sought. Hence, these factors largely govern which pattern of capital structure is deemed desirable and which form of financing is chosen in a given situation.

The existence of optimum capital structure is not accepted by all. A great deal of controversy has developed over this issue.

3.17 CAPITALISATION AND CAPITAL STRUCTURE

In the area of financial management, two related expressions, ‘capitalization’ and ‘capital structure’ are more often than not erroneously used interchangeably. The capital structure decisions are not taken much frequently by a company. The following are the circumstances under which such a decision is taken:
(a) Establishment of a new business  
(b) Expansion and development of the business  
(c) Rehabilitation of business and  
(d) Reconstruction of the financial structure  

In these situations, two fundamental issues have to be settled. First, what should be the total amount of securities to be issued? Secondly, what particular types of securities should be issued to raise the funds? The first issue forms the subject-matter of capitalization, and the second issue lies in the preview of capital structure. In other words, ‘capitalization’ embraces the owned capital and borrowed capital of an enterprise insofar as it represents its long-term indebtedness, while ‘capital structure’ comprises the kind and proportion of each security that makes up the capitalization.

3.18 FINANCIAL STRUCTURE AND CAPITAL STRUCTURE

The financial structure is the mixture of owners’ equity and creditors’ equity. It describes the proportion in which different sources of finance have been used to finance the assets of the company. It consists of equity capital, preference capital, reserves and surplus, debentures, long-term and medium-term loans, and the short-term liabilities. In other words, it refers to the liability side of the balance sheet.

Capital structure is a part of the financial structure. It includes owners’ equity and creditors’ equity other than the short-term liabilities. It is a combination of long-term funds raised to finance all the fixed assets and permanent portion of working capital, preference capital, reserves and surplus, debentures, long-term and medium-term borrowing from banks, financial institutions and other sources.

The current liabilities have been excluded from the financial structure in order to define the concept of capital structure for the following reasons:
(i) That the current liabilities are incurred to cater to the short-term financial requirements of the business,

(ii) That the form of current liabilities changes quite frequently during the operating cycle depending upon the conditions prevailing in the company, money market, industry and so on, and

(iii) That the current liabilities mature for payment within a short-period, usually a year.

Thus, the current liabilities possess different characteristics and purpose when compared to other sources of funds. The long-term and medium-term funds in the form of equity capital, debentures, loans, etc. aim at improving the profitability and investment value of the business. They do not change their form quite often and are raised in order to finance the permanent assets to be used to generate return over a period of time. Hence, it appears reasonable to exclude short-term liabilities from the purview of capital structure.

3.19 TRADING ON THE EQUITY

In the financial circles, the term ‘leverage’ and ‘trading on equity’ are used synonymously. However, the term ‘leverage’ incorporates both operating and financial leverages. In fact, trading on equity refers to financial leverage only.

Trading on equity is the process of using debt in the capital structure to magnify return for the equity shareholders. This is known as trading on equity mainly due to the fact that the creditors are willing to advance funds on the strength of the equity supplied by the owners. Trading feature here is simply one of taking advantage of the permanent investment in equity share capital to borrow funds on reasonable cost.

The policy of trading on equity indicates availment of the advantage of permanent equity investment by borrowing funds on favorable cost of capital.
It is presumed that there is a significant difference between the rate of interest payable and the rate of return earned on investment of these funds.

From the foregoing discussion, it can be deduced that from the viewpoint of equity shareholders, debt capital is preferable to other sources due to various reasons. First, there is no dilution of control because the existing equity shareholders enjoy the same voting rights as before and control over the enterprise. Secondly, funds are obtained at a lesser cost than otherwise. If these funds can be invested to earn a return on equity would increase more than it would have been if all the capital was provided by equity. This phenomenon of using the fixed-interest bearing sources of funds in the capitalization of a company known as ‘Trading on Equity’.

3.20 EQUITY VERSUS DEBT FINANCING

Equity capital is the investment made by shareholders in the form of equity shares for which they do not necessarily expect any fixed rate of return every year and debt capital represents that part of capital for which a fixed rate of return in the form of interest is expected by the suppliers of such capital.

A company that finances whole of its assets through equity capital may be in a very advantageous position since no fixed return is required to be paid to anybody. Such a company may also be able to manage its finances very efficiently as it has not to reduce its commitments of outstanding loans or arrange further financing through loans. But equity capital may not come forward to the full extent in the case of all the difficulty of meeting the financial requirements to the necessary extent will not arise. This is because if investors are assured of a fixed rate of return, they may be prepared to invest to the full extent required for financing the projects. A question may arise as to whether it is desirable that the entire assets of a company are financed by equity capital. This is not desirable because using of long-term funds (equity capital) for short-term purposes may not be sound form of use of the available
savings of the community. Besides, due to the total quantum of equity finance available in a country being limited and some companies following a policy of financing their entire assets through equity capital, certain other companies may not be able to go into production for want of equity capital. Further, a company which is making high profits will not like to increase its equity capital if other sources of finances are available. This is because equity capital gets all the residual profits. Also, lending institutions which may not like to invest monies on long-term basis may be satisfied with a lower rate of return and be prepared to advance loans carrying a lower rate of return than what the equity shareholders can get. Thus, it is both in the interest of equity shareholders and the lenders that a company does not finance the entire assets through equity capital.

Advantages and Disadvantages of Equity Financing

Advantages

The equity capital is the most important long-term source of financing. It offers a number of advantages to the company.

1. **Long-term Permanent Capital**

   Equity shares provide long-term capital to the company. They are the chief risk-takers. Since equity capital is not redeemable, the company has no liability for cash outflow coupled with its redemption. It is a perpetual capital, and available for use as long as the company goes.

2. **Creditworthiness**

   The equity capital enlarges the company’s financial base, and thereby its financial limits. Lenders generally provide funds in proportion to the company’s equity capital. By issuing equity shares, the company strengthens its financial capacity enabling it to borrow when it needs additional funds.
3. **No Fixed Burden**

   Equity capital carries no fixed burden in terms of return. It does not carry any fixed rate of interest like debt funds. So, it does not create any fixed obligation on the company’s income statement. After meeting all the fixed charges payable on borrowed capital, the remaining amount of profits belongs to equity shareholders. Thus, in times of financial difficulties, it can reduce or suspend payment of dividend, and thereby avoid cash outflow.

4. **Other Advantages**

   Equity shares may, at times, be sold more easily than the debt. They appeal to certain investor groups for two reasons. They typically carry a higher expected return than does preference share or debt capital. Equity capital provides the investors with a better hedge against inflation because it represents the ownership in the company. Equity share increases in value when the value of real assets rises during an inflationary period.

**Limitations**

   Equity capital possesses some limitations for the company as compared to other sources of long-term finance.

1. **High Floatation Cost**

   The costs of underwriting and selling equity shares are generally higher than those for underwriting and selling debentures and preference shares, etc. The specific cost of equity shares is also typically higher than that of debt funds.

2. **Uncertain Income to Investors**

   Equity shares are riskier from investors’ point of view as there is uncertainty regarding dividend and capital gains. Therefore, they require a relatively higher rate of return. This makes equity capital as the highest cost source of long-term finance.
3. **Dilution in Control**

The each sale of equity shares gives power of control to the additional shareholders. For this reason, inter alia additional equity financing is often avoided by new and small companies because the existing management may be unwilling to share control of the concern with outsiders.

4. **No Advantage of Leverage**

If a company always issues equity shares to meet the requirement of additional funds, it cannot avail of advantage of leverage. The use of debt may enable the company to use funds at low fixed cost, whereas equity shares give equal rights to new shareholders too to share the net profits of the company.

5. **No Tax Advantage**

Dividends on equity shares are not deductible as an expense for determining the taxable income of the company, while interest on debt is admissible. This is why debt is considered to be a cheaper source of finance than equity capital.

6. **Inflexible capital structure**

Equity shares once issued and allotted cannot be refunded. The use of equity capital creates inflexibility in the capital structure of the company. On the other hand, redeemable preference shares and redeemable debentures provide the flexibility.

In view of the above factors, equity capital has proved to be the most prominent source of financing. It also appeals to a large number of investors who are venturesome and willing to assume risks for larger income. By purchasing equity shares, they share the prosperity and progress of the company. However, there is a danger of losing control to outsiders if the company decides to raise substantially large amounts through equity shares. Controlling position of the existing shareholders is jeopardized. Existing shareholders may, therefore, be averse to additional financing by
means of equity issues. Besides this, a company raising additional capital through equity shares will not be taking the valuable benefits of trading on equity.

Advantages and Disadvantages of Debt Financing

Advantages

A basic question arises as to why a company uses debt capital. Its answer is very simple. A company uses debt to magnify the return to its equity shareholders as debt capital is a cheaper source of funds. There are some obvious advantages of debt capital which motivate the companies to use debt capital in its capital structure.

1. No Dilution of Control

As the lenders do not have voting rights, debt capital does not result into dilution of ownership.

2. Lower Average Cost of Capital

The debt funds enable the management to lower down the average cost of capital because interest charges are usually lower than the expected dividend rate on preference shares as well as equity shares.

