Chapter 4

LONG TERM DEBT AND INVESTMENT

The conventional value maximization framework fails to capture some factors that have considerable impact on firm level investment decisions. One such factor is the existence of long-term debt obligations. Existence of long term debt in firm's balance sheet results in an inefficient outcome either by encouraging firms to take negative NPV projects or by compelling them to reject positive NPV projects. The extent of over or underinvestment depends on the nature of debt contract as well as on the financial position of the firms. Hence, the nature of debt contract has considerable influence on investment activity of the firms.

In this chapter I shall focus on the investment behaviour of firms under pari-passu debt contract – which gives all the debt-holders the same seniority in terms of repayment in the event of default. Pari-passu debt contract appears to be the most common form of debt contract prevailing in India. Through a handful of papers have concentrated on developing different type of debt contracts and their consequent impact on investment, this particular nature of contract never got its due importance. Therefore focusing on pari-passu debt contracts may throw light on some particular aspects of investment, which still remains unanswered. An overview of leading institutions in India and a case study of two Indian firms will be presented in course of our analysis.
4.1 Survey of Literature

The impact of long term debt on investment was first analyzed by Jensen and Meckling (1976) and Myers (1977). Interestingly, the two papers came up with mutually contradictory results. According to Jensen and Meckling, existence of debt obligations lead firms to take excessive risks. This problem intensifies in the situation of financial distress when the equity holders receive nothing if the firm is liquidated while they have a probability of gaining some value even if the firm invests in negative NPV projects.

Myers, on the other hand, argued that a large debt burden on firm’s balance sheet discourages new investment, particularly if this new investment is financed by issuing claims that are junior to existing debt. Under financial distress, when the existing debt is traded at less than face value, it acts as a tax on the proceeds of new investment. A part of the value generated by new investment goes to the old lenders, thereby depriving new lenders and shareholders. The resulting suboptimal investment decision cause dead weight losses, which are commonly referred as the ‘agency costs of debt’.

Subsequent papers developed in this particular field reconciled both the over and under investment incentives. Since both over and under investments lead to inefficient solution, they devoted most of their efforts to deriving ways to get rid of these potential inefficiencies. Their suggestions can be classified into three categories:

(i) Searching for ways that allow a firm to eliminate existing debt or neutralize its impact prior to undertaking a new project.
(ii) Renegotiation of prior debt contracts.
(iii) Designing ex-ante debt contracts.
There are several ways of neutralizing the impact of existing debt. Myers (1977) suggested relying on short-term debt which matures before undertaking the new project. Bodie and Taggart (1978) and Chsea (1990) argued in favour of callable bonds that mature before undertaking the new project. Jensen and Meckling (1976) and Green (1984) talked in favour of convertible debts, which give the bondholders a claim on equity, thereby neutralizing the conflict between debt holders and equity holders.

Bergman and Callen (1991) argued that there are several reasons for which the actual chance of declaring a firm bankrupt is very low. In fact, empirical researches suggest that only a few firms are forced to declare bankruptcy by their creditors. As long as the firms are solvent and shareholders can meet current obligations, courts are generally reluctant to accept a bankruptcy petition. Often it becomes very difficult for the creditors to provide concrete evidence in favour of mismanagement. However, as showed by Titman (1984) and Jackson (1986), there are situations under which it is not optimal to force a firm towards bankruptcy. The courts often encourage the lenders to rely more on reorganization plan provided by the managers rather than appointing trustees who are generally known to be poor managers.

Since the chance of being bankrupt is low, the management gets the opportunity to use its discretion over investment decision to wrest out concessions by threatening to run down firm value through sub-optimal investment policies. One common form of concession is renegotiation of the existing debts in terms of softer contracts. Aviazian and Callen (1980) showed that this renegotiation leads to an efficient solution. But Bergman and Callen contradicted their findings. According to then the creditors anticipate the opportunistic behaviour of the management ex-ante and therefore create an upper bound on the debt capacity,
which is less than the value of the firm. Hence existence of debt overhang leads to an under investment equilibrium.

Gertner and Seharfenstein (1991) extended this idea and demonstrated that the over investment and under investment incentives do not boil down even after bank debt renegotiations. They highlighted that the incentives to over or under investment are highly influenced by changes in seniority rules and the maturity structure of the debt. They considered a situation where a firm takes two types of debt - a bank debt and a public debt. The bank debt is negotiable while the public debt is not. Under financial distress a firm faces two options:

(i) It can liquidate itself and distribute its proceeds to the debt and equity holders.

(ii) It can renegotiate with a bank, roll over its debt and manage some additional inflow of capital to undertake a new investment project.

If all the debts are ranked pari-passu, the banks prefer to renegotiate only if the NPV of the project is greater than required return of the public debt holders.

Depending on the return of the new project there are two possible consequences. When the initial cash flow is very low, the value of public debt is very low under liquidation. Hence every additional revenue earned from new projects raises the benefit of the public debt holders. Under this situation existence of public debt leads to under investment equilibrium. On the other hand, when the initial return to the firm is very close to the debt repayment capacity, taking up of new project does not benefit public debt holders much. This encourages the incentive to over invest.

Taking up a new project becomes less attractive if the firm tries to raise the required money from another bank or by issuing new equity rather than restructuring the initial loans. A change in the priority rule in repayment changes
the investment incentive considerably. If the existing bank debts are given seniority to public debts, the return to the banks in the event of bankruptcy increases. This reduces the interest of the bank to renegotiate. On the other hand, if the new bank debts are given priority in terms of repayment, the gain of public debt holders under bank debt restructuring decreases. This raises the chance of new investment.

The most exhaustive study of the impact of debt contract on investment is by Berkovitch and Kim (1990). According to them when the old debts have senior claim on the returns of an investment project than the new debts, there is an incentive to under invest. Increase in seniority of new debt decreases the under investment incentive but raises the chance of over investment. They found, under symmetric information (about the possible value of returns from a project) the optimal financial contract requires giving new debt holders first claim on the proceeds of new project. Under asymmetric information the story becomes a bit complicated. As the financial intermediaries provide loan to the firms on the basis of average quality of the projects, the low quality risky firms get access to funds at a lower rate of interest than otherwise be possible. This raises the chance of over investment. To prevent this propensity optimal financial contract needs new debt to be strictly subordinate to existing debts, thereby raising the cost of borrowing. Similarly, the firms with safer projects are found to face a higher cost of borrowing. This forces them to under invest. Hence, for them the optimal seniority rule requires providing full seniority to new debts.

