Agency Theoretic Analysis of the Causes of the Low Average Market Capitalisation of the Bombay Stock Exchange

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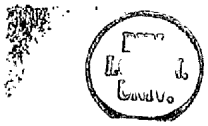

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Abstract

This thesis aims to provide an explanation for the causes of existence of many low capitalised companies (LCCs) listed on the Bombay Stock Exchange. The main theoretical framework for the thesis is derived from the agency conflicts approach. The agency model examines the relationship between managers and owners and determines managerial effort in a contractual arrangement under asymmetric information.

Given the developing nature of the financial and industrial structure in India, the agency conflicts between the different claimants take a different form as compared to that suggested in the traditional agency literature, which is oriented towards developed market economies. Accordingly, the inherent governance structures, which are specific to India and changes initiated by financial reforms of the early 1990s, make a strong case for agency theory to be used as a tool to investigate the peculiarity of Indian stock markets. The dynamics of agency conflicts inherent in the firm structure influences all decisions made in the firm, i.e. debt-equity ratio, dividend policy. It then becomes important to study the impact of the firm's structure on its outstanding equity. This thesis is an attempt at analysing the low average market capitalisation of the BSE from the point of view of owner-managerial behaviour capacitating financial decision-making i.e. how the decision-making of the owner-managers affect the value of the outstanding stock.

The existence of many LCCs on the BSE can be analysed by the simple "entry and exit" model of firms into the low capitalised category of the stock market. Among other reasons the entry of firms into BSE was facilitated by relaxation of many stringent bureaucratic policies towards new firms making their maiden public issues. Survival of a firm depends on its performance in the real market and effective monitoring is required to sustain both performance in the market and any improvements thereof. An LCC can move to a different capitalisation category through internal growth and takeovers or mergers. LCCs on the BSE face not only an ineffective outside monitoring (outside shareholders and debt holders) but also non-existent market "exit" mechanisms of takeovers or mergers. Most of the LCCs have exited from the stock exchange through de-listing (if firms fail to pay the listing fees and abide by the rules of the exchange) by SEBI, the regulatory authority. This corroborates to the insufficiency of the market mechanisms of "exit" in changing the status quo of LCCs. This thesis explores the causes behind the non-existent mechanisms of "exit" for LCCs.

This thesis proposes that lack of exit mechanisms stem from a market for lemons syndrome. Effective monitoring from outside stakeholders i.e. diffused shareholders is non-existent because of the free rider problem. Whereas block debt holders base their monitoring on the relative position of a particular firm in their portfolio or the importance of a firm to the block debt holder determines the extent of monitoring. Lack of an effective outside monitoring is manifested in the dividend policy, which reflects accumulation of free cash flow used for the personal benefit of owner-managers. Lack of effective monitoring and exit mechanisms have led to the existence of many LCCs and them continuing in the similar status for a long period of time. These hypotheses were established with the help of an interview-based survey of managers working for these firms as well as econometric analysis of their financial data.

Acknowledgements

I convey my sincerest gratitude to my supervisor Prof. Laurence Harris who provided me with timely guidance. He was ever helpful in directing me towards the right path from the very beginning of my research. His comments and suggestions have always helped me to improve the quality of this work and I am very thankful to him for that.

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List of Abbreviations and Acronyms

BIFR	Board of Industrial and Financial Reconstruction
BOLT	BSE On-Line Trading System
BSE	Bombay Stock Exchange
BSE Sensex	Bombay Stock Exchange Sensitive Index
CCI	Controller of Capital Issues
CDs	Convertible Debentures
CMIE	Center for Monitoring Indian Economy Pvt. Ltd.
Cr.	Crore (Rs. 1,00,00,000)
CRAR	Capital to Risk weighted Assets Ratio
CRR	Cash Reserve Ratio
D:E	Debt Equity ratio
EBIT	Earnings before Interest and Taxes
ERCs	Earnings Response Coefficients
FCCs	Foreign Controlled Companies
FERA	Foreign Exchange Regulation Act
FIs	Financial Institutions
FOBs	Family owned Businesses
GIC	General Insurance Corporation of India
ICCs	Indian Controlled Companies
ICICI	Industrial Credit and Investment Corporation of India
IDBI	Industrial Development Bank of India
IFCI	Industrial Finance Corporation of India
IPO	Initial Public Offering
IRBI	Industrial Reconstruction Bank of India
Lakh	Rs. 100, 000
LCCs	Low Capitalised Companies
Low-cap	Low Capitalised Company
LIC	Life Insurance Corporation
M&A	Mergers and Acquisitions
MBO	Management Buyout
Mkt. Cap.	Market Capitalisation
MIS	Management Information Systems
MNCs	Multi-National Companies
MRTP	Monopolies and Restrictive Trade Practices Act
NBFCs	Non-Bank Financial Companies
NCDs	Non- Convertible Debentures
NPV	Net Present Value
NSE	National Stock Exchange
NYSE	New York Stock Exchange
OECD	Organisation for Economic Co-operation and Development
OTCEI	Over the Counter Exchange of India
P/E	Price Earnings ratio
PAT	Profits after Tax
PUC	Paid Up Capital
R & D	Research and Development
RBI	Reserve Bank of India
S & P	Standard & Poor
SBI	State Bank of India
SCICI	Shipping Credit and Investment Corporation of India
SCMRD	Society of Capital Market Research and Development
SEBI	Securities Exchange Board of India
SFC	State Finance Corporation

SHCIL	Stock Holding Corporation of India Ltd
SIDBI	Small Industries Development Bank of India
SLR	Statutory Liquidity Ratio
SOEs	State owned Enterprises
UTI	Unit Trust of India

Chapter-1

The Stock Exchange, Mumbai

1. 1 INTRODUCTION:

The recent east Asian economic crisis has shown that even highly successful economies with high economic growth rates can suffer if there are fundamental flaws in corporate, financial and governance systems. For a large majority of developing countries including India, the last decade was characterised by considerable deregulation, privatisation, internal and external liberalisation of product markets as well as extensive financial liberalisation. This has meant that some version of the Anglo saxon model of corporate, financial and governance systems has been adopted by many of these developing countries. One of the structural characteristics which have been criticised for the east Asian crisis is the nature of corporate finance. Although India has been quite immune to the fall out in east Asia, there are important lessons that it needs to learn in order not to face the same grief.

The interface between capital markets and firms provides avenues of performance monitoring by a number of agents under a variety of circumstances, depending on the firm's financial policies. Differences in the financial policies of firms (the formulation, implementation and adaptation of corporate strategy) lead to differences in financial preferences on the part of investors and may result in a variety of systemic outcomes. "Insider" systems[1] are considered superior at implementing policies that require strong relations with a number of different stakeholders. "Outsider" systems[2] are better at responding to market driven change (Sarkar et al., 1998). But a hybrid of these two

[1] Characterised by greater concentration of shareholder power with banks, families and the other firms.
[2] Characterised by diversified equity ownership and less involvement of lending institutions.

systems in India seem to be dominated by their respective disadvantages rather than their advantages, the next chapters provide evidence to this statement.

Performance monitoring by different constituents of the capital market is, in principle, a key element in influencing overall "corporate governance". The interaction among competition, governance and performance of firms is strong although the existing literature does not provide sufficient evidence to support a conclusive basis for any policy decisions (Mayer, 1996). Corporate governance has become a subject of active academic and policy debate throughout the world, although in the UK and US, there is much discussion of the deficiencies of the market system in delivering effective governance.

This thesis tries to analyse one particular element of apparent market failure in the governance of firms in the developing country context of India. Specifically this thesis tries to illuminate why such a large number of very low market-capitalised companies (LCCs) continue to exist in listings on Indian stock exchanges, i.e. why the entry of LCCs on capital markets is so facile while exit is so rare. The reasons of this phenomenon could be due to both *a priori* structural and incentive deficiencies and/or empirical failures of the market in permitting the phenomenon to persist and recur. The presence of such a phenomenon indicates structural, policy and regulatory shortcomings in the Indian capital market which bear examination and rectification. Using empirical analysis and personal-interview-based survey of managers of the LCCs, the thesis points to possible causes of market failure in inducing sufficient and effective corporate governance. Persistence of ineffective corporate governance leads to too many firms remaining in a low market-capitalisation trap over a long period of time. This not only reduces overall market capitalisation of Indian stock markets, it also diminishes their quality.

The structure of this introductory chapter is as follows, Section 1.2 deals with a description of the Bombay Stock exchange, the premier stock exchange of India, Section 1.3 outlines the objectives of this study while Sections 1.4 and 1.5 provide an analytical and overall structure for the thesis.

1. 2 INDIAN STOCK MARKETS (BOMBAY STOCK EXCHANGE):[3]

A discussion of the Indian Stock Markets, requires tobe preceded by an outline of some of the key features of the Indian financial system. The Indian financial system is characterised by relatively small, highly imperfect stock markets, a very large number of medium and small firms, and a banking cum long term "development financing" institutional system which lends large amounts to companies but does not have the kind of close or inter-corporate ties with firms (Cobham and Subhramanyam, 1998) that bank dominated systems in Germany, Japan and Korea for example have had. Between 1950-85, the main feature of the industrial funding pattern in India was the significant usage of debt[4] (owed to banks and other institutions i.e., not "marketable" debt). The major Financial Institutions (FIs) in India played a highly significant role in funding corporate growth, during a period when equity markets had not evolved to their current dominant status. The investment made by the FIs in terms of both debt and equity in public and private industrial corporations was very high. The eventual transformation towards market-based equity financing was consciously brought about by different government

[3] Bombay Stock Exchange has been renamed as Stock Exchange, Mumbai, but the old and more widely recognised name of Bombay Stock Exchange is used throughout this thesis.

[4] Financial Institutions (FIs) provided credit at relatively stable lending rates during the 1980s. The prime-lending rate of the major FIs during the 1980s was 14% whereas the regular short-term lending rates of commercial banks were between 16 and 19.5%. Inflation rates based on the Wholesale Price Index were between 4.5% and 8% during the period. Although the GDP deflator was higher, and was between 6.5%-9.3%, real interest rates on non-concessional loans were positive. The fiscal system also encouraged debt finance over equity; as a result Indian firms have been highly leveraged and dependent on the FIs for their investment needs (Srivastava and Schiantarelli, 1997).

policies[5] occurring from the mid 1980s onward and accelerating after the 1991-92 crisis. In India as in many other developing economies, the State has been active in promoting the growth of the stock markets (Singh, 1993).

Indian stock markets are many and varied. India currently has 2 national and 23 regional stock exchanges and an over-the-counter market, which are recognised by the Government under the Securities Contracts (Regulation) Act, 1956. The two national stock exchanges are both located in Mumbai. The regional stock exchanges are located in other primary and secondary cities in India, including Delhi, Calcutta, Chennai, Ahmedabad, Hyderabad and Bangalore. All these stock exchanges function under the regulation of the Ministry of Finance and Securities and Exchange Board of India (SEBI). By any comparative standard for emerging markets Indian stock markets have a very large base of shareholders[6] (the retail equity investor population increased from about 2 million in 1980 to around 25 million in 1996-97, while the number of retail investor accounts that the mutual fund industry manages is estimated at around 50 million). Retail investors are currently serviced by about 6500 brokers and 150,000 intermediaries, including sub-brokers, and investment advisors (Roy et al., 1997).

The Bombay Stock Exchange (BSE), which forms the focal point of this study, is the oldest in Asia as well as the largest in India (Price, 1994). BSE accounts for nearly 70% of daily turnover and for 75% of total market capitalisation in India. It was established in 1875 as "The Native Share and Stockbrokers Association" and is a voluntary non-profit making association. The Exchange has evolved over the years into its present status as one of the two premier Stock Exchanges in the country. At present

[5] Foreign Exchange Regulation Act, 1973 and other fiscal measures (see Chapter –2).
[6] India has the third largest investor base in the world after the USA and Japan (Roy et al., 1997).

there are over 6,000 companies listed on the BSE; a very high number of listed companies compared to any other emerging or developed market.[7]

Yet, although the secondary market in BSE is characterised by voluminous trading, that volume is highly concentrated in just a few issues. Trading in the shares of 50 companies, out of the 6000 listed (with a total market capitalisation of about Rs. 2.5 trillion), accounts for over 80% of market turnover. More recently about 65% of trading volume has been concentrated in just 10 scrips. The market is afflicted by outdated and inefficient floor trading practices, which are opaque. Broker behaviour is severely inimical to the market's integrity and to the interests of all other market participants (CR 1992, Gupta 1990).

But given the large number of listed companies, the average market capitalisation of BSE is inefficiently low (because of a very large proportion of firms with extremely low market capitalisation as shown in table 1.1) compared to other emerging markets; which have far fewer number of firms listed on their stock markets. Under a process of gradual reform initiated in the early 1980s,[8] market capitalisation has been steadily increasing[9] along with the number of companies listed on the stock market.

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[7] USA has the largest number of companies listed on its stock exchanges followed by India and the BSE.

[8] The first step towards decontrol and deregulation was taken in 1982 with the decontrol of cement companies and prices. Although that decade did not witness major changes in the financial system, it started a period of gradual change towards decontrol and deregulation. But growing public concern about the need to reform stock markets led the government to set up a committee in May 1984 under G.S. Patel. The Committee submitted its final report to the government in June 1986, suggesting a radical and exhaustive set of recommendations for the primary and secondary markets. Since then the government has managed to implement a few not-so-important recommendations like the cost of raising fresh capital and increasing the marketable lot of shares of new companies to a uniform number of 100. The other suggestions of this committee were; a uniform structure and organisation for all stock exchanges, closer supervision of the day-to-day functioning of the stock market, broad-based membership of the stock exchanges, computerisation of dealings in securities, strict curbs on insider-trading and simple transfer procedures. Very few of these recommendations were implemented until 1998, when dematerialisation was introduced along with changes in settlement systems and periods. The Patel report remains among the more exhaustive and visionary documents produced on reforming India's capital markets.

[9] See Table -1.2.

Table 1.1: Proportion of LCCs in BSE:

Year	No. of listed companies	No. of LCCs	Proportion of LCCs
1991	2556	2158	.8442
1992	2781	2383	.8568
1993	3263	2865	.8780
1994	4413	3815	.8644
1995	5389	4791	.8890
1996	5999	5401	.9003
1997	5843	5245	.8976
1998	5860	5262	.8979

Note: The proportion of LCCs was derived by subtracting the number of companies which are part of stock market based indices like BSE Sensex, BSE National Index, BSE-100 Index, BSE-200, BSE-500, S&P Mid Cap. All these indices have overlapping listed companies and there is no specific index for the LCCs.

A round of deeper financial reforms triggered by the severe financial crisis of 1991-92[10] has resulted in a major increase in the market capitalisation of the BSE (which represents about 75% of the total market capitalisation of the country) has quadrupled from Rs. 1.1 trillion at the end of 1990-91 to Rs. 4.64 trillion at the end of 1996-97. By 1998, 9,833 companies were listed on all the stock exchanges in India, compared to 9,890[11] companies listed at the end of 1996-97. The total market capitalisation of companies listed on the BSE (5,853[12] companies listed on BSE in 1998) was Rs. 5.60 trillion as on March 31, 1998, indicating a rise of 20.78% from its 1996-97 level of Rs.

[10] A Committee on (Reforms of the Financial System, 1991) headed by Mr. Narasimham set out the rationale of the 1991-92 financial sector reforms. It submitted its report on Dec. 1991 which put forward a set of recommendations dealing with various aspects of the functioning of the financial system i.e. improving the efficiency and effectiveness of the sector conceding operational freedom and flexibility to it through regulation and supervision in a free financial environment. Capital market reforms in the period 1992-93 to 1996-97 include:

- Allowing direct stock investments by institutions,
- Permitting private sector mutual funds to be established,
- Scrapping of the Office of Controller of Capital Issues (CCI) that regulated the issuance of stocks and debentures,
- Establishment of SEBI as a regulator of the capital market,
- Allowing companies to access international capital markets through Euro Issues.

Firm level reforms included;

- Compulsory disclosure of material facts and specific risk factors associated with their projects while making public issues,
- Mandatory filing of annual statements disclosing end use of funds by companies raising funds from the capital market,
- Underwriting by the issuer has been made optional to reduce costs of issue.

[11] Includes companies listed in the OTC market.

[12] Excludes companies listed in the OTC market.

4.63 trillion. As a percentage of GDP, movement in market capitalisation has been more erratic, but this ratio has also been rising (SEBI Report, 1998).

Table 1.2: Performance of Indian Stock Markets.

Year	1991	1992	1993	1994	1995	1996	1997
Trading Val (Rs. bn.)	626.81	572.72	675.15	854.14	724.40	3398.44	5764.83
Mkt.Cap/GDP	19%	27%	38%	42%	39%	34%	33%
Traded Val/GDP	10%	8%	9%	9%	6%	27%	40%
Traded Val/Mkt.Cap	51%	31%	22%	21%	16%	77%	122%

Source: SEBI Annual Report, 1998.

In Tables – 1.3 and 1.4 emerging markets have been listed by the size of their market capitalisation. They highlight the very low market capitalisation when expressed as an average per company.

Table 1.3: Comparison of Indian Stock Market Capitalisation and Turnover ratios with other Emerging and Developed markets.

Countries	Mkt. Cap. ($ bn)	Turnover ratio[13] (%)	Value Traded	Mkt. Cap. ($ bn)	Turnover ratio (%)	Value Traded
	1998			1991		
Similar Markets						
India	105.2(21)	55.2(27)	64498(19)	47.7	50.9	24295
Korea	114.6(20)	28.9(48)	137859(17)	96.4		85464
Mexico	91.8(25)	27.3(46)	33841(28)	98.2	32.3	31723
Malaysia	98.5(23)	9.1(64)	6805	58.7		10657
Singapore	94.5(24)	50.5(33)	50735(23)	47.6	37.9	18074
Larger Markets						
US	13451.3(1)	106.2(10)	13148480(1)	4087.6	534.4	2183910
Japan	2495.7(2)	40.3(35)	948522(4)	3130.8	100.7	315279
UK	2374.3(3)	53.4(30)	1167382(3)	987.9	100.8	995939
Taiwan	260.0(14)	323(1)	884698(5)	124.8	292.5	365232
Brazil	160.9(18)	70.4(21)	146594(16)	42.8	31.2	13373
Smaller Markets						
Austria	34106(37)	47.4(34)	16566(32)	7689	-	7039
Thailand	34903(36)	71(19)	20734(31)	35815	64.5	23119
Pakistan	5418	111.1(9)	9102(39)	7387	155.3	11476
Sri Lanka	1705	14.8(53)	281	1936	16.0	311
Bangladesh	1034	61.7(25)	793	269	142.7	384

Note: Numbers in the brackets show the world rankings.

Source: IFC Emerging Stock Market Fact book, 1999, P. No. 15-17, 20-23.

[13] The ratio of total value traded for the period to average market capitalisation in local currency. Average market capitalisation is the mean of the end-of-period market capitalisation of the prior and current periods.

Table 1.4: Number of Listed Domestic Companies. (End of period levels)

Countries	No. of Domestic Listed Companies	
Similar Markets	1998	1991
India	5860(2)	2556
Korea	748(13)	183
Mexico	194	209
Malaysia	736(15)	321
Singapore	321(25)	166
Larger Markets		
US	8450(1)	6742
Japan	2416(4)	2107
UK	2399(5)	1623
Taiwan	437(22)	221
Brazil	527(20)	570
Smaller Markets		
Austria	96	105
Thailand	418(24)	276
Pakistan	773(12)	542
Sri Lanka	233(38)	178
Bangladesh	208	138

Source: Emerging Stock Markets Fact book, International Finance Corporation, 1999.

With almost similar levels of market capitalisation, the number of domestic companies listed in Korea, Mexico, Singapore, or Malaysia is far fewer than the number in India. The tables below also show the world ranking of the BSE in terms of market capitalisation (rank 20) and number of domestic companies listed (rank 2) in 1998. The comparison between 1991 and 1998 in these tables highlights increases in these two measures after the 1991-92 financial reforms that took place in India. So the BSE portrays an unusual situation in that with very low market capitalisation, a large number of existing as well as new companies have resorted to new market-based equity issues[14] to finance the growth of their net assets as shown in tables 1.5 and 1.6.

[14] Between 1994-1998, capital raised through the primary market declined (due to recessionary conditions in the economy) as shown in Table 1.5. But it showed an increase in 1998-99. The total amount of capital raised during 1998-99 from the primary capital market was Rs. 55.8 bn., which is 22.24 % higher than the amount of Rs. 45.7 bn. mobilised in 1997-98. While the amount of capital mobilised increased during 1998-99, the number of firms entering the market declined substantially from 111 in 1997-98 to 58 in 1998-99. This indicates that companies on an average made issues of a size considerably larger than that in the previous year. In 1997-98, the proportion of rights issues in total issues increased by more than three times over 1996-97. The over-pricing of issues following the introduction of free pricing and decline in the market prices of those same issues had an adverse impact on the primary market (SEBI Annual Report, 1998). At the same time, the number of IPOs has also declined. The proportion of IPOs in total issues has

Table 1.5: Capital Raised in the Indian Primary Market.

Year	Book value of the Issues (Rs. Bn.)	No. of Issues (Public and Rights Issues)
1994-95	276.32	1692
1995-96	208.03	1725
1996-97	142.76	882
1997-98	45.70	111
1998-99	55.86	58

Source: SEBI Annual Report, 1999.

Table 1.6: Proportion of Initial Public Offerings (IPOs) in Indian Public Issues.

Year	No. of IPOs	Book value of the Issues (Rs. Bn.)
1996-97	715	59.50
1997-98	52	10.47
1998-99	18	4.04

Source: SEBI Annual Report, 1999.

On turnover, BSE is ranked 27th of the world markets. This turnover ratio is a measure of liquidity. All the markets which are similar to BSE in terms of market capitalisation tend to lack liquidity. When ranked by turnover ratios their relative position is lower than when compared to their rankings based on market capitalisation (Tables – 1.3 and 1.4). Given the large number of companies listed on the BSE, a low turnover ratio can be obviously attributed to lack of liquidity in the market as a whole and almost complete illiquidity for over 85% of listed scrips i.e., despite a large number of stocks listed, there is no trading in most of these stocks at all.

Domestic institutional investors hold about one-third of the market's capital, while management insiders and individual investors hold a third each. Effectively the bulk of daily trading is restricted to institutional investors both domestic and foreign. In the case of smaller companies (which make the bulk of listed companies in BSE), family members usually hold over 50% of the firm's issued shares. With the remainder being held by domestic FIs, and insurance companies as well as by banks (mainly as collateral), only a small proportion (usually less than 20%) of total shares issued are available for

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also declined from 81.07% in 1996-97 to 31.03% in 1998-99. SEBI claims that the strict norms it introduced for all public offers since 1995-96 has helped ensure improvement in quality of firms entering the stock market (SEBI Annual Report, 1998).

public trading. According to Sarkar et al. (1999), in the private stand-alone companies, the equity holding by directors and relatives is highest (22% of the total stake). Table 1.7 shows the market concentration in the BSE. A majority of the smaller companies have extremely low turnover ratios, given that they face thin trading.

Table 1.7: Market Concentration in BSE.

Year	Share of Mkt. Cap. Held by 10 largest stocks	Share of value traded held by 10 most active stocks
1989	20.8%	47.3%
1990	23.5%	30.6%
1991		
1992	22.6%	32.2%
1993	19.6%	29.9%
1994	19.4%	6.2%
1995		
1996	20.4%	74%
1997	24.8%	81.1%

Source: IFCI Emerging markets Fact book, 1998.

As observed earlier turnover on Indian stock exchanges has been increasing significantly since 1994. In 1994, the government introduced competition by creating a new National Stock Exchange (NSE) that offered superior technology for electronic trading and computer links to brokers in 40 cities around the country. At present the NSE's average daily trading volume is almost three times higher than that of BSE, which introduced electronic technology belatedly in response to competition from NSE, which has led to increased liquidity and efficiency nationwide. In 1995 the government also created India's first depository,[15] and has moved progressively toward dematerialisation and electronic transfer of scrip ownership. Those measures have improved dramatically an outmoded share trading system (Barger, 1998) that was subject to considerable abuse by the broker community. After 1996-97, increase in turnover has been facilitated and supported by the screen based trading systems of NSE and the expansion of BSE's On-

[15] National Securities Depository Limited.

Line Trading System (BOLT)[16] facility across the country. Table 1.8 looks at the market capitalisation and the turnover ratios of the BSE from 1980-98.

Table 1.8: Market Capitalisation, No. of Domestic Companies listed and Turnover ratio in BSE.