3. Tax Advantage

The interest payable on debts is an admissible expenditure in computing the taxable earnings of the company. Thus, its real cost is reduced by the marginal tax rate applicable to that company. This advantage is not available in respect of preference share capital or equity share capital because dividend is an appropriation of profits.

4. Flexible capital structure

The use of debt capital incorporates necessary flexibility in the capital structure of the company as it can be redeemed during the periods when it is no more needed in the business.
Disadvantages

Debt financing has some limitations also, the important of which are as follows:

1. Riskier Financing

Debt involves an element of risk, primarily because interest and principal payments are fixed charges. If a company has unstable earnings, it runs the risk of being unable to pay interest during periods of low earnings, and of inviting receivership.

2. Contractual Restrictions

Sometimes, the bankers or financial institutions providing loans to the company impose such restrictions upon the company that additional loans cannot be raised by that company without their prior approval. Such terms and conditions naturally obstruct the use of debt capital in future.

3. Cost of Borrowings

Another limitation of debt financing is that with successive issues of debt the company is required to pay higher rate of interest since each dose or debt involves the lender in greater financial risks.

In view of the aforesaid factors, companies with certain peculiar characteristics can avail of the benefits of debt. Only those companies whose earnings are reasonably stable and high enough to cover fixed interest charges on debt capital should use the debt funds. Companies not sure of future earnings would incur the risk of insolvency by using debt funds. Any factor contributing to instability of income would call for the company to restrict its financing mainly to equity share capital. Thus, a company pursuing a new industrial activity would have to depend upon the issue of equity shares to raise long-term funds. A new manufacturing concern requiring large and expensive plants and machines would place relatively less reliance on debt because its earnings are uncertain. Projects with longer gestation period and lower rate of profitability should have strong equity base while keeping the
debt funds to the minimum. Therefore, while deciding upon the use of debt vs. equity, the actual decision should be based on a judgment about the relative importance of the several underlying factors and principles.

### 3.21 CAPITAL STRUCTURE AND FINANCIAL LEVERAGE

Capital structure refers to the mix of securities (long-term debt, common stock or preferred stock) issued by a firm for finance real investment. Researchers often refer to the proportions of debt and equity when studying capital structure. A firm is unlevered when it has no debt in its capital structure, while a firm with debt is said to be leveraged. Therefore, the value of equity in an unlevered firm is the same as the total value of the firm. In contrast, the value of stock in a levered firm is equal to the value of the firm less the value of its debt. (Brealey et al., 2003)

There are two leverage terms concerning capital structure, operational leverage and financial leverage. Operational leverage is related to the firm's fixed operating cost, while the financial leverage is related to the fixed debt cost. More specific, the operating leverage increases the operating risk or business risk and the financial leverage increases the financial risk. The total leverage for the firm is given by the use of fixed operating costs and debt costs; more specifically, the total risk of the firm is equal to the business risk and the financial risk. Most common measures of capital structure can be divided into two categories, those that are based on the market value of equity and those that are based on the booked value of equity. Han-Suck Song (2005) explain that different measures of financial leverage can be used to investigate firms choice of capital structure, these are long-term, short-term and convertible debt divided by respectively market and book value of equity. But for simplicity the book value of equity is more used in empirical studies due to data limitations. In our study we will only look upon long-term debt to the value of equity when analyzing the firm’s capital structure decision.
Capital structure is often a concept which is perceived differently by researchers. Vasiliou and Daskalakis (2006) give definitions on different academics concept on capital structure; the capital structure can be the mix of long-term source of funds used by the firm or the long-term funds of the firm and debt capital as the all long-term borrowing incurred by the firm. Further on they write, the capital structure of the firm can be defined as the firm’s combination of different securities both short-term and long-term. Firms are often assumed to use short-term borrowing mainly for financing operating activities and long-term debt to finance their investment activities. In this thesis the concept of capital structure will therefore be excluded from short-term borrowing since we are only interesting in analyzing the firm’s decisions behind investment funding.

3.22 CARDINAL PRINCIPLES GOVERNING CAPITAL STRUCTURE

The financial manager has to plan the capital structure in such a way that owners’ interest is maximized. Accordingly, that pattern of capital structure should be selected which minimizes cost of capital and maximizes wealth of shareholders.

The financial manager has to plan the capital structure in such a way that owners’ interest is maximized. Accordingly, that pattern of capital structure should be selected which minimizes cost of capital and maximizes wealth of shareholders.

The capital structure of a company may be simple, compound or complex. A simple capital structure is composed of single security base, such as, the equity share capital. A compound capital structure consists of a combination of two securities, such as, equity and preference shares. The complex capital structure is made up of a multi-security base, consisting of equity and preference share capital, and a series of debentures and loans.
Which of the above capital structure is most suited to the company, should be decided in view of the fundamental principles laid down in this regard? These principles may be conflicting with each other. A prudent financial executive strikes an appropriate balance among them. Managerial freedom to adjust debt-equity mix is primarily conditioned by availability of different types of sources of finance in desired quantum. In view of this, wisdom of financial manager is seen in a satisfactory adjustment between requirement and supply of funds. Therefore, while designing the capital structure of an enterprise, certain basic principles has to be compiled with; otherwise the desired objective may not be attained in full.

1. Cost Principle

Under this principle, securities should be issued in such a manner as to entail the least cost of financing and maximize earnings per share. Cost of capital is subject to interest rate at which payment has to be made to the supplier of funds as well as the tax status of such payments. Generally, the cost is the lowest in case of issue of debentures and the highest in case of equity share. Rate of interest on debt capital is usually much less than the expected dividend rate. Debenture holders do not participate in the profits after interest and taxes. Secondly, interest on debt is deductible for income tax purposes, whereas no deduction is allowed for dividends. Consequently, effective interest rate which the company has eventually to bear would be less than the nominal rate of interest. Thus, the issue of debt is greatly helpful in raising the income of the company.

2. Control Principle

While designing capital structure for the company, the financial manager should also keep in mind that the control with the residual owners remains undisturbed. The use of preference shares and debentures offers an opportunity of raising funds without diluting control. The management desiring to retain control must fulfill its financial requirement through debt
funds. Since, equity shares carry voting rights, issue of new equity of existing shareholders. But this does not mean that the company should be indebted highly because that would certainly enhance the possibility of the company’s bankruptcy and the company might bear with the consequences of reorganization and liquidation. Instead of pouring more funds through debt, it would be better to issue equity shares and share some control with new equity shareholders.

3. **Risk Principle**

   This principle suggests that such a pattern of debt-equity mix should be designed as would not create the risk of bankruptcy for the company. Since, debt reflects a commitment for a long-period, it involves risk. If the expectations on which the debt was issued are not meet, debt may prove fatal to the survival of the company. If for example, income of the company declines to such low levels that debt cannot be serviced out of current income, the debenture holders in that case may force the liquidation and equity shareholders lose part of all of their assets. Similarly, if the company issues large amount of preference shares, equity shareholders may be left with no or little income after meeting fixed dividend obligations in a lean year. This would result in capital loss to the equity shareholders.

   As against this, since equity share capital does not entail any fixed obligation, the company does not incur the risk of insolvency in spite of the fact that additional equity share capital may lead to decline in earnings per share for the existing equity shareholders. Hence, risk principle places relatively greater reliance on equity capital for financing additional requirements of the company and forbids, as far as possible, the use of fixed cost bearing sources of long-term finance.
4. **Flexibility Principle**

As per flexibility principle, a finance executive should try to achieve such pattern of capital structure that enables the management to manoeuvre sources of funds at the time of expanding or contracting the requirement of funds. It should be possible for a company to adjust its capital structure with a minimum cost and delay, if required, by a changed situation.

Restrictive provisions are commonly included in debentures and loan agreements. These restrictions curtail the company’s freedom in dealing with the financial matters and place it in an inflexible position. Provisions in debt agreement may include restrictions to distribute cash dividends, to incur capital expenditure, to raise additional external finances or to maintain working capital at a particular level. Though these restrictions may be reasonable for the lenders to protect their interest, they curtail the flexibility of the company to operate freely. Therefore, the management should, as far as possible, avoid procuring cheaper debt on very restrictive terms and conditions.

A company attempting to obtain debt funds on easy terms may have to pay higher rate of interest. Hence, the company should evaluate the desired degree of flexibility in terms of cost and benefits and balance them properly.

5. **Principle of Timing**

Time factor is an important element in financing, especially in a growing concern. Important point that is to be considered is to make the public offering of such securities as are greatly in demand. Depending on various business cycles, investors’ attraction fluctuates with regard to different types of securities. In times of boom when there is all-round business expansion and economic prosperity with investors’ strong desire to invest, it is not difficult to raise required funds through the issue of equity shares. Contrary to this, in periods of depression, funds should be raised
through debt because investors are afraid of risking their investment in shares which are, by and large, speculative. Therefore, timing may favour debt at one time and equity share capital or preference share capital at the other.