Thus, we find that both the nature of debt contracts and the chance of debt renegotiation alter investment incentives considerably. Hence, before forecasting the impact of long-term debt on investment it is necessary to know a priori the underlying nature of debt contracts and the scope of renegotiations.
A wide variety of debt contracts exist in the world. Moreover, there are considerable differences in the scope of old debt renegotiations. This makes us to concentrate on a particular country and study the nature of its debt contracts and its associated impact on investment. Being an Indian, choice of Indian debt market as a case study appears to be a natural selection.

The debt market of India shows evidence of both ex-ante debt contracts and ex-post debt renegotiations. As data on bank debt renegotiations are kept secret between the agents, we focus completely on the nature of debt contracts and their impact on investment activity. The total analysis is done in three steps:

**Step I:** We highlight the model of Berkovitch and Kim as the benchmark of our analysis.

**Step II:** We consider the nature of Indian debt market and its underlying debt contracts.

**Step III:** On the basis of Indian debt contracts we try to modify the existing theory. In particular, it will be shown that the existence of pari-passu debt contracts creates a negative association between the amount of outstanding debt and the level of investment.

### 4.2 Financial Contract and Investment Incentives – the Benchmark Model

As stated early, in this section we shall present the framework developed by Berkovitch and Kim (1990) to highlight the mechanism through which specific
debt contracts influence the relationship between the amount of debt and the amount of investment activity in an economy. Berkovitch and Kim [henceforth BK] considered a two period model. Suppose in period 1 a firm has an ongoing project, project x, partly financed by debt with face value \( F_0 \). The firm considers whether to take a new project, project y, or not. This project, if undertaken, will be entirely financed by debt with face value \( F_1 \). In period 2 the gross return of the projects are realized and distributed to the shareholders.

The return in period 2 is uncertain and unknown in period 1. For simplicity BK assumed two states - high (H) and low (L) depending on which the returns differ. The gross returns in each state are summarized as follows:

<table>
<thead>
<tr>
<th>States</th>
<th>Probability</th>
<th>Gross Return from Project x</th>
<th>Gross Return from Project y</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>( p )</td>
<td>( X_L )</td>
<td>( Y )</td>
</tr>
<tr>
<td>H</td>
<td>( 1-p )</td>
<td>( X_H )</td>
<td>( Y+s )</td>
</tr>
</tbody>
</table>

Though BK assumed the possibility of \( Y \) and \( s \) to be negative, we ignore this possibility and consider both \( Y \) and \( s \) to be positive. The returns from the projects are assumed to follow the following properties:

\[
0 < X_L < F_0 < X_H
\]

\[
0 < X_L + Y < F_0 + F_1 < X_H + Y + s
\]

The condition stated above has two implications - (i) the firms have a positive probability of default and (ii) the market value of equity remains positive both before and after undertaking the project. We shall assume that managers work in
the interest of shareholders, the market is risk neutral and the time value of money is zero (no discounting).

Depending on the nature of information available, BK considered two separate situations - one with symmetric information and the other with asymmetric information.

**Symmetric Information:**

Under the assumption of symmetric information, the true values of the parameters of project y are revealed to everyone. Depending on the nature of debt contracts there are two possible cases -

**Case1: Old debts are strictly senior to new debts:**

BK started their analysis with the simplest assumption that debt contracts provide all existing debts strict seniority to new debts. Under this situation, the value of equity ($E_x$) and debt ($D_x$) associated with project x are:

\[ E_x = (1-p)(X_H - F_0) \quad \text{(1)} \]

\[ D_x = pX_L + (1-p)F_0 \quad \text{(2)} \]

If project y is undertaken it requires an investment outlay of $I_1$.

Since project y is financed entirely by debt, the market value of debt ($D_1$) must be equal to the investment outlay, i.e., $D_1 = I_1$. When the firm decides to undertake
the new project, the face value of new debt and the market value of equity become:

\[ D_i = p \left( X_l + Y - F_0 \right) + (1-p) F_i \]  \hspace{1cm} (3)

\[ E_i = (1-p) \left( X_i + Y + S - F_0 - F_i \right) \]  \hspace{1cm} (4)

where \( Z = \max \{ X_l + Y - F_0, 0 \} \)  \hspace{1cm} (5)

Rearranging (4) we get:

\[ E_i = E_x + Y + S + p(Z - Y) \]  \hspace{1cm} (6)

where \( S = (1-p)S - I_i \)  \hspace{1cm} (7)

Here \( Y+S = [Y + (1-p)S - I] \) represents the NPV of the new project. Hence, equation (6) indicates that taking new project affects shareholder’s wealth not only by its NPV but also by the additional term \( p(Z - Y) \). The definition of \( Z \) indicates that the term \( p(Z - Y) \) should be negative. As managers undertake projects only if it increases the value of equity of the shareholders, equation (6) suggests that they would forego some positive NPV projects. Hence existence of senior debts, by transferring a part of the proceeds of the new project to the old debt holders, leads to an under investment equilibrium.

The model can be diagrammatically represented as follows. A firm without any debt overhang undertakes a project only if its NPV, i.e., \( Y+S \) is positive. The firm will be indifferent between investing and not investing when \( Y+S=0 \). This is represented in Figure 4.1 by the line NPV=0. Any point on the right of the curve indicates projects with positive NPV and hence is undertaken by the firm. On the other hand the points on the left of the line represents negative NPV projects.

To find the action of the firm with debt overhang we put \( E_i = E_x \) in (6) and get the indifference lines :
$S = -(1-p)Y$ if $Y \leq F_0 - X_L$ \hspace{1em} (8.1)

$= -Y + p(F_0 - X_L)$ if $Y > F_0 - X_L$ \hspace{1em} (8.2)

Figure 4.1

The kinked line representing equations (8.1) and (8.2) is shown in the figure by $E_i = E_x$. Any point to the right of the line induces the producer to undertake new project while the points to the left of the line $E_i = E_x$ do not seem attractive to the firm. Thus the region bounded by the lines $E_i = E_x$ and NPV=0 shows the area where the firm rejects project $y$ even if it has positive NPV.

**Case 2 : Effects of change in seniority rules :**

The crux of the underinvestment problem in case 1 is the specific nature of debt contract that assigns old debt holders seniority over the new. Any change in the
nature of debt contract can significantly change the over or under investment incentives. For example, if the new debt is considered senior to the existing debt, there would be no such transfer and hence shareholders will get higher incentive to invest.