Year	No. of Companies listed on the stock exchange	Market Capitalisation (US $ Millions)	Value Traded (US $ Millions)	Turnover Ratio (%)
1981	1031	6649	6693	108.3
1982	1106	7058	5030	74
1983	1151	7178	2377	33.5
1984	1295	6370	3916	57.6
1985	1529	14364	4959	48.3
1986	1912	13588	10781	77
1987	2095	17057	6743	43.9
1988	2240	23623	12241	59.2
1989	2407	27316	17362	68.8
1990	2435	38567	21918	65.9
1991	2556	47730	24295	56.8
1992	2781	65119	20597	37
1993	3263	97976	21879	22.4
1994	4413	127571	27290	21.4
1995	5389	122199	13738	11.24
1996	5999	122605	26599	21.6
1997	5843	128466	53954	42
1998	5860	105188	64498	61.3

Source: IFCI Emerging Markets Fact book, various issues.

No doubt, low turnover partly explains the low average market capitalisation of scrips on the BSE. A low proportion of effectively tradable shares contributes to low turnover in the stock market. Given the capital gains and transfer, tax structures and other transactions costs, the lack of liquidity in BSE can be attributed to both the capital structure of firms and their ownership structure. Analysing the debt and equity (holding) pattern in Indian corporates and the inherent conflicts of interest that arise is important for understanding the fundamental causes of low market capitalised companies listed on the BSE.

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[16] BOLT was set up to achieve the following goals:
To increase market transparency,
To enhance market quality through improved liquidity, by increasing quote continuity and market depth,
To reduce settlement risks due to open trades, by elimination of mismatches,
To provide management information systems (MIS),
To introduce flexibility in systems in order to handle growing volumes easily,

1.3 OBJECTIVE OF THE THESIS:

This thesis attempts to investigate and explain the causes of low average market capitalisation of firms listed on BSE. The main theoretical framework for the thesis is derived from the agency costs approach, initiated by Jensen and Meckling (1976).

The thesis highlights the contrast between the rhetoric surrounding the supposed attributes of market mechanisms[17] (disciplinary and efficient allocation of resources) and their apparent inability to induce effective corporate governance and performance through market discipline especially in an emerging market like India.

Firms try to maintain a desired capital structure (or debt-equity ratio) according to the nature of their productive activities, although the ratio is maintained more in the book-value terms than in market value proportions.[18] When sales, profits or assets increase or taxes change, the impact on the financial structure of a firm emerges through changes in the book value of its debt and equity. These changes in turn lead to changes in public issues on capital markets by firms by way of equity issues and/or debt from the financial intermediaries. Market pricing and valuation of such issues is reflected in the premia or discounts obtained over par in the pricing of issues and in the case of debt their coupon returns (with the interplay between price and coupon determining yield). Thus changes in the above mentioned variables, i.e. sales, profits, assets, costs, taxes, affect the

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and to support nation-wide expansion of market activity (SEBI Annual Report, 1997).

[17] Capital markets allocate scarce capital among competing users and uses. They provide signals to guide investors in making investment decisions and provide a mechanism by which capital markets enforce performance and governance disciplines.

[18] Financial ratios related to the firm make use of book values rather than market values. The market value of the equity of a company finally determines whether debt holders get their money back. But analysts do not look at the face amount of the debt as a proportion of the total market value of debt and equity because market values are often not readily available and are subject to volatility. The market value includes the market's perceptions (subject to rapid change) of value of intangible assets generated by R&D, advertising, staff training, and so on. These assets are not readily saleable, and if the company falls on hard times, the value of these assets may disappear altogether (Myers and Brealey, 1997).

book value proportions of debt and equity. The resulting market value of equity[19] or the market traded debt of a corporation acts as a mediating influence on the cost of effecting changes in the book values of debt and equity. LCCs incur higher costs in bringing about changes in the book values of their debt and equity.

Companies in emerging markets with low levels of development and inherent market imperfections, depend much more on internal, rather than external or market finance. As King (1977) observes, firms in countries where stock markets are poorly developed are forced to rely more extensively on bank and non-market debt as an informal credit, depending on the level of development of the domestic credit market. But the number of firms listed on the stock markets in India suggests a seemingly paradoxical situation, with large number of companies financing a significant part of their investment through equity markets,[20] for whom dependence on debt as a source of finance is not preferable compared to equity as shown in the table 1.9.

Table 1.9: Debt-Equity Ratios of Indian corporate sector.

Year	No. of Companies	Debt to Equity ratio in Public Limited Companies
1990-91	2131	99
1991-92	1836	98.4
1992-93	1802	90.4
1993-94	1700	73
1994-95	1720	65.5
1995-96	1730	58
1996-97	1930	61.6
1997-98	1948	65

Source: RBI Finance and Currency Bulletin, Various Issues

[19] "Financial price data provide a window into the firm through the market's valuation of the securities issued by the firm and the changes in these values over time. Accounting data, on the other hand, provide information on the resources used by the firms. Thus, comparing accounting data and financial valuation data offers the opportunity to examine performance, the difference between inputs on one hand and output on the other" (Lindenberg and Ross, 1981).

[20] Prior to 1992 Indian firms faced bureaucratic hurdles in respect to raising new equity finance as well like, companies making new issues, bonus issues, pricing the issues had to seek the permission of Controller of Capital Issues (CCI), as stock markets in general, were under the direct control of Ministry of Finance, Government of India. Many of the small and medium firms faced problems of inadequate access to the capital markets.

Floating external equity is often regarded by corporate managers especially of family owned ad new firms as leading to loss of control,[21] which most managers try to avoid. Companies with low market capitalisation compared to the book value of their net asset become an easy target for acquisitions and hostile takeovers.[22] In addition to loss of control and vulnerability to takeovers, the tax rate[23] in India on widely held domestic companies and closely held domestic companies is around 40% and 50% respectively. Because of the deductibility of interest payments, Modigliani and Miller (1958) argue that the net gain from debt financing relative to equity financing increases with the firm's tax rate.

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[21] This is because public issues increase the number of outside shareholders who become residual claimants on the net assests of the firm. Outside shareholders could then act as monitors to the managerial activity. Private stand-alone companies with higher insider ownership have lower agency costs of equity and higher agency costs of debt because the incentives of managers are more closely aligned with owners than with creditors [Lang-Friend (1988) and Friend-Hasbrouck (1987)]. Managers are envisaged as pushing investment programs to a point where their marginal rate of return is below the level that would maximise stockholder welfare, in other words managers indulge in over investment. For these purposes internal finance is particularly favoured since they are the most accessible part of the capital market and most amenable to managerial desires for growth. In other words, professional managers avoid relying on the external finance because it would subject them to the discipline of the external capital market (Cherian, 1996).

[22] A low Tobin's Q can be a reliable indicator of a declining firm as it measures the low valuation of a firm's tangible assets in their current use. It may pay to sell off assets when Q is low because those assets may have a higher value in another firm or sector. If a low Q reflects a low valuation of physical assets relative to their potential, then acquiring the firm will be a cost-effective way to buy and redeploy its physical capital. A related measure of profitability relative to the value of physical assets is the deviation of a firm's Q from the average Q for its industry. A low Tobin's Q can also result from well-managed but invaluable assets. For example, if the targets for hostile takeovers invested a long time ago when their industry was growing, but in the current period if the fortunes of the industry have turned around, they will be stuck with excess capacity. In recent years the corporate sector in India has witnessed many mergers and takeovers (though few have been hostile), yet LCCs have been immune to this mode of market correction. Despite the increasing frequency of highly publicised takeover battles in recent times, not many of the worst managed listed companies in India are vulnerable to hostile takeovers. Such companies are restructured by the Board of Industrial and Financial Reconstruction (BIFR) and not through the market for corporate control. This is because the promoters have voting control in their hands, facilitated by many regulatory relaxations made in the listing requirements for companies (Gupta, 1990). Also their shares are heavily owned by FIs and public insurance companies and unit trusts that are disinclined to support hostile takeovers.

[23] Corporate taxation for "widely held" domestic companies has been in the range of 55% in 1975-76 [for income of more than Rs. 1 Lakh (Rs. 1,00,000)] to 50% in 1988-89. in the early 1990s it ranged between 45-40%. Surcharge is levied on tax at 8% for the accounting year ended march 31, 1990 if taxable income exceeded Rs. 50,000. It is levied at 15% for the accounting year ended march 31, 1991 and thereafter if taxable income exceeds Rs. 75,000 (Source: Price Waterhouse Information Guide; Doing business in India).

High tax rates, limited access to capital markets due to thin trading, loss of control, vulnerability to takeovers and acquisitions should have pushed firms toward debt financing. But the number of firms both existing quoted firms and new firms issuing Initial Public Offerings (IPOs), seeking funds from the equity markets has been steadily increasing.

Why then do (a) the potential tax savings to be generated by increasing debt coupled with (b) the fear of loss of control, not lead firms to borrow as much as possible instead of issuing equity on the stock market? The different lines of argument from the supply side, suggest the following reasons:

- Imperfect or incomplete capital markets;
- Credit rationing[24] by public banks and other lending institutions (e.g. FIs),
- Financing decisions considered as information signals[25] about the firm's credit quality and commercial risk rating and its current/future profitability,

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[24] "Banks making loans are concerned about the interest rate they receive on the loan, and the riskiness of the loan. However, the interest rate a bank charges may itself affect the riskiness of the pool of loans by either: 1. Sorting potential borrowers (Adverse selection effect) 2. Affecting the actions of borrowers (incentive effect). Both effects derive directly from the residual imperfect information, which is present in loan markets after banks have evaluated loan applications. When the price (interest rate) affects the nature of the transaction, it may not also clear the market. ...It is difficult to identify "good borrowers," and to do so requires the bank to use a variety of screening devices. The interest rate, which an individual is willing to pay, may act as one such screening device: those who are willing to pay high interest rates because they perceive their probability of repaying the loan to be low. As the interest rate rises, the average "riskiness" of those who borrow increases, possibly lowering the bank's profits. Similarly, as the interest rate and other terms of the contract change, the behaviour of the borrower is likely to change. For instance, raising the interest rate decreases the return on projects, which succeed. In a world with perfect and costless information, the bank would stipulate precisely all the actions that the borrower could undertake. However, the bank is not able to directly control all the actions of the borrowers; therefore it formulates the terms of the loan contract in a manner designed to induce the borrower to take actions, which are in the interest of the bank, as well as to attract low-risk borrowers. For both these reasons, the expected return by the bank may increase less rapidly than the interest rate and beyond a point may actually decline. The interest rate at which the expected return to the bank is maximised is called the bank-optimal rate r*. The bank would not lend to an individual who offered to pay more than r*. In the bank's judgement, such a loan is likely to be a worse risk than the average loan at interest rate r*, and the expected return to a loan at an interest rate above r* is actually lower than the expected return to the loans the bank is presently making. Hence, there are no competitive forces leading supply to equal demand, and credit is rationed" (Stiglitz and Weiss, 1983).

- Avoiding the hidden costs and implicit taxes (kick-backs) involved in borrowing from public financial institutions and banks,
- Avoiding tying up collateral as well as potential bankruptcy[26] costs and transaction costs involved in reorganisation and, lastly,
- Owner-managers having proclivity to avoid high debt ratios in an attempt to retain control and protect personal wealth.

The last of these reasons forms part of the agency approach.[27] Agency theory purports to capture the conflict of interests among various groups ("agents") with claims to the firm's resources, including owner-managers, shareholders, debt holders etc. To analyse the interface between a firm and the capital markets, an understanding of the conflicts of interest between these groups was important. This thesis analyses the high proportion of LCCs on the BSE using agency theory as its analytical proposition.

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[25] The shareholder and the manager have private information regarding the firm's prospects. The asymmetry of information in capital markets engenders an adverse selection problem. Information asymmetry models argue that as managers know more than investors do about the firm's prospects, dividends reveal some of that information to the market. It also helps explain the observed reluctance of managers to change dividends. Thus, dividend-signalling models describe how managers can optimally convey their private information to lesser-informed outside investors (Bessler and Nohel, 1996). Fama and Babiak (1963) find a relation between annual dividends and earnings that is consistent with the view that dividend-paying firms increase their dividends only when management is relatively confident that the higher payments can be maintained. If managers have information about the future and/or current cash flows that investors do not have, investors will interpret a dividend increase as a signal that management anticipates permanently higher cash flows, and a dividend decrease as a signal that management expects permanently lower cash flows. Unexpected changes in dividends provide the market with clues about unexpected changes in earnings, which in turn trigger price movements that look like responses to dividend decisions. Miller and Modigliani (1959) suggest that given information asymmetry investors are likely to interpret a change in dividend rate, as a change in management view of future profit prospects of the firm.

[26] As debt and firm risk increase, financial distress and bankruptcy become more likely. In a two period model in which the firm invests in the first period and gets its return in the second period, bankruptcy can be defined as the income of the firm which is less than the fixed obligations to bondholders in an ongoing firm. But a firm can avoid bankruptcy even when its income is less than the obligations of the firm by borrowing more. A firm is also bankrupt if the value of its equity is zero or if the value of its future income streams, assuming it does not go bankrupt in the meantime, is less than the value of its outstanding debt.

[27] Jensen and Meckling (1976) identify three potential value-reducing behaviours, which arise out of conflicting interests between stockholders and bondholders. Asset substitution occurs when a firm invests in riskier, lower-valued projects than originally anticipated by bondholders. Claim dilution results when new debt of equal or greater priority than original debt is issued. Under investment results when instead of

Corporate capital structure is determined at least in part by optimisation of management interests even when these interests conflict with shareholders' interests. In their empirical study on bond and equity issues, Jung et al. (1996) conclude that their results on corporate security issue choice strongly supports the agency model. Their results are consistent with the role of agency costs in the new issue decision. An equity issue allows firms with poor investment opportunities to invest in poor projects and/or to reduce the disciplinary role of debt. Their study finds that firms which issue equity, are of two types:

a. Firms with valuable investment opportunities which seek financing to grow profitably
b. Firms, which do not possess any valuable investment opportunities.

Most of the LCCs would belong to the second category (they also don't have debt capacity). Equity in most cases is deemed as a non-obligatory, unrestricted source of finance.[28] Hence, there are few incentives for the firm's management to align their interests with those of the outside shareholders (in maximising the market value and dividend returns on the company's shares).

Aspects of corporate monitoring and governance,[29] which play a positive role in improving the performance of a firm, can also be best understood within a principal-agent framework (Sarkar et al., 1999). According to Mayer (1998) there are five channels[30]

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investing in positive net present value projects, a firm pays the debt proceeds to shareholders either as a dividend or a share repurchase. All three conflicts impose agency costs on the firm.

[28] It increases managerial discretion, which management values. Managerial discretion can take numerous forms; managers may run slack operations, pursue sub-goals that are at variance with corporate purposes, and can engage in self-dealing.

[29] Mechanisms of corporate governance deals with providing managers with proper incentives in labour markets, in order to induce them to work in the interests of the shareholders and to make them accountable for company performance.

[30] a. Managerial incentives,
b. Disciplining,
c. Financing and investment decisions,

through which corporate governance affects performance. These channels are established by structural and institutional factors related to a firm i.e. ownership structure, financial structure, internal control systems, and the legal, political and regulatory environments. This thesis deals with only some aspects of corporate governance, i.e. through finance and investment (debt and equity), disciplining and restructuring (market for corporate control[31] and the role of financial institutions).

Barua et al. (1994) commenting on the state of capital market research in India, assert that certain areas such as arbitrage pricing theory, option pricing theory, agency theory and signalling theory are virtually unresearched in the Indian context. The Indian capital market has been attracting considerable attention in recent years especially after the financial liberalisation initiated in 1991-92. Against this background, it becomes important to study hitherto unresearched aspects of finance related to India.

There is a strong case for agency theory to be used as a tool to investigate the behavioural characteristics of Indian stock markets. The dynamics of agency conflicts inherent in the firm structure influences all the decisions taken by a firm i.e. debt policy, dividend policy etc. Accordingly, it becomes important to study the impact of firm's financial structure on its outstanding equity. This thesis tries to analyse low average market capitalisation of the BSE by looking into how owner-manager behaviour

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d. Corporate restructuring and
e. Instilling commitment and trust.

[31] Prior to the economic reforms, regulatory bodies like the Monopolies and Restrictive Trade Practices Act (MRTP) placed several restrictions in the way of takeovers, mergers, and amalgamations. Banks could not finance takeovers under the regulations of the Reserve Bank of India. Currently RBI allows banks to lend against shares only to individual borrowers within a ceiling of Rs. 100, 000 and stockbrokers against their stock in trade where the ceiling is decided on a case-to-case basis by individual banks. Business houses cannot borrow against shares. The cost of funds is high at around 23%, including service charges. In 1991, the Government omitted relevant sections and provisions from the MRTP Act. The need for prior approval of the federal government for M&A activities was abolished. Bhagwati Committee Draft on Takeovers

influences financial decision making i.e. how does decision-making of owner-managers affect the market value of outstanding equity and the movement of its prices.

1.4 ANALYTICAL FRAMEWORK:

A model of turnover of the population of firms (through the birth of new firms and death of existing firms) helps to analyse the incidence of LCCs on the BSE. High rates of entry typically coincide with high rates of exit; since one effect of entry is the displacement of some of the older firms by new firms. A common way of modelling is to assume that entry responds to deviations in expected profits from the cost of entry,[32] which depends on entry barriers. The determinants of birth, growth and death of firms on the BSE can be summed as follows:

$E_t = f(P_t - CE_t)$

$CE_t = g(BE_t, C_t)$

Where E is entry, P is expected profits, CE is the cost of entry, BE are entry barriers, C is cost of finance.

$X_t = f(P_t, G_t, BX_t, C_t)$

1996 and SEBI Substantial Acquisitions of Shares and Takeovers Regulations 1994 attempted to ensure that takeovers as a disciplinary mechanism perform the function of enhancing efficiency of firms.

[32] Firms which want to be listed on BSE have to fulfil the following criteria:

- Minimum Capital: New companies can be listed on the Exchange, if their issued & subscribed equity capital after the public issue, is Rs.100 mn. and above.
- Minimum Public Offer: As per Rule 19(2) (b) of the Securities Contracts (Regulation) Rules, 1957, securities of a company can be listed on a Stock Exchange only when at least 25% of each class or kind of securities is offered to the public for subscription.

Whereas companies listed on other Stock Exchanges and seeking listing on these Exchanges are required to fulfil the following criteria:

- Minimum Issued Equity Capital of Rs.30 mn. to Rs.100 mn.;
- Profit track record of at least three years;
- Minimum Market Capitalisation of Rs.200 mn., based on average price of last six months;
- Trading for a minimum 50% of the total trading days during the last six months on any stock exchange;
- Minimum average volume traded per day during the last three complete months should be 500 shares and minimum 5 trades per day;
- 25% of the issued capital should be with public (including corporate bodies) and minimum 15 shareholders per Rs. 100,000 of capital in the public category (BSE Annual Report, 1999).

Where X is exit, BX is the exit barrier,[33] G includes variables related to the growth[34] of the firm and P is profits.[35]

Now assuming that all the new entrants in BSE are LCCs, let L_t be the proportion of low capitalised firms in BSE at time t. These new firms generally start on a small scale and their access to the capital markets may be limited. L_t can be defined as

$L_t \equiv \Sigma E_{t-j} - \Sigma X_{t-j}$

Where ΣE_{t-j} is summation of all the factors leading to the entry of a firm in the low capitalised category of BSE. ΣX_{t-j} is the specific exit factors.

$\Sigma X_{t-j} \equiv$ Bankruptcy of LCCs + Involuntary de-listing[36] of LCCs + Voluntary de-listing of LCCs + LCCs reaching medium capitalised and large capitalised companies' category through growth + LCCs being taken over or merged.

This thesis concentrates on the last two variables on the RHS of the above equation. For considering the causes restricting takeovers and internal growth, this chapter looks at the firm level characteristics of financial policy. The firm-specific characteristics are analysed from the point of view of agency theory.[37] Some of the characteristic features of a typical "low-cap" firm's financial policy were in accordance

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[33] Exit barriers in India were high, i.e. management was constrained by law to retrench either surplus assets or labour (Venkiteswaran, 1993).

[34] Growth in the market value of a company due to a takeover or a merger.

[35] Falling profits over a period of time would lead to bankruptcy and liquidation.

[36] In addition to the market determined routes of exit, the regulatory body Securities Exchange Board of India (SEBI) de-lists companies from the stock exchange. Since 1999 BSE has introduced "Z Category" stocks instead of delisting for companies which do not comply with the provisions of the Listing Agreement. De-listing was not a very effective disciplinary option because it was realised that companies, which defaulted on the listing fees wanted to be de-listed in the first instance. This meant that then they would have no obligation towards the Stock exchange or its direct governance and interference. But SEBI does not have any rules as yet to deal with such companies. The number of companies placed under this group, by the end of 1999 was 600 (BSE Annual Report, 1999).

[37] "The size and scale of operations of most listed companies leads to a division between the shareholders, the board and the professional management. In addition to the benefits from specialisation of function, there are also however, certain costs inherent in the corporate form of firm organisation. The most

with existing literature. There were some which did not follow the pattern as suggested by existing literature. Insights on these deviant characteristics were available from the personal interview based survey of the LCCs' managers.

1.5 STRUCTURE OF THE THESIS:

The broad structure of this thesis is as follows:

The chapter 2 develops the implications of agency theory in the Indian context. By using the exit and entry model of firms, this chapter deals with the mechanisms (analysing them on the basis of agency theory) by which the agency costs of LCCs can be reduced i.e., agency costs of debt, equity and takeovers.

The chapter 3 outlines the interface between Indian corporations and capital markets. It deals with the choice of different sources of finance in India along with the institutional environment, which determined the prevailing financial policies of firms. It also provides an account of takeover activity in India and outlines the financial reforms of 1991-92, which brought about changes influencing the choice of finance among other things.

The chapter 4 deals with two models of takeover markets and institutional debt holding and monitoring. The takeover model analyses the "market for lemons" or adverse selection to understand the lack of effective corporate mergers and acquisitions market for firms listed on BSE. Given the highly diffused ownership of outside shareholders and high proportion of family ownership in a typical firm listed on BSE, the second model points out that monitoring is possible by financial institutions but only on the basis of a firm's relative position in the overall portfolio of the financial institutions. These two models help to explain why there are so many LCCs listed on BSE as a permanent

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significant of these are agency costs. Agency costs arise because of a divergence between the interests of shareholders and managers" (Stapledon, 1996).

feature. Takeovers provide firms with an exit mechanism, which is absent on BSE; as is effective performance monitoring, which helps to improve firm performance for many LCCs. Together they explain why LCCs have become a permanent feature of Indian stock exchanges to the detriment of firms, investors and that of the market itself.

The chapter 5 models dividend behaviour of LCCs using agency theory and adopting a critical approach to existing theories on dividend behaviour. The agency theory approach to dividends, subjects firms to be monitored by capital markets before they are able to raise outside equity. The use of "rights issue" and private placements of shares in India reduces the monitoring of firms by capital markets. This again points to the absence of any effective monitoring perpetuating the presence of a large number of LCCs on Indian stock markets.

The chapter 6 presents with the results of an interview-based survey conducted between December 1997 and May 1998 with the managers of LCCs. The survey questions ranged from those investigating the choice of debt and equity, the fear of market driven performance monitoring and decision making in the firm to that concerning threats of takeovers. The questions in the survey helped to unveil the management's perception about dividend policy, and about monitoring by outside stakeholders.

The chapter 7 tests two of the hypotheses empirically, on the basis of the independent variables suggested in other studies, leaving out the model on takeovers and the "market for lemons". A comparative test between LCCs and the top 30 companies of the BSE Sensex has been done. Using panel data, a comparative analysis has been undertaken of firms in the BSE Sensex and firms in the sample surveyed.

The chapter 8 concludes the thesis. It outlines the main conclusions drawn by this study. The first section of chapter 8 deals with a summary of the inferences of all the chapters individually. The second section outlines the main contributions that this thesis makes in improving understanding of Indian stock market behaviour.

Chapter-2

Corporate Governance and the Principal-Agent Conflicts

2.1 INTRODUCTION:

This chapter tries to apply agency theory to India-specific firm characteristics learnt from the survey (as mentioned in the previous chapter). In order to address the central question of this thesis (namely analysing why such a high number and proportion of LCCs have remained a permanent feature of BSE) it was felt that agency theory provided an analytical framework that embraced the various and conflicting interests of all the key constituents that determined the financial behaviour of a firm. Agency conflicts are inherent in the formulation of different policies related to the firm. Policies related to a firm can be implemented effectively only when the interests of all the stakeholders are adequately addressed.

The performance of a firm on the stock market depends on its financial and operating policies and its performance in the "real" market. But while a firm's performance in the real market depends upon the policies formulated and implemented by it, performance and outcomes are subject to being influenced by random unanticipated shocks.