Therefore, the choice of a particular capital structure is an issue which cannot be resolved easily. One has to take into account the pros and cons for each possible alternative. The ultimate choice has to be left to the individual judgment in each particular case. But at the same time, if the proper analysis of all these principles is carried out in an objective manner, the resultant capital structure so likely, within limits, to fit into a general pattern suited to the character of the industry in which the company operates.

Besides the above mentioned principles, there are a number of other factors which bear upon the corporate capital structure. We shall now discuss how the pattern of debt equity mix is influenced by different variables.

3.23 FACTORS DETERMINING THE CORPORATE CAPITAL STRUCTURE

There are no rigid rules to suggest what pattern would be ideal under what circumstances and what percentages of capitalization should be represented by each type of security. A certain proportion of owned funds to borrowed funds considered suitable for one company may be inequitable for the other. Capital structure varies from industry to industry, from trade to trade, and even within the same industry, from company to company. So, to determine the most desirable capital structure for a particular company, a number of factors are to be considered along with the principles discussed earlier.

The capital structure of an enterprise reflects an interaction between the individual enterprise’s operational and financial characteristics (Internal Factors) on the one hand and the environmental forces (External Factors) on the other. Both of these forces operate continually on the capital structure of
enterprises although either of them may predominate in shaping the capital structure at any given time.

These factors influence the capital structure in different way. The internal factors generally account for the differences that exist between the capital structure of companies belonging to the same industry and operating under the same conditions. In contrast to this, the external factors tend to influence all the companies in an industry or industries in more or less the same way, though, of course, not to the same extent, and indicate the ‘shift’ in the capital structure over a period of time.

3.23 (1) Internal Factors that Affect Corporate Capital structure

Internal factors are the company considerations that have a bearing on the kinds and amounts of securities in the capital structure. Some of these factors are:

1. **Maintainable Earnings**

   With greater stability in earnings, a company can use debt funds without much risk. But a company with irregular earnings may not burden itself with fixed charges. Such a company should, therefore, pay greater attention to risk principle and resort to the issue of equity shares to meet its fund requirements.

2. **Expected Growth Rate**

   Securities are sold when the growth of company is expected at a rate more rapid than can be financed by retained earnings. In general, fast growing companies with great need of funds are more likely to use debt or preference share capital. Management hopes to benefit from trading on equity and to be able to retire such obligations from the profits arising from expansion. If such expectations are realized, the existing equity shareholders gain from the expanded earning power that has not been shared with new equity shareholders. But if earnings do not meet the expectations, there would be the possibility of cash drain resulting from the payments of interest and principle.
3. **Assets Structure of the Company**

A company which has invested a relatively larger portion of its funds in fixed assets and the demand of whose products is constant should assign more weight to the use of debt. But in a company whose assets are mostly receivable and inventory, the use of equity capital will get more emphasis than the debt.

Companies tend to match the maturity of their assets and liabilities. Also, companies with more fixed assets that can be used as security may be expected to use more debt in their capital structure to take advantage of cheaper source.

4. **Size of Business**

Smaller companies face tremendous problems in raising required funds due to their poor credit worthiness. Investors feel more exposed to risk in investing their money in securities of these companies, while supplier of debt capital prescribes highly restrictive terms. Therefore, due attention should be paid to flexibility principle so as to assure that the company is able to obtain required funds on acceptable terms with the growth in its size.

5. **Age of Company**

New companies find it difficult to satisfy their capital requirements in the beginning because of greater uncertainty as to their success. It would, therefore, be proper for the company to give more attention to flexibility factor so as to have as many alternatives open as possible in future to meet their growth requirements. On the other hand, old companies with good record of sales and earnings do not face much difficulty in raising capital from whatever source they like. Leverage factor should, therefore, be followed in such concerns.

6. **Credit Standing**

A company with high credit standing is more able to adjust sources of funds upwards or downwards in response to varying needs for funds over the
one with poor credit standing. In the former case, the management should pay more attention to flexibility principle.

7. **Form of Business Organization**

Control principle should be given higher weightage in closely held companies where ownership of the concern is confined to a few hands. This may not so pressing in the case of public limited companies whose shareholders are large in number and so widely scattered that it becomes difficult for them to organize in order to seize control. In such form of organization, flexibility predominates because a public limited company finds it easier to procure both equity and debt funds.

8. **Ownership Pattern**

Ownership pattern refers to the composition of different groups of equity holders, such as, the foreign equity holders; financial institutions; body corporate; promoters, directors and their relatives; and other scattered shareholders. All these groups of equity holders have their own mutually conflicting investment criteria with the result that the financing mix will be decided according to the degree of influence of each group which is represented by its respective shareholdings.

**3.23 (2) External Factors that Affect Corporate Capital structure**

External factors are those considerations which are beyond the control of the company and affect all industries in general though in a varying measure. Some of these factors having a bearing on the composition of debt-equity mix are as follows:

1. **Impact of Income Tax**

As a result of existing tax provisions, debt has an edge over equity capital insofar as interest on debt is a tax deductible expense, whereas dividend is subject to tax. The management should forecast future changes in tax rate reach the financing mix decision accordingly. However, in view of
prevailing high corporate tax rate in India, the management is tempted to raise the degree of financial leverage by placing greater reliance on borrowing.

2. **Trends of Capital Market**

   Trends of capital market affect the cost and availability of different sources of finance. If the stock market is likely to be in bearish phase and interest rates are expected to decline, the management may lay more emphasis on flexibility principle to take advantage of cheaper debt quite for some time. However, if debt proves to become costlier and scarce in its availability due to bullish trend of the capital market, income factor may be assigned higher weightage and accordingly management may desire to meet additional fund requirements through the debt.

3. **General Level of Business Activity**

   In case the economy is to recover from current depression and the level of business activity is expected to expand, the management should pay more attention to maneuverability to enable the company to tap several alternative sources for procurement of additional funds for its growth requirements and accordingly, equity capital should be given more emphasis with avoidance of debt containing restrictive provisions.

4. **Policy of Term-financing Institutions**

   If financial institutions impose highly restrictive terms, the management should give more importance to maneuverability factor by not borrowing from those institutions so as to preserve the company’s maneuverability with regard to financial resources. However, if funds are available on easy terms from the financial institutions, more importance should be given to cost principle and obtain cheaper funds from the institutional supplier.

5. **Government Regulations**

   Decision regarding financing mix is subject to governmental control. At present, in India, capital issues by public limited companies are regulated
through SEBI. Norms imposed by the SEBI regarding the capital issues have their own impact on the capital structure and should be followed properly.

6. **Degree of Competition**

Public utility concerns are generally free from inter-industry competition, which makes their profits relatively more stable and predictable. In such concerns, management usually provides greater attention to the cost principle to avail of the benefit of financial leverage. But in those companies where there is stiff competition among them and profits are not easy to predict, risk principle should be given more consideration. Accordingly, the company should rely on equity capital as source of finance because issuing of debt in such cases would involve risk of not being able to meet the commitments.

7. **Industry-Class**

The nature of industry is one of the most important determinants of debt-equity mix of a company. If an industry’s sales fluctuate widely over a business cycle, the company should use less debt in its capital structure. On the other hand, industries dealing with inelastic demand are not likely face wide fluctuations in sales and can afford to have higher debt proportions in capital structure as in lean years they will not face the risk of being unable to meet their obligations.

In terms of competitive nature of an industry, it may be concluded that those industries which interface competition among themselves should have a relatively greater proportion of equity capital than debt. At the other extreme, there are public utility undertakings involved in the production of electricity, gas, water, etc., which are relatively free from intra-industry competition and their sales are more stable and predictable. Therefore, such companies can place more emphasis on the use of debt funds.
3.24 CAPITAL STRUCTURE THEORIES

The value of concern can be affected either by changing the expected earnings or the cost of capital or both. Though leverage cannot change the total expected earnings of the company, it can affect the shareholders’ earnings. The effect of leverage on the cost of capital is not very clear. Conflicting opinions have been expressed on this issue. Consequently, the purpose of this chapter is to bring out a brief discussion on the capital structure theories for an in-depth understanding of the relationship between financial leverage and value of the concern.

Theories of capital structure have been well documented in the finance literature. Most influentially, the NI, NOI and Modigliani and Miller (1958) work has given the theoretical foundation for further enquiry into the capital structure theory. The contributions of various financial economists and researchers have given new dimensions to capital structure theories, in particular by taking into account corporate taxes (Modigliani and Miller, 1963), bankruptcy costs (Stieglitz, 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 and Majluf, 1984; Myers, 1984). This subsection is devoted to get brief insight into these theories. Modigliani and Miller's (1958) independent hypotheses is dealt separately. Tax, bankruptcy cost and agency cost aspect are dealt under tradeoff theory and information asymmetry approaches are dealt under pecking order theory.