To provide a general form of the alternative seniority rules, BK defined a seniority rule \(( e; n)\) such that in the event of default, new debt holders receive a fraction \('e'\) of both the cash flows and the terminal value of existing assets and a fraction \('n'\) of those of new projects. Hence \(0 \leq e, n \leq 1\)

Under the seniority rule, the payoff to the new debt holders in the case of bankruptcy becomes:

\[
Z = \min (eX_L + nY, F_i) \quad (9)
\]

Subtracting (9) in (6) we get:

\[
E_j = E_x + (1 - p)Y + S + pF_i \quad \text{if } eX_L + nY \geq F_i \quad (10.1)
\]

\[
= E_x + [1 - p(1 - n)]Y + S + p e X_L \quad \text{if } eX_L + nY < F_i \quad (10.2)
\]

Putting \(E_j = E_x\), we obtain the following indifference line:

\[
S = -(1 - p)Y - pF_i \quad \text{if } eX_L + nY \geq F_i \quad (11.1)
\]

\[
= -[1 - p(1 - n)]Y - p e X_L \quad \text{if } eX_L + nY < F_i \quad (11.2)
\]

In this case the indifference line will vary depending on the values of \(e\) and \(n\). We shall consider two special cases –

(a) \((e=1; n=1)\) i.e., the new debt holders have full seniority to old debt holders

(b) \((e=0; n=1)\), i.e., the case of project financing.

For the first case the indifference line becomes -
Before representing this situation diagrammatically, it is needed to compare the values of $F_0$ and $F_1$. If we take all the existing debts as a single debt and denote their face value as $F_0$ then it is more likely that $F_1 < F_0$. The indifference line under this assumption is shown in Figure 4.2.

The indifference line under the new seniority rule is denoted by $E_1=E_x$. As full seniority makes new debt less risky, shareholders are allowed to finance the new projects at a lower cost. This lower cost of borrowing reduces the under
investment incentive. However, as the figure suggests, this also engenders an incentive to over invest to the firms with $Y < F_i$.

This implies that any attempt to reduce the under investment problem leads to the emergence of over investment incentive and hence it is not possible to usher in efficiency by adhering to this type of debt contracts.

Under project financing ($e=0; n=1$), the indifference line becomes -

$$S_1 = -(1-p)Y - pF_i \quad \text{when } Y > F_i \quad \text{(13.1)}$$
$$= -Y \quad \text{when } Y < F_i \quad \text{(13.2)}$$

This situation is presented in Figure 4.3. The indifference line is shown by

![Figure 4.3](image-url)
E^{p}_{t}=E_{x}. From the figure it becomes clear that project financing does not exacerbate the over investment incentive while it controls a part of the under investment incentive.

When seniority arrangement falls in the intermediate range (0< e < 1, n = 1) the indifference line lies between the lines representing full seniority and project financing. Hence there will always be an incentive to under invest, though its impact will be lower than under full seniority. This made BK reach the conclusion that “under symmetric information the seniority rule (e=0; n=1), i.e., project financing is the optimal seniority

It should be noted that for firms with \( Y > F_{1} \), there is always an under investment equilibrium. This is because, under this condition “the new project is so safe that not only does the new debt becomes risk less, but also the old debt becomes safer”. Therefore, some of the benefits of the new project are captured by the old debt holders, creating a wealth transfer from stockholders to old debt holders. Because such a wealth transfer is the source of the under investment problem, not all under investment problem can be solved by the ex-ante seniority rule alone.

Asymmetric Information:

After considering the consequences of debt overhang under symmetric information BK extended the analysis to incorporate the case of asymmetric information. By asymmetric information BK considered a situation in which only the stockholders discover the true values of \( Y \) and \( s \) at period 1. The lenders only
have the information that \( Y \) and \( s \) follows a joint cumulative distribution function \( F(Y,s) \). However they retained the assumption (A1) and (A2).

Following Myers and Majluf (1984) and Narayan (1988) BK showed that under information asymmetry there exists only a pooling equilibrium in the debt market at time 1. As there is no mechanism to separate high quality firm from low quality firm, the lenders price new debt based on the average quality of the new projects. To capture the nature of the average quality of the project BK introduced a new variables \( \mu_z(e; n) \) that denotes the expected cash flow to new debt holders in state \( L \) given seniority rule \( (e; n) \).

Under strict subordination equation (1) through (4) and (6) are still valid if \( Z \) is replaced by \( \mu_z(0, n) \) where:

\[
\mu_z(0, n) = E \left[ \max(X_L + Y - F_0, 0) \right] \quad (14)
\]

Where \( E \) is the expectation operators and \( n \) is the minimum \( n \) such that for any \( n \) above \( n \) the claims of new debt holders become higher than strict subordination. Replacing \( Z \) by \( \mu_z \) in (6) and setting \( E_i = E_x \) we get

\[
S = -(1-p)Y - p \mu_z \quad (15)
\]

As long as there is a positive probability that new debt holders can receive positive returns in state \( L \) (i.e. \( X_L + Y > F_0 \) for some realizations of \( Y \)), \( \mu_z \) is strictly positive. Thus the indifference line (15) has a negative intercept. This is represented in Figure 4.4 by the bold line \( E_{i,a} = E_x \).
In the figure we find that as long as $Y < F_0 - X_L + \mu_x$, firms are more willing to undertake projects under asymmetric information than under symmetric information. According to BK, "This is because the pooling equilibrium in the debt market allows low quality firms to borrow at a lower rate than that under symmetric information. This lower cost of borrowing gives the lower quality firms a greater incentives to invest, resulting in either exacerbation of the over-investment problem."

Similarly for the high quality firms, i.e., firms with $Y > F_0 - X_L + \mu_x$, the cost of borrowing is higher than under symmetric information. As a result, their under investment incentive is greater.
If we replace the strictly subordinated debt by non-subordinated one, the under investment incentive will be lowered but only at the expense of over investment incentives. Hence BK suggests the optimal seniority rules as follows:

1) New debt to be given strict subordination if $\mu_z > EY$

2) New debt to be given full seniority if $\mu_z < EY$.

3) New debt to be given a seniority between strict subordination and full seniority which satisfies $\mu_z = EY$, if neither of the above conditions hold.

4.3 Ex-ante Debt Contracts in India: A Case Study:

Analysis of the previous section makes it clear that existence of the long term that debt and its underlying debt contract alter the investment incentives of the firms. However this influence becomes significant only if debt is a significant source of funds to the firm. If the dependence on debt is not that high the nature of debt contract cannot generate an impact strong enough to alter the investment pattern of the firm.