The fundamentals of corporate governance[38] can also be best understood within a principal-agent framework. The management of a firm has the freedom to choose

[38] Corporate governance deals with the ways in which suppliers of finance to companies assure themselves of getting the maximum return on their investment consistent with their contractual position. The mechanisms of governance include providing managers with proper incentives, inducing managers to work in the interests of the shareholders and make them accountable towards firm performance. Corporate governance mechanisms are economic and legal institutions. They deal with constraints that managers put on themselves, or that investors put on managers, to reduce *ex post* misallocation and thus to induce investors to provide more funds *ex ante* (Stapledon, 1996).

financial policies (debt-equity ratio and dividend payout policy) that aim to maximise the market value of the company. Therefore it is important to know about the kind of institutional monitoring mechanisms that influence the choice of financial policies i.e. financial institutions and banks (via debt) and market forces (via equity). The adequacy and effectiveness of such "internal" monitoring determines the performance of firms.

This chapter reviews the existing literature on the agency theory approach. Although that approach is powerful, a simple version framed only in terms of principals with direct claims on the firm is inadequate, even in the presence of well-defined property rights within a firm. In addition to the groups with direct claims on the firm, it shows that interaction between other outside claimants and the firm also forms an essential part of the principal-agent conflict. Given the developing nature of the industrial and corporate structure in India, agency conflicts between different claimants take a different form to that suggested in traditional agency literature, which is oriented mainly towards developed market economies.

This literature review identifies specific features of the principal-agent relationship and shows how financial policies of the firms are affected by the conflicts between different stakeholders. The identification of gaps in prevailing literature about the structure of a firm in a developing economy (especially in India) is a necessary step towards a better understanding of the functioning of the firm. Knowledge of these gaps aided in constructing models for dealing with prevailing conditions in Indian stock markets as a consequence of the existing structure of the firm. This chapter deals with "agency costs" related to debt and equity and with "agency motives" behind takeovers.

The agency costs related to dividends are dealt with in Chapter 5, together with a model on the dividend payout policies of family-owned businesses.

In the rest of this chapter; Section 2.2 provides a historical perspective of the principal-agent conflict and an overview of conclusions drawn from the literature survey. Section 2.3 and its sub-sections (A and B) analyse the agency costs of debt in general and the agency costs of debt provided by State-owned financial institutions respectively. Section 2.4 analyses the different aspects of agency costs related to equity and includes an analysis of the conflict between large shareholders and minority shareholders as well as an exposition on ownership patterns and monitoring. Section 2.5 deals with the agency motive of takeovers and reputation building by managers. Section 2.6 deals with equilibrium at the industry level, given the presence of agency costs in the individual firms. The last section 2.7 concludes the chapter.

2.2 THE AGENCY PROBLEM:

Separation of ownership and management control is a quintessential and endemic feature of the modern limited liability corporation. In a firm owned entirely by an individual, all the net benefits and costs accrue to him or her. Conversely, in a diffusely owned firm, the divergence between the accrual of benefit and costs[39] is much larger for the typical fractional owner; he or she usually responds by neglecting some tasks of ownership.

From assumptions of the unrestricted nature[40] of residual claims and/or highly diffused ownership, a complete separation and specialisation of decision making

[39] Divergence between benefits and costs equals net profit.

[40] The common stock residual claims of organisation are unrestricted in the sense that
1. Stockholders are not required to have any other role in the organisation.

functions and residual risk bearing can be posited. The separation of ownership and management control of company stakes leads to managerial control over all aspects of corporate decision-making. The shareholders, or the owners of residual claims are assumed to perceive a conflict of interest when independent managers are assigned the task of decision-making. Dispersed individual or institutional shareholders usually hold diversified portfolios. They have little incentive to monitor on a day-to-day basis the activities of managers, leading to a free rider[41] problem. Portfolio stockholders are eager to diversify firm specific risk, while the managers of a firm pursue their own interests. These may not necessarily be in the best interests of stockholders. The manager's preference is assumed, typically, to conflict with that of the owner, since maximising his or her compensation may not be equivalent to maximising the firm's profit.

The inefficiency implied by such externalities represents the cost of diffused ownership structure. Yet diffuse ownership structures exist precisely because there are other counterbalancing advantages in terms of value maximisation and portfolio risk reduction. According to Demsetz (1985), a decision by shareholders to alter the ownership structure of their firm from concentrated to diffuse is made keeping in view the consequences of losing control over professional management. Higher costs and reduced profits, which are associated with the decrease in owner-control, are offset by other profit enhancing aspects of diffuse ownership.

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2. Residual claims are freely alienable.
3. Residual claims are rights in net cash flows for the life of the organisation.

[41] Shareholders who are the owners of a firm may have a little incentive to devote much attention to the monitoring and control of a company if each holds a minute fraction of the total shares. Even if they are willing to do this, the dispersed nature of shareholding prevents them from undertaking effective collective action.

Many authors have highlighted the advantages of this separation of ownership and control. The determinants of diffused ownership according to Demsetz (1985) are; value maximising size, profit potential, systematic regulation. According to Berle and Means (1933), diffused ownership makes the owners of shares powerless to constrain professional management. The interests of management do not converge with those of owners, implying that corporate resources are not used solely to maximise shareholder profit. Veblen (1924) believed that a transfer of control from capitalistic owners to engineer-managers would become more pronounced as diffusely owned corporations grew in economic importance. As a result of this transfer of power, profit maximisation would end, as capitalists would try to seek monopolistic restrictions to raise prices rather than seek efficiency or increased output. But, trained engineers seeking technological efficiency would ensure that production in firms they controlled would rise to higher and socially more desirable levels. The profits of monopoly would be sacrificed for efficiency goals. Galbraith (1967) also argued that technocrats who gained control of diffusely owned corporations would be inclined to sacrifice owner profit for increased output, which would serve the interests of consumers, and firm enlargement which would serve the interests of managers.

The separation of decision making and risk bearing functions observed in large corporations is common to other organisations such as large professional partnerships, mutual funds, and non-profit organisations. The complications arising from such separation are handled by an effective common approach, i.e. through a "contract structure". The contract structure in most organisations tries to limit the risks undertaken by managerial agents by specifying either fixed promised payoffs or incentive payoffs tied

to specific measures of performance. The residual risk[42] is borne by those who have the rights to net cash flows. Contracts that direct decisions toward meeting the interests of residual claimants are claimed to enhance ability of the organisations to survive.[43]

But agency problems arise because contracts cannot be costlessly written and enforced. Agency costs include the costs of structuring, monitoring and bonding a set of contracts among agents with conflicting interests and asymmetric information.[44] Agency costs also include the value of output lost because the costs of full enforcement of contracts exceed the benefits. Agency problems in organisations take the following forms:

1. The possibility that individuals will sometimes say what they do not mean or what they know not to be true (Hidden action or moral hazard)
2. Individuals sometimes do things they said they will not do or do not do things they said they would (Adverse or self-selection).
3. Member's willingness and ability to engage in actions that enhance their claims on the organisation's payoff (Strategic behaviour).

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[42] The risk associated with stochastic flows of returns given promised payments to agents.

[43] "The enforceability of contracts is generally recognised as central for the development of market economies. Without binding commitments (contracts), all transactions would have to be "spot," that is, only contemporaneous exchanges would be viable. Owners of a firm can, and do, making binding commitments, commitments which are binding not only upon them, but also upon their successors; when they sell the firm, the sale entails a transfer not only of the assets, but also of the liabilities, and included in the transfer are all the binding commitments. If current owners make commitments that a later owner may not like, it will be reflected in the price that the later owner will be willing to pay. Since the transaction is voluntary, when someone buys a firm, he willingly undertakes all the outstanding commitments of the concern" (Stiglitz, 1989).

[44] The principal determines a rule that specifies a pay-off for the agent, as a function of the latter's action. The problem acquires interest when there is uncertainty about the outcome of the agent's action and when the information available to the two participants is costly and unequal. Information asymmetries play a pervasive role in the principal-agent relationship and have implications for economic efficiency. Agents typically know more about their tasks than their principals. Therefore, they may have an incentive to hide or distort information so as to serve their interests best. "Managers can always claim that the reason they are losing money is not that they are inefficient or incompetent, but that they have been pursuing other goals. It is virtually impossible for an outsider to judge the validity of those claims. The difficulties ascertaining whether a manager is a good manager make it difficult to judge the magnitude of the market's

These problems arise because of asymmetric information between principals and agents in an organisation (Ben-Ner et al, 1993).

Control of agency problems is important because the managers who initiate and implement important decisions are not the major shareholders of the wealth effects of their decisions. Without effective control mechanisms, managers are more likely to take actions that diverge from the interests of residual claimants. If the decision management and control are combined in a few agents i.e. in an owner-managed firm, residual claims will also be restricted to these agents. Restricting residual claims to decision-makers will, no doubt, control agency problems between residual claimants and decision agents, but at the expense of the benefits of unrestricted common stock. The decision process would suffer efficiency losses, as decision agents must be chosen on the basis of both wealth and willingness to bear risk as well as for their decision skills. Residual claimants will have to forgo optimal diversification so that residual claims and decision-making can be combined in a small number of agents. Forgone diversification and limited ownership lowers the value of the residual claims and raises the cost of risk bearing services and lead to lower investment in projects with uncertain payoffs (Fama and Jensen, 1983).

Whereas decision-making agents have limited wealth, restricting residual claims to them also limits resources available for bonding contractual payoffs and for acquiring risky organisation-specific assets. It limits the scope of the firm in acquiring any assets even the less specific ones.

Thus restricted residual claims of proprietorship can dominate only when technology does not involve important economies of scale and when specialised decision

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incompetence" (Stiglitz, 1989). Asymmetric information may be simple incomplete information caused by

skills, specialised risk bearing, and wealth are not needed from residual claimants. Conversely, unrestricted common stock residual claims involving a full separation of ownership from management, are more likely to dominate when there are important economies to scale in production that;

1. Can be realised only with a complex decision hierarchy that makes use of specialised decision skills throughout the organisation.
2. Generate large aggregate risks to be borne by residual claimants
3. Demand large amounts of wealth from residual claimants to purchase risky assets and to bond the payoffs promised to a wide range of agents in the organisation (Fama & Jensen, 1983).

2.2. A. IMPLICATIONS DRAWN FROM THE CURRENT LITERATURE SURVEY:

This section outlines the main conclusions drawn from the literature survey of agency conflicts. It deals with only those aspects of traditional literature, which were modified to suit the Indian firm given its financial system. A detailed explanation of the agency costs of debt, equity and takeovers along with their respective limitations follows this section.

The agency problem is an essential element of the so-called contractual view of the firm, developed by Coase (1937), Jensen and Meckling (1976) and Fama and Jensen (1983). The essence of the agency problem is the separation of ownership and control. When an entrepreneur or a manager raises funds from investors i.e. in the form of debt or equity, the lenders and shareholders have to make sure that their investment is not expropriated and at the same time generates returns. Given the managerial control rights (discretion), free riding problem faced by individual investors, inability of legal

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bounded rationality, or when self-interested individuals intentionally hide or misrepresent information.

institutions to enforce contracts,[45] the costs incurred by both managers and the investors are called agency costs.[46]

The agency costs of debt can be defined as a measure of the difference in the firm's market value when, to meet bondholders' desire for protection, the shareholders are compelled to opt for the second best operating policy rather than the first best. Debt holders realise that the incentive of shareholders to undertake greater risk in a situation of high debt is higher. Accordingly block debt holders, who possess large enough bargaining power, pressurise the incumbent management to change the policies of the firm, if they are risky.

Monitoring by the block debt holders or the financial institutions or banks may not depend on the high debt-equity ratios of the firm in all circumstances. In some situations lenders will become more like shareholders and greater consultation between the management and its principal creditors takes place (Williamson, 1986). Intensity of monitoring may not depend on the proportion of debt that a firm has borrowed. Instead it will be based on the relative position of a firm in the overall portfolio of the financial institution. Accordingly, the agency costs of debt may or may not increase monotonically with the debt ratio, given the firm's position in the total debt portfolio of the bank or the financial institution and its market value.

On the other hand, agency costs of equity stem from effort-incentive and perk consumption problem. Traditionally it has been considered that agency costs of equity

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[45] Assuming that it is too costly to write contracts, which have enforceable terms that cover all foreseeable circumstances, which makes courts weak in enforcing enforceable terms of contracts.

[46] These comprise costs incurred to monitor managers in order to minimise the divergence between their interests; costs incurred by the managers, and the residual loss resulting from the remaining divergence in shareholders' and managers' interests (Stapledon, 1996).

decline with decrease in debt-equity ratio. In principle agency costs of equity are absent in case of firms that have high insider ownership (see Chapter-3, most of the LCCs in India have large insider shareholding). In the absence of any protection for minority shareholders, the owner-managers can divert resources from the firms for their own personal benefit despite their large stake in the firm. Payment (non-payment) behaviour of dividends is a manifestation of this attitude of the owner-managers.

Takeovers,[47] mergers[48] and acquisitions[49] are mechanisms that can correct management inefficiency and increase the value of the target firm. There are some doubts regarding the effectiveness of takeovers as a mechanism for effective corporate governance. A takeover market could be completely absent where it is needed the most, as in the case of stock markets with a large number of LCCs (potential takeover targets).[50] Takeovers and their absence are relevant to the persistence of large numbers of LCCs in emerging stock markets.

[47] Achieved by buying shares of the target company (Sen et al., 1997).
[48] The transferor company is dissolved and its assets and liabilities vested in the acquiring company (Sen et al., 1997).
[49] Outright purchase of a business undertaking (Sen et al., 1997).
[50] Some firms find it worthwhile to acquire loss-making companies for the following reasons, instead of letting them go into liquidation:
1. For tax purposes.
2. The less profitable firm will be relatively cheaper to acquire in relation to its assets.
3. There will be more opportunity and greater certainty of increasing the profits of firms with lower profitability relative to their respective industries (Singh, 1971).

2.3 AGENCY COSTS OF DEBT:

Williamson (1986) regards debt and equity as different governance structures rather than as financial instruments. Providers of both these sources of funding necessitate some monitoring of firm performance and management. There are significant differences in the ways in which companies in different countries finance themselves and also in the costs of capital across countries, but the implications of these differences are still very unclear (Mayer, 1996). Debt financing requires that the debtor meets stipulated interest payments regularly, that business should continuously meet liquidity tests, that sinking funds[51] are set up, and finally the principal amount is repaid on the loan-expiration date. If the firm performs well the debtor can pay interest and principal on schedule, but when the firm produces poor results debt is unforgiving. Failure to make scheduled payments promptly results in reorganisation or liquidation. Various debt-holders will then attempt differential recovery in the degree to which the assets in question are redeployable (Williamson, 1986).

The agency costs of debt take several forms, in the Jensen-Meckling (JM) (1976) framework it is associated with managerial risk incentive and bankruptcy. It also occurs when the exact nature of firms issuing bonds cannot be revealed costlessly. According to Myers (1977), when firms are likely to go bankrupt in the near future, equity holders may not have any incentive to invest. The reason is that equity holders bear the costs of further investment while the returns accrue to debt holders. This concept is similar to Jensen-Meckling's asset substitution effect, but clearly the beneficiaries are not the same.

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[51] "Long term loans are commonly repaid in a steady, regular way, perhaps after an initial grace period. For publicly traded bonds this is done by means of a sinking fund – every year the firm pays a sum of cash into a sinking fund which is then used to repurchase and retire the bonds" (Brealey and Myers, 1997).

The asset substitution problem[52] as identified by JM (1976) forms a major component of the agency costs of debt. JM believe that the agency costs of debt increase with the amount of debt the firm employs or it monotonically increases in debt-equity ratio. The whole of JM's analysis on the agency costs of debt (asset substitution) is based on the phenomenon of the managers taking up risky projects at the expense of the bondholders. Usually, the shareholder's value maximising investment policy responds to changes in the level of debt[53] by increasing monotonically the risk of the firm as the promised debt payment increases. Even when the debt is increasing to levels at which debt holders acquire an almost complete claim on the cash flow[54] of the firm, managers in the initial period would still have a strong incentive to alter the choice of projects toward risky ones (Green and Talmor, 1986). Thus, the greater the quantity of debt in the capital structure, the greater is the lack of effort on the part of managers and corporate performance is negatively affected.

The existence of the agency costs of debt may provide an explanation for the lack of increase in debt ratios for firms in general, even though corporate tax rates have risen steadily. Over the past 50 years in the industrial countries, corporate ownership has become much more dispersed. The percent of ownership by corporate insiders has declined dramatically with the growth in corporate assets. Thus, the incentive for higher debt ratios due to tax increases may have been offset by the increased agency cost of debt

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[52] "The agency costs associated with the existence of debt ... are composed mainly of value reductions in the firm and monitoring costs caused by the manager's incentive to reallocate wealth from the bondholders to himself by increasing the value of his equity claim"(Jensen and Meckling, 1976).

[53] The managers increase the riskiness of the firm by carrying out physical investment in riskier projects; as a result, the risk of equity holders rises as debt rises.

[54] Present value of expected future cash flow.

(Kim and Sorensen, 1986). The same argument is true for the Indian corporate sector,[55] (See Chapter -3 for more details) which relies more on outside equity[56] although the tax rates[57] have not been reduced considerably after the financial reforms. But debt financing[58] is still prevalent because the owners of these firms want to retain control (Stulz, 1990) by acquiring more debt and at the same time they want to avoid the costs of external equity.[59] Large firms in developing stock markets, as Demirguc-Kunt (1992) points out, take advantage of further stock market development to increase their borrowings, whereas in the developed stock markets, firms would substitute equity for debt. The benefit of a debt contract is in preventing the manager from investing in negative net present value projects.

If there are two projects 1 and 2 and its investment outlay is assumed equal and that the value of the stock rises with an increase in the variance of the outcome distribution. Assuming then that two distributions vary in their variances, $\sigma^2_2<\sigma^2_1$, if the equity value of S_1 is lower than S_2 i.e. $S_1 < S_2$ then the bond value of B_1 is greater than B_2 i.e. $B_1 > B_2$, since $B_1 = V - S_1$ and $B_2 = V - S_2$. V is the value of the firm. The manager

[55] The survey that I conducted in 1997-98 suggested that for many managers of LCCs in India, the time gap between applying for a loan and sanction of the loan acted as a deterrent for acquiring debt capital. As many regulations related to stock markets, capital structure etc. have been considerably reduced, Family Owned Businesses (FOBs) can now easily become public limited companies and can be listed on the stock markets. Due to reasons of lack of access to bank loans and for funding risky projects most of the FOBs depend on the external equity sources.

[56] The growing reliance on equity can be seen in Chapter 3, Table 3.9 on the debt -equity ratios in India.

[57] Corporate taxation for "widely held" domestic companies has been in the range of 55% in 1975-76 [for income of more than Rs. 1,00,000] to 50% in 1988-89 and it decreased to 45% in 1993. Surcharge is levied on tax at 8% for the accounting year ended march 31, 1990 if taxable income exceeded Rs. 50,000. It is levied at 15% for the accounting year ended march 31, 1991 and thereafter if taxable income exceeds Rs. 75,000 (Source: Price Waterhouse Information Guide; Doing business in India).

[58] See Table 3.4 in Chapter 3.

[59] Associated with flotation costs, monitoring by outside shareholders and the regulatory authorities, disclosure norms and also agency costs of equity.

will invariably choose the investment with the higher variance distribution 2. If the cash flow distribution 2 is lower than that of distribution 1, i.e. $V_1 > V_2$ and then ΔV, which is,

$\Delta V = V_1 - V_2 = (S_1 + B_1) - (S_2 + B_2)$

$= (S_1 - S_2) + (B_1 - B_2)$ is small relative to the reduction in the value of the bonds the value of the stocks will rise. Rearranging the above equation,

$S_1 - S_2 = (B_1 - B_2) - (V_1 - V_2)$

$B_1 - B_2$ is the amount of the wealth transferred from the bondholders and $V_1 - V_2$ is the reduction in the overall value of the firm. As $B_1 > B_2$, $S_2 - S_1$ can be positive even when the reduction in the firm value $V_1 - V_2$ is positive. The wealth loss $V_1 - V_2$ in addition to monitoring and bonding costs, according to JM, are the agency costs associated with debt. And they increase with the increase in the debt-equity ratio as shown in the figure 2.1.

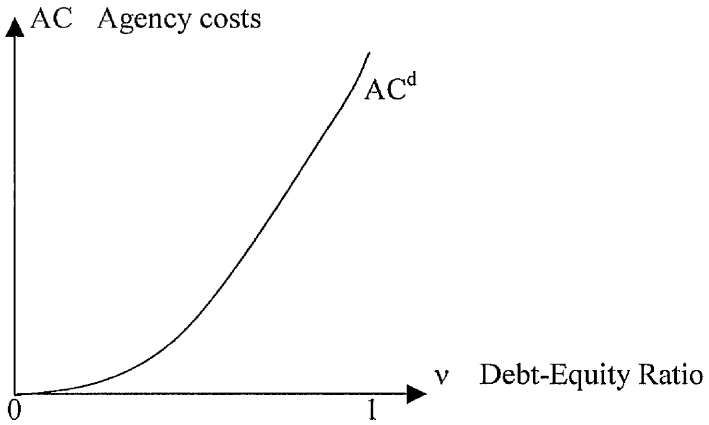

Figure 2.1: Traditional agency costs of debt.

Without agency costs of debt, the value of the levered firm is the first best value of the firm plus the interest tax shield of debt. Each added unit of debt increases the value of the firm by the value of its associated interest tax shields. With agency costs, as the size of debt increases, the total agency costs more than offset the total tax shields, making the value less than the first best. With increase in debt obligations, managers are more

likely to indulge in risky activities because their loyalties lie with their shareholders and not with the debt holders. Thus the agency costs borne by the firm's equity holders increase monotonically with the obligatory payment on the debt. And as debt is never issued beyond debt capacity,[60] agency costs also increase monotonically with the market value of debt (Green and Talmor, 1986). In the absence of agency costs, corporations are indifferent between equity and debt financing as long as the corporate debt yields the certainty-equivalent of interest. An individual firm issues debt until the differential agency costs of debt financing are equal to the marginal unit of debt.

According to Jensen and Meckling (1976), the agency costs of debt increase monotonically in the debt-equity ratio. But firms with large amounts of debt cannot afford to take high risks because of the fear of bankruptcy. So it can be implied that the agency costs of debt in that case cannot increase with leverage, as firms usually set a target debt level, beyond which any increase in the leverage can lead to bankruptcy. Gavish and Kalay (1983) also maintain that stockholders who control firms with a high leverage ratio are less likely to choose high-risk projects with negative net present value. Bradley et al (1984) also imply that the debt ratio is inversely related to the costs of financial distress, which includes bankruptcy costs and the agency costs of debt, level of non-debt tax shields and the variability of firm value.

Adequate safeguards are difficult to provide for risky projects. As the exposure to risk increases, debt holders become more concerned with the details of the firm's operating decisions and strategic plans. With high debt-equity ratios, the creditors become more like shareholders, and greater consultation between the management and its

[60] Rational shareholders will never issue debt where the market value of the debt is a decreasing function of

principal creditors results. A banking presence on the board of directors[61] may be reasonable in those circumstances (King, 1977). Bondholders realising the incentive of shareholders to undertake greater risk in a situation of high debt will require a higher payment as compensation. The tough negotiating stance of debt holders after default deters managerial shirking *ex ante* (Tirole and Dewatripont, 1994). These are some of the ways through which bondholders can effectively discourage managers from following risky policies. Managers are forced to change their policies because of a continuous need for finance from banks and financial institutions. Moreover, firms usually obtain debt only after the firm has laid out its project plan and a stringent project appraisal from the financial institution has been done.

On the other hand, privately owned debt suppliers can exercise a check on discretionary managerial behaviour (Jensen, 1986). Likewise block debt holders have large enough bargaining power[62] to pressurise the incumbent management to change the policies of the firm, if they are risky. This bargaining power results when stock markets are not well developed and firms have to depend on debt. As mentioned earlier, large

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its face value (Green and Talmor, 1986).

[61] "Unlike stockholders, for short-term lenders who make loans for general business purposes, evidence that the firm is currently financially sound, coupled with short maturity, provides protection for short-term lenders. Such lenders do not need additional representation. But long-term lenders, who make loans against earmarked assets, place pre-emptive claims against durable assets. Long-term lenders usually align incentives and protect themselves with safeguards, and a place in the board is justifiable" (King, 1977).