The major capital structure theories are:

(i.) Net Income (NI) Approach
(ii.) Net Operating Income (NOI) Approach
(iii.) Traditional Approach
(iv.) Modigliani-Miller (MM) Approach
NET INCOME APPROACH

According to Net Income (NI) Approach, suggested by Durand, the capital structure decision is relevant to the valuation of the concern. In other words, a change in the capital structure or debt-equity mix will lead to a corresponding change in the overall cost of capital as well as the total value of the company. If, therefore, the proportion of debt in the capital structure is increased, the overall cost of capital will decline, while the value of the company as well as the market price of equity shares will increase. On the other hand, a decline in the proportion of debt to equity will bring about an increase in the overall cost of capital and a decline both in the value of the company and the market price of the equity shares.

This approach is based on three basic assumptions:

1. There are no corporate taxes;
2. The cost of debt is less than the cost of equity capital; and
3. The use of debt does not change the risk perception of investors.

The implication is that as the degree of leverage increases, the proportion of an inexpensive source of funds in the capital structure increases. Consequently, the overall cost of capital tends to decline, thereby bringing about an increase in the total value of the company.

Finally, the proponent of this approach is of the opinion that the financial leverage is an important factor in the capital structure decision of a concern. With a proper mix of debt and equity, a company can evolve an optimum capital structure, at which the market price per share would be
maximum and the overall cost of capital minimum. Hence, under this approach a company can employ hundred per cent debt to maximize shareholders’ wealth.

**NET OPERATING INCOME APPROACH**

According to the Net Operating Income (NOI) Approach, the capital structure decision is irrelevant to the valuation of a concern. This approach is suggested by Durand. It is quite opposite to the NI Approach.

Any change in debt-equity ratio will not affect the total value of the company and the market price of shares, since the overall cost of capital is independent of the proportion of debt to equity. The assumptions of the net operating income approach are:

1. The corporate income taxes do not exist,
2. The debt-capitalization rate is a constant.
3. The overall capitalization rate of the company remains constant for all degrees of leverage. In other words, the market evaluates the company as a whole. The split of capitalization between debt and equity is therefore, not significant.
4. The use of cheaper source of fund, i.e., debt, increases the risk to equity shareholders. To compensate for the increased risk, the equity shareholders would expect a higher return on their investment. Thus, the benefit of cheaper debt is offset exactly by the increase in the equity-capitalization rate.
5. The market uses an overall capitalization rate to capitalize the net operating income. The overall capitalization rate depends risk is assumed to remain unchanged, the overall.

Therefore, the total value of the company is unaffected by its capital structure. The market price of shares will also not change with the change in
the degree of leverage. There is no specific capital structure which is optimum under this approach.

**TRADITIONAL APPROACH**

The Traditional Approach to the capital structure suggests that the average cost of capital does depend on the financing pattern which includes a moderate amount of debt that generally results into a least cost debt-equity mix. This approach is mid-way between the NI and NOI approaches as it possesses some features of both these approaches.

It resembles the NI approach in so far as it says that the cost of capital and total value of the company are not subscribe to the view of NI approach in that the value of company will necessarily increase for all degrees of leverage. On one point, it shares a feature with the NOI approach so much so that beyond a certain degree of leverage, the overall cost of capital increases, resulting into a decrease in the total value of the company. But it differs from the NOI approach in that it does not presume the overall cost of capital remains constant for all degrees of leverage.

The theory implies that through judicious mix of debt and equity, a company can increase its total value and thereby reduce its overall cost of capital, since debt is a relatively cheaper source of funds as compared to equity share capital. According to this capital reacts to changes in capital structure can be divided into three steps.

**First Step**

In the first step, with a change in the debt-equity ratio, i.e., using more debt in place of equity, a relatively cheaper source of funds replaces a source of funds which involves a relatively higher cost. At this stage, the cost of equity remains constant or rises slightly with debt. But when it increases, it does not increase fast enough to offset the advantage of cheaper source of
funds. As a result, the value of the company increases or the overall cost of capital falls with increasing leverage.

**Second Step**

Once the company reaches a certain degree of leverage, increases in leverage have a negligible effect on the value, or the cost of capital of the company. This is so because the increase in the cost of equity due to the added financial risk offsets the advantage of low cost debt capital. Within that range or at the specific point, the value of the company will be maximum or the cost of capital will be minimum.

**Third Step**

If the percentage of debt in the capital structure is enhanced further, it would increase financial risk for the investors who would penalize the company by expecting a higher equity-capitalization rate. The company would also prove to be very risky to the lenders who would like to be compensated by a higher rate of interest. As a result, the increase in equity capitalization rate is more than to offset the advantage of low-cost debt. Thus, the use of debt beyond a certain point will, therefore, have the effect of raising the overall cost of capital and conversely the total value of the company.

Thus, according to the traditional approach, the cost of capital of a company as also its valuation are dependent upon its capital structure and there is an optimum capital structure in which the company’s cost of capital is the minimum and its value the maximum.

**MODIGLIANI-MILLER (MM) APPROACH**

When Modigliani and Miller (1958) presented their article “The cost of capital, corporation finance and the theory of investment” it laid ground for several studies about capital structure. Their proposition one and two are today well-know and established within the academic field of corporate
finance. An alternative approach to the cost of capital has been propounded by Modigliani and Miller, who argue that, in the absence of corporate income tax, the cost of capital and the market value of a concern is independent of the capital structure. This approach is identical with the net operating income theory. The NOI approach does not provide operational justification for the irrelevance of the corporate capital structure, while MM approach provides operational justification for the constant overall cost of capital and, therefore, the total value of the company. The hypotheses get support from the presence of Arbitrage in the capital markets.

**Arbitrage Process**

Arbitrage is an act of buying an assets/security in one market (at lower prices) and selling it in another (at a higher price). Consequently, equilibrium is essentially, the arbitrage process is the purchase of securities whose prices are lower and sale of securities whose prices are higher, in related markets which are temporarily out of equilibrium. It is a balancing operation and implies that a security cannot sell at different prices.

**Basic Propositions**

There are three basic propositions of the MM Model:

1. The overall cost of capital and the total Market values of a company are independent of its capital structure. The total value is given by capitalizing the expected stream of operating earnings at a discount rate appropriate for its risk class.

2. MM’s Proposition II, states that, for any Company in a given risk class, the cost of Equity capital is equal to the constant Average cost of capital, plus a premium for Financial risk, which is equal to debt-equity Ratio times the spread between the constant Average cost of capital and the cost of debt capital. The cost of equity capital increases in a manner to
offset exactly the use of a relatively cheaper source of funds, i.e., debt capital.

3. The cut-off rate for investment decision making is completely independent of the way in which an investment is financed.

**Assumptions**

The foregoing propositions are based on certain assumptions, which are outlined below:

1. There is no corporate income tax.
2. Capital markets are perfect. Information is freely available and transactions are costless; securities are infinitely divisible.
3. Investors are rational. They are well-informed and choose a combination of risk and return. That is most advantageous to them.
4. Investors have homogeneous expectations and hold identical subjective probability distributions about future net operating Income.
5. Companies, on the basis of their business risk can be grouped into ‘equivalent risk classes’.
6. The dividend payout ratio is 100 per cent.

**Criticism**

The most crucial factor in the MM model is the arbitrage prices which provide an operational justification to the MM hypotheses. The assumption of perfect capital market in which arbitrage is expected to work, is not met practically due to the existence of imperfections in that market. Therefore, the arbitrage process is no more realistic and the exercise based upon it is purely theoretical. As the basic assumption of the MM approach does not hold well, a company may increase its total value and lower its overall cost of capital with judicious mix of debt and equity capital into the capital structure. Consequently, the capital structure of the company is not irrelevant to its valuation and the overall cost of capital.
MM Approach under Corporate Taxes

MM hypotheses that the value of the company is independent of its capital structure decision is based on the critical assumption that the corporate income tax does not exist. However, later on MM incorporated taxes in their hypotheses and showed its impact on the value of the company and cost of capital. According to them, corporate tax causes leverage to affect the cost of capital in such a way that increased debt proportion in capital structure is accompanied with decreased overall cost of capital and increased value of the company. Since, interest on debt is tax deductible, the effective cost of debt capital is less than the contractual rate of interest. Debt capital, thus, provides an edge to the company. A levered company would have greater market value than an unlevered company.

The implication of MM’s ‘tax-corrected’ analysis is that the value of the company is maximized when its capital structure contains only the debt. Thus, the optimum capital structure is reached when the company employs 100 per cent debt. But the situation in the real world is contrary to this view. Because the extensive use of debt financing would expose business to high probabilities of default, it would find it difficult to meet the promised payments of principal and interest. In practice, companies do not employ large amounts of debt, nor are lenders ready to lend beyond certain limits. Consequently, there are disadvantages of using more debt, and excessive use of debt may cause a rise in the cost of capital due to increased financial risk and may reduce the value of the company. Again, we find that MM’s proposition is unjustified when leverage is extreme. MM also recognize that the extreme leverage increases financial risk as also the cost of capital. They suggest that companies would adopt a target debt ratio so as not to violate the limits of the debt ratio so as not to violate the limits of the debt level imposed by supplier of debt funds. This suggestion indirectly admits that there is a safe limit for the use of debt and companies should not use debt funds beyond that limit. It implies that the cost of capital rises beyond a certain level on the use
of more debt in the capital structure. There is, therefore, an optimum capital structure.