Considering this fact, India appears to be a natural choice for finding the impact of long term debt and its nature of contract on investment behavior. To have an idea about the importance of long-term debt, we present two tables. Table 1 compares the financing patterns of industries of India and U.S.A. As evident from the table, Indian firm's reliance on external funds is much higher than that of the US firms. Generally, the firms of the developing countries tend to use external funds more extensively compared to their developed counterparts.
Table 1: Financial Patterns Of Industries In U.S.A and India.

<table>
<thead>
<tr>
<th>Year</th>
<th>U.S.A.</th>
<th>India</th>
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<tbody>
<tr>
<td></td>
<td>Internal Funds</td>
<td>External Funds</td>
</tr>
<tr>
<td>1988</td>
<td>81.0</td>
<td>19.0</td>
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<tr>
<td>1989</td>
<td>87.0</td>
<td>13.0</td>
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<tr>
<td>1990</td>
<td>90.0</td>
<td>10.0</td>
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<tr>
<td>1991</td>
<td>112.0</td>
<td>-12.0</td>
</tr>
<tr>
<td>1992</td>
<td>88.0</td>
<td>12.0</td>
</tr>
<tr>
<td>1993</td>
<td>88.0</td>
<td>12.0</td>
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<tr>
<td>1994</td>
<td>86.0</td>
<td>14.0</td>
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<tr>
<td>1995</td>
<td>78.0</td>
<td>22.0</td>
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<tr>
<td>1996</td>
<td>89.0</td>
<td>11.0</td>
</tr>
<tr>
<td>1997</td>
<td>85.0</td>
<td>15.0</td>
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</tbody>
</table>

* Note: all figures are expressed in percentages.


In Table 2 we represent the sources of funds of non-financial enterprises in Indian private sector. From the table we find that over the years borrowings acted as the most important sources of finance. Among borrowings, the most important contributors are – bank borrowings and borrowings from financial institutions.
However, there is a significant difference between borrowing from a bank and borrowing from the financial institutions. While banks generally lend funds for small and medium terms, financial institutions adhere to long term lending. Borrowings from financial institutions rose significantly during the early 1990s though its contributions started to decline in later years. The importance of borrowing from financial institutions is so high that in projecting the growth of corporate investment in India Satyanarayana and Bose (1999) comment

"The bulk of the major projects in the corporate sectors are financed traditionally by the four all India term lending institutions, namely, The Industrial Development Bank Of India (IDBI), The Industrial Credit And Investment Corporation Of India (ICICI), The Industrial Finance Corporation Of India (IFCI), and The Industrial Investment Bank of India (IIBI). As the share of term financing in the total project cost is often found to be substantial, the drawl from the term lending institutions as capital expenditure would provide a base for estimation."

Rangarajan, in 1970, started to project corporate investment in India entirely on the basis of application for the term loans in all India term lending institutions. This method was used by the Reserve Bank Of India (R.B.I) and others in subsequent years and is considered to have relevance in developing countries like India where capital requirements for projects are largely met by the specialized term lending institutions.
### Table 2: Sources of Funds Of Non-Financial Enterprises In Indian Private Sector

<table>
<thead>
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<tbody>
<tr>
<td><strong>Internal Sources</strong></td>
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<tr>
<td>Internal</td>
<td>38.8</td>
<td>40.6</td>
<td>33.2</td>
<td>39.2</td>
<td>29.9</td>
<td>26.3</td>
<td>25.1</td>
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<tr>
<td>Capital Markets</td>
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<td>66.8</td>
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<td>70.1</td>
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<td>74.9</td>
<td>72.0</td>
<td>74.6</td>
<td>73.5</td>
<td>73.2</td>
<td>67.9</td>
<td>59.9</td>
<td></td>
</tr>
<tr>
<td>Bank Borrowings</td>
<td>3.6</td>
<td>7.7</td>
<td>7.5</td>
<td>10.6</td>
<td>8.0</td>
<td>30.0</td>
<td>33.7</td>
<td>15.6</td>
<td>16.5</td>
<td>20.7</td>
<td>19.8</td>
<td>22.8</td>
<td>18.8</td>
<td></td>
</tr>
<tr>
<td>Institutional Borrowings</td>
<td>11.0</td>
<td>4.7</td>
<td>8.8</td>
<td>8.0</td>
<td>9.0</td>
<td>10.8</td>
<td>12.8</td>
<td>20.5</td>
<td>15.3</td>
<td>13.7</td>
<td>6.6</td>
<td>18.9</td>
<td>9.1</td>
<td></td>
</tr>
<tr>
<td>Other Borrowings</td>
<td>9.4</td>
<td>9.4</td>
<td>8.4</td>
<td>12.9</td>
<td>14.6</td>
<td>15.4</td>
<td>5.7</td>
<td>7.2</td>
<td>10.5</td>
<td>12.1</td>
<td>9.9</td>
<td>0.7</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>19.8</td>
<td>17.3</td>
<td>22.1</td>
<td>9.1</td>
<td>17.2</td>
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<td>11.0</td>
<td>15.3</td>
<td>7.5</td>
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</tbody>
</table>

* Note: all figures in the table are expressed in percentages

* Source: Sen and Vaidya (1997), C.M.I.E. various issues
4.3.1 All India Financial Institutions : An Overview :

The first financial institution set up in India was IFCI in 1948. It was assigned to play the role of gap filler by providing long term finance to industries, who are unable to raise funds by issuing new equities or borrowing from commercial banks. The success of IFCI led to the establishment of other financial institutions both at national and regional levels. At present, the financial institutions of India are divided into four categories:

(1) All India development banks consisting of IDBI, IFCI, ICICI, SIDBI, and IIBI.

(2) Specialized financial Institutions consisting Risk Capital and Technology Finance Corporation Limited (RCTC), TDICI ltd and Tourism Finance Corporation Of India limited.

(3) State level institutions consisting of UTI, LIC, GIC and its subsidiaries.

(4) State level Institutions like State Financial Corporation (SFCS) and State Industrial Development Corporation (SIDCS).

The aggregate financial assistance of these institutions reached to Rs 81,981 crores in 1997-98, of which 82.4% came from all India development banks. The shares of the specialized financial institutions were 0.5%, investment institutions 11.4% and state level institutions 5.7%.

We now describe, in brief, the major functions of the all India development banks:
Industrial Finance Corporation Of India (IFCI):

IFCI is the first all India development bank established in 1948 to provide medium and long term credit to the industry. From July 1, 1993 IFCI has been converted into a public limited company and is now known as Industrial Finance Corporation of India Limited.

IFCI started its operation by granting credit only to the industrial private and co-operative sectors. Now IFCI has extended its lending to the public sector and joint sector projects too. However, private sector is still the major beneficiary.