[62] Debt may be tougher than equity when it is not concentrated. If a borrower defaults on debt held by a large number of creditors, renegotiating with these creditors may be extremely difficult and the borrower might be forced into bankruptcy (Gertner and Scharfstein 1991, Bolton and Scharfstein 1996). But public debt is an extremely uncommon financing instrument used only in few developed countries, and even there much less than bank debt (Mayer, 1990). There are other studies, which point out the failure of banks as tools of corporate governance: Harris and Raviv (1990) suggest banks have no incentive to discipline managers and some incentive to cater to them to get more business as long as the firm is away from a default. Dewatripont and Maskin (1995) suggest that banks fail to terminate unprofitable projects they have invested in when continuation is preferred to liquidation. Banks as block debt holders usually try to force the managers to change to alternative policies if their interests are in danger, and would avoid a direct disciplining of managers.

firms in developing stock markets take advantage of further stock market development to increase their borrowings. With stock market development, the borrowing capacity of the firms increases as the stock markets provide improved quality of information and banks are in a better position to assess the credit worthiness of their clients more accurately and can increase lending. But the coefficients of the same stock market indicator for small firms[63] in the developing stock markets are negative but not statistically significant (Demirguc-Kunt, 1992).

But exercise of bargaining power by the block debt holders may not depend on the high debt-equity ratios[64] of the individual firm. Intensity of the monitoring would be based on the relative position of a firm in the overall portfolio of the financial institution.[65] Monitoring each small firm increases the costs of the financial institution. Accordingly it monitors those firms where the marginal benefit of monitoring equals marginal cost of monitoring. Increase in the costs of monitoring a firm's activities should either decrease the supply of debt to the firm or increase the level of collateral.[66]

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[63] Banks may view requests for loans from small businesses less favourably than those from larger firms because of informational problems, because smaller firms are less likely to be professionally audited, and are both difficult and costly for a bank to monitor. But in her empirical work, Bopaiah (1998) finds that FOBs are associated with an easier availability of credit than non-FOBs. This suggests that lenders see family ownership as providing incentives for a behaviour, which reduces the moral hazard problems faced by lenders.

[64] An additional finding of Bopaiah's (1998) study was that family ownership of a business is not significantly related to a reduction in the premiums on loans. So the individual firm's debt-equity ratio does not affect the monitoring of it by a financial institution.

[65] See Chapter-4 (Section –2) for a more detailed theoretical analysis. And Chapter - 6 section - 6.5.B for empirical evidence on the FI's monitoring.

[66] Usually collateral affects a firm's access to credit, it acts as a signal from the borrowers concerning the safety of the lender's investments (Besanko and Thakor, 1983) and it also acts as an insurance which the banks require from riskier borrowers to hedge their position in the case of default (Stiglitz and Weiss, 1983). But not all firms that seek a loan have enough business assets to pledge as collateral. Moreover, banks may not wish to accept accounts receivable and inventory as collateral because of the higher monitoring costs required (Berger and Udell, 1995). FOBs are assumed to have more control over their firms, it is possible that owners and managers of FOBs may be more willing, if able, to offer personal collateral to ensure approval of a loan request. In the case of expansion plans, which are considered to be risky by the owner-managers, they would not pledge their personal assets.

According to the costs and benefits of monitoring, a financial institution prioritises firms in its portfolio and a firm's position on this portfolio determines monitoring by the financial institution. In the case of smaller firms, debt holders will concern themselves with the value of the collateral and not with the valuation of the entire firm (Shleifer and Vishny, 1996). Firms whose relative position in the FI's or bank's portfolio is higher, attract more monitoring. As a result their agency costs of debt increase with an increase in the debt. Agency costs of debt as a result may increase monotonically not with the debt – equity ratio but with the market value of the firm. This is because financial institutions, which provide debt to several firms, would initially monitor those firms whose relative position in their overall portfolio is higher. Change in the market value of a firm changes its position in the portfolio of the financial institution and will accordingly lead to closer or looser monitoring of the firm.

Following the exposition of JM, it was assumed that bondholders could not prevent managers from changing the investment program. Relaxing this assumption, managers are now forced to choose investment project 1 because project 2 has a higher variance distribution. In this case, managers have to maximise V_1 instead of V_2:

$V_1 = (B_1 + S_1)$

$V_2 = (S_2)$.

$\Delta V = V_2 - V_1$ the loss of value is the agency cost. But the block debt holders will exercise their bargaining power only when the position of an individual firm in their overall portfolio is high. And a firm's position in the portfolio of the debt holders will rise according to its market performance. Thus agency costs of debt will increase not with an increase in the debt equity ratio, but with the market value of a firm as shown in figure

2.2. The volume of debt is irrelevant. Thus, the negative consequences of debt-induced moral hazard cannot be ameliorated simply by reducing the amount of debt.

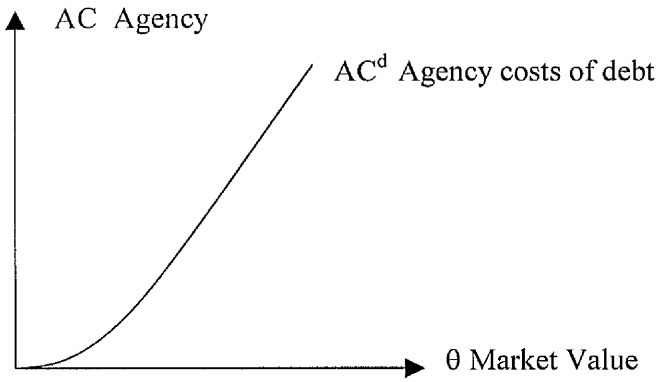

Figure 2.2: Agency costs of debt in relation to market value of the firm.

By using a state contingent claims model,[67] Mello and Parsons (1992) define the agency costs of the debt as a measure of the value lost when the equity owners, because of the outstanding debt, change the operating policy from the first best. As the operating policy chosen (second best operating policy)[68] to maximise the value of the equity is not the first best operating policy,[69] the value of the levered firm is less than the first best value of the firm plus the interest tax shields. They claim that by using the contingent claims technique, a measure of agency costs can be yielded which is robust i.e., it is not vulnerable to variations in parameters determining a firm's market value. This can be further used to compare different capital structures and to analyse the agency effects under different circumstances facing the firm. Although it is difficult to identify beforehand different states likely to arise in the future, a firm's present and future

[67] State contingent claims are those which specify payoffs for each possible future state of the world. Such state contingent claims help avoiding and allocating risk. But in order to specify the total payoffs to be paid in all future states, identification of all current and future states and all current and future decisions of an organisation through state contingent claim contracts is needed. Given the costs and information requirements, the state-contingent claims are not the dominant system for allocating risk. (Fama and Jensen, 1983).

[68] Maximising the value of levered equity.

decisions still need to be carefully analysed, which involves heavy information and cost requirements as Fama and Jensen (1983) also indicate. However, a company's past capital structure can provide sufficient insights into the pattern of decision making under different circumstances. Agency scholars assume stable and consistent risk preferences on the part of both the principals and agents. A contingency-based view on risk-taking to allow for the possibility of varied risk preferences by the agent is important, because the context the agent faces every time he/she makes a decision on behalf of the shareholders does not remain constant. Hence, a comprehensive view of managerial risk choices should integrate risk, performance attributes of the choice situation, and internal governance structure (Wiseman and Mejia, 1998).

Thus, agency costs of debt can be measured as a difference in the firm's value when the shareholders are compelled to opt for the second best operating policy to meet debt holders' desire for protection, rather than the first best. In order to evaluate the effect of the level of debt on a shareholder's choice of projects, what should be examined is whether a higher promised debt payment leads shareholders to choose an alternative operating policy rather than the one that would have been chosen in the absence of debt. Given the book value of debt, shareholders will usually choose an investment policy that maximises the present value of the residual equity claim.[70]

Kim and Sorensen (1986) empirically test whether cross-sectional variations of corporate leverage ratios can be related to agency costs. Their study classifies firms into

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[69] Maximising the value of equity.
[70] Residual equity claim is the difference between a firm's end of period cash flow and the level of debt.

two groups, one with relatively high insider ownership[71] and the other with relatively low insider ownership. They test whether firms with concentrated equity ownership among insiders make use of long-term debt in the capital structure differently from diffused ownership firms. The determinants of long term borrowing in their study included annual growth rate in earnings, variation in earnings, average level of total assets of the firm, average tax rate, average rate of depreciation and a dummy variable for firms heavily owned by insiders. They conclude that although several of the variables determine the debt decision, the debt decision is determined non-systematically by managers across firms. Their findings indicate that insider owned firms tend to use long-term debt to finance projects. They also maintain that high inside ownership have lower agency costs of debt.[72]

Leland and Pyle (1977) also find that the level of debt in a firm is directly related to the entrepreneur's equity position[73] or his stake. Myers and Majluf (1984) suggest that

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[71] An insider ownership firm is one in which insiders own more than 25 percent of the equity. They can be also referred to as FOBs, which are characterised by owner-management, high levels of insider ownership of equity, and the use of personal collateral to secure loans. Other less observable characteristics may be different managerial skills and styles i.e. they have more cohesive managerial structures retained by family members, with leadership positions carrying more authority. The widely held corporation is more common in countries with good shareholders protection. Family control is more common in countries with poor shareholder protection (La Porta et al, 1998).

[72] The reasons for this are;

1. Debt provisions and covenants designed to counter balance shareholders' incentives to exploit bondholders is considered more effective if there is close control of equity ownership.
2. For these kinds of firms, the lenders have a clearer view of risk involved with corporate investment decisions.

[73] Given that the entrepreneur owns higher levels of equity in his firm, conservative investment strategies are adopted because he/she is the residual claimant and bears the greatest risk (Fama and Jensen, 1983). Owner-managed family-owned businesses (FOBs) may have an additional advantage in monitoring decision agents because family members have many levels of interaction amongst themselves (Fama and Jensen, 1983). Because of their greater stake in the survival of the firm, owner-managers of FOBs may want to be more certain to meet their fixed obligations and avoid bankruptcy (Jaffee and Stiglitz, 1990), thus reducing the lenders risk. All these features count towards incentives to banks to lend more to FOBs. But banks use non-price terms of the loan contract such as size of the loan, collateral, commitment status, demand status, maturity premiums and other restrictive covenants, to provide for insurance against default or to avoid adverse incentives for borrowers. Banks use other proxies as well i.e. ownership and organisational features,

more profitable firms will decrease their demand for debt, as more internal funds will be available to finance investment. Friend and Lang (1988) test whether capital structure decisions are at least in part motivated by managerial self-interest. To analyse the effect of differences in management's ability and desire to reduce the level of debt, they classify firms into two groups depending upon the stock owned by management i.e. closely held (CHC) and publicly held (PHC). They further group CHC and PHC into CHC1 and CHC0, PHC1 and PHC0 i.e. CHC and PHC with and without non-managerial principal stockholders respectively. They find that corporations in CHC1 and PHC1 have higher average debt ratio than CHC0 and PHC0. The level of debt decreases as the level of management investment in the firm increases in CHC1, CHC0 and PHC1, but debt is positively related to management investment for PHC0.

Table 2.1: Closely held and privately held companies.

	CHC1	CHC0	PHC1	PHC0
LMV[74]	negatively significant	Negatively significant	Less negatively significant	Insignificant
FR[75]	negatively significant	Negatively significant	Insignificant	negatively significant

Source: Friend and Lang (1988).

balance sheet and financial information, characteristics of the industry and trends in the economy to estimate risks involved in lending (Bopaiah, 1998). An additional finding of her study was that family ownership of a business is not significantly related to a reduction in the premiums on loans. When the size of a firm increases it improves its access to the capital markets as the average fixed costs of going public decrease. However, since owner-managers of incorporated firms are not (totally) personally liable for the losses of the firm, it is possible that they would make riskier investment choices and banks would require some protection against loan losses.

[74] The value of the stock held by corporate insiders.

[75] The ratio of managerial holdings to the total value of their outstanding stock.

2.3.A. AGENCY COSTS OF DEBT AND STATE-OWNED FINANCIAL INSTITUTIONS:

Given that the block debt holders who possess enough bargaining power to alter the risky policies of a firm in India are State-owned Financial Institutions, it was important to consider the nature of agency costs when the debt is provided by public financial institutions.

The firm and the state are both "non-market" institutions. The co-ordination of decisions taken by different individuals on the basis of asymmetric information and different competencies takes place directly through the issue of orders and control over their execution. There is a division of labour and a hierarchical structure within the two institutions, and so internal co-operation and authority relationships influence the behaviour of the agents belonging to them. The problem faced by economic agents is to close the gap between the exogenous complexity of their various choice problems dictated by the environment and their decision-making capacity (Dallago, 1994). As a response all economic agents make plans, but the relevant question is who has the effective control of the process of making and carrying out plans (Birner, 1994)?

In any economic organisation be it public firm or private firm, interchange between three main actors i.e. workers, managers and owners can be characterised as a series of contracts where one party, the agent agrees to perform tasks on behalf of the principal in return for compensation. Public firms[76] then can be specifically perceived

[76] A pertinent question, when initiating a discussion on public sector, is, what is the most appropriate response in cases where the profit-making form enterprise is not readily available and where redistribution through cash is not an option? The state then is compelled to intervene due to gaps created by the market in the economic sphere. To attain allocation of resources which are Pareto efficient, the private sector requires markets to be perfectly competitive and welfare effects to be traded in the market. The universally accepted

from the point of view of principal-agent relationships of citizen, politician, senior bureaucrat, subordinate bureaucrats and managers of State-owned-enterprises (SOEs). If the principal, i.e. government, possessed full information about market and technological conditions, it could instruct the agent to set first-best levels of prices, output, capital, labour and wage rates. If allocative efficiency were the concern then this would imply marginal cost pricing, labour receiving its opportunity cost wage, and inputs chosen to minimise costs. Government or for that matter any other principal does not effectively possess all the relevant information.

In market economies, most state institutions are formed to provide public goods, or goods and services that have strong externalities. Their principal goal may not be maximisation of profits or net worth, but some complex set of objectives, which cannot be readily measured in financial terms. Given the political compulsions and other economic considerations, agency costs are a manifestation of the difference in the firm's value when the firm is compelled to opt for the second best operating policy rather than the first best.

State Owned Enterprises (SOEs) differ in the extent of autonomy they enjoy. In some countries such institutions have managements that make decisions without any

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notion of higher productive efficiency in the private sector hence may not always lead to allocative efficiency. The state intervenes in the cases of Public goods, natural monopolies and goods, which produce externalities. The state can also involve itself in the area of economic activity in three ways: provision, subsidy or regulation. It can provide a particular commodity itself through owning and operating the relevant institutions and employing the relevant personnel. It can subsidise the commodity by using public funds to lower the commodity's price below the one that it would otherwise obtain. Or the state can regulate the provision of the commodity, regulating its quality and its quantity or its price (Le Grand and Robinson, 1992). Thus in the presence of imperfect information or incomplete markets the economy will not be Pareto efficient and there will always be some intervention by which the government can make everyone better off (Stiglitz, 1994). In a developing country context this intervention commands greater importance in order to build the much-needed basic infrastructure on which subsequent economic activities can take place. As a result the scope of state activities increased through time in most developing countries as in India.

government intervention. In others, managers have to operate within relatively narrow constraints.

The identity of owners[77] in SOEs is fuzzy. While in theory these firms are controlled by the public at large, the de facto control rights belong to bureaucrats. These bureaucrats have concentrated control rights, but no significant cash flow rights because cash flow ownership of the state firms is in theory effectively dispersed amongst the taxpayers of the country. Bureaucrats have goals that are dictated by political and personal career interests. Particularly in democratic countries these executives operate under many constraints, of running SOEs in ways that will be acceptable to the relevant population or their representatives (Ben-Ner et al, 1993). Hence state firms are termed to be commercially inefficient enterprises.

The other specific characteristics of public firms, given the lack of effective monitoring to control agency costs and lack of competition is that the planner-manager relation has developed in an idiosyncratic and inefficient way. In addition, there is no automatic and constantly operating economic feedback mechanism, which controls the performance of managers and planners (Wagener, 1994). Accordingly, as Stiglitz (1989) suggests, managers of government departments may engage in practices that are difficult to verify: such as over manning, simply because they make a manager's task politically easier. The penalties that can be imposed on public officials when failure occurs are also limited (Sappington and Stiglitz, 1987). The severity of the agency problems encountered by the government may be compounded by the government's relative imperviousness to

[77] Ownership refers to a bundle of rights that an economic agent is entitled to exercise over an asset. Its main component are the right of utilisation, the right to the products of the asset, and the right to alienate or dispose of the asset and of these rights of utilisation and return (Putterman, 1993).

financial distress (Brealey et al., 1997). The lack of avenues for comparisons of efficiency makes it is difficult to ascertain whether production in SOEs is efficient or not.

Majumdar and Chibber (1999) suggest that when debt is supplied primarily by State-Owned Financial Institutions a negative relationship appears between the level of debt and performance. For debtor firms' managers, debt is owed to the public at large[78] who effectively can do nothing. In a system characterised by a hierarchy of FIs, the burden of bad debts is invariably (inevitably) passed on to the superior organisation. Ultimately it is the State that has to write it off. Lewis and Sappington (1995) model the capital structure of a regulated firm (agent) controlled by a regulator (risk-averse principal) and capital secured from a risk neutral financier (credit market). They suggest that the financier can play a dual role of limiting the agent's information rents and at the same time reducing the risk the principal must bear. Lewis and Sappington (1995) analyse an exceptional case to the conventional thinking of the sources of funding, but this is possible only, in government owned firms when the credit institutions are also guaranteed by the state itself. Now due to mounting pressure on public funds in India, the state has been unable to finance the expanding portfolios of its own financial institutions.

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[78] The following exposition relates to lack of property rights in the State-owned enterprises:
"Financial institution's ownership is normally vested in one government department which holds all the shares on behalf of the government. Thus, ownership is not diffused but vested in one owner who can exercise control. From the debtor firm's perspective, this fact ought to encourage bonding because their debt suppliers are likely to face strong monitoring pressures themselves. This, however, is not the case since the fuzziness of owners' identity crops up. The government department, which owns shares in the financial institutions, is itself an agency of the citizens who are *de jure* owners of the financial institutions. This implies that the control of the state-owned financial institutions being undertaken by civil servants of the concerned government department, is vested in persons who are themselves agents of the citizens of the state, monitoring other agents, the financial institutions' managers. As collection of many principals, citizens of a state face several agency problems. Citizens in a democracy neither have incentives, because of free riding problems (Olson, 1965), nor do they find it easy to control managers in state-owned enterprises such as financial institutions. The very diffuseness of public ownership implies that citizens acting individually have small probabilities in influencing outcomes, or in expressing their voice. As a result,

Consequently they have been attracting an increasing proportion of their funds from capital markets for debt and equity. The partial discipline emanating from the stock markets has induced state financial institutions to increase their efficiency, as in the case of India.

The argument of monitoring based on the relative position of a firm in the portfolio of the FI is also valid in the case of state-owned FIs. So the argument that debt from a state-owned FI will lead to a negative impact on performance of the firm, may be a biased conclusion.

The theorists of transition agree that once freed from the government (through privatisation) firm managers will automatically be motivated to maximise profits, and markets will spontaneously arise to co-ordinate production.[79] Although this proposition is theoretically sound, given the agency arguments it still remains more or less an empirical issue. Moreover, for privatisation to be successful in the short-run, important post-

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financial enterprises become proprietary organisations owned *de facto* by civil servants or politicians" (Majumdar and Chibber, 1999).

[79] The benefits of privatisation, which are often cited in the literature, are that privatisation permits the replacement of soft budget constraints and it permits more flexible executive compensation than is possible under civil service rules (Stiglitz, 1994). Executive compensation alone cannot align manager's pursuit of self-interest with that of the principal. James et al. (1979) consider the problem of the design of incentive schemes that will induce managers of state firms to pursue risk-neutral strategies on behalf of the organisation. It turns out, however, that such incentive schemes are likely to result in the self-selection of risk-averse managerial candidates. Thus a correct static policy prescription has negative dynamic consequences due to adverse managerial self-selection. Along with this, most SOEs often have non-financial goals. Because other owners cannot acquire their ownership, their top management cannot be motivated through incentive schemes such as share in the organisation's payoff or the discipline imposed by an external market for control. Moreover, public opinion often opposes high pay or financial incentives to SOE management. Instead of financial incentives, top management's behaviour is controlled through selection methods, which place considerable weight on their support for the organisation's mission. In addition, it is regulated through rules, which determine acceptable and unacceptable behaviours, and also monitoring. Executive compensation in public enterprise management thus provides limited incentive to improve performance. SOEs have provided a measure of job security for its employees, which its private sector counterparts may not possess. Uncertainties attached to market mechanisms can mean shorter job spans even when the managerial performance cannot be completely blamed for poor results. Performance is thus strongly affected by lack of job security in the private sector.

privatisation conditions such as protection of minority shareholders, creation of large outside investors, need to be fulfilled.

2.4 AGENCY COSTS OF EQUITY:

Equity is the most suitable financing tool when debt contracts are difficult to enforce or when collateral value is insufficient to back credit and short term cash flows are not sufficient to service debt payments. Newly established firms, and firms with intangible assets may need to be financed by equity because their assets have little value. As a result in most of the growing economies like India (See Chapter-3 for more details), such firms are characterised by highly concentrated equity ownership by the entrepreneurs, and dispersed outside equity ownership (Mayer 1990, Singh 1994). Equity does not promise any payments in return for the investment to its holders; they receive dividends but at the discretion of the board of directors. Equity holders have no claim on specific assets of the firm and have no right to call on collateral. And they do not even have a final date on which their investment matures: i.e. when the firm is liquidated and the proceeds are distributed. In most cases, equity holders may never get anything in return for their investment. But equity holders have voting power.

As noted earlier, the separation of ownership and control in firms usually means managerial control over decision-making resulting in conflicts of interest and free rider problems that result in agency costs related to equity as well.

In more technical terms, the agency costs of equity can be understood by the following exposition:

"...when an owner-manager sells equity claims on the firm which are identical to his, agency costs are generated by the divergence between his interest and those of the

outside shareholders, since he will then bear only a fraction of the costs of any non-pecuniary benefits he takes out in maximising his own utility." (Jensen & Meckling, 1976: p. 320).

The agency conflict between the owner-manager and outside shareholders is derived from the manager's propensity to appropriate perquisites at the firm's expense for his/her own consumption. As the manager's ownership claim falls, his/her incentive to devote effort to creative activities falls. He/she provides less effort in managing the firm since he/she bears the disutility of work, but receives only part of the firm's value enhancement (effort incentive problem). In other words, the owner-manager consumes more perquisites since he/she himself benefits from the consumption and bears only part of the consequent value reduction of the firm (perk consumption problem). This requires minority shareholders to expend more resources in monitoring his/her behaviour, while the owner-manager faces more wealth costs in obtaining additional cash from the equity markets. Thus, the agency costs of equity are in effect caused by the conflict of interest between inside shareholders (owner-managers) and outside shareholders. The agency costs of equity decrease monotonically in the debt-equity ratio (Jensen-Meckling, 1976) as shown in the figure 2.3.

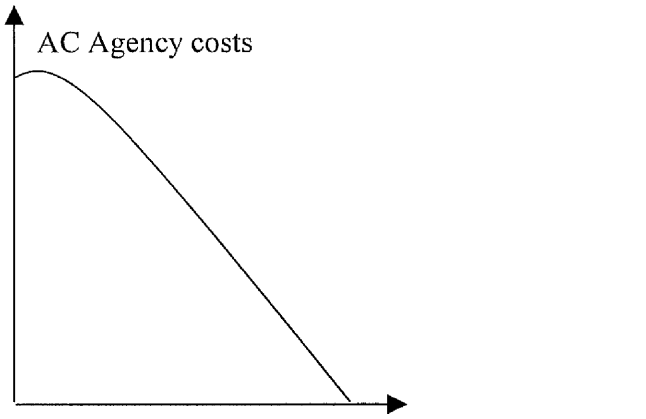

Figure 2.3: Traditional Agency costs of equity

As long as managers are not the sole beneficiaries of enhanced value, they will not exert greater effort to derive more value. So, increasing the equity level does not necessarily imply a reduction in the agency costs associated with equity. Usually, managers would try to avoid ventures that demanded more effort on their part. In the case of firms with high insider shareholding, owner-managers are the majority residual claimants. There is, therefore, no conflict of interest in effort exertion. As a result the agency costs of equity cannot decline monotonically in the debt-equity ratio. Kursten (1995) also suggests that the agency costs of equity can increase or decrease monotonically, or be non-monotonic, as long as risky debt is involved. Only when debt is risk-free, do the agency costs of equity decline monotonically.

Reducing the amount of external equity does not reduce the agency costs of equity. Given risky debt, the agency costs of equity can be defined as the loss of value to shareholders caused by sub-optimal investment by managers who choose to do so in order to avoid investing a lot of his personal strain. Whereas agency costs of debt are incurred by a firm when managers are forced to choose the second best operating policy.