To conclude the discussion of the theoretical relationship between capital structures, cost of capital and valuation, there are sharp differences of opinion in the academic literature, although, the traditional approach provides a fairly close approximation of the position. The optimum capital structure would, of course, vary from case to case. In other words, an appropriate debt-equity mix will depend upon the circumstances of each case.

3.25 THE TRADE-OFF THEORY

The trade-off theory of the capital structure suggests that a firm’s target leverage is driven by three competing forces: taxes, cost of bankruptcy (financial distress), and the agency conflict. Therefore, the firm seeks debt level that balances the tax advantages of additional debt against the costs of the possible financial distress and agency conflict. Therefore, a firm sets target leverage ratio and gradually moves toward it.

Taxes: After five years of their original work, in 1963, the Modigliani and Miller published second article (Modigliani and Miller, 1963) introducing the corporate tax, that is, relaxing the early assumption of ‘no tax world’. Incorporating corporate taxes, they concluded that leverage would increase a firm's value because interest on debt capital is tax-deductible expenses. The increasing leverage ratio linearly increases the value of the firm. Hence, under the corrected version of MM Proposition I, the value of levered firm is equals to the value of unlevered firm in the same risk class plus the gain from leverage 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 profit, personal earnings from stocks and personal interest earnings. He shows that the
incentive to finance completely through debt disappears under a variety of tax regimes. He states that 'even in a world in which interest payments are fully deductible in computing corporate income taxes, the value of the firm, in equilibrium will still be independent of its capital structure. In his paper, Miller also suggests 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 income stream, against which interest expenses can be deducted, is less than the firm's total interest expenses. Importantly, they note that the presence of deductions from taxable incomeZ, other than interest payments, reduces the expected gains from leverage. These non-interest tax deductions are generally known as ‘non-debt tax shields’. For examples, depreciation on fixed assets and investment tax credits.

**Bankruptcy Costs:** 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. According to them, when a firm raises excessive debt to finance its operations, it may default on this debt. As the proportion of debt in the Capital structure is increased, the probability of bankruptcy also increases.

However, it is not bankruptcy per se that is the problem. If the bond payments are not met when they become due and the bond defaults, the firm is simply transferred to the bondholders. However, there are ‘dead weight’ costs that arise in the case of corporate bankruptcy which come in form of direct and indirect deadweight costs. Direct out-of-pocket expenses for the administration of the bankruptcy process (legal fees and management time)
are relatively small compared to the market values of the firms. However, they seem of less important for large firms, they can be substantial for small firms. Indirect bankruptcy costs can be significant for both large and small firms (Warner, 1977). Once the firm runs into financial distress, it is obvious that the firm’s investment policy changes, which results in a reduction of firm value. Most obvious, the firm may decide on shortsighted cutbacks in research and development, maintenance, advertising, and educational expenditures that ultimately result in lower firm values. Besides, bankruptcy hampers conduct with customers. They are usually lost because of both fear of impaired service and loss of trust.

**Agency Costs:** In search of optimal capital structure, beside the tax and bankruptcy cost aspect, Jensen and Meckling (1976) explore on the agency cost aspect. They use the agency cost to argue that the probability distribution of cash flow provided by the firm is not independent of its ownership structure. Their theory of corporate ownership is based on the assumptions that the firm size and outside financing are constant. Hence the actual value of the firm 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 percent of the residual claim. Consequently, they do not capture the entire gain from their profit enhancement activities, but they do bear the entire cost of these activities. Conflict between debt holders and equity holders arise because the debt contract gives equity holders an incentive to invest sub optimally. The consequences of this conflict are overinvestment (risk shifting), underinvestment (assets substitution) problem and residual claim. The risk shifting or bondholder expropriation hypotheses assert that stockholders have the incentive to exploit bondholders once the debt is issued. Managers, whose
ultimate responsibility is to the stockholders, are likely to make investments that maximize stockholder wealth rather than total firm value. In particular, because equity can be viewed as a call option, managers tend to accept risky negative net present value (NPV) projects in which the value decrease consists of a decrease in the value of debt and a smaller increase in the value of equity. This is known as the overinvestment problem.

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 debt comes due. Hence, the firm will refuse to accept good investment opportunities ex post, reducing the firm value ex ante.

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 managers’ financial discipline. Free cash flow is cash flow in excess of that required to fund all projects that have positive net present values. Firms with substantial free cash flow face conflicts of interest between stockholders and managers. The problem is how to motivate managers to distribute excess funds rather than investing it below the cost of capital or wasting it on organizational inefficiencies. Even worse, managers can invest less effort in managing firm resources, but transfer firm resources to their personal benefits. Instead of investing into low-return projects, managers of firms with stable free cash flows can pay out cash by increasing dividends or repurchasing stock. 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. Bondholders can take the firm into bankruptcy court if managers do not maintain their promise.
to make the interest and principal payments. Accordingly, debt reduces the agency cost of free cash flows for mature companies by reducing the cash flow available for spending at the discretion of managers.

**Figure: 3.2**

![Diagram showing the tradeoff theory of capital structure]

**Tradeoff Theory of Capital structure**

Therefore the agency cost theories imply that corporate leverage is chosen, in a rather 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 shareholders' interest. The trade-off theory of the capital structure posits that there is an optimal debt-equity ratio. Firm's attempt is to balance the tax benefits of higher leverage and the cost associated with bankruptcy and agency problem. Figure 3.2 gives a bird-eye view of tradeoff theory of capital structure.

**Pecking Order Theory**

Capital structure theory has become yet another dimension with the explicit modeling of private information in financial theory. Two main strands have emerged in the literature on asymmetric information. In the first
approach, suggested by Ross (1977), debt is regarded as a means to signal confidence to the firm’s investors. In the second approach, suggested by Myers and Majluf (1984), it is argued that the capital structure is designed to mitigate distortions in the investment decisions caused by information asymmetries. Firms prefer internal financing when available; and, if external financing is required, debt is preferred over equity, that is, ‘pecking order’.

**Signaling Hypotheses:** Ross (1977) assumes that managers (the insiders) know the true distribution of firm returns, but investors do not. He argues that investors interpret larger levels of leverage as a signal of higher quality. The intuition behind his argument is that debt and equity differ in an important way that is crucial for signaling insider information. Debt is a contractual obligation to repay interests and the principal. Failure to make these payments can lead to bankruptcy and managers may lose their jobs. In contrast, equity is more forgiving. Although shareholders expect dividends at least to be maintained, managers have more discretion and can cut them in times of financial distress. Therefore, adding debt to the capital structure can be interpreted as a credible signal of high future cash flows and managers’ confidence about their own firm. Lower quality firms will not imitate higher quality firm by issuing more debt because they have higher bankruptcy costs at any level of debt. Accordingly, Ross (1977) concludes that investors take larger levels of debt as a signal of higher quality and that profitability and leverage are thus positively related.

**Pecking Order Hypotheses:** 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 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 NPV projects, then all positive NPV projects would be undertaken. Therefore, holding more liquid assets would be a good reason in this regard. They show that managers use private information to issue risky securities when they are overpriced. This leads to an interaction between investment and financing decisions. Because market participants cannot separate information about new projects from information about whether the firm is under or overvalued, equity will be mispriced by market participants. If firms are required to finance new projects by issuing equity, under pricing may be so severe that new investors capture more than the net present value of the new project, which would result in a net loss to existing shareholders. Even a positive net present value project will be rejected, leading to yet another underinvestment problem. The information costs associated with debt and equity issues has led Myers (1984) to argue 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 adapt their target dividend payout ratios to their investment opportunities, 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, mean that internally generated cash flow may be more or less than investment outlays. If it is less, the firm first draws down its cash balance or marketable securities portfolio.
- If external finance is required, firms issue the safest security first. That is, they start with debt, then possibly hybrid securities such as convertible bonds, then perhaps equity as a last resort. In this story, there is no well defined target debt-equity mix, because there are two kinds of equity, internal and external, one at the top of the pecking order and one at the bottom. Each firm’s observed debt ratio reflects its cumulative requirements for external finance.
In nutshell, the pecking order hypotheses states that businesses adhere to a hierarchy of financing sources and prefer internal financing when available; and, if external financing is required, debt is preferred over equity. Firms prefer more liquid assets to mitigate the investment and financing problems (Myers, 1984).