Financial assistance is provided to the firms for their operations, expansion, renovation, modernization, and diversification of existing projects. This assistance is provided in the form of:

(a) Granting loans and advances both in rupees and foreign currencies repayable within 25 years.

(b) Guaranteeing rupee loans floated in open market by industrial concerns.

(c) Underwriting shares and debentures of industrial concerns etc.

Industrial Credit And Investment Corporation Of India (ICICI):

The ICICI was set up in 1955 as the second all India development bank. Unlike other all India development banks ICICI was a private sector development bank from its birth. A notable feature of ICICI is that it provides underwriting facilities, which is generally neglected by other financial institutions. In 1996 SICICI ltd was merged with ICICI limited. In April 2002, ICICI ltd with its other two subsidiaries merged with ICICI bank limited.
ICICI provides assistance to industries mainly in the form of:
(a) Long and medium term loans and equity participation;
(b) Guaranteeing loans from other private investment sources;
(c) Subscription to ordinary and preference share capital and underwriting
new issue or securities.

It also renders consultancy services to Indian industry in the form of managerial
and technical advice.

**Industrial Development Bank of India (IDBI):**

IDBI was set up in 1964 as an apex organization to coordinate the functions of
various financial institutional and provide "a dynamic leadership task of
promoting a widely diffused and diversified yet viable process of
industrialization" (Bhatt 1974). Initially it was set up as a wholly owned
subsidiary of the R. B. I. In 1976, it was made autonomous.

The IDBI works as an apex organization of developmental banking by
coordinating the functions of various financial institutions. Like any other apex
organization it provides refinance against loans granted by other development
banks and rediscount their machinery bills. It also provides direct financial
assistance to the financial institutions in the forms of loans, underwriting and
direct subscription to shares, debentures and guarantees.
Small Industries Development Bank of India (SIDBI):

SIDBI commenced its operation from April 2, 1990 with the objective of providing larger flow of financial and non-financial assistance to small-scale sector. The SIDBI provides assistance to the small scale units through State Financial Corporation, State Industrial Development Corporations, Commercial Banks, Co-operative Banks and Regional Rural Banks for: (a) technological upgradation and modernization of existing units, (b) expanding the channels of marketing of products of small scale industries and (c) promotion of employment oriented industries.

The Industrial Investment Bank of India (IIBI):

IIBI was initially established as Industrial Reconstruction Corporation Of India in 1971 to provide financial assistance and managerial and technical support to the sick industrial units. The institutional was converted to a statutory corporation named Industrial Reconstruction Bank Of India (IRBI) in 1985. In March 1997, it was converted into IIBI.

The total financial assistance sanctioned and disbursed by the all India development institutions in recent years are given in Table 3.
Table 3: Financial Assistance Sanctioned and Disbursed by All India Development Banks

(rupees crore)

<table>
<thead>
<tr>
<th>Year</th>
<th>IDBI</th>
<th>IFC</th>
<th>ICICI</th>
<th>SIDBI</th>
<th>IIBI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S</td>
<td>D</td>
<td>S</td>
<td>D</td>
<td>S</td>
</tr>
<tr>
<td>1988-89</td>
<td>4411.1</td>
<td>3382.1</td>
<td>1635.5</td>
<td>997.5</td>
<td>1978.5</td>
</tr>
<tr>
<td>1989-90</td>
<td>7269.1</td>
<td>5121.2</td>
<td>1817.0</td>
<td>1121.8</td>
<td>2850.6</td>
</tr>
<tr>
<td>1990-91</td>
<td>6278.3</td>
<td>4501.1</td>
<td>2429.8</td>
<td>1574.3</td>
<td>3744.0</td>
</tr>
<tr>
<td>1991-92</td>
<td>6590.2</td>
<td>5768.8</td>
<td>2421.2</td>
<td>1604.4</td>
<td>4094.9</td>
</tr>
<tr>
<td>1992-93</td>
<td>9249.4</td>
<td>6710.7</td>
<td>2347.9</td>
<td>1733.4</td>
<td>5771.8</td>
</tr>
<tr>
<td>1993-94</td>
<td>12086.0</td>
<td>8095.9</td>
<td>3745</td>
<td>2163</td>
<td>3491.4</td>
</tr>
<tr>
<td>1994-95</td>
<td>18199.4</td>
<td>10671.8</td>
<td>5719.5</td>
<td>2833.7</td>
<td>14529.9</td>
</tr>
<tr>
<td>1995-96</td>
<td>16476.4</td>
<td>10695.2</td>
<td>10300.3</td>
<td>4563.3</td>
<td>14594.9</td>
</tr>
<tr>
<td>1996-97</td>
<td>15634.0</td>
<td>11467.7</td>
<td>7212.3</td>
<td>5157.1</td>
<td>14083.8</td>
</tr>
<tr>
<td>1997-98</td>
<td>23082.0</td>
<td>15170.0</td>
<td>7693.0</td>
<td>5650.0</td>
<td>24717.5</td>
</tr>
<tr>
<td>1998-99</td>
<td>23744.7</td>
<td>14470.1</td>
<td>4445.2</td>
<td>4819.3</td>
<td>32370.6</td>
</tr>
<tr>
<td>1999-00</td>
<td>26966.5</td>
<td>17059.4</td>
<td>2080.0</td>
<td>3272.1</td>
<td>43522.8</td>
</tr>
</tbody>
</table>

* Note: S = Sanctions    D = Disbursements
@ IRBI was renamed as IIBI w.e.f. March 27, 1997
* Source: Handbook of Statistics of Indian Economy, RBI, 2002-03.

Indian commercial banking sector, on the other hand, consists of public sector banks, private sector banks, and regional rural banks. Finance to the industries are provided by the first two types of banks. In term of business public sector banks take the dominant position by accounting for more than 60% of the entire banking business. There are 19 nationalized banks throughout the country with more than 30,000 offices. Among the nationalized banks State Bank of India is the biggest
both in terms of business and spread over the country. On January 30, 1998, State Bank and its associates controlled 13,106 branches located all over the country.

The private sector banks consist of both domestic and foreign banks. These banks operate mostly in big cities. Domestic private sector banks have a spread of 4,710 branches located all over India. There are 41 foreign banks with 182 branches located in big cities.