Firms with high insider shareholding for e.g. LCCs, tend to vest most of the decision-making positions to family members[80] who may not indulge in shirking their responsibilities. Then the conflict between inside shareholders and diffused outside shareholders does not include overseeing the behaviour of the managers. The manifestation of the conflict of interest takes the form of accretion and diversion of the firm's returns towards insider shareholders[81] for their personal benefit. But diversion of the firm's returns towards family shareholders will depend on a firm's performance in the market. If the firm does not create enough returns for its future operations, the insiders cannot accumulate net earnings for themselves. As the market value of a firm's shares increases there is a higher tendency for the accumulation of firm's returns. But at higher levels of market value, accumulation by insiders is invariably reduced in order to create credibility[82] with outside shareholders. The agency costs of equity can be defined as a loss of value to outside shareholders due to adoption of certain payout policies by owner-managers who choose them in order not to divert the returns from the firm to outside shareholders. Thus agency costs increase with increases in the market value of the firm and decline at further higher levels of market value as shown in figure 2.4.

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[80] All-equity firms exhibit greater equity ownership by top managers and there is more extensive family involvement in corporate operations than levered firms: Managerial ownership in all-equity firms is positively related to the extent of family involvement. Therefore, the loss to managers from bankruptcy is potentially greater when members of the manager's family are also employed in the firm. Managers face the risk of displacement by dissident shareholders or through hostile takeovers. There is greater managerial control of voting rights in all equity firms with greater family involvement. Thus, managers avoid leverage to reduce the risk to their personal and family human capital. But if the decision management and control are combined in a few agents, residual claims will also be restricted to these agents. Although it will control agency problems between residual claimants and decision agents, the benefits of unrestricted common stock cannot be reaped. Limited ownership lowers the value of the residual claims and raises the cost of risk bearing services and leads to less investment in projects with uncertain payoffs.

[81] This is evident in their dividend policies.

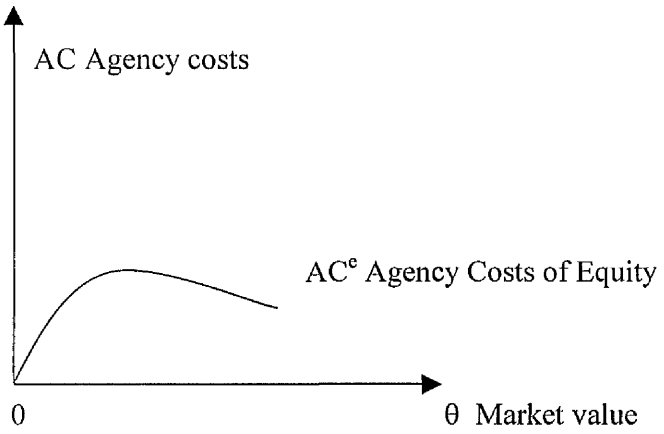

Figure 2.4: Agency costs of equity in relation to market value of the firm.

2.4.A. CONFLICT BETWEEN LARGE AND MINORITY SHAREHOLDERS:

An entrepreneur always tries to choose his/her own stake in the firm and a monitor's stake so as to maximise the total surplus arising in a firm i.e. the market value of the whole firm minus the cost of the investment plus his private benefits minus monitoring costs (Pagano and Roell, 1996). In this situation when share ownership is more concentrated, a single large shareholder or a tightly knit group of shareholders retains a controlling stake in the company. The main conflict of interest is then between the controlling shareholder and the minority shareholders. This conflict is generated by the diversion of corporate earnings to the advantage of the controlling shareholder. Although it has been accepted that large investors are necessary to force managers to distribute profits, in the case of firms with high insider ownership, large investors themselves accumulate profits without distributing them in equal proportion to smaller outside shareholders. But at the same time they bear excessive risk. Expropriation by large investors can be detrimental to efficiency through adverse effects on the incentives of managers and employees, who might reduce firm-specific human capital investments.

[82] At higher levels of market value, the firm is in need of additional funds for its investment projects. For

If the initial owner of the firm wants to sell out to many small shareholders, he/she has to go public. If he wants to keep the company private, then he cannot sell minority stakes to more than a few large shareholders. In the bargain, he saves the cost of listing the company on the exchange but will have to accept a far greater degree of monitoring. The danger of over monitoring increases with the amount of the outside finance to be raised. So companies go public if they need a large amount of new funding relative to their value. A single large external shareholder generally has an incentive to over-monitor which an entrepreneur tries to avoid. Increasing the number of shareholders beyond one alleviates the over-monitoring problem but it also carries costs (i.e. transaction costs, monitoring costs, and cost of investment).

The costs of insider ownership are borne by insiders who must allocate a large portion of their wealth to the firm and hold a concentrated portfolio with high covariant risk. Control of a firm provides the greatest incremental value when informational asymmetry between insiders and outsiders is greatest. The controlling shareholder tries to limit the transferability of shares in order to maintain his position. Several restrictions are used to ensure that the controlling shareholder captures a bigger share of any rents that may result from future changes in shareholders' stakes. Large non-controlling shareholders are often bought off by the company's managing shareholder via disguised side payments, in the form of favourable supply contracts, reciprocal share deals etc. (Pagano and Roell, 1996). In order to prevent outside shareholders from interfering in the management[83] of the company, outside stakes are usually sufficiently dispersed. Thus an

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this it will depend on outside shareholders.

[83] Minority shareholders can verify the actions of controlling shareholder in a public company, if companies are subject to stricter disclosure requirements and transparent accounting standards.

ownership structure emerges when there is one large shareholder who monitors, while all other shareholders are atomistic and therefore too small to enter into a co-operative agreement to monitor. Then the presence of a large outside shareholder may harm the interests of minority shareholders. In the absence of minority investor rights, public equity markets do not develop (Shleifer and Vishny, 1996). But the large equity market of BSE despite lack of concrete protection of minority investors is indeed a puzzle. This can be explained by lack of corporate governance mechanisms.

2. 4. B OWNERSHIP STRUCTURE AND MONITORING:

Different types of ownership structure (e.g. concentrated and diffused) which result in monitoring firm activities, and liquidity in the secondary market respectively, have generated extensive debates in the academic world. Liquidity in capital markets is often associated with the lack of effective corporate governance. As Bhide (1993) argues, in the US stock market, regulators have created market liquidity at the expense of the efficient governance of firms. The liquidity promoted by US policies has obvious benefits; investors can encash their assets quickly and diversify cheaply. The same policies, however, impair governance by encouraging diffuse stockholding and discouraging active monitoring. Diffuse stockholders face more serious collective action problems. They cannot be provided with confidential information, be included on boards, or be given any other active role in the governance of firms.

Kahn and Winton (1998) argue that market liquidity can undermine effective control by a large shareholder by giving him excessive incentives to speculate rather than monitor. These investors may lack access to proprietary firm specific information, and therefore find it difficult to evaluate the long-term value of a firm (Porter, 1992). Instead

they may focus on performance measures like current earnings that are easily quantifiable. Their behaviour is like that of arbitrageurs who frequently turn over their portfolio of stocks in order to capitalise on all possible short-term gains (Shleifer and Vishny, 1990).

On the other hand it is also true that, while monitoring managerial activities, a large shareholder may receive information about the value of the firm before other market participants (Huddart, 1993). Together the managers and the large shareholder might obstruct any information production in the stock market. Due to this informational monopoly, a firm's exclusive lender can dictate the terms of continuation of finance, thus distorting the firm's investment choice (Burkart et al., 1997). All these characteristics are true of a shareholder that can sell his/her claims as soon as he or she perceives a bad return state and, in other states, can speculate on the basis of his or her exclusive access to private information about the firm. While Holmstrom and Tirole (1993) argue that insider trading by a large shareholder could provide incentives to monitor incumbent management, it inevitably results in a higher cost of capital for the firm.

If a large shareholder decides to disperse his/her block of shares to several buyers, no large owner will emerge *ex post* in usual circumstances. Although according to Bolton et al. (1998), as long as trading remains non-anonymous, an attempt by the large owner to unload his/her block of shares with several buyers would immediately be reflected in the price,[84] which in turn would remove the incentive to disperse his/her block.

Outside shareholders will only buy shares at a discount in the bad state, which in turn, reduces the number of trading partners in the secondary market who are ready to provide liquidity in all states. Although concentration of ownership improves the

[84] If in a bad state the large block is sold, it trades at the same price as the single shares.

incentives for the control of management, it reduces valuable trading possibilities for all shareholders. On the other hand, maximum dispersion of shares among initial owners increases trading opportunities among those who potentially will pay the full price for shares even in a bad state, but it leads to value-reducing lack of control. A shareholder monitors the manager only when the benefit exceeds the cost of monitoring. The benefit increases with the fraction of the firm he owns. A shareholder will not monitor when he owns a tiny fraction of the firm or when monitoring is expensive. A minority portfolio shareholder will have a short-term sense of association with a firm, so he/she cannot be expected to play an important role in monitoring the activities of either the large shareholder or of the firm's managers.

Most of the work related to monitoring a firm's activities assumes that the relevant ownership structure is the initial one determined in the IPO.[85] Maug (1998) and Bolton et al. (1998) emphasise an ownership structure that is robust i.e. resistant to retrading in secondary markets. A dispersion in time t=0 does not necessarily imply that there is dispersion in time t=1, after liquidity trading. One of the more patient owners may buy enough shares in the bad state to assemble a stake that makes it profitable for her or him to intervene. According to Maug (1998), the capital gain on her/his initial stake does not cover the costs of monitoring. Part of the incentive to monitor, therefore comes from the ability to purchase additional shares in the stock market at a price that does not reflect the large shareholder's improvements. As a result, the large shareholder's engagement in shareholder activism increases with the liquidity of the market. This result runs counter to the conventional wisdom that liquid markets discourage large activist shareholders. When

[85] Initial Public Offering.

there is no concentration at date t = 0, the main question is whether an owner who is large enough to control management emerges after trading in the secondary market in the bad return state. The main factor which prevents the emergence of a controlling block at date t = 1 is due to free riding by small patient owners. So, free riding makes the concentration of shares in the bad return state impossible. According to Vishny and Shleifer (1986), if the ownership structure of the firm is initially very diffuse and trading is public, it is not profitable to assemble a large block of shares. Premonitoring purchase of shares by the large shareholder raises the firm's expected profits. If the major shareholder changes his/her holdings through trade, then the price at which trade takes place will reflect the new resultant monitoring level. He/she can capture the gains of monitoring only on the shares he owns initially, but not on any newly acquired shares, for which he/she must pay a price, which reflects the eventual monitoring. When he/she buys shares, he/she increases his/her monitoring but does not receive the benefits of this higher level of monitoring on the newly acquired shares. The reason is that the price he/she pays for the shares already reflects increase in the expected payoffs brought about by the higher monitoring level. Conversely, when he/she sells shares, he/she reduces his/her monitoring costs. But these cost savings are partially eroded by the loss realised on the shares sold since the price at which they are sold reflects the lower expected payoffs with a reduced level/cost of monitoring. Therefore, he/she captures the benefits of monitoring only on his/her initial endowment (Admati et al, 1994).

Usually in most firms large shareholders co-operate in order to influence positively the management of a company. But this arrangement, according to Bolton and Thadden (1998), reduces liquidity and does not provide any improvement in the *ex post*

reorganisation/continuation decision. A single large owner with a stake strictly greater than 10-20%[86] reduces liquidity but does not improve *ex post* efficiency. This establishes that firm value is maximised by having exactly one large owner with a stake of between 10-20%. It is usually difficult for single large outside shareholder with a stake of 10-20% to emerge in the case of small sized firm where a controlling family will resist any such attempt at entry. The existing large inside shareholder (the owner-family) fears an outside large shareholder as the latter can pressurise management in ways that affect adversely the total surplus they can expropriate.

The above exposition points out that: (a) the presence of a large shareholder does not always guarantee monitoring, and (b) liquidity, or the lack of it in the market, does not change the monitoring behaviour of the large shareholder. Hence, both types of ownership structure concentrated or dispersed can be optimal, depending on the characteristics of the firm[87] and the environment in which it operates (Bolton and Thadden, 1998).

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[86] In the US a block of 10-20% if established can be associated with significant share price rises due to improved corporate control.

[87] Mikkelson and Partch (1989) find that the level of inside ownership has a negative relation to the probability of being targeted but a positive relation to the probability of successful targeting if activism serves as a substitute for takeovers. The presence of a large outside block holder can increase the likelihood that a firm is targeted (Shleifer and Vishny, 1986). Shivdasani (1993) finds a positive relation between ownership by block holders unaffiliated with management and the likelihood of a hostile takeover attempt. Hence firm size and likelihood of targeting should be positively related. If larger firms comprise a larger percentage of an institution's investment portfolio, the expected benefits may be larger from targeting these firms, since the private gains to the activist are higher. If stock price performance reflects managerial performance and firms with poor stock price performance are more likely to be disciplined, then there should be a negative relation between stock price performance and probability of being targeted through activism. Firms with lower Tobin's Q or market-to-book ratio of firm value should have a higher probability of targeting. If activism, like bonding, aligns incentives, which results in improvements in operating performance, then the market value of the firm is expected to increase with unanticipated activism. The market value of the firm could also increase if activism targeting is associated with an increase in the probability that the firm will be subject to a takeover attempt. Both the levels of insider and institutional ownership measure ownership structure. Larger the firm and higher the level of institutional ownership, the greater the probability of being targeted.

Only a diffused ownership structure can arise in a competitive equilibrium when all investors are price takers. In a diffused ownership structure, risk sharing is efficient but no one monitors. To sustain a welfare maximising ownership structure the major shareholder must be discouraged from liquidating his holdings piecemeal. If a shareholder divests his stake holding piecemeal, then the firm has always to ensure that paper wealth[88] stays high. Imposing restrictions on the sale of shares by certain large shareholders facilitate such a commitment. The major shareholder could receive a payment from the firm, conditional on retaining a specific stake of the firm (Huddart, 1993).

Huddart (1993) considers that monitoring is valuable only when coupled with an incentive scheme responsive to the signals generated. Monitoring is necessary to induce managers to work hard; only concentrated share ownership induces shareholders to monitor. A manager's incentive to signal his/her qualities by producing high short-term profits depends on how that particular performance affects his/her prospects of retaining the job. But managers in family owned companies do not face employment risks such that incentive schemes may not make any significant contribution to their efficiency. At the same time it is observed that although managerial discretion is *ex post* detrimental to shareholders, it can be beneficial *ex ante* as it favours firm-specific investment. The manager is less inclined to show such initiative when shareholders are likely to interfere. Hence, to the extent that managerial initiatives contribute to the value of a firm, there is a

[88] The difference between paper and real wealth is the following:
Paper wealth of a shareholder's holdings refers to their value at the prevailing market price. This is common practice in financial risk management and is also referred to as "marking-to-market". Accountants use this procedure in market value accounting. Whereas Real wealth refers to the value of the shareholder's holdings after he liquidates his position. If the shares of the corporation are widely distributed among numerous small shareholders that trade for liquidity purposes, it is optimal for the corporation to ensure that the paper wealth of the corporation stays high. In this case, small shareholders stay satisfied as they can sell their shares at high prices (Chatterjea et al, 1994).

trade-off between the gains from monitoring and those from exercising managerial initiative. Under these conditions the owner-entrepreneur may be willing to bear a lower share price, because a more dispersed outside ownership grants him more effective control and higher private gains (Burkart et al, 1997).

This could partly explain the trend for most of the small owner-managed companies listed on BSE. Given the prevailing situation in BSE, in the absence of any effective monitoring by the outside shareholders, block debt holders[89] (financial institutions) are the only institutional holders who can potentially monitor the activities of a firm, albeit only partially.[90] It becomes important that a block debt holder monitors the firm, as there is no scope for an outside large shareholder to emerge. Moreover, as the debt holder has limited claim on the returns of the firm, its intervention cannot constrain managerial initiative. A block debt holder with a sufficiently large stake may be willing to monitor the firm and guide managerial decisions. But again the block debt holder considers only certain conditions in which it is worthwhile to monitor, or in some cases is forced[91] to monitor.

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[89] But there is also a possibility of collusion between banks and insiders concerning preferences for profit retention over distribution of dividends. Corporate growth and product diversification based on high retentions allows managers and employees to secure their jobs. Creditor banks have a similar strategy as high retentions reduce the risk that the company will default on its outstanding debt. Banks as shareholders may have a strong incentive to behave opportunistically, since they have privileged access to company information (Filatotchev, 1997). Simultaneous existence of low dividends and FI's presence can still provide some credibility in the minds of the investors, which may be completely absent if there were no block debt holders.

[90] A large shareholder is only concerned about selling his shares at the highest price whereas institutional investors normally have a fiduciary duty to try to achieve their client's objectives. Given their responsibility towards the clients, institutional investors must justify their activism in terms of achieving these objectives. Consequently, for an institution, activism during the bad return state will depend upon the pressure of its own clients.

[91] Continuous losses for a long period of time in a firm drives it towards being declared as bankrupt. A financial institution in that case has to decide between two options i.e. going through costly bankruptcy procedures or playing a part in the decision making process of the firm and give the firm another opportunity to reorganise and restructure.

2.5 AGENCY MOTIVES OF TAKEOVERS:

Takeovers, mergers and acquisitions provide ways through which firms can exit from the LCC category. The emphasis of the analysis is from the point of view of the target firm. Given the documented large gains in shareholder wealth after a takeover, under what conditions might there be a lack of initiative to divest, or a lack of interest in taking over a target firm? In attempting to answer that question, this section explains the effectiveness of one of the areas of corporate governance i.e. disciplining managers through takeovers[92] and mergers.

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[92] Economic analysis has identified two broad classes of takeovers. They can be divided on the basis of the purpose: motives, which stem from industry-specific factors (including synergistic effects and the impact of restructuring); and corporate control and agency cost motivations. Early theories of takeover emphasised industry-specific factors as important motives for takeover (Gort, 1969) or called synergistic takeovers, since the motivating force behind them is the possibility of benefits from combining the businesses of two firms. These include the realisation of economies of scale and the desire to reduce competition and benefit from monopoly power. Both provide motives for takeovers, which are either horizontal or vertical. An extension of this theory is provided by Mueller (1969), who argues that conglomerate acquisitions can be explained by the existence of management synergies and by the fact that large diversified firms might have easier access to finance. And also due to a desire on the part of management to reduce risk through a pooling of activities (Amihud and Lev, 1981). A second industry-specific motive is that mergers and acquisitions can often be a convenient means through which industries are restructured following some economic disturbance, which requires a reduction in the optimal size of that Industry (Gort, 1969). The acquiring firms determine their takeover targets by using the following measures:
1. Tobin's Q: The ratio of the market value of the firm to the replacement cost of its tangible assets. Tobin's Q can be viewed also as measuring the ratio of intangible to tangible assets of the firm. The former may include future growth opportunities, monopoly power, and quality of management, good will, and so on. A low Q can be a reliable indicator of a declining firm as it genuinely measures the low valuation of the firm's tangible assets in their current use. It may pay to sell off assets when Q is low because those assets have a higher value in another firm or sector. If a low Q reflects a low valuation of physical assets relative to their potential, then acquiring the firm will be a cost-effective way to buy and redeploy its physical capital. A related measure of profitability relative to the value of physical assets is the deviation of a firm's Q from the average Q of its industry. A low Tobin's Q can also result from well-managed but invaluable assets. For example if the hostile targets invested a long time ago when their industry was growing, but in the current period if the fortunes of the industry have turned around, they will be stuck with lots of capital. This is also possible when foreign competition and technological progress have ruined the hostile targets. But the view that firms with a great deal of old fixed capital have a low Tobin's Q doesn't explain why these firms are potential targets for mergers and acquisitions. The free cash flow theory explains this situation as follows; if low Q industries are in decline, managers may be too slow to close down or sell off plants, curtail investment, and trim down operations in order to retain their positions. If manager's dedication to the survival of organisations, as suggested by Donaldson and Lorsch (1983), keeps them from shrinking their operations sufficiently fast, then acquirers can increase value by accelerating the decline of the target firm.
2. Stock market valuation: Manne (1965) argues that the stock market provides the only objective evaluation of management performance through the price it places on a firm's equity. If the management of a public

Disciplinary takeovers try to correct the non-value-maximising practices of the managers of target firms. These practices might include excessive growth and diversification, lavish consumption of perquisites, over payment to employees and suppliers or debt avoidance to secure a quiet life. Disciplinary takeovers thus address the problem of discretionary managerial behaviour (Williamson 1964) or the agency cost of free cash

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corporation performs inefficiently, then the firm's share price will fall to create an incentive for more competent managers to take control of the firm and try to increase the value of the firm. Thus, the worse a firm is managed, the lower its share price and therefore higher potential capital gains to outsiders who buy the firm's stock and run the firm more efficiently. Although the process of the takeovers can be expensive as long as the cost of the takeover is outweighed by the gains to be made by ousting inefficient managers, they will be attractive to potential acquirers. This is what is called the Inefficient Management Hypothesis. So acquisitions become a mechanism through which managers of a firm who are unable to maximise its market value are replaced. The excess return on a firm's stock, averaged over an extended period of time is used as a proxy for management efficiency. As an alternative to the excess return measure, accounting profitability is also used as a proxy for management performance. If the stock market does not value some firms properly, an acquirer who understands their intrinsic value may be able to buy their assets more cheaply on the stock market than on the new or used capital goods market.

3. Industry related reasons: According to the Growth resource mismatch hypothesis, two types of firms are likely to be takeover targets i.e. low-growth, resource rich firms and high growth, resource-poor firms. This hypothesis indicates that both growth and resource availability are important variables in determining a firm's acquisition likelihood. The Industry Disturbance Hypothesis explains an observed variation in merger rates both across industries and over time. Gort argues that mergers are caused by valuation differentials among market participants resulting from economic shocks like changes in technology, industry structure, and regulatory environment. A factor that signals the acquisition likelihood of a firm is, therefore, the recent history of acquisitions in its industry (Palepu, 1986).

4. Other accounting measures: The Size hypothesis relates to the transaction costs associated with acquiring a firm. These include the cost associated with the absorption of the target into the acquirer's organisational framework as well as the costs associated with fighting a prolonged battle that a target may wage to defend itself. These costs are likely to increase with the target size and hence the number of potential bidders for a firm to decrease with size. The Market to book hypothesis suggests that the firms with low market-to-book value ratios are cheap buys. But as the book value of a firm need not reflect the replacement value of its assets, the validity of this assumption is dubious. And also bidders with high P/E ratios seek to acquire low P/E firms to realise an instantaneous capital gain because of the belief that the stock market values the earnings of the combined entity as a higher P/E ratio of the acquirer (Palepu, 1986).

In summary, hostile targets appear to have sharply distinguishable asset characteristics. Relative to the market value of the firm, they appear to have a considerable amount of old tangible capital. They are growing slowly and have heavy debts. Although these characteristics suggest that hostile acquisitions might be related to the desire to purchase these fixed assets, other explanations as mentioned above also form part of this general story. In particular incompetent management, asset redeployment, free cash flow, taxes, and under pricing of the firm's assets by the market could all invite takeover bids. But empirical studies on these hypotheses prove that just like the stock markets, they fail to predict targets with a high degree of accuracy long before the takeover announcements (Palepu, 1986). Due to asymmetric information problems governing the takeover markets it is difficult to predict that a firm with all the above-mentioned features would become a target for a takeover or a merger.

flow[93] (Jensen 1986). In the absence of any internal method of control, or where such methods are not successfully implemented, the market for corporate control facilitates the dismissal of managers who are not acting in shareholders' best interests (Vishny and Shleifer, 1988). The agency motive suggests that takeovers occur because they enhance the acquiring management's welfare at the expense of the acquiring shareholders. A takeover is therefore motivated by an acquiring management's self-interest, enabling management to extract wealth from shareholders.

When exogenous increases in earnings decrease managerial effort below efficient levels, firms financially recapitalise themselves by increasing the debt/equity ratio, in order to restore the effort of existing managers to *ex ante* efficient levels. When the target firms are under performing compared to other firms in the industry, a takeover leads to replacement of incompetent management[94] rather than recapitalisation of the corporation to raise managerial effort.

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[93] The free cash flow theory of takeover suggests two additional channels through which the market for corporate control exerts its influence. In firms with a lack of positive NPV investment opportunities, the payment of higher dividends will signal that managers are not dissipating shareholders' assets. Thus, higher dividends are related to a lower probability of takeover. At the same time, any increase in investment by such firms will necessarily be value reducing since they have no profitable investment opportunities, and the market should discipline such over-investment behaviour by takeover. Jensen's extension of the agency theory indicates a role for both investment and dividend policy in influencing the probability of a takeover, among companies, which have no positive NPV investment opportunities. Free cash flow is the main factor emphasised in Jensen's (1986) agency model of M&A.