Other Considerations

There are some other aspects put forth by different authors/researchers. Harris and Raviv (1991) in their comprehensive review of capital structure theories outline product/market interaction aspect and corporate control aspect. These aspects are still in infancy and lots of empirical works are required to refine these approaches. The capital structure models are based on product/market interaction between capital structure and either product market strategy or characteristic of product/inputs (Harris and Raviv, 1991). Product price and quantity are considered as the strategic variables. Models involving product or input characteristics have focused on the effect of capital structure on the future availability of products, parts and serves, product quality, and the bargaining game between management and input suppliers (Harris and Raviv, 1991). The oligopolists will tend to have more debt than firms in competitive industries or monopolists (Brander and Lewis, 1986). And the firms that produce products that are unique or require service and/or parts and firms for which a reputation for producing high quality products is important may be expected to have less debt (Titman, 1984). The growing importance of merger and acquisition activities during 1980's in US and large European counties, the finance literature has been to examine the linkage between the market for corporate control and the capital structure (Harris and Raviv, 1991). Stulz (1988) argues that the capital structure affects the outcome of takeover contests through its effect on the voting rights of equity and claimants of debts. Harris and Raviv (1991) argue that the capital structure affects the value of the firm, the probability of takeover, and the price effect of takeover. They further write that the optimal ownership share is
determined by the incumbent manager who trades off capital gains on his stake against the loss of any personal benefits derived from being in control. Since the manager's ownership is determined indirectly by the firm’s capital structure, this trade-off results in a theory of capital structure.

3.26 LIBERALIZATION OF ECONOMY

The Government of India started the economic liberalization policy in 1991. Even though the power at the center has changed hands, the pace of the reforms has never slackened till date. Before 1991, changes within the industrial sector in the country were modest to say the least. The sector accounted for just one-fifth of the total economic activity within the country. The sectoral structure of the industry has changed, albeit gradually. Most of the industrial sector was dominated by a select band of family-based conglomerates that had been dominant historically. Post 1991, a major restructuring has taken place with the emergence of more technologically advanced segments among industrial companies. Nowadays, more small and medium scale enterprises contribute significantly to the economy.

By the mid90s, the private capital had surpassed the public capital. The management system had shifted from the traditional family based system to a system of qualified and professional managers. One of the most significant effects of the liberalization era has been the emergence of a strong, affluent and buoyant middle class with significant purchasing powers and this has been the engine that has driven the economy since. Another major benefit of the liberalization era has been the shift in the pattern of exports from traditional items like clothes, tea and spices to automobiles, steel, IT etc. The ‘made in India’ brand, which did not evoke any sort of loyalty has now become a brand name by itself and is now known all over the world for its quality.
3.26 (1) CAPITAL STRUCTURE OF INDIAN CORPORATE BEFORE LIBERALIZATION

Studies on capital structure of Indian Industries are inconclusive and often conflicting. A study by Sharma and Rao (1968) on 30 Engineering firms for 3 years concludes that debt due to its tax-deductibility is a prominent determinant of the cost of capital. A study by I. M. Pandey (1981) on cotton textiles, chemicals, and engineering and electricity generations lends support to the traditional approach. Bhatt (1980) in his paper concludes that the leverage ratio is very much influenced by business risks measured in terms of variability in earnings, profitability, debt service capacity, and dividend-payout ratio. I. M. Pandey (1984) in another study found that during 1973-81 about 80 percent of the assets of the companies sampled were financed by external debt and current liabilities. Large sized companies were more levered though a large number of small firms also courted more debt capital. Leverage did not exhibit a definite relationship with growth and profitability, although all the three variables moved in the same direction. He also found that a majority of the profitability and growth oriented companies were within the narrow bands of leverage. S. K. Chakraborty (1977) in their study found that age, retained earnings, and profitability were negatively correlated with the debit equity ratio, while total assets and capital intensity were directly related to it. They felt that a high cost of capital for all the consumer industries was due to their low debt component. Their indirect attempt to test the MM hypotheses for 22 firms showed that cost of capital was almost invariant to the debt equity ratios.

Before 1980s Indian financial managers courted debt due to its low cost, tax advantages and the complicated procedures to be observed in garnering equity capital. The substitutability of short term debt for long term loan was another attraction. However, with the waves of liberalization, privatization and globalization sweeping the capital market in recent years, the corporate world has started wooing equity capital in a big way. The arrival
of a matrix of new financial instruments such as commercial papers, asset securitization, factoring and forfeiting services, and the market related interest rate structure and their stringent conditions for lending, force modern enterprises to court equity finance.

In the study conducted by Chhabi Majumdar in 1992 for his Doctoral Thesis titled, “Borrowing as a source of financing working capital in The corporate sector in India: An empirical analysis” on working capital financing sources of Indian corporate before liberalization, for the period 1981 to 1990, he analyzed the balance sheets of 20 companies, 10 from private sector and 10 from public sector. In addition, he has processed the relevant figures of a good number of public limited companies whose results have been published in the RBI (Reserve Bank of India) Bulletins during the period under study. While processing the figures so obtained, he has taken help of some accounting as well as statistical tools e. g. current ratio, debt-equity ratio, standard deviation, coefficient of variation and test of significance.

In the process of the study he has seen that the working capital of each firm is constituted by several types of sources like bank borrowings, public deposits, trade credit, long-term borrowings and equity capital. At the outset, he has tried to find out the reasons behind utilizing several sources instead of relying upon one or two best-suited sources. What appears there from is that, since working capital needs are partly fixed and partly fluctuating, the companies cannot but resort to sources of different types and terms. Moreover, whereas short-term borrowings offer the benefit of reduced cost due to reduction of idle capital, the use of long-term borrowings has also the necessity on many grounds. Long-term borrowings are less risky than short-term borrowings and the firms would not have to meet the cash obligations off and on. Not only the long term borrowings, but the equity capital has also its role to play in the financing of working capital in Indian corporate sector. At the initial stage of a firm, fixed assets as well as current assets have to be financed by this equity capital, since other sources may not be easily available.
at that time. Subsequently, when the firms get momentum, several lenders may stretch their hands for advancing loan, but the importance of equity capital does not end altogether. On the ground of stability and security, each firm is to maintain “equity-cushion” throughout its life time. In view of this, it has been deduced in his study that there is need for financing working capital from various sources.

Of different sources, bank credit has been working since long as a major source of working capital in India and abroad. In 1970s the use of bank credit in Indian corporate sector became so excessive that the desired correlation between bank credit and the holding of inventory and book debt was hampered in most cases. Hence, attempt was initiated to bring in a ‘check’ on the use of bank credit and several study groups (Dehejia Study Group, Tandon Study Group, Chore Study Group, Marathe Committee, Chakraborty Committee etc. ) were set to find out a way in this regard. All the study Groups gave recommendations in favour of providing a ‘restraint’ on the use of bank credit, and the Tandon Study Group prescribed some definite norms to that effect. Suggesting a limit on the holding of inventory and book debt, the Tandon Study Group prescribed three methods (methods I, II and III) to be implemented one after another, with a view to reducing the share of bank credit in the working capital. Applying the prescribed (prescribed by Tandon Study Group) norms for holding inventory and bank credit he has seen in his study that there has been a positive impact of the Tandon Study Group recommendations on the use of bank credit by Indian companies. That means the desired correlation between bank credit and the holding of inventory and receivables has now been mostly established. Notwithstanding, the share of bank borrowings to total borrowings in public limited companies is 20 percent in average during the period 1981-90, and that to current assets is 22-25 percent. The yearly scores during the decade of eighty are also in agreement with the average results, and hence the standard deviations calculated there-on have been very low. In government companies, the
combined scores in relation to total borrowings as well as to current assets are only 56 percent no doubt, but in six out of ten government companies the individual scores range from 17 percent to 31 percent. In view of this, it may be said that the role of bank borrowings in working capital financing in Indian corporate sector is still immense. Then, he has analyzed the role of public deposit as a source of working capital in Indian corporate sector. This source emerged in India in 1930s. In 1950s, there became a downfall in the use of it. In 1970s it again came into prominence. Use of public deposit may frustrate the Government's policy of canalizing the flow of funds to industrial sector according to planned priorities. Moreover, it is said that the unwary depositors may come into the trap of unscrupulous depositee companies, by lending their hard-earned money as public deposit. But from the standpoint of depositee companies, public deposit can be said to be a viable source of finance in many respects. The most important argument in favor of its use is that it is cheaper than bank borrowings and many other sources of finances. Now, government has imposed some regulation and as a result the interest of innocent investors has been protected to an extent and the flow of public deposit has also been restrained in the interest of planned economy. It is thus expected that the investors will now accept the offer for public deposit more freely and the firms, due to its cost advantage, will utilize this source up to at least the permissible limit. But what he has observed is that the share of public deposit to total borrowings is, on an average, only 6 percent in public limited companies, and this is as meager as 0.08 percent in government companies. Share of public deposit to current assets is also only 7 percent in public limited companies and 0.08 percent in government companies. The individual results as to the use of public deposit are, however, widely scattered, and this is substantiated by the high coefficient of variation (108 percent) of the scores. Nevertheless, it is evident from the combined results that the role of public deposit as a source of working capital is not significant in the decade of eighty, though in 1970s its role had been better to some extent.
Long-term borrowings like debenture, institutional loan and government loan have also a contribution to working capital financing, since, a part of current assets is usually covered by long-term funds. The corporate practices as to these of different types of long-term sources reveal that the position of debenture in corporate finance is almost equal to that of institutional loan. In RBI sample, both hold individually 14 percent of total borrowings. In case of ten selected public limited companies their individual scores are 7 percent and in case of government companies their scores are only 0.1 - 0.3 percent. Government loan, on the other hand, occupies as much as 66 percent share of total borrowings in government companies, though its position in public limited companies is really insignificant.