The assistance to the industries from commercial banks comes mostly in the form of short and medium term loans. Total deployment on bank credits to the industries over the years are shown in Table 4.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Total credit</td>
<td>53805</td>
<td>61689</td>
<td>65240</td>
<td>78662</td>
<td>102310</td>
<td>124937</td>
<td>138548</td>
<td>161038</td>
</tr>
<tr>
<td>1999</td>
<td>124937</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>138548</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>161038</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>178999</td>
<td>200133</td>
<td>18839</td>
<td>229523</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Handbook of Statistics of Indian Economy, RBI, 2002-03*
4.3.2 Debt Contracts:

After a brief survey of the structure of loan market in India we now focus on the nature of debt contracts underlying the loan agreements. As stated earlier, banks generally lend money for short and medium terms while financial institutions adhere to long term lending. Companies take loan to finance both fixed and working capital. Loans for working capital are generally unsecured loans. But fixed capitals are financed by secured loans. These loans are provided either by mortgaging fixed assets or by hypothecating moveable assets. Since, we are mainly concerned with the investment activity (which implies expansion of fixed capital) we shall leave the issue of financing working capital and concentrate on the nature of fixed capital finance.

In terms of seniority loans on fixed capital can be two types - Senior Loans and Junior Loans. A loan is said to be a senior loan if, in the event of bankruptcy, the lender has first claim (defined in the contracts as ‘first charge’) on the value of the liquidated assets. On the other hand, a junior loan is that loan which has claim only on that part of the liquid assets which is left after meeting the claim of the senior lenders. This is referred in the debt contracts as ‘second charge’.

If there are more than one senior loan (as is generally found in India) and the value of liquidated assets are lower than the debt obligations then the senior debt holders share the liquidated assets on a ‘pari-passu’ basis. This means each gets a part of the liquidated assets in proportion to the value of his loans. In India most of the loans are provided on a first charge pari-passu basis. Financial institutions
generally hesitate to provide loans on second charge due to the financial risk inherent in these contracts. Only a few high profit oriented firms get the scope of acquiring funds on the basis of second charge.

To provide evidence in favour of the above argument we shall present the loan agreement of two firms with four financial institutions – two commercial banks and two all India development financial institutions. However, as loan agreements are not supposed to be public knowledge, both the firms prefer to remain anonymous. We therefore call them ABC Ltd and XYZ Ltd respectively. The details of the loan agreements are given in the Appendix.

4.4 Over and Under Investment Incentives under Pari-Passu Debt Contracts

The survey on Indian debt market makes it clear that most of the debt contracts undertaken in the country rank their debt holders pari passu. This means that in the event of default all the existing debt holders have equal right on the cash flow and terminal value of the firm and share them in proportion to their contribution on the capital stock of the firm. Though BK dealt with several types of contracts, this particular type of contract was not considered by them.

To fill up this lacuna, in this section, I shall reformulate their model in terms of pari passu debt contracts and find out how the over or under investment incentives change with a change in the nature of contracts. Finding suggests that under pari passu debt contract the under investment incentive is lower than under strict subordination. But this has been achieved only at the expense of increase in over investment incentive. Moreover, the firms with high amount of outstanding debt are generally reluctant to take new investment projects. This suggests a
negative relationship between the degree of indebtedness of the firm and the rate of investment.

The Model:

Let \( x \) denote the totality of the projects undertaken by the firm up to time 1 and \( X_i \) \( \{ i=L, H \} \) be their cumulative outcome. Hence \( F_0 \) is now the face value of all the outstanding debts taken by the firm. Suppose, the new debt is \( 1/m \) proportion of the value of total debt undertaken by the firm including the new debt itself, i.e., \( F_1 = (1/m)(F_0 + F_i) \). Under pari passu debt contract this would imply, in the event of default, the lenders of the new debt will get \( 1/m \) proportion of the total proceeds of the firm. The higher the initial degree of indebtedness, the lower is the value of \( 1/m \) and consequently the lower is the return to the new holders in the event of default.

Following BK we shall now consider two separate situations:

Situation 1: Symmetric Information

Under symmetric information equations (1) through (7) remains valid except (5), which now transforms to

\[
Z = \min \left( \frac{1}{m} (X_i + Y), F_i \right) \tag{16}
\]

Putting \( E_i = E_x \) in (6) and substituting the value of \( Z \) from (16) we get the following indifference lines:

\[
S = - (1-p + \frac{1}{m})Y - (\frac{1}{m})p X_L \quad \text{for} \quad X_L + Y < mF_i \tag{17.1}
\]

\[
= - (1-p) Y - pF_i \quad \text{for} \quad X_L + Y \geq mF_i \tag{17.2}
\]
As done previously, the consequences of pari passu debt contracts can be realized by comparing the indifference line derived from (17.1) and (17.2) with the line presenting NPV=0. From the equations it becomes clear that the result depends on the relative values of $1/m$ and $p$. In fact, there are three possible cases: (a) $1/m < p$; (b) $1/m = p$ and (c) $1/m > p$.

**Situation (a) $1/m < p$:**

When $1/m < p$, the indifference line before $Y = mF_1 - X_L$ is flatter than the line representing NPV=0. However, the point of intersection of the two lines depends on the value of $m$. When the value of $m$ is not very large [$m < (F_i + X_L)/F_1$], the firm is not so indebted, the indifference line cuts NPV=0 at $Y = F_1$. On the other hand, as $m$ rises above $(F_i + X_L)/F_1$ both the lines intersect at $Y = [(p/m)/(p-1/m)]$, this is represented in Figure 4.5.
In the figure the indifference lines are drawn under two separate values of $m$ : $m'$ and $m''$ such that $m' < \frac{(F_1+X_0)/F_1}{(F_1+X_0)/F_1}$ and $m'' > \frac{(F_1+X_1)/F_1}{(F_1+X_1)/F_1}$. The indifference lines are represented by $IL'$ and $IL''$ respectively. Comparison of the two lines makes it clear that increase in the value of $m$ decrease the over investment incentive only but at the expense of increase in under investment incentive. This is because increase in $m$ implies a low value of $(1/m) (X + Y)$. This would imply transfer of a larger part of the proceeds from new investment to the existing debt holders. As this transfer is the crux of the under investment incentive, firms with higher $m$ show higher tendency to under investment.

To compare the underinvestment problem under pari passu debt contract with that of strict subordination we present Figure 4.6 where $E_1 = E_X$ represents the indifference line under strict subordination while $IL'$ and $IL''$ represent indifference lines under pari passu contracts. We find, for low values of $Y$, the under investment incentive under pari passu debt contract is generally lower than in the case of strict subordination. However, as the amount of outstanding debt increases $(1/m$ decreases), the pari passu debt contract appears to be as risky as subordinated debts. As a result both the lines tend to coincide.
Situation (b) $1/m = p$:

When $p = 1/m$, the indifference lines become parallel to $NPV = 0$ till $Y < mF_1 - X_L$ and flatter thereafter. The curve intersects $NPV = 0$ at $Y = F_1$. This is shown in Figure 4.6.
Figure 4.7. Though the curve looks similar to that of Figure 4.6, since $1/m$ is higher the incentive to over investment becomes higher than the previous situation.