[94] From a sample of contested and friendly bids in the UK in 1985-86, Franks and Mayer (1996) found no statistical difference in either the share price performance of targets of hostile bids compared to targets of friendly bids over the 2 years prior to the bid. In addition it was found that only 12% targets of successful hostile bids had reduced or omitted their dividends in the 2 years prior to the bid, compared to a figure of 41% for a random sample of poorly performing firms (companies from the bottom 20% of the market measured by share price performance). But they found that there was a significantly higher level of corporate restructuring - asset disposals and executive dismissals associated with successful hostile bids compared to friendly bids. An interpretation of these results is that the market for corporate control is a market in contending prospective strategies for firms rather than a mechanism for correcting past poor performance of firms. That is hostile bids occur where there is ex-ante managerial failure (i.e. the prospect of improved performance in the future by an alternative management, even without poor performance by the incumbent management) rather than ex-post managerial failure (i.e. poor past performance by the incumbent management) (Stapledon, 1996).

Takeovers solve the problem of free cash flow as they lead to distribution of the firm's profits to investors over time (Jensen, 1986). Conflicts of interest arise between shareholders and managers when the organisation generates substantial free cash flow because of its payout policies. Managers have the tendency to use this free cash flow to increase the size of the firm even though it does not increase the value of stocks held by shareholders. Acquisitions are one of the ways by which managers spend the cash instead of paying it out shareholders. They do not pay this excess cash flow to the shareholders as such payouts to shareholders reduce the resources under managers' control. In small firms with high insider shareholding free cash flow may not be always used for increasing the size of the firm. Instead there is a tendency to accumulate free cash flow to increase the personal wealth of inside owners as in the case of firms listed on BSE.

If a project chosen by the management fails, most managers would be reluctant to divest because a divestiture would mean admitting that an inappropriate project was chosen, and it would adversely effect perceptions of his/her ability. In this situation, skilled managers with high reputation manage to generally make divestiture decisions (value maximising), whereas unskilled managers delay divestitures. Thus a takeover threat may deter a manager from adopting a sub-optimal project. In the same manner, when low Q industries are in decline, managers may be too slow to close down or sell off plants, curtail investment, and trim down operations in order to retain their positions. If managers' dedication to the survival of organisations, as suggested by Donaldson and Lorsch (1983), keeps them from shrinking their operations sufficiently fast, then acquirers can increase value by accelerating the decline of the target firm.

When a takeover is motivated by agency reasons, firms' profits should be higher than previously anticipated. The threat of takeovers should result in financial restructuring, which could take the form of increased debt, a spin-off of the source of the free cash flows, or increased regular dividends. Replacement of top management is unimportant in this case (Griffin & Wiggins, 1992).

The exact functional relationship between the firm characteristics and its acquisition likelihood in a given period, is given by Palepu (1986);

"Let p (a, t) be the probability that the firm *a* will be acquired in period t, x (a, t) a vector of measured attributes of the firm, and ε a vector of unknown parameters to be estimated. Then,

$p(a, t) = 1/[1 + e^{-\varepsilon x(i, t)}]$

p (a, t) is the logit probability function of the measured attributes of the firm.

Whether or not a firm is acquired in a particular time period depends on the number and type of acquisition bids it receives in that period. This in turn depends on the firm's own characteristics, agency factors as well as the motives and attributes of the bidders. The relevant characteristics of the target, which influence its attractiveness, and the characteristics of the target-bidder combination are modelled as stochastic random variables. It is the probability distributions of these random variables which are endogenous to the acquisition process, that determine the specific functional form of p (b, t)."

In takeovers initiated by agency factors, there are negative total gains and negative gains to acquiring shareholders. But, according to Berkovitch and Narayanan (1993), if target shareholders realise the management's motives, they can attempt to appropriate

some of the management's rent and will succeed in doing so if they have some bargaining power. Since the management's rent reduces total value to shareholders, total gain to shareholders is inversely related to rent. This implies that the correlation between target and total gains is negative. Their empirical study found that on average, takeovers yield positive total gains, which occurred in about 75% of the takeovers in the sample. So, the synergy motive[95] for takeovers appears to dominate. Palepu (1986) also finds that friendly strategic takeovers[96] which combine firms in related businesses are likely to offer greater business synergies and higher profitability than hostile transactions.[97]

A great deal of theory supports the idea that takeovers automatically address governance problems. That, however, is not the case. Takeovers increase the combined value[98] of the target and acquiring firm. Profits are expected to rise thereafter, through the gains involved in selling off parts of the company, laying off workers, and availing of tax advantages. Most of the takeover targets are often ill-performing firms with incompetent managers who are removed once the takeover succeeds (Palepu, 1986). But according to

[95] Takeovers occur because of economic gains that result by merging the resources of the two firms.
[96] Friendly transactions, typically involve stock payment for firms in overlapping businesses.
[97] Hostile transactions, generally involve cash payments for firms in unrelated businesses.
[98] Bhagat et al (1990) also confirm that although it is clear that the hostile takeovers largely allocate businesses to firms owning other related businesses, the source of gains in related acquisitions come from improvements in operating efficiency, increases in market power, or other sources. But there is uncertainty regarding the sources of gains from takeovers, it is highly likely that a firm which bases its decision of takeover on the above mentioned measures (i.e. Tobin's Q, stock market valuation etc.) is not sufficient to carry out the takeover. The asymmetric information leads to extracting of gains through laying off workers, selling off parts of the acquired firm etc., if the acquiring firms realise that the target firms cannot be restructured to suit to its strategic policies. Thus, raiders and Management Buy Out (MBO) teams appear largely to serve the temporary function of brokering the transfer of assets toward related acquirers. High debt levels and concentrated ownership give these organisations a strong incentive to implement a takeover, but the task of subsequent management is left to others.

Even if this was true, many of the LCCs on the BSE would have been taken over and subsequently the management would have changed hands, but this has failed to occur. After a takeover, if the target firm does not seem to be valuable to the acquirer strategically, the acquirer may liquidate the acquired firm. As a result the acquiring companies may either face tough resistance to their takeover proposal from the target management or the raiders may not indulge in a takeover of an LCC.

Cosh et al. (1989), the effect of a merger on company performance is unimpressive. Although growth rates are maintained or improved, profit performance worsens more often than it improves. Their study of the evidence of UK takeovers suggests that takeovers or the threat of them has been an imperfect device for ensuring efficient resource allocation and improved company performance.

Takeovers can actually increase agency costs when bidding managements overpay for takeovers, which bring private benefits of control (Shleifer and Vishny, 1988). Takeovers also require a liquid capital market, which can provide bidders with a large amount of capital on short notice (Shleifer and Vishny, 1988). Participation in the market for corporate control is costly; a raider faces positive investigation costs prior to detecting a takeover target. A takeover threat is only credible if a raider can expect to obtain part of the wealth gains. According to Boot (1992), lack of incentives for the raider to investigate potential takeover targets are that the threat of a takeover, which has a disciplinary effect on management, reduces the wealth gains which arise from the actual takeover, and the raider may not be able to capitalise on private information about the inefficiency of the target. Moreover his/her bid would reveal the information to the market and invite competitive bids. If his/her bid does not invite competitive bids from other firms, it would mean that he/she is planning a takeover that the market is not enthusiastic about. When his/her bid invites competitive bids and he/she values the target firm higher than any of his/her competitors due to hubris, he/she faces what is known as the "Winner's curse".[99]

[99] When bidding takes place for a valuable object with an uncertain value, the winning bid is likely to represent valuation error. The positive valuation error represents the winner's curse. Given strong-market efficiency in all markets, the prevailing market price of the target already reflects the full value of the firm. The higher valuation of the bidder (over the target's true economic value) results from hubris- the bidder's

These factors reduce the raider's potential to obtain rents and discourage participation in the market for corporate control. In an environment where there are hidden and asymmetric information problems, takeover market[100] may fail to occur due to adverse selection.

2.5. A. THE ROLE OF FINANCIAL INSTITUTIONS IN TAKOVERS:

Given the agency reasons for takeovers, it is highly probable that top executives would engage in acquisitions, initially, at least in areas related to their core business. Any non-bonded cash requests by management are likely to be perceived negatively by shareholders. Thus, shareholders will perceive requests for unbonded funds as the acquisition of free cash flow unless they are provided with contrary evidence. Hence, the share price will decline to reflect the residual loss due to the expected misuse of free cash flow by managers. But if cash is obtained through the sale of debt, firms are contractually committed to pay out these cash flows to the debt holders. If the bonding of cash flow mitigates shareholder concerns about the misuse of funds, shareholders will respond more favourably to debt issue announcements if management has a favourable acquisition track record.

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excessive self-confidence (pride, arrogance). Hubris is one of the factors, which causes the winner's curse phenomenon to occur (Brealey and Myers, 1997).

[100] After having evaluated the possible takeover targets, it is highly unlikely that the acquiring firm is fully aware of the intrinsic value of the target firm. This is clear from the premium that is paid by the acquirer when a hostile takeover is accomplished, in addition to the market value of the company before the takeover bid. Payment of premiums stem from differences in valuations by different parties i.e. the market could be undervaluing the companies, so that takeovers occur to correct an under valuation, not to make any changes in operations. Acquiring companies can make incorrect valuations and the pay higher takeover premiums. Outside shareholders do not have access to all the information regarding the investment operations open to firms. Therefore it is difficult to decide whether changes in the profitability of firms are the result of good or bad management, or of the inevitable uncertainty associated with any investment program (Hall, 1988). If the market decides that the managers' decisions are incorrect the value of the company's shares in the market will fall. As a result firm will become vulnerable to a takeover by a raider who can correct the managers' decisions. But Palepu (1986) finds that in most cases the new value created for the stockholders of the target company

Significant creditors like banks or financial institutions can also be potential active participants in the market for corporate control. Banks and financial institutions hold both equity and debt in the firms and vote on the equity of other investors (OECD, 1995). They possess a whole range of controls, and use their cash flow rights to interfere in the major decisions of the firm. And hence they may be similar to large shareholders, in playing an active role in Merger and Acquisition (M&A) transactions. Banks and financial institutions themselves may be listed on stock markets and hence are responsible towards their own outside shareholders for better returns. In such a situation FIs would try to downsize their portfolio in order to concentrate on effective control and monitoring over a limited number of companies in which they have a substantial holding. A debt holding in many small firms thus means lack of effective control and monitoring of all individual firms.[101] This is perhaps one of the reasons why Cosh et al. (1989) find that the presence of institutional investors has not altered the basic underlying characteristics of the takeover selection process in UK.

Many studies argue that Financial Institutions and large block holders have economic incentives and as a result make the voting process efficient in a proxy process. Outside shareholders hold a very small portion of all the outstanding corporate votes and residual claims. Thus their voting pattern is unlikely to affect the outcome of the voting process significantly. So there is no incentive for them to become informed and vote so as to maximise share value. Given this problem, Pound (1988) suggests that the most

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and the acquiring company combined, does not include any additional cash flows beyond those required to recover the premium paid.

[101]This runs contrary to the hypothesis of Cosh et al. (1989), which suggests that behaviour of all the companies in the market will change, given the presence of institutional investors irrespective of the relative size of their holding.

important determinant of efficiency in the proxy process is the informed shareholders with large holdings who have economic incentives to make the voting process efficient at the margin, even in the presence of some uninformed shareholders.

There are alternative hypotheses about the effects of both groups as suggested by Pound(1988):

"Large investors may simply vote 'street rules', meaning that they abstain from voting and sell their holdings rather than vote actively against management.

Large block holders may maintain strategic alliances with incumbent management.

Institutional investors may vote with management because of conflict-of-interest problems. Existing business relationships with incumbent management influences their voting behaviour. Voting against management may significantly affect the FI's business relationship with the incumbent management, whereas voting with management results in no penalties."

In addition to the above hypotheses, Brickley et al (1988) suggest that inside block holders vote more actively than non-block holders, and that they vote for management initiated proposals more frequently than non-block holders, independent of the proposal's effect on the firm value. Institutions that derive benefits under the management control are less likely to oppose management proposals. They classify FIs under 3 mutually exclusive categories based upon their susceptibility to management influence:

"Pressure sensitive institutions- insurance companies, banks, and non-bank trusts owning at least 1% of the firm's stock;

Pressure resistant institutions - public pension funds, mutual funds, endowments, and foundations owning at least 1% of the firm's stock;

Pressure indeterminate institutions - corporate pension funds, brokerage houses, investment counsel firms, miscellaneous and unidentified institutions plus institutions owning less than 1% of the firm's stock." (Brickley et al., 1988)

It is quite possible that FIs can find themselves in situations where they own significant stockholding in both firms that are engaged in a takeover battle. Institutions then find themselves on both sides of the conflict. During these situations their potential business with incumbent managements is at stake on both sides. The occurrence of takeover or not will then depend on the FI's higher interests in one of the two firms. Debt holding in many firms leads to financial institutions finding themselves in situations like these. Takeovers in such cases may not really fulfil the objectives of corporate governance.

2.5.B. REPUTATION BUILDING:

In firms that do not have high insider ownership top executives generate rents from superior management skills. The managerial competence of the top team is crucial to the firm's success. This team organises the firm and makes decisions for it. By using superior skills to make and implement strategic and operational decisions,[102] the top management of a firm creates rents. Castanias and Helfat (1992) claim that rent-generating top managers have incentives to act efficiently and the potential goal conflict

[102] By this managers improve security of their positions by diversifying the firm's real asset portfolio. They reduce employment risk by increasing the size of the firm and by purchasing assets that are unrelated to the firm's primary line of business. Managers have incentives to expand firm size since executive compensation and promotions are positively related to firm size. But entry into lines of business that are unrelated to the firm's primary focus could yield sub-optimal performance.

between top management and diffused shareholders is not a source of concern. The top management of a firm maximises its utility subject to a constraint, which is enforced by the market for corporate control. This does not suggest that takeover attempts correct for inefficient management. Instead, such attempts may involve rent-seeking behaviour by outsiders and result in rent distribution. Rent distribution need not necessarily have a value increasing effect. By using their reputation for superior management, the top executives of a firm can indulge in acquisitions that bring more assets under their control.

Reputation building is a very common explanation for why people deliver on their agreements even if they cannot be forced to. Managers repay investors because they want to keep coming to the capital market to raise funds in the future. Hence they need to establish a reputation as good risks in order to convince future investors to provide funds (Vishny and Shleifer, 1996).

Jensen argues that self-interested managers have incentives to hoard and misuse free cash flow. Agency costs can be mitigated through reputation building, particularly, management's reputation regarding its misuse of free cash flow. Investor perceptions about management may be more favourable if the firm develops a track record of expanding only into related areas of business[103]. Expansion in related lines of business provides information to the shareholder that the firm's managers are acquiring assets that fit them strategically and that they are investing in their areas of expertise. Mann and Sicherman (1991) find evidence that if managers exhibit a propensity to invest and expand only in assets related to their core business, investors respond more favourably to equity announcements. Thus, managerial reputation for not abusing free cash flow may

reduce agency costs. Otherwise, given managerial incentives to hoard and misuse free cash flow, shareholders will respond negatively to equity issue announcements because they expect, on average, management misuse of any non-bonded funds. Investors also expect that firms with no track record are likely to pursue unrelated acquisitions. A favourable acquisition track record is defined as only acquisitions of assets that are related to the firm's core line of business. Creating reputation in the minds of investors is very difficult, although coverage of a company in the financial press helps achieve this objective. It may happen however that entry of a firm into related activities through takeovers could result in negative returns due to unforeseen circumstances. In effect it is the improved performance of the acquired firm under the new management which helps investors to respond favourably to an equity issue.

[103] Rumelt (1974) provides evidence that conglomerates under perform than other firms.

2.6 AGENCY COSTS AND INDUSTRY EQUILIBRIUM:

Most of the existing models of financial structures and investment decisions are single-firm based. As such they do not take into account the relationship between cash flows and the investment decisions of all firms in the industry. The standard results of agency theory have been derived for a single firm in isolation than for the whole industry taken together. Industry equilibrium may have very different properties if firms within an industry compete in the product market. Then, the standard predictions of agency theory may have limited validity. Maksimovic and Zechner (1991) show that the effect of financial structure on investment and production decisions is irrelevant in a competitive equilibrium. In a single firm case, a firm's financial structure affects equity holders' incentive to substitute assets. But when the decisions of other firms are taken into account, the effect of asset substitution on firm value differs from that of single firm.

If there are two alternative production technologies with the same expected costs but imperfectly correlated cost shocks, the price of the output is correlated to the technology's cost shocks in a competitive market. If one firm adopts alternative technology, the price of the good sold will not be highly correlated to the deviating firm's cost shocks. The difference between prices and costs is more volatile for a deviating firm. Its expected profit will be higher but riskier. In equilibrium the number of firms choosing each technology adjusts until their expected values are equated. At that point an individual firm becomes indifferent to the choice between alternative technologies.

A firm's choice is also affected by its financial structure in the following manner: equity holders of firms with risky debt have an incentive to choose the riskier but higher-yield investment. If there are too many firms with risky debt, the value of the riskier

investment will fall below that of the less risky project. This creates incentives for some firms to reduce their debt levels and invest in the less risky project. In equilibrium, the distribution of capital structures must adjust until no firm can increase its value by altering its equity holders' incentives to invest so that each individual firm is indifferent between alternative financial structures (Maksimovic and Zechner, 1991). But if the effects of the agency costs of debt (Section 2.2) are taken into consideration where a single firm is forced to adopt the second best operating policy, then too many firms adopt the less risky project; the value of it would be less than that of a riskier project. If, in a competitive equilibrium, financial structures do not matter then at the firm level there is no difference between optimal and sub-optimal decisions. This may indicate inefficiency at the firm level leading to efficiency at the aggregate industry level.

They also suggest a link between technology choice and financial structure. Within an industry, firms that adopt technology chosen by the majority of firms generate higher expected earnings before interest and taxes, and are less levered than firms that deviate and adopt a technology which is only chosen by few firms.

According to Williams[104] (1995), managers of most firms like to invest in capital-intensive production but fail to commit to avoid the wastage of perks. As a result firms cannot sell to outside investors sufficient securities so that they can finance their capital-intensive project. Some firms are forced, in the resulting equilibrium, to miss investment with positive Net Present Value (NPV). The foregone investment is a result of competition within an industry. In equilibrium, capital-intensive firms are profitable and

[104] Williams (1995) assumes that each firm in an industry produces a homogeneous good by adopting either a labour or capital-intensive technology. The labour intensive technology has no initial cost but has high variable costs.

less risky compared to labour intensive firms. Thus they are hence able to finance their investments with some outside debt. Even if entry costs approach zero, capital-intensive firms can earn extraordinary profits, while labour intensive firms can fail.

With their findings taken together, the above authors show that the standard agency results for an isolated firm change when the same firm is interacting with other firms in an industry.

2.7 CONCLUSION:

Any modern economic production system can be described at the level of the individual firm as consisting of three main actors: workers, managers and owners. The three possible principal-agent relations between them define the functioning of the firm. Agency models essentially: (a) examine the relation between managers and owners, (b) develop a model of managerial effort; and (c) determine levels of effort in a contractual arrangement under asymmetric information (Haskel and Sanchis, 1995).

Agency theory therefore focuses on a study of the differential risk preferences of agents and principals. Principals are considered "risk neutral" in their preferences for individual firm actions, since they can diversify their shareholdings across multiple firms. Agents are considered risk averse in their decisions regarding the firm in order to lower risk to their income as their income is tied to one firm. Agent risk aversion creates opportunity costs for risk neutral principals who prefer that agents maximise shareholder value returns. Given this relationship, the mechanisms of executive compensation, and the threat of hostile takeover, disciplines managers to act in the interests of the shareholders.

The agency problems take three forms, i.e. moral hazard or hidden action (when individuals say what they do not mean), adverse or self-selection (individuals indulge in activities which they said they will not do or do things which they said they would) and, strategic behaviour (individual's willingness and ability to engage in actions which enhance their claims on the firm's payoffs) (Ben-ner et al, 1993).

Corporate governance deals with the agency problem. The challenge of corporate governance is to set up monitoring, supervisory and incentive alignment mechanisms, that alter the risk orientation of agents to align them with the interests of principals. Discussion of several aspects of agency conflicts within the firm concludes that, given the self-interest seeking behaviour of the different constituents of the firm, a firm never reaches its optimum level of production and output. Different monitoring mechanisms that align managerial decisions with the interests of shareholders have also not resulted in controlling managerial opportunism. Certain agency conflicts related to convertible debt and callable securities have not been dealt with in this chapter.

Agency conflicts related to debt decrease with the market value of the firm. They do not decrease with an increase in the as against debt-equity ratio as suggested in the traditional literature. The agency cost of equity suggests that it can increase or decrease with the market value of the firm instead of simply being increasing with the debt-equity ratio. Agency theory explains takeovers from the point of view of free cash flow, which is used for mergers in order to expand manager's sphere of influence. Free cash flow may not always be used by the high insider shareholding companies for takeovers but for increasing the personal wealth of owner-managers. These conclusions have been drawn by integrating insights gathered from the personal-interview-based survey of the

managers with agency theory. These findings have been corroborated by the econometric results.

Accordingly the high entry and low exit of LCCs in the BSE can be explained as follows: high entry can be explained by lax legal requirements, low entry barriers and perverse incentives for brokers (See Chapter-3, Appendix-3.1 for further details) whereas low exit is due to the absence of an active takeover market, and ineffective monitoring of LCCs by FIs and outside shareholders.

Apparent market failure in emerging economies is manifest by the market not functioning to achieve optimality (i.e. the "market for lemons"). Decline of the market and its disappearance does not always lead to an automatic rise of an alternative institution, which enables the system to achieve equilibrium. The mechanism of competition, which supposedly selects competent behaviour virtuously, is superceded by a vicious mechanism of adverse selection, which discourages the emergence of efficient and competent behaviours. In the same way, if a contractual system does not allocate optimally, this does not result in an alternative contractual system emerging. As a result, the economy may remain trapped in a sub-optimal condition (Egidi, 1994).

Chapter-3

Capital Structure and Governance Structures in Indian Companies

3.1 INTRODUCTION:

This chapter outlines the characteristic features of the Indian financial system especially its inherent governance structures,[105] together with the changes that have taken place after the initiation of financial reforms (1991-92), which has affected the nature of the capital structure of the firms. In other words, given the high entry and exit barriers, which existed before the 1990-91 the nature of the financial policies was very different from what is now emerging when both barriers have been considerable reduced. Industrial structure was determined more by the rules and regulations of the state than the market mechanisms. Regulations notwithstanding, between 1950-90 there has been considerable widening and deepening of the Indian financial system as can be seen from the Table 3.1.

Table 3.1: Financial Ratios

Ratio	1951-52 to 1955-56	1966-67 to 1968-69	1980-81	1989-90
Finance ratio[106] %	4.9	13.8	32.7	43.9
Financial Interrelation ratio[107]	0.63	0.93	1.93	2.50
Intermediation ratio[108]	0.27	0.33	0.41	0.45

Source: Rangarajan and Jadhav (1992)

This chapter helps understand the peculiarities of the Indian financial system, which were incorporated in the traditional theory of agency in the previous chapter to derive an India-specific form of agency conflicts. These features of Indian financial system and its effect on the corporate

[105] See Appendix -1 for the legal stipulations related to the governance structures.
[106] Finance ratio = total financial claims/national income.
[107] Financial Interrelation ratio = increase in stock of financial claims/net capital formation.
[108] Intermediation ratio = claims issued by FIs/issues of non-financial sectors.

sector were substantiated by the results[109] derived from the sample survey of 34 LCCs listed in BSE.

The financial system in India has over the years evolved into five broad segments: banking, specialised lending institutions, capital markets, money markets and insurance/investment institutions. All segments compete intensively, though not through the price mechanism (i.e. interest rates) in mobilising household savings. The financial system has been oriented towards meeting social/developmental objectives without sufficient regard for credit risk, financial soundness and prudential controls (Mistry, 1995). The system also characterises of directed credit to state owned enterprises and priority sectors and controlled/prescribed interest rates for lending and deposits. In addition, the system is distinct with its relatively small stock markets, large number of medium and small sized firms, and the banking system which lends large amounts to companies but does not have really close ties with the firms (Cobham and Subhramaniam, 1998).