Sometimes long-term borrowings may occupy important role in total borrowings, but that does not mean that contribution of long-term borrowings to working capital will also be significant. If current liabilities cover the current assets in full, the long-term sources, whatever may be their position to total borrowings, will have to be presumed to be used for financing the fixed assets only. From this view point, he has computed the extent of gap between current assets and current liabilities of the selected companies, and has presumed that the gap has been financed by long-term sources as a whole. Multiplying the gap with the ratio of each long-term source to total long-term funds, he has estimated the share of different companies of long-term borrowings, visa, debenture, institutional loan and government loan, in the context of working capital. The results so obtained reveal that the individual share of institutional loan and debentures towards financing working capital is 2-5 percent in case of public limited companies and 0.05-0.16 percent. In case of government companies. Thus, it appears that the role of debenture and institutional loan in working capital finance is almost an exercise of paper only. Position of government loan is also disappointing in public limited companies. But in government companies its contribution is remarkable. This is quite expected as government companies have developed a practice of
banking upon ‘easily-available’ government loans. However, the position of government loan as a source of finance is gradually decreasing even in government companies. On the other hand the position of debenture is gradually improving both in private as well as in public sector. Institutional loan exhibits a fluctuating trend during the decade of eighty, although ultimately its position has improved to an extent.

Another viable source of working capital is trade credit, which is considered to be a formality-free, security-free and interest-free source of finance. Due to the above advantages, trade credit has been practically a common source of working capital to almost all enterprises; Notwithstanding the fact that there is some implicit cost associated with trade credit and the explicit cost is also originated when cash discount offered is foregone. During 1980s, 30 percent of current assets and 25 percent of total borrowings of public limited companies have come from trade credit and in case of government companies the scores have respectively been 8.3 percent and 8.8 percent. As such, it may be stated that the role of trade credit is equally important during the period under study. However, its contribution in public limited companies is higher in comparison with that in government companies.

One of the important factors determining the feasibility or otherwise of a particular source of finance is stated to be the cost. Hence, he has attempted to see thereafter how far the cost actually plays the decisive role in the selection of sources. With an attempt to estimate the effect of cost on their selection, he has computed the specific costs of some sources. Trade credit has been taken to be less costly source of finance, although there are some implicit costs of trade credit over and above the cost of foregoing cash discount. Bank borrowings, on the other hand, appear to be costliest of the three sources. Thus, on cost consideration, it is natural that share of bank borrowing in working capital finance will be much lower than that of trade credit. But the corporate practices reveal that ratio of bank borrowings, to
trade credit is, on an average, 88 percent, that is, bank borrowings do not lag as much behind the trade credit as it should be from the view point of cost of finance. Then, coming to the comparative position of bank borrowings and public deposit he found that, throughout the decade of eighty, the cost of public deposit had always been lower than that of bank borrowings. But during the period, the use of bank borrowings was approximately four times of public deposit. Moreover, it has been revealed that the cost of public deposit, contrary to general expectation, has gradually come down. Had the cost been a factor for the use of public deposit, its share to current assets would have been higher over time due to gradual reduction in cost. Reversely, he has observed a decreasing trend in the use of this source. In view of all these, he concluded that effect of cost on the selection of sources of working capital is not at all significant.

IMPACT OF LIBERALIZATION ON CAPITAL STRUCTURE OF INDIAN CORPORATE

Until the early nineties, corporate financial management in India was a relatively drab and placid activity. There were not many important financial decisions to be made for the simple reason that firms were given very little freedom in the choice of key financial policies. The government regulated the price at which firms could issue equity, the rate of interest which they could offer on their bonds, and the debt equity ratio that was permissible in different industries. Moreover, most of the debt and a significant part of the equity were provided by public sector institutions. At the beginning of the reform process, the Indian corporate sector found it significantly over-levered. This was because of several reasons:

1. Subsidized institutional finance was so attractive that it made sense for companies to avail of as much of it as they could get away with. This usually meant the maximum debt-equity ratios laid down by the government for various industries.
2. In a protected economy, operating (business) risks were lower and companies could therefore afford to take more risks on the financing side.

3. Most of the debt was institutional and could usually be rescheduled at little cost.

The liberalization changed all of this. The corporate sector was exposed to international competition and subsidized finance gave way to a regime of high real interest rates. One of the first tasks for the Indian companies was substantial deleveraging. Fortunately, a booming equity market and the appetite of foreign institutional investors for Indian paper helped companies to accomplish this to a great extent in 1993 and 1994. The downturn in the stock market that has followed since then has stopped this process from going any further and has probably left many companies still excessively levered. According to the figures compiled by the Centre for Monitoring the Indian Economy, the average debt-equity ratio of private sector manufacturing companies in India fell from 1.72 in 1990-91 to 1.05 in 1996-97, and more than half of this reduction took place in one single year 1994-95. And consequently, the post liberalized era has started observing the following changes in the sources of Industrial finance:

**DOMESTIC CAPITAL FORMATIONS**

The planners, in the fifties, had recognized that the material shortage of capital in relation to labor was the principal constraint to the industrial growth. It was envisioned that increased capital formation would contribute for more industrial output and a 'virtuous circle' of growth. Gross Capital Formation (GCF) is estimated across three types of assets, viz., construction, machinery and equipment. The GCF, adjusted for errors and omissions, is termed as aggregate investment or Gross Domestic Capital Formation (GDCF). A positive association is hypothesized between the capital formation and the industrial production.
FOREIGN DIRECT INVESTMENT

Foreign investment can be classified as foreign direct investment (FDI) and foreign portfolio investment. International investment in financial assets such as shares, debentures and bonds, is called portfolio investment. Foreign investment in real assets is called foreign direct investment (FDI). Multinational corporations (MNCs) are the chief source of foreign direct investment in real assets. Real assets consist of physical things such as factories, land, capital goods, infrastructure and inventories. Multinational may collaborate in joint ventures with host country enterprises or may have fully owned subsidiaries in host countries. Such investments are called foreign direct investments.

A few decades ago, many countries considered FDI as the source of economic imperialism. But things are quite different now. The argument is that FDI contribute to the growth of host economies in many ways. e.g. physical capital formation, technology transfer, human formation, stimulation of productivity, augmentation of output, promotion of foreign trade and improvement of competitiveness of indigenous entrepreneurs. After weighing the prospects and consequences, government of India seems keen to attract ever-increasing amount of FDI, which can be evidenced by its efforts aimed at deregulation, transparency and globalization. In brief, it can be regarded as a source of industrial growth. As part of the economic reforms introduced in 1991, in the wake of a sharp external payments crisis, policies relating to foreign investment and foreign technology agreements were radically changed. Foreign Investment Promotion Board (FIPB) was specifically created to invite and negotiate for substantially large investment by international companies.

PRIMARY ISSUES IN THE CAPITAL MARKET

Capital market constitutes primary (new issues market) and secondary (stock) market. The primary market helps the public and private sector
companies in raising finance mainly for their new projects, expansion, modernization, acquisition etc. The secondary market provides liquidity for the financial instruments (equity, preference shares and debentures/bonds) through adequate marketability and price continuity. The array of financial institutions also have played crucial role in meeting long-term credit needs of the industrial sector.

With the liberalization of the Indian economy since 1991, the government has provided a number of additional fiscal and other incentives to foster capital market development. The result has been an explosive growth of the market. The magnitude of the growth has been rapid and vivid in terms of fund mobilized, the amount of market capitalization and the expansion of investor population. The Indian market was opened up for investment by the foreign institutional investors (FIIs) in Sept.1992 and the Indian companies were allowed to raise resources abroad through Global Depository Receipts (GDR) and Foreign Currency Convertible Bonds (FCCB). Both the primary and secondary segments of the capital market displayed rapid expansion and growth accompanied by greater institutionalization and larger participation of individual investors during the post-reform period.

Despite the structural transformation of the Indian capital market, there are many problems which often come on the way of its efficiency. These relate to investor protection, consolidation (after massive expansion), integration with other market segments, product innovation and technology, etc. which are critical and need to be addressed. Reserve Bank of India has expressed concern over continued sluggishness in the primary capital market for the last two years (1996-97 and 1997-98), as long term prospects for industrial development are critically dependent on the revival of primary market.
BANK CREDIT

Banks are the dominant financial intermediaries in developing countries including India. Bank credit is considered as an important source of industrial finance. The dependence on bank for finance could vary according to the size of the companies. The small-scale industrial units have increased their dependence on banks for loans because they have virtually no access to the capital markets.

The Reserve Bank of India’s attempt at reforming the financial sector was visible from the recommendations of the committee to review the working of the monetary system (1985) (referred to as Chakraborty Committee Report). The committee advocated the necessity of moving away from quantitative controls which, it felt, led to distortions in the credit market and resulted in curbing the growth of the economy. But the impetus to reforms in the financial sector was given by the report of the committee on the financial system (Narasimham Committee). The financial sector reforms, based on this report were mainly aimed to provide credit to the industrial sector by reducing the cash reserve ratio and statutory liquidity ratio. The liberalization policy also called for increased efficiency of commercial banks by encouraging them to compete in the market. The public sector banks were given autonomy to frame their policies including interest rate fixation. It may be noted that the bank credit to the industrial sector has not increased during the post-reform period in spite of the various attempts.