Situation (c) $1/m > p$:

When $1/m$ is greater than $p$ the indifference line becomes steeper than NPV=0 before $Y=mF_1 - X_L$ and flatter thereafter. Both the lines intersect at $Y=F_1$. Since $1/m$ is highest in this case, the incentive to over invest is also the highest. This is shown in Figure 4.8. Similar to case 1, the over investment incentive decreases with increase in the amount of outstanding loans.
Consideration of the three cases brings out **two important observations**:

1. Comparison between \( p \) and \( 1/m \) becomes important in determining over and under investment incentives.

2. As \( 1/m \) decreases the under investment incentive increases and vice versa.

For the first observation, note that \( p \) shows the probability of default while \( 1/m \) the proportion of return to be received by the lender in the event of default. Hence, the term \((p-1/m)\) can be interpreted as the net chance of default. Hence, a
fall in the value of 1/m raises the net chance of default. This restricts the new investment.

The economic intuition underlying the second observation is that, when 1/m is low, most of the returns of the firm are transferred to the old debt holders in the event of default. Since, this transfer is the crux of the under investment problem, reduction in the value of 1/m reduces the urge for further investment.

**Situation 2: Asymmetric Information**

Under asymmetric information, the lenders only have the information that $Y$ and $s$ follows a joint cumulative probability distribution $F(Y, s)$ and replaces $Z$ by $\mu_z$ which under pari-passu debt contract, takes the form

$$\mu_z = E[\min\{(1/m)(X_l + Y), F_1\}] \quad (18)$$

Since the lenders form the expectation before lending to the project, the situation is similar to that of BK and the indifference line can be represented by equation (15). The consequences of information asymmetry is similar to that stated by BK. The additional information derived from our framework is that – the more the degree of indebtedness the lower is the value of $\mu_z$ (due to lower return in bad state). This shifts the indifference line upwards. This is shown in Figure 4.9. Clearly, increase in the amount of outstanding debt raises the under investment incentive.
4.5 Summary of Results Obtained:

(a) The nature of debt contract takes an important role in the determination of the investment decision of firms.

(b) In India most of the debt contracts are made in pari passu terms. This contract gives every debt holder the same seniority in terms of repayment in the event of default.

(c) Under pari passu debt contract the underinvestment incentive is lower than under strict subordination. However, this is achieved only at the cost of increase in overinvestment incentives.
(d) Increase in the amount of outstanding debt, by transferring higher amount of the proceeds of new investment to the old debt holders, raises the underinvestment incentive. Hence under pari passu debt contract there is a negative relationship between the amount of outstanding debt and the level of investment.
APPENDIX

Term Loan Agreements:

Company 1

Name of the Company: ABC Limited

(A) Lender: EXIM Bank
   Date of lending: 3rd October 2001
   Major terms of contract:

   a) The borrower hypothecated its moveable fixed assets both present and future

   b) Moveable fixed assets include moveable plants and machinery, equipments, appliances, furniture, vehicles, spare and stores, tools, accessories, whether or not installed and related movables in the course of transit or delivery whether belonging on which may hereafter belong to the borrower or which may be held by any person at any place whether within or outside India to the order of disposition of the borrower and all documents of title including bills of lending, shipping documents, policies of insurance and other instruments relating to such movables together with the benefits of all rights and threats.
c) This hypothecation has been made with reference to the repayment of loan, payment of interest thereon, compound interest, additional interest by way of liquidation damages (in case of default), service fee, cost (legal) charges, expenses, and all other payments becoming due provided that the charge hereby created by the borrower in favour of EXIM Bank shall rank in order of priority as set in schedule[].

d) For security for the loan and also for the payment of interest and any other charges, costs and expenses payable to or incurred by the bank in relation thereto the borrower agrees to create a pari-passu first mortgage and charge of all the borrowers immovable and movable fixed assets, both present and future.

(B) Lender: ICICI ltd.

Major terms of contract:
a) The facility together with all interest, liquidated damages, front and fee, repayment costs, charges and expenses and other monies whatsoever stipulated in or payable under the facility agreement shall be secured by a first mortgage/charge in favour of ICICI on all the company's assets including all movable and immovable properties (save and except the specific equipment charged/to be charged by IDBI, EXIM Bank, SBI for their existing financial assistance) both present and future.

b) The mortgage/charges in favour of ICICI shall be created in form and manner satisfactory to ICICI and shall
i) be subject to prior charges created/to be created in favour of the company’s bankers on the company’s stock of raw materials, semi-finished and finished goods, consumable stores book debts and such other movables as may be agreed to by ICICI for securing the borrowings for working capital requirements in the ordinary course of business.

ii) rank pari-passu with charges created/to be created in favour of:
   I) ICICI for its rupee loan of Rs 200 million
   II) SBI for its term loan of Rs 100 crore
   III) EXIM Bank for its term loan of Rs 10 crore
   IV) EXIM Bank for its term loan of Rs 12 crore
   V) SBI in its capacity as Debenture Trustees for the debenture holders in respect of debentures aggregating Rs 5 crore.

   c) The company shall make out a good marketable title to its properties to be mortgaged to ICICI to the satisfaction of ICICI Ltd. and comply with all formalities as may be necessary or required for the said purpose.

Name of the Company: XYZ Limited

(A) Name of the lender: The Industrial Finance Corporation of India Limited.

Date of borrowing: 2nd September 1998

Major Terms of Contract:
I. Security for the Loans

[A] The loans together with all interest, liquidated damages, premia on prepayment on redemption, costs, expenses and other monies whatsoever stipulated in this Agreement shall be secured by -

[a] **a first mortgage and charge** in favour of the lender in a form satisfactory to the lender of all the borrowers immovable properties both present and future; and

[b] **a first charge** by way of hypothecation in favour of the lender of all the borrowers moveable [save and except book debt] including moveable machinery, machinery spares, tools and accessories, present and future, subject to prior charges created and/or to be created:

(i) in favour of the borrower’s bankers on the borrower’s stock of raw materials, semi finished and finished goods, consumable stores and such other moveables as may be agreed to by the lender for securing the borrowings for working capital requirements in the ordinary course of business.