Indian corporate sector is characterised by a coexistence of public, private domestic and multinational enterprises. Among domestic private enterprises are the large business houses and stand-alone companies (Sarkar et al, 1998). Sarkar et al (1998) study 1613 listed manufacturing companies on the BSE and their equity holding pattern. Table-3.2 below shows the results of their study (1995-96), which reveals that the nature of equity holding as well as identity of the largest equity holder varies significantly across different groups. For domestic group companies, corporate bodies are the single most dominant group followed by institutional investors' holdings, for domestic stand alone companies, directors and relatives hold the maximum stake,

[109] Detailed results are in Chapter-6.

followed by corporate bodies.[110] For foreign companies, foreign bodies clearly are the single largest equity holders followed by holdings by corporate bodies.

Table 3.2: Pattern of equity ownership in different types of companies.

Type of Company	Mean equity holding by %					
	Directors and relatives	Corporate bodies	Foreign	Financial Institutions	Institutional investors	Public
Private companies belonging to business houses	8.1	33.8	9.2	4.2	10.2	34.5
Private stand-alone companies	21.6	18.5	7.2	3.1	3.1	46.5
Foreign companies belonging to business houses	0.8	18.3	42.0	4.3	12.2	22.4
Foreign stand-alone companies	2.8	13.8	43.3	1.7	8.4	30.0
All	15.7	23.8	9.9	3.5	6.1	41.0

Source: Sarkar, S. and S. Sarkar, "The governance of Indian Corporates", India Development Report, 1998.

Table-3.3 shows that equity holding by institutions and non-institutions in the corporate sector in India. The participation of institutional investors is significant and comparable to the extent of their participation in Japan and Germany (Sarkar et al, 1998). The equity held by individuals is comparable to Anglo-Saxon countries. As a result the Indian corporate governance system is a hybrid of the "outsider" systems of the US and UK characterised by diversified equity ownership and less involvement of lending institutions, and the "insider" systems of continental Europe and Japan characterised by greater concentration of shareholder power residing with banks, families and the other corporates.

[110] Holdings by other group companies.

Table 3.3: Distribution of outstanding corporate equity for select countries.

Percentage of equity held by	India (1996)	US (1993)	UK (1993)	Germany (1993)	Japan (1993)
All corporations	36.3	46.0	64.0	68.0	69.0
Financial Institutions	12.7	46.0	62.0	29.0	45.0
a. Banks/lending institutions	6.6	-	1.0	14.0	22.0
b. Insurance companies	4.0	5.0	17.0	7.0	17.0
c. Pension/investment funds	-	26.0	34.0	-	1.0
d. Mutual funds	2.1	11.0	7.0	8.0	3.0
e. Others	-	4.0	3.0	-	1.0
Non-financial Corporations	23.6	-	2.0	39.0	24.0
Individuals	40.8	49.0	18.0	17.0	24.0
Foreign	9.8	5.0	16.0	12.0	7.0
Government	-	-	1.0	4.0	1.0
Others	15.3	-	2.0	-	-
Total	100.0	100.0	100.0	100.0	100.0

Source: Sarkar et al (1998). "Governance of Indian Corporates" India Development Report 1998, IGIDR, Mumbai.

The financial system affects the capital structure of firms, because they derive funds from the different components of the system for their short and long-term capital needs. The existing financial system and the legal framework have in effect created a corporate sector with two characteristics, (1). The Indian corporate sector was significantly over-levered, compared to other developing markets as shown in the tables 3.4, 3.5 and 3.5. (2). It is characterised by a large number of small-capitalised[111] firms quoted on its stock markets.

Table 3.4: Top listed companies in manufacturing, mean proportion of internal and external finance of corporate growth (%), Singh (1995) results.

Country	Internal Finance	Equity	Long-term debt
Korea	19.5	49.6	30.9
Pakistan	74.0	1.7	24.3
Jordan	66.3	22.1	11.6
Thailand	27.7	N/A.	N/A.
Mexico	24.4	66.6	9.0
India	40.5	19.6	39.9
Turkey	15.3	65.1	19.6
Malaysia	35.6	46.6	17.8
Zimbabwe	58.0	38.8	3.2
Brazil	56.4	36.0	7.7
ALL	38.8	39.3	20.8

Source: Cobham, D. and R. Subramaniam (1998), "Corporate Finance in Developing Countries: New Evidence for India", World Development, Vol. 26, No. 6, p. 1037. Extracted from Singh (1995).

[111] Refer to Chapter-1, Table – 1.1.

Table 3.5: Gross and net sources of finance for the Indian corporate sector.

Type/Source	1980-81 to 1992-93	1980-81 to 1986-87	1987-88 to 1992-93
(a) Gross sources of finance as % of total identified sources			
Internal	37.8	38.5	37.4
Market finance (equity issues + bonds)	18.4	15.3	20.2
Bank lending	31.2	29.3	32.3
Other	12.6	16.9	10.1
(b) Net sources of finances as % of physical investment			
Internal	42.0	33.1	49.7
Market finance (equity issues + bonds)	16.9	10.4	22.5
Bank lending	28.8	22.6	34.0
Other	12.3	33.9	-6.2

Source: Ibid.

Table 3.6: International Comparisons.

Source	Group A	Group B	Group C	India
Gross Sources of finance				
Internal	60.4 - 62.7	38.5 - 54.2	38.5 - 44.1	37.4 - 38.5
Equity	-4.9 - 7.0	3.9 - 11.9	5.6 - 10.8	N/A.
Market finance	3.1 - 9.3	7.4 - 18.0	7.4 - 13.2	15.3 - 20.2
Bank loans	14.7 - 23.3	12.8 - 41.5	27.2 - 41.5	29.3 - 32.3
Net sources of finance				
Internal	80.6 - 97.3	51.9 - 76.4	51.9 - 64.4	33.1 - 49.7
Equity	-10.4 - 0.9	-0.1 - 8.2	-0.1 - 8.2	N/A.
Market finance	-6.9 - 8.3	2.7 - 11.0	2.7 - 9.8	10.4 - 22.5
Bank loans	11.0 - 19.5	15.2 - 37.3	27.7 - 37.3	22.6 - 34.0

Note: Group A: high internal finance countries (US, UK and Germany), Group B: low internal finance countries (Canada, Finland, Italy and Japan), Group C: Finland, France and Italy
Source: Ibid.

According to CMIE,[112] the average debt-equity ratio of private sector manufacturing companies in India was 1.72 in 1990-91, which fell to 1.05 in 1996-97. More than half of this reduction took place in one single year. The reasons for high leverage were; financial institutions[113] provided finance at subsidised interest rates[114] compared to the required return on

[112] Center for Monitoring Indian Economy.
[113] IDBI (Industrial Development bank of India), IFCI (Industrial Finance Corporation of India), ICICI (Industrial Credit and Investment Corporation of India), SFC (State Finance Corporations) and other Unit Trusts and Insurance Companies etc.
[114] Most FIs in India granted loans to the extent of twice the level of equity capital and often much more than that (Majumdar & Chibber, 1996).

equity. This attracted companies towards debt finance. This usually meant the maximum debt-equity ratios[115] laid down by the government for various industries. In a protected economy prior to the financial liberalisation, operating (business risks) were lower and therefore companies could afford to depend on a high level of debt and take more risks on the financing side. A high proportion of the debt was acquired from the financial institutions; it was easier for companies to reschedule[116] the loans at little cost. In addition to these reasons there were some other factors, which led to higher debt ratios; given the high corporate tax rate[117] structure, it helped the companies to take advantage of the debt tax shields. With underdeveloped organised stock markets and many other bureaucratic hurdles, the role of new equity issues in corporate financing was very limited (Varma, 1998), as shown in the Table 3.7. In 1996, more than three-quarters of total funds raised by Indian corporates were from external sources via the capital market and through bank borrowings. Funds raised from the capital market constituted 17.4 % of the total finance and bank borrowings constituted 33.1% of total funds.

[115] See the section Appendix -3.1 on government guidelines on issuing equity.

[116] However, the fact that FIs are largely publicly owned and guided by so called "public interest consideration" is likely to have led to serious incentive problems and to misallocation of resources. These institutions are not under pressure to foreclose a mortgage when a borrower defaults. Thus loans are likely to rescheduled more often than if the FIs were guided purely by commercial motives (Srivastava and Schiantarelli, 1997).

[117] Corporate taxation for "widely held" domestic companies has been in the range of 55% in 1975-76(for income of more than Rs. 1 Lakh {Rs. 1,00,000}) to 50% in 1988-89.

	1990	1991	1992	1993
Widely held company	50%	40%	45%	45%

Surcharge is levied on tax at 8% for the accounting year ended march 31, 1990 if taxable income exceeded Rs. 50,000. It is levied at 15% for the accounting year ended march 31, 1991 and thereafter if taxable income exceeds Rs. 75,000 (Source: Price Waterhouse Information Guide; Doing business in India).

Table 3.7: Share Capital raised during 1957-90. (Rs. bn.)

Year	Share Capital	Shares as % of Total Capital Raised
1957	.582	53.7
1958	.430	46.5
1959	.635	68.4
1960	.804	72.1
1961	.886	75.9
1962	.784	59.3
1963	.712	64.4
1964	.837	80.0
1965	.810	67.8
1966	.633	64.3
1967	.647	72.1
1968	.684	66.6
1969	.630	59.4
1970	.767	79.7
1971	.787	86.1
1972	.977	62.8
1973	.986	83.5
1974	1.072	75.7
1975	.683	63.8
1976	.658	38.1
1977	.820	66.0
1978	.926	57.0
1979	1.085	74.6
1980	.929	42.5
1981	1.703	54.9
1982	1.249	29.3
1983	1.555	21.6
1984	2.447	26.9
1985	2.447	28.5
1986	8.992	51.5
1987	10.082	39.3
1988	11.109	62.5
1989	10.355	32.6
1990	12.267	18.9

Source: Balasubramanian, N. (1993) Corporate Financial Policies and Shareholder returns

Demirguc-Kunt (1992) finds a positive and significant correlation between firm leverage and the extent of stock market development. Although the decade of eighties saw some gradual reforms in the financial sector, the debt-equity ratio of Indian companies still remained high. Her study points out that large firms in developing stock markets take advantage of further stock market development to increase their borrowings, whereas in developed stock markets, firms substitute equity for debt. With stock market development the borrowing capacity of the firms increases as the stock markets provide improved quality of information and banks are in a better

position to assess the credit worthiness of their clients more accurately and can increase lending. The coefficients of the stock market indicator for small firms in the developed markets are negative and also that of the developing stock markets are negative but not statistically significant. Table 3.8 shows the D-E ratios of some of the developing as well as the developed stock markets.

Table 3.8: Firm characteristics of some developing and developed economies.

Economy	Long-term Debt to Total Equity	Short-term Debt to Total Equity	Total Debt to Total Equity	Non-Debt Tax Shield
Germany	1.479	1.188	2.732	-0.007
Japan	0.938	2.726	3.688	-0.016
US	1.054	0.679	1.791	-0.015
UK	0.387	1065	1.480	0.009
Hongkong	0.309	0.967	1.322	0.020
Brazil	0.139	0.421	0.560	0.017
Malaysia	0.284	0.639	0.935	0.010
South Africa	0.597	0.518	1.115	0.066
Thailand	0.518	1.769	2.215	0.007
Singapore	0.491	0.718	1.232	-0.004
India	0.763	1.937	2.700	0.027

Source: Demirguc-Kunt (1992).

After an overhaul of the restrictive financial policies in 1991-92, more and more smaller companies, which depended on traditional sources of finance, i.e. family and friends, local creditors etc. have been able to access stock markets for additional finance. Finance from other outside formal sources was restricted, as these firms were not considered creditworthy by FIs or the banks, at the same time there were restrictions on the amount of capital that could be raised from the primary stock markets. As a result the Indian corporate structure is not as highly leveraged as it was prior to 1991-92 as shown in Table 3.9.

Table 3.9: Debt-Equity ratios.

Year	No. of Companies	Debt to Equity ratio in Public Limited Companies
1990-91	2131	99
1991-92	1836	98.4
1992-93	1802	90.4
1993-94	1700	73
1994-95	1720	65.5
1995-96	1730	58
1996-97	1930	61.6
1997-98	1948	65

Source: RBI Bulletin, Various Issues

This chapter has been structured as follows:

Section 3.2 provides a description of the sources of finance for Indian Companies since the first five-year plan, and the governance structures associated with each of these sources. Section 3.3 presents a critical summary of the studies dealing with the determinants of the D-E ratios in India along with the managerial attitudes towards capital structure. Section 3.4 deals with recent reforms in the financial sector, which have had a bearing on the capital structure of firms during the eighties and in the early nineties in particular, those following the recommendations of the Narasimham Committee report. Section 3.5 deals with the market for takeovers in India. Section 3.6 makes some concluding observations regarding the financial structure of the Indian firms.

3. 2 SOURCES OF FINANCE FOR INDIAN COMPANIES:

3. 2. A. DEBT:

Finance theory suggests that firms with unstable profitability i.e. which are prone to cyclical swings in output, prices and sales avoid issue of debt, since servicing of debt is a contractual obligation. A high debt service burden reduces the ability of corporate units to absorb unforeseen business shocks and hence firms usually try to keep the burden of fixed charges to a minimum. On the other hand, industries with assured cash flow prospects, valuable and durable assets, which are subject to mortgage, can depend on the capital market for debt instruments. Irrespective of these constraints, firms in general have been highly leveraged in India because of the above-mentioned reasons in Section 3.1.

Debt can be regarded both as a governance structure and a financial instrument (Williamson, 1986).

Intermediaries like commercial banks and financial institutions, which are predominantly owned or controlled by the government, have traditionally, met most of the debt requirements of the private corporate sector in India. The principal sources of debt finance are shown below: -

Table 3.10: Sources of debt.

Long and Medium Term Debt	Short Term Debt
Term loans from financial and investment institutions	Working capital financing from banks
Term loans from commercial banks	Short-term deposits from institutions
Debentures and bonds	Inter-corporate deposits and loans
Deposits from public	Deposits from public
	Commercial Paper

Source: Barua et al. (1994)

1. Debentures and other Corporate Debt Instruments:

Borrowings through the issue of transferable debt securities like bonds and debentures were negligible until the 1980s. But, in the recent times, issuance of debentures by the corporate sector has been increasing sharply reversing earlier pattern, as is evident from the Tables - 3.11 and 3.12 below. Total debentures and loans outstanding rose from Rs. 300 cr. in 1982 to Rs.

5246 cr. in 1990. Table 3.12 also shows almost an unchanging importance of debentures and loans in total borrowings.

Table 3.11: Debentures and loans as a source of finance (Rs. mn.) between 1957-90

Year	Debentures and Loans	Debentures as % of Total Capital Raised
1957	501	46.24
1958	493	53.41
1959	293	31.57
1960	31	27.83
1961	28	24.01
1962	537	40.65
1963	392	35.51
1964	208	19.90
1965	383	32.10
1966	35	35.60
1967	25	27.87
1968	343	33.40
1969	43	40.57
1970	19	20.27
1971	127	13.90
1972	578	37.17
1973	194	16.44
1974	344	24.29
1975	386	36.11
1976	1066	61.83
1977	421	33.92
1978	696	42.91
1979	368	25.33
1980	1252	57.40
1981	1394	45.01
1982	3003	70.63
1983	6162	79.85
1984	6649	73.10
1985	6136	71.49
1986	8457	48.46
1987	15557	60.68
1988	6672	37.54
1989	21369	67.36
1990	52464	81.05

Source: Balasubramanian, N. (1993), Corporate Financial Policies and Shareholder Returns

Table 3.12: Debentures and loans as a source of finance (Rs. bn.) between 1991-98

Year	No. of Companies	Debentures and loans	Debentures and loans as %age of total borrowings
1991-92	1802	474.29	91%
1992-93	1802	577.39	93
1993-94	1720	584.63	91
1994-95	1720	719.39	93
1995-96	1730	842.61	94
1996-97	1930	1163.91	94
1997-98	1948	1379.36	94

Source: RBI Finance and Currency Bulletin, Various Issues

Table 3.13: Borrowings by the IDBI sample of 401 companies as on 31 March. (Rs. bn.)

Year	Amount of Long Term Debenture Issues (1)	Total Long Term Borrowings (2)	Total Borrowings (3)	(1) as %age of (2)	(1) as %age of (3)
1982	2.92	27.26	43.61	10.7	6.7
1983	4.33	35.30	52.32	12.3	8.3
1984	6.57	42.39	60.24	15.5	10.9
1985	11.79	57.37	79.70	20.5	14.8
1986	17.81	67.48	96.82	26.4	18.4
1987	24.16	77.99	110.97	31.0	21.8
1988	31.63	96.77	130.69	32.7	24.2
1989	36.89	114.03	157.10	32.4	23.5
1990	56.34	139.25	191.91	40.5	29.4
1991	63.35	160.92	224.92	39.4	28.2

Source: Barua et al (1994), Analysis of the Indian Securities Industry: Market for Debt

As the Table 3.13 shows, debentures constituted 6.7% of total borrowings at the end of 1981-82. By the end of 1990-91, the share of debentures had increased to 28.2%. In the 1980s the Convertible Debentures (CDs) dominated the debt market in India as the interest rates were fixed by the CCI[118] for debt instruments. Firms by issuing CDs managed to give their investors advantage over straight debt instruments. In many issues, the investor acquired the major proportion of his/her return on conversion. Partially convertible debentures were designed to minimise the transfer losses through capital gains. A debenture would be issued; part of that was to be compulsorily convertible into shares at a predetermined CCI price. The other part carried a coupon rate significantly below market rates. Investors commonly kept the portion convertible into equity and sold the non-convertible part to an investment institution at a discount in order to

[118] Controller of Capital Issues.

give the instrument a market rate of interest. By permitting firms to issue bonds at below market rates, firms could recoup part of the loss on selling shares at a discount (Barua et al, 1994).

The market for corporate debt remained underdeveloped because of the following reasons: (a) FIs met most of the long-term debt requirements of corporates by providing loans at low interest rates with long repayment periods of 5-7 years in addition to some other concessions;[119] (b) commercial banks also provided loans to companies at much lower interest rate than their short term working capital lending; (c) in addition these companies had to incur issuing and servicing costs for debentures while institutional debt saved them these costs; (d) tight government regulations meant that companies did not have the freedom to fix the prices of the issues and in the case of the convertible debentures, the mandatory conversion of the debentures into equity at a rate and time was determined by the CCI; (e) while interest rate incomes on bank deposits and public sector bonds and dividend income from shares were all exempted from tax, debenture interest was fully taxable; and (f) the institutional interest in fixed income corporate securities was crowded out by various government regulations, which required them to invest in government securities and SLR (Statutory Liquidity Ratio) and CRR (Cash Reserve Ratio) investments.

The development of fixed income instruments trading segment of the capital market has also been restricted due to government holding of a large share of banking liabilities at below market rates. Though equity markets in India have been operating for over a century (predating several markets in sophisticated developed markets) a genuine bond market in trading government and corporate issues similar to such markets in the developed world has remained underdeveloped. Other characteristics like controlled interest rates and the absence of credit risk differentiation have further contributed to its underdevelopment (Mistry, 1995). The recent

institutional development and other reforms leading to interest rate deregulation,[120] abolition of CCI, establishment of the Over the Counter Exchange of India (OTCEI)[121] and Stock Holding Corporation of India Ltd. (SHCIL)[122] will have major implications for the corporate debt securities market (Barua et al, 1994).

2. Bank Borrowings:

In terms of institutional structure and complexity, India has a total of 300 banks with over 60,000 branches accounting for about 70% of the entire financial system's assets (over Rs. 5 trillion in 1994). These comprise: 28 nationalised banks with over 40,000 branches, nearly 200 regional rural banks with about 15,000 branches; 55 private banks with 4,400 branches of which 24 are foreign and a small number of cooperative and non-scheduled banks which are of little significance (Mistry, 1995). Before the nationalisation of banks in 1969, bank borrowings formed a major source of corporate debt, as shown in Table 3.14.

Table 3.14: Bank borrowings as a source of finance during 1951-52 and 1973-74.
Annual average amounts (Rs. mn.)

Period	Bank Borrowings (1)	Total External (2)	Total Sources (3)	(1) as %age of (2)	(1) as a %age of (3)
I Plan	53	285	725	18.6	7.3
II Plan	362	1011	1836	35.8	19.7
III Plan	713	1899	3603	37.5	19.8
Annual Plan	1024	3095	5321	33.1	19.2
IV Plan	734	3861	8111	19.0	9.0

Source: Kishor, B. (1981) Corporate Capitalisation in India

After 1969, bank business was substituted by specialised financial institutions and banks were compelled to shift their main focus towards priority sectors i.e. agriculture and rural area

[119] Investments in backward area projects, export oriented projects etc.
[120] Company managements, based on the market's risk-return expectations can fix the interest on corporate debentures and are free to fix coupons to meet the market's yield requirements.
[121] This was started mainly for trading in shares of smaller companies, but from 1993 onwards trading in corporate debentures has also begun.
[122] It is promoted by some FIs, its functions include depository and custodial services i.e. share transfer and registration through book entries, safe custody of securities, collection of dividend and interest etc.

related investments, and as a result their importance to the corporate sector declined. Table 3.15 shows the changes in bank lending after nationalisation of banks.

Table 3.15: Structural changes in the pattern of lending between 1969 and 1996. (As % of gross bank credit)

Sector	1969	1976	1982	1988	1992	1996
Food procurement	6.5	18.8	7.3	3.1	4.3	4.2
Industry (Large)	78.2	43.4	38.3	36.3	38.4	40.1
Wholesale trade	-	7.0	7.6	4.9	4.9	5.1
Others	1	6.6	10.2	14.2	17.7	18.7
Priority Sectors	14	24.2	36.6	41.5	34.7	31.6
1. Agriculture	5.2	9.4	15.8	17.1	14	11.6
2. Small-Scale Industry	7.9	10.5	13.4	15.5	13.8	13.7
3. Others	0.9	4.3	7.4	8.9	6.9	6.2
Gross Bank Credit	100	100	100	100	100	100
Of which: Exports	7.2	8.4	6.2	5.4	8.5	12.8

Source: Kohli, R. (1997), Directed credit and financial reform, Economic and Political Weekly.

But banks still form a major source of finance for fulfilling the working capital needs of the corporate sector. As the Table - 3.16 points out, total bank credit as a share of GNP rose from 7.3% in 1979 to 10.5% in 1988, reaching 11.11% in 1992.

Table 3.16: Bank credit to small and large industry.

	1979	1982	1988	1992	1996
Percentage to Total Bank Credit					
Large Industry	43.4	38.3	36.3	38.4	40.1
Small Industry	10.5	13.4	15.5	13.8	13.7
Percentage to GNP					
Large Industry	5.7	7.0	7.4	8.2	NA
Small Industry	1.8	2.4	3.1	2.9	NA
Percentage to Sectoral (manufacturing) Value Added					
Large Industry	31.7	55.5	41.4	46.0	NA
Small Industry	8.6	16.2	17.7	16.6	NA

Source: Ibid.

The decline in the bank credit was compensated by the industrial credit extended by the specialised financial institutions. Bank credit is now restricted to working capital needs of the industry, but this segregation of functions between the financial institutions and the banks could well be removed, following recommendations of the Narasimham Committee Report (Bhole, 1992).

Bank credit was specifically obtained to finance inventory build up or for the operating cycle of which inventory accumulation is a very important factor. A high correlation exists between bank finance and inventory levels. But the coefficient of correlation is less than the one for the inventory-trade credit variables. So, the two components of short-term funds influence the level of inventory activity. The two sources were used simultaneously to sustain high levels of inventory needs (Kishor, 1981).

India's commercial banking system suffers from a large and inefficient institutional structure with too many public banks and rural branches, a large impaired portfolio in sick industrial units and rural loans, inadequate capital strength, extreme technological backwardness; poor management and inadequate internal controls, overmanning and work practices which result in excessively high administrative costs, political interference in the credit allocation and cost/risk decisions of public banks which have severely impaired their institutional ability to make independent credit judgements or to manage their portfolio risks (Mistry, 1995). But now the role of banks has increasingly come under scrutiny in view of their reportedly passive role in the corporate governance of companies (Sarkar et al, 1998).

3. Financial Institutions:

There are two types of financial institutions in the Indian capital market, namely, developmental institutions and investment institutions. In the former category, there are institutions of all-India stature, namely, IDBI (Industrial Development Bank of India), IFCI (Industrial Finance Corporation of India), ICICI (Industrial Credit and Investment Corporation of India) and IRBI (Industrial Reconstruction Bank of India) and also state level institutions like, State Finance and Development Corporations. In addition to these there are also a number of specialised long-term lenders, Small Industries Development Bank of India (SIDBI), Shipping

Credit and Investment Corporation of India (SCICI). In the latter category of investment institutions, there are Life Insurance Corporation of India (LIC), Unit Trust of India (UTI) and General Insurance Corporation of India (GIC) with its four subsidiaries, National, New India, Oriental and United India form the mutual funds industry. A number of quasi-banking and quasi-capital market functions are performed by a complex network of many specialised financial intermediaries owned by Reserve Bank of India (RBI), central and state governments and operating across key economic sectors, i.e.industry and commerce, agriculture and rural development and housing (Mistry, 1995).