3.26 (2) CAPITAL STRUCTURE OF INDIAN CORPORATE AFTER LIBERALIZATION

Capital structure management has been impacted by a number of the developments discussed above operational reforms in the area of credit assessment and delivery, interest rate deregulation, changes in the competitive structure of the banking and credit systems, and the emergence of money and
Some of the important implications of these changes for short term financial management in the Indian corporate sector are:

1. **Creditworthiness:** The abolition of the notion of maximum permissible bank finance has given banks greater freedom and responsibility for assessing credit needs and creditworthiness. Similarly commercial paper and other disinter mediated forms of short term finance are very sensitive to the company’s credit rating and perceived creditworthiness. Companies are suddenly finding that their creditworthiness is under greater scrutiny than ever before. Over a period of time, companies will have to strengthen their balance sheets significantly to ensure a smooth flow of credit. In the meantime, many borrowers’ especially small and medium businesses have seen their source of credit dry up.

2. **Choice:** Top notch corporate borrowers are seeing a plethora of choices. The disintegration of the consortium system, the entry of term lending institutions into working capital finance, and the emergence of money market borrowing options gives them the opportunity to shop around for the best possible deal. Some borrowers indeed appear to have moved to a highly transaction oriented approach to their bankers. Over time, however, we would probably see the reemergence of relationship banking in a very different form.

3. **Maturity Profile:** The greater concern for interest rate risk makes choice of debt maturity more important than before. Short term borrowings expose borrowers to rollover risk and interest rate risk.

4. **Cash Management:** Cash management has become an important task with the phasing out of the cash credit system. Companies now have to decide on the optimal amount of cash or near-cash that they need to hold, and also on how to deploy the cash. Deployment in turn involves decisions about maturity, credit risk and liquidity. In the mid-nineties, many corporate found that they had got these decisions wrong. During the tight money policy of this period, some companies were left with too little liquid cash, while others found that
their “cash” was locked up in unrealizable or illiquid assets of uncertain value.

In quantitative terms, the growth of the Indian capital markets since the advent of reforms has been very impressive. The market capitalization of the Bombay Stock Exchange (which represents about 90 percent of the total market capitalization of the country) has quadrupled from Rs. 1.1 trillion at the end of 1990-91 to Rs. 4.3 trillion at the end of 1996-97. As a percentage of GDP, market capitalization has been more erratic, but on the whole this ratio has also been rising. Total trading volume at the Bombay Stock Exchange and the National Stock Exchange (which together account for well over half of the total stock market trading in the country) has risen more than tenfold from Rs 0.4 trillion in 1990-91 to Rs. 4.1 trillion in 1996-97. The stock market index has shown a significant increase during the period despite several ups and downs, but the increase is much less impressive in dollar terms because of the substantial depreciation of the Indian rupee. It may also be seen from the chart that after reached its peak in 1994-95, the stock market index has been languishing at lower levels apart from a brief burst of euphoria that followed an investor friendly budget in 1997. For the primary equity market too, 1994-95 was the best year with total equity issues (public, rights and private placement) of Rs. 355 billion. Thereafter, the primary market collapsed rapidly. Equity issues in 1996-97 fell to one-third of 1994-95 levels and the decline appears to be continuing in 1997-98 as well. More importantly, most of the equity issues in recent months have been by the public sector and by banks. Equity issues by private manufacturing companies are very few.

A study conducted by Justin Paul, A. Ramanathan, reveals that bank credit constitutes two-thirds of the total credit to the industrial sector and still continues as the important source of finance for small-scale industries. More attention has to be paid for providing as much as bank credit for the industrial sector. Reserve Bank of India’s efforts to reduce the cash reserve Ratio and
withdrawal of ad-hoc treasury bills (abolition of automatic monetization of fiscal deficit) will be helpful to pump more credit to the banking sector. But commercial banks are required to take steps for providing more credit to the industrial sector, rather than investing in government securities. Priority should be given for small-scale units and new entrepreneurs. Bank Rate has to bring down in order to reduce the cost of funds (interest rate) in India. Similarly, certain measures have to be adopted immediately in the financial sector to recover the buoyancy in the stock market.

3.27 CAPITAL STRUCTURE OF INDIAN COMPANIES IN RECENT PAST

In order to know the financing pattern of Indian companies in recent past, A study was conducted by Ashok Kumar Panigrahia (1999-2000 to 2007-2008) and they have analyzed the financing pattern of 300 Indian private sector companies, comprising of 20 different sectors for the period 1999-2000 to 2007-2008, duly grouping them on the basis of their region, size, age, and nature etc. At first they have conducted the analysis of the total sample of all the 300 companies on an aggregate basis. Later on they have examined the capital structure of the companies after classifying them into different sizes, ages, regions and sectors. The different sources from where the corporate sector has raised the funds and the ways and means by which the so raised funds have been utilized have been analyzed in detail. The analysis of the study is based on the historical funds flow statements of each company. For the total sample, the aggregate of (300 companies) individual sources of funds and their investment in acquiring different assets has also been made. The key findings are as follows:

- Indian corporate employ substantial amount of debt in their capital structure in terms of the debt-equity ratio as well as total debt to total assets ratio. Nonetheless, the foreign controlled companies in India use less debt than the domestic companies. The dependence of the Indian
The corporate sector on debt as a source of finance has over the years declined particularly since the mid-nineties.

- The corporate enterprises in India seem to prefer long-term borrowings over short-term borrowings. Over the years, they seem to have substituted short-term debt for long-term debt. The foreign controlled companies use more long-term loans relatively to the domestic companies.

- As a result of debt-dominated capital structure, the Indian corporate are exposed to a very high degree of total risk as reflected in high degree of operating leverage and financial leverage and, consequently, are subject to a high cost of financial distress which includes a broad spectrum of problems ranging from relatively minor liquidity shortages to extreme cases of bankruptcy. The foreign controlled companies, however, are exposed to lower overall risk as well as financial risk.

- The debt service capacity of a sizeable segment of the corporate borrower as measured by interest coverage ratio and debt service coverage ratio is inadequate and unsatisfactory.

- Retained earnings are the most favored source of finance. There is significant difference in the use of internally generated funds by the highly profitable corporate relative to the low profitable firms. The low profitable firms use different forms of debt funds more than the highly profitable firms.

- Loan from financial institutions and private placement of debt are the next most widely used source of finance. The large firms are more likely to issue bonds in the market than small corporate.

- The hybrid securities are the least popular source of finance amongst corporate India. They are more likely to be used by low growth firms. Preference shares are used more by public sector units and low growth corporate.
• Equity capital as a source of fund is not preferred across the board.

• Indian companies prioritize their sources of financing (from internal financing to equity) according to the law of least effort, or of least resistance, preferring to raise equity as a financing means “of last resort”. Hence internal funds are used first, and when that is depleted debt is issued, and when it is not sensible to issue any more debt, equity is issued.

• Study reveals that an average of 60.54 percent of the total funds was raised from internal sources whereas external sources contribute only 39.46 percent of the total funds of Indian companies. It indicated that Indian companies prefer more to raise funds from internal sources as compared to external sources.

• It has been found that, issue of share capital had never been a major source of long-term finance for the corporate sector. The dependence on debt capital i.e. secured and unsecured loan is more as compared to equity.

• Small sized companies relies more on debt capital as compared to large sized companies. The average debt-equity ratio of small sized companies were found to be more than 3:1 whereas in case of large sized companies it is 1:1. This shows that the large sized companies followed a strict conservative policy while deciding the debt equity mix.

• The average debt-equity ratios of manufacturing companies were more than double of the average debt-equity ratio of service sector companies. It indicates that service sector companies relies more on the equity and less on the debt, and vice-versa in case of manufacturing companies.

• The common observation for the companies of all the four regions was that they have raised more funds through debt capital as compared to equity, may be due to the reason of easy availability of cheap debt capital.
• Although the size of the firm, its age, the region to which it belongs and industry classification contribute to the existing variation in Capital structure across industry classes but nature of the industry seems to dominate.

• The study revealed that in terms of total average inflow of funds, western region stood highest as this region is the most industrially advanced region of our country and covers 135 companies out of the total sample size of 300 companies. In terms of mean average southern region has the highest inflow of funds as compared to other regions because most of the large sized companies are situated in this region, which are capable of generating more funds as compared to the companies of other region.

• More specifically, it is the differences in external fund requirement based on technology differences that play a leading role in determining the inter-industry variation in capital structure. This signals that there exists a linkage between product market and capital market. This proves that the capital structure and the determinants of capital structure vary from industries to industries and the nature of the industry acts as a key determinant of the capital structure.

• To sum up, nature of the industry to which the firm belongs to, its size, age and location plays a major role in the determination of the capital structure of the private sector firms of Indian corporate.