The mortgage and charge referred to above shall **rank pari-passu** with the mortgages and charges and/or to be created in favour of

1) Industrial Development Bank of India of its-

   (i) Rupee loan of Rs. lakhs;

   (ii) Obligations arising out of Guarantee issued in favor of Mitsubishi Corporation, Japan for sums not exceeding JPY lakhs. Equivalent at the time of issue;

   (iii) FC loan of US equivalent to Rs lakhs at the time of sanction;
2) The Industrial Finance Corporation of India Ltd. of its-
(i) Rupee Loan of Rs lakhs (since converted to FCL);
(ii) Obligations arising out of guarantee issued in favor of Mitsubishi Corporation Japan for sums not exceeding JPY lakhs equivalent at the time of issue.
(iii) FC loan of US Equivalent to Rs Lakh at the time of sanction;

3) The Industrial Credit and Investment Corporation of India Ltd. of its-
(i) Rupee loan of Rs Lakhs;
Obligation arising out of Guarantee issued in favor of Mitsubishi Corporation for sums not exceeding JPY Lakhs equivalent at the time of issue;
(ii) FC loan of US equivalent to Rs Lakh at the time of sanction;

4) Life Insurance Corporation of India of its Term Loan of

5) General Insurance Corporation of India of its Term Loan of

6) National Insurance Corporation of India of its Term Loan of

7) New India assurance Company Ltd of its Term Loan of

8) Oriental Insurance Company Ltd. of its Term Loan of

9) United India Insurance Company of its Term Loan of

10) State Bank of India of its-
(i) Term Loan of Rs
(ii) Obligation arising out of Guarantee issued in favor of Mitsubishi Corporation, Japan for sums not exceeding equivalent at the time of issue.
(iii) Obligation arising out of Guarantee issued/ to be issued for sums not exceeding Rs

11) Allahabad Bank of its-
(i) Term Loan of Rs lakhs;
(ii) Obligations arising out of Guarantee issued/to be issued for sums not exceeding (Rs  Lakhs equivalent at the time of issue).

12) Dena Bank of its –

(i) Obligations arising out of Guarantee issued/to be issued for sums not exceeding Rs  Lakhs equivalent at the time of issue.

(ii) Term Loan of Rs  Lakhs

13) UCO Bank of its-

(i) Obligations arising out of Guarantee issued/to be issued for sums not exceeding USD  (Rs. Lakhs equivalent at the time of issue).

(ii) Term Loan of Rs  lakhs.

14) Punjab National Bank of its-

(i) Term loan of Rs  lakhs.

(ii) Obligations arising out of Guarantee issued/to be issued for sums not exceeding USD  Lakhs equivalent at the time of issue.

15) United Bank of India of its-

(i) Obligations arising out of Guarantee issued/to be issued for sums not exceeding USD  Lakhs equivalent at the time of issue.

(ii) Term Loan of Rs  Lakhs;

16) Central Bank of India of its-

(i) Obligations arising out of Guarantee issued/to be issued for sums not exceeding  lakhs equivalent at the time of issue.

(ii) Term Loan of Rs  lakhs;

17) State Bank of Hyderabad of its-

(i) Obligations arising out of Guarantee issued/to be issued for sums not exceeding USD  Lakhs equivalent at the time of issue.

(ii) Term loan of Rs  Lakhs.

18) State Bank of Saurashtra of its-
(i) Obligations arising out of Guarantee issued/ to be issued for sums not exceeding USD  Lakhs equivalent at the time of issue.

(ii) Term Loan of Rs  Lakhs

19) Union Bank of India of its-

(i) Obligations arising out of Guarantee issued/ to be issued for sums not exceeding USD (Rs.  Lakhs equivalent at the time of issue).

(ii) Term Loan of  Lakhs;

20) Bank of India of its-

(i) Term Loan of  Lakhs;

(ii) Term Loan of  Lakhs;

21) Canara Bank of its-

(i) Term Loan of  Lakhs;

(ii) Term Loan of  Lakhs;

22) Bank of Baroda of its-

(i) Term Loan of  Lakhs;

(ii) FCL of  million;

23)(i) United Bank of India (UBI) acting as Trustees for holders of the Bonds of aggregate nominal value of Rs  Lakhs for which UBI is acting as Trustees.

(ii) UBI acting as Trustees to Bond Series  crores.

24) State Bank of Indore of its Term Loan of  crores.

25) State Bank of Patiala of its Term Loan of  crores.

26) Indian overseas Bank of its Term Loan of  crores.

27) The Karur Vyasya Bank Ltd. of its Term Loan of  crores.

28) Exim Bank of its DPS of Rs  crores.

29) Indusind Bank of its Term Loan of Rs

30) Industrial Investment Bank of India Ltd of its Term Loan of Rs
The Borrower shall make out a good and marketable title to its properties to the satisfaction of the Lender and comply with all such formalities as may be necessary or required for the sale purpose.

2 Creation Of Additional Security

If, at any time during the subsistence of this Agreement, the Lender is of the opinion that the security provided by the Borrower has become inadequate to cover the balance of the Loans then outstanding, then, on the Lender advising the Borrower to that effect, the Borrower shall provide and furnish to the Lender to the satisfaction of the Lender such additional security as may be acceptable to the Lender to cover such deficiency.

3 Acquisition Of Additional Immoveable Properties

So long as any monies remain due and outstanding to the Lender, the Borrower undertakes to notify the Lender in writing of all its acquisitions of immoveable properties and as soon as practicable thereafter to make out a marketable title to the satisfaction of the Lender and charge the same to favour of the Lender by way of first charge in such form and manner as may be decided by the Lender.

(B) Name of the Lender: Canara Bank

Date of Borrowing: 1st February 1992

Major terms of contract:

1. For security of the loan and also for payment of interest and any other changes, costs (including those between attorney and client) and express payable to or incurred by the Bank in relation thereto, the Borrower hereby agree to create charge over both moveable
and immovable properties, both past and present subject to charge on specified properties securing working capital finance.

2. In the event of default by the Borrower, the Bank may
(i) apply and/or appropriate and/or set off any credit balance standing upon any account of the borrower with any branch of the Bank in India or abroad in whatever currency first in or towards satisfaction of any sum (whether principal, interest or otherwise) due to the bank from the Borrower hereunder and;
(ii) in the name of the borrower as the Attorney of the Borrower do all such acts and execute all such documents as the Bank may consider necessary or expedient in this regard;

3. Notwithstanding what is stated here in above, it is clearly understood that all the rights of the bank under this agreement are subject to pari-passu rights of other lenders to the project.