The supply of debt capital in India is almost fully in the hands of the public sector, but private individuals supply equity capital. Financial institutions making long-term loans were all established by the State. The only major private sector financial institution is ICICI, but the government has a strong presence on its board. These institutions are the main players in the market, both in the primary market and in the secondary market. Besides providing loans and venture capital to the industry, they invest in their debentures and shares, underwrite subscriptions and actively trade in the shares in the secondary market. The professionalism and capabilities of the industrial SFCs are higher than most Indian banks, although their portfolios are characterised by the same non-performing asset problems suffered by other Indian banks (Mistry, 1995).

Given the lack of avenues of risk-bearing equity investment, high corporate taxes and relatively low cost long term finance, lack of flexibility available to financial institutions to negotiate interest rates consistent with risk perceptions and other such commercial criteria etc. debt was a preferred source of corporate finance. The role of the FIs became important given the

characteristics of a financial system in a developing economy. The following tables 3.17 and 3.18 show the importance of the institutional finance for the corporate sector.

Table 3.17: Cumulative equity and preference capital support by all FIs till 1989. (Rs. bn.)

Institutions	Sanctions (S)/Disbursements (D)	Total (1)	Equity & Preference Capital (2)	(2) as a %age of (1)
IDBI	S	245.924	8.756	3.56
	D	183.929	2.248	1.22
IFCI	S	65.697	3.840	5.85
	D	42.952	.976	2.27
ICICI	S	93.132	4.343	4.66
	D	64.450	1.477	2.29
LIC	S	30.677	2.496	8.14
	D	24.136	1.955	8.10
UTI	S	52.028	3.165	6.08
	D	35.346	2.173	6.15
GIC	S	10.976	7.040	64.16
	D	8.578	5.742	66.94

Source: Balasubramanian, N. (1993) Corporate Financial Policies and Shareholder Returns

Table 3.18: FIs as a source of finance (Rs. bn.)

Year	No. of Companies	Borrowings from FIs	As %age of total borrowings
1991-92	1802	146.79	28%
1992-93	1802	185.76	30
1993-94	1720	188.59	29
1994-95	1720	205.25	26
1995-96	1730	241.70	27
1996-97	1930	324.01	26
1997-98	1948	363.59	24

Source: RBI Finance and Currency Bulletin, Various Issues

FIs have been a significant influence on the extent and composition of the private corporate finance particularly from the mid-seventies through the eighties. By 1989, the FIs had disbursed assistance of Rs. 359.39 bn. since their respective inception. Of this aggregate disbursement, only Rs. 14.57 bn. (4.06%) was disbursed in the form of equity and preference capital. So, in the process they contributed to the growing debt base of the assisted firms. According to Kishor (1980), most of the new companies have a smaller reliance on institutional sources and a relatively higher dependence on equity sources. But existing companies still prefer to remain inclined to institutional sources of finance compared to new stock issues. That is because firms with little or no history of production and profits failed to get debt finance from

these institutions, due to adverse selection problems. As a result they relied upon stock markets and/or other traditional sources of finance. Venture capital institutions were non-existent in India till the beginning of the 1980s (Barua et al, 1994).

Inspite of the FIs' dominant position as providers of long-term capital, corporate sector had its apprehensions to deal with them because of two reasons:

- Firstly, the convertible debt gave the institutions an option to convert upto 20% of the loans into equity at a predetermined price, usually at par, after a period of time and generally coinciding with the commencement of commercial operations. Due to this, institutions not only received capital gains on conversion but also gained considerable amount of control in the company affairs.
- secondly, fear of the pressures that might be imposed on the companies and their managements, as a result of government control over and ownership of the financial institutions. This concern was related to the FIs acting under the government direction to the disadvantage of the existing managements, particularly during hostile takeover bids or family disputes. Financial institutions appoint a nominee director on the board of every company they deal with.

But the fears of the convertibility clause have largely remained misplaced. The case of IDBI points out that till 1987 it had requisitioned the option in 1064 instances with a loan/debenture assistance of Rs. 3.42 bn. and it acquired only Rs. 0.236 bn. as converted equity in about hundred cases. And from Aug. 1991, the convertibility option is not stipulated in respect of new and expansion projects (Balasubramanian, 1993).

Financial institutions managed to acquire a dominant position in terms of their resource base that they had all these years because of the following two reasons: (a) bonds of term lending

institutions qualified for SLR[123] investments of commercial banks, (b) the Reserve Bank of India (RBI) made its Long-Term Operations Fund available to these institutions at a concessional rate of 8%.

Many studies[124] point out that because of public ownership of these institutions in which a distinction between ownership rights and control rights is impossible to make, governance structures will not be effective enough to monitor activities of a firm. According to Majumdar and Chibber (1999) the entry of private foreign and domestic financial institutions in the Indian capital market (they initially entered as portfolio investors in equity and have only lately been allowed to become suppliers of debt), will pave the way for a disciplining impact[125] on Indian managers. FIs were both equity and debt holders in the companies, and their nominees are represented on corporate boards. Almost all FI debt contracts until recently carried a covenant that it will be represented on the board of the debtor company via a nominee director. Majumdar and Chibber (1999) find that it is the highly leveraged firms, which are unsatisfactory performers. But high leverage in a firm does not always result in higher monitoring of that firm, rather it depends on the relative position[126] of the individual firm in the overall portfolio of the financial institution. Almost all of these studies suggest privatisation of these institutions as the solution for their inherent problems. On the basis of recommendations of the Basudeb Sen

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[123] Statutory Liquidity Ratio, an obligatory investment requirement in government bonds, which usually fetched yields below market rates.

[124] Patel (1997), Mistry (1995) etc

[125] "These foreign FIs are well capitalised and can draw on the deep pockets of their parent companies for resources. As foreign FIs exercise their financial muscle in forcing firms in India, which use the capital market as a source of funds to meet the standard norms of behaviour that are commonly accepted in the West, then firms' performance is also likely to improve. The entry of foreign institutional investors (FIIs) into the Indian capital market has considerable implications, and overtime it is expected that these institutions will develop into major suppliers of capital" (Majumdar and Chibber, 1999).

[126] See Chapter – 4 for a detailed theoretical analysis.

Committee (1997), FIs have decided to put nominee directors[127] only on boards of companies where their stakes are higher. This suggests that FIs want to monitor only those companies whose relative position in terms of equity is higher in their overall portfolio.

FIs in India have been perceived to be very passive[128] in corporate governance. But this FI passivity with respect to corporate governance is based on anecdotal evidence (Sarkar et al, 1999). There has been a major transformation in the position of FIs after the initiation of financial reforms beginning 1991-92. In 1991, when interest rates were partially freed, FIs were forced to borrow at higher rates of interest in the market and hence are forced to pay the price of their own borrowings and investment choices.[129] As a result, FIs are undergoing a restructuring phase by redefining[130] their portfolios. In many of the takeover contests and M&A activity in the Indian economy, financial institutions have become deciding factors, suggesting redefinition of their portfolio. Thus when creditors were made to bear the risk of their investment, they began to monitor corporate performance more effectively (Business India, 1998). Signs are emerging in recent times of a more proactive[131] role in corporate governance by FIs. So the importance of FIs

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[127] FIs have implemented new norms for appointment of nominee directors, which have drastically cut down the total number of such directors on company boards. According to the new criteria for nomination, FIs are required to place their nominees only in companies where their combined exposure is above Rs. 50 cr. or their shareholding is above 26% or in the event of the company showing signs of problems such as defaults on loans (Sarkar et al., 1999).

[128] The nature of ineffective monitoring was evident in the project appraisal and evaluation, supervision of projects and mechanisms to anticipate problems and take a proactive role in tackling them through managerial, technical and/or financial assistance in time, to projects/enterprises which did not perform as well as anticipated at the time of project appraisal. The primary reason for the lack of adequate monitoring of enterprises has been the failure of the lead development bank to evolve mechanisms of co-ordination with commercial banks, which provided working capital finance (Cherian, 1996).

[129] The government also reduced the SLR levels steadily in line with the Narasimham Committee report and by 1992 it withdrew the income tax benefits given to IDBI capital bonds. As a result borrowings from institutions like LIC, GIC and UTI declined, partly because these investment institutions began demanding rates of return around 18%.

[130] In order to weed out loss making companies from their portfolio, FIs are being forced to commit a person on the board of the companies who can effectively monitor activities of the company, following the Basudeb Sen Committee (1997) report on the nomination of directors on company boards. Under new directives to the nominee directors, FIs are considering to make it mandatory for FI nominee directors to attend specific board meetings, especially those related to finalisation of accounts (Sarkar et al., 1999).

[131] FIs have been asked by the Finance Ministry to take full responsibility for corporate governance in companies where they have substantial stake. The objective is to improve investor confidence in the capital markets. The government has directed the FIs to insist the companies to make adequate disclosures, move towards internationally

in the economy has not decreased as a result of the financial liberalisation, they have been forced to determine their operations in order to maximise their shareholders' returns.

During the regulated regime, the ultimate risk bearer when a firm became sick was the federal government, actually a SFC[132] as the direct creditor would be the immediate risk bearer, which passed on its burden to the IDBI, which in turn could shift to the federal government. The system where the burden of risk could be shifted weakened the creditor's incentive to monitor or control corporate activities. Presence of many debtholders and their lack of co-ordination led to presence of the classic free rider problem with regard to monitoring of borrower activities (Cherian, 1996).[133]

Until recently, financial institutions rarely suffered from making bad loan-decisions by their own principals, because the government, in theory, has deep pockets. The encouragement of industrial development in economic environments where capital markets are thin is often one of the goals of the government when setting up financial enterprises (Jalan, 1991). So the basic issue is in determining how effectively creditors can be made to bear the risk of their investment before they begin to monitor corporate performance.

Because these financial enterprises were not subject to any discipline by their owner-principal, firms that took loans from these financial institutions did not feel the need to change their own incentive structures by the bonding behaviour. From the debtor firm's point of view, the perception that debt holders' presence is irrelevant or inconsequential can then encourage

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accepted accounting standards, maintain distance between the CEO and Chairman where applicable and hold regular board meetings with proper dissemination of proceedings. FIs have been active in pushing for change in management of under performing and defaulting companies, in protecting the interests of minority shareholders. FIs are setting up audit subcommittees comprising of non-executive independent directors of the company board to strengthen internal control structures. Mutual funds are asking leading companies to make presentations outlining their plans and expected performance after the declaration of half-yearly results (Sarkar et al., 1999).

[132] State Financial Corporation.

[133] In contrast, IDBI has devised an informal institution called Inter-institutional meeting to co-ordinate the functions of all the Indian development banks.

managers towards undertaking discretionary behaviour, with negative performance consequences.

3. 2. B. EQUITY:

Equity as a governance structure has the following properties, i.e.

"it bears a residual-claimant status to the firm in both earnings and asset-liquidation respects, it contracts for the duration of the life of the firm and a board of directors is created and awarded equity, which is elected by the pro-rata votes of those who hold tradable shares, has the power to replace the management, decides on the management remuneration, can authorise audits in depth for special follow-up purposes, is consulted of all important investment and operational proposals before implementation, has access to internal performance measures on a timely basis, in other respects has a decision-review and monitoring rights of the firm's management." (Williamson, 1993).

1. Shares:

The equity raised in India through the primary market grew ten fold between 1981-1991; the amount raised increased from Rs. 5.6 bn. in 1981 to Rs. 57 bn. in 1991. These large amounts, however, have been raised by a diminishing number of established companies, following a series of failures of newly floated companies in the early 1980s. An increasing number of these issues are rights issues limited for purchase by existing shareholders. Prospectus issues, available to any investor, have been limited because of former State control over their timing and pricing enforced by CCI. These controls resulted in considerable underpricing (and over subscription), thus compromising the interests of existing shareholders in favour of new buyers.

Equity markets were assigned a marginal role in intermediation until the early 1980s. Equity markets were characterised by distortions with a few large public institutional investors

dominating market activity. The equity market was driven by Bombay-based brokers who operated in relatively unfettered fashion, often more in their own interests than in those of issuers, intermediaries or investors (CR 1992, Gupta, 1990). The early 1980s saw an increase in stock market activity in response to the reforms initiated (as shown in Table 3.19) and also due to the following factors, which contributed, to the growth of stock market activity.

- Following the enactment of the Foreign Exchange Regulation Act (FERA), in 1973 and the government's move towards the process of foreign equity dilution, a large number of FERA companies entered the new issues market to sell part of their foreign principals' holdings and to issue further equity without proportionate foreign subscription, so as to reduce the percentage foreign holding in their companies down to prescribed levels. The reputation of good management and high profitability usually associated with foreign held or controlled companies were the attraction for the investing public. An estimated 115 companies offered about Rs. 125 cr. in the later half of the 1970s, increasing the population of the shareholders in the country to 2 million (Balasubramanian, 1993).
- A series of fiscal policy measures encouraged investments in equity securities and units, and led to an improved perception of corporate equities as desirable investments. A government requirement also required that allotment of shares be widespread in the case of oversubscribed issues helped in increasing the shareholder populations enormously.

So, in India, like in many other developing economies, the State has been active in promoting the growth of stock markets (Singh, 1993).

Table 3.19: New security issues during the period 1952-1999. (Rs. bn.)
Annual average amounts

Year	No. of capital Issues	Amount of issues	As % of Net Domestic Savings
I Plan period	NA	.845	-
II Plan period	315	1.711	-
III Plan period	676	3.65	-
3 Annual Plan period (avg.)	333	2.686	-
IV Plan period	647	3.088	-
V Plan Period	594	4.084	-
1980	115	.912	-
1988-89	253	54.64	11.4
1989-90	379	122.87	18.6
1990-91	335	96.83	13.2
1991-92	572	134.50	15.6
1992-93	1038	281.95	18.9
1993-94	1165	309.33	20.3
1996-97	715	59.502	-
1997-98	52	10.475	-
1998-99	18	4.042	-

Source: Gangadhar V. et al (1996), Impact of Capital Market Reforms on Capital Issues and Panda et al (1985) Corporate Sector and Institutional Finance in India and SEBI Annual Report, 1999.

In 1993-94, 1165 companies raised Rs. 309.33 bn. forming 20.3% of net domestic savings in India. This trend was in response to economic reforms coupled with setting up of a large number of companies as joint ventures with multi-national companies (MNCs). A very significant increase in number as well as amount of capital issues was evident in the aftermath of economic reforms in 1991-92 as shown in Table 3.19.

The following two tables 3.20 and 3.21 show how capital was raised i.e. through what market instruments.

Table 3.20: Security-wise classification of new issues during plan periods. (Rs. mn.)

Plan period	Equity Shares	Preference Shares	Debentures	
First Plan	511	890	245	
Second Plan	1228	291	192	
Third Plan	2620	300	730	
Three Annual Plans	1340	349	997	
Fourth Plan	2156	410	522	
Fifth Plan	3699	210	1702	
1980	553	184	3409	
			CD	NCD
1981	2018	300	1319	769
1982	2297	750	2639	1365
1983	2400	210	773	5138
1984	3522	30	1877	7638
1985	6425	90	273	1,2184

Source: Ibid. and Center for Monitoring Indian Economy, Bombay.

In the mid 1980s the Indian capital market saw an expansionary phase in the number of capital issues, especially that of NCDs (non-Convertible Debentures) due to the incentives offered to the investors introduced by the financial institutions in 1982-83 (Barua et al, 1994).

Table 3.21: Components of Capital Issues

Year	Equity & Preference Shares	Non-Convertible Debentures	Convertible Debentures
1988-89	1060	2649	1756
1989-90	1808	5216	5263
1990-91	1522	5714	2446
1991-92	2396	7396	3659
1992-93	16561	3618	8016
1993-94	19678	3560	7686

Source: Ibid.

But by 1993-94, equity and preference shares formed 63.6%, convertible debentures 24.8% and non-convertible debentures 11.6% of total capital issues in India. During the pre-reforms period non-convertible and convertible debentures formed 80.6% as against only 19.4% of equity issues.

Table 3.22: Mode of capital issues.

Year	Public Issues through Prospectus	Rights Issues	Private Placement
1988-89	2513	1362	5590
1989-90	4430	3397	4460
1990-91	2544	2666	4473
1991-92	3250	3917	6283
1992-93	14205	12464	1526
1993-94	18510	NA	12423
1994-95	1692		
1995-96	1725		
1996-97	882		
1997-98	62	49	-
1998-99	32	26	-

Note: For years 1994 till 1997, the figures show total number of issues without any segregation between different types of issues.
Source: Ibid. and SEBI Annual Report, 1999.

In 1993-94, issues through prospectus formed 60% of total capital issues, while private placements accounted for 40%. By contrast, in 1988-89 equity issues formed 46%, private placements 29.1% and rights issues 24.9% of total issues as shown in Table 3.22.

Table 3.23: Pattern of Capital Issues with reference to the Issuing Bodies.

Year	Private Sector companies	Mutual Funds and Financial Institutions	Public Sector Companies
1988-89	2977	430	2058
1989-90	6771	1072	4444
1990-91	4432	791	4460
1991-92	4466	1263	5721
1992-93	20083	6833	1279
1993-94	22736	5444	2753

Source: Ibid.

Capital issues from public sector companies have declined steeply from 4-8% in the post-reforms period as against 36-46% in the pre-reforms era, whereas the private sector has increased its capital issues from 54.8% in 1988-89 to 73.5% in 1993-94 as shown in the above Table - 3.23.

Issues in primary markets are plagued with three problems:

"first, the preference given to very small lots has resulted in unduly expensive administrative burdens for issuers, second, the size of minimum lots permitted, and because multiple applications from one source are not an offence, the market is characterised by multiple

small lot applications in different locations which manual processing systems are incapable of shifting out, and third, money for unsuccessful applications is not returned for long periods of time, despite the introduction of a stockinvest scheme which places the applicant money in an interest bearing account in favour of the applicant. Issuing companies can no longer use these funds as free float". (Mistry, 1995)

As a result of many small lot applications, the governance structure of a company would typically include many diffused shareholders, which leads to free rider problem. Diffuse stockholders face more serious collective action problems and cannot be provided with confidential information, included on boards or given any other active role in firm governance. At the same time a single external shareholder generally has an incentive to overmonitor. Minority shareholders can verify the actions of controlling shareholder in a public company, only when companies are subject to stricter disclosure requirements and transparent accounting standards. But as Bhide (1993) argues that US stock market regulators have created market liquidity at the expense of the efficient governance of firms. The liquidity promoted by US policies has obvious benefits; investors can encash their assets quickly and diversify cheaply. The same policies, however, impair governance by encouraging diffuse stockholding and discouraging active monitoring.

The secondary market is also riddled with problems of fraudulent practices of the brokers i.e. they arbitrarily change margin call requirements, short selling rules and occasionally market closes itself down when brokers wish to protect themselves on large, long or short positions. Although the number of retail shareowners in India increased from about 10 million in 1990 to 20 million in 1997-98, an estimated 30-40% of the companies in which they invested cannot even be traced (Gupta, 1994). In an all India survey of nearly 3,000 middle and upper-middle

class households, carried out by Society of Capital Market Research and Development (SCMRD), 79% of the respondents had either no or low confidence in company management 64% thought similarly about statutory auditors. The Shankar Acharya Committee (1998) on the primary market also confirms that most companies enjoy little credibility with investors, which is one of the reasons for poor demand. So, the practices of both company managements and stockbrokers have led to lack of confidence of retail investors in the stock markets. The Indian Stock market has been described as:

"a snake-pit, lacking in fairness and integrity, prone to speculative excess and showing scant regard for the interests of small investors."(Joshi and Little, 1994).

For the small sized firms listed on the BSE, there appears to be lack of effective monitoring by both external blockholders of debt and external shareholders. Malpractices of the companies and the brokers have led to low confidence in stock markets resulting in low capitalisation of small firms. But due to the many changes brought about by the capital market reforms, governance by large and small shareholders has improved compared to past standards (Sarkar et al., 1998).

3. 3 DETERMINANTS OF DEBT-EQUITY RATIO:

The following Table - 3.24 shows the proportion of external and internal sources of finance for the corporate sector from 1951-52 onwards till the late 1980s.

Table 3.24: Corporate financing trends from 1951-52 to 1988-89. (Rs. mn.)

Year	No. of Companies	Total Sources	Internal	External			As % of total resources		
				Equity	Borrowings	Other	Internal	External	Borrowings
1951-2	750	1160	590	70	360	140	50.86	49014	31.03
1952-3	750	290	270	30	-100	90	93.10	6.90	34.48
1953-4	750	470	390	60	10	10	82.98	17.02	2.13
1954-5	750	1010	510	40	310	150	50.50	49.50	30.69
1955-6	750	1270	680	110	320	160	53.54	46.46	25.20
1956-7	1001	2680	980	240	990	470	36.57	63.43	36.94
1957-8	1001	2450	690	290	1040	430	28.16	71.84	42.45
1958-9	1001	1690	820	210	440	220	48.52	51.48	26.03
1959-60	1001	1570	990	270	50	260	63.06	36.94	3.18
1960-1	1001	2780	1570	200	680	330	56.47	43.53	24.46
1961-2	1333	3280	1810	380	680	410	55.18	44.82	20.73
1962-3	1333	3450	1710	290	910	540	49.57	50.43	26.38
1963-4	1333	3740	1920	290	1010	520	51.34	48.66	27.00
1964-5	1333	4150	1930	240	1260	720	46.51	53.49	30.36
1965-6	1333	4300	1920	230	1530	620	44.65	55.35	35.58
1966-7	1501	6300	2620	270	2310	1100	41.59	58.41	36.66
1967-8	1501	5430	2240	290	2080	820	41.25	58.75	38.30
1968-9	1501	5030	2530	400	1230	870	50.30	49.70	24.45
1969-70	1501	6050	3270	380	1120	1280	54.05	45.95	18.51
1970-1	1501	7020	4030	180	1390	1420	57.41	42.59	19.80
1971-2	1650	8090	4940	250	1290	1610	61.06	38.94	15.95
1972-3	1650	7190	5350	180	80	1580	74.41	25.59	1.11
1973-4	1650	12550	6540	180	2100	3730	52.11	47.89	16.73
1974-5	1650	19400	8920	290	4470	5720	45.98	54.02	23.04
1975-6	1650	12960	5520	320	4310	2810	42.59	57.41	33.26
1976-7	1720	11180	5080	290	2910	2800	45.44	54.56	26.03
1977-8	1720	13620	5710	290	3450	4170	41.92	58.08	25.33
1978-9	1720	17790	7640	460	4530	5160	42.95	57.05	25.46
1979-80	1720	25360	10910	470	6910	7070	43.02	56.98	27.25
1980-1	1720	31810	12200	290	9250	10070	38.35	61.65	29.08
1981-2	1651	44830	12980	920	16530	14400	28.95	71.05	36.87
1982-3	1651	46400	14140	750	18840	12670	30.47	62.53	40.45
1983-4	1838	41980	15730	1850	16980	7420	37.47	62.53	40.45
1984-5	1838	51840	20360	1800	17000	12680	39.27	60.73	32.79
1985-6	1942	75310	26020	1960	27690	19640	34.55	65.45	36.77
1986-7	1953	74390	22020	2540	29830	20000	29.60	70.40	40.10
1987-8	1953	69640	24670	11590	24130	9250	35.43	64.57	34.65
1988-9	1885	87020	34780	7810	44430	3020	28.97	71.03	37.01

Source: Balasubramanian, N. (1993), Corporate Financial Policies and Shareholder Returns.

Over the last four decades, two clear trends in corporate financing are discernible; first, a marked movement away from internal financing (primarily comprising of retained earnings and accumulated depreciation) particularly in the later part of the time period, and second within external funding, a growing reliance on borrowings in preference to risk bearing equity. After the initiation of financial reforms of 1991-92 and the deregulation of stock markets, equity financing has now become very dominant.

As most managers agreed (during the survey) that equity issues were unavoidable if a company wanted to take advantage of growth opportunities, which were unleashed by the economic reforms. As a result many small companies, given the liberal financial rules, listed their companies on the stock exchange hoping to reap the benefits of the economic reforms. Table - 3.25 also shows that till 1973-74 internal sources have constituted an important source of financing the asset needs of non-financial non-government companies.

Table 3.25: Relative roles of different sources, Percentage annual average.

Individual Sources of Finance	1 plan	2 plan	3 plan	Annual plan	4 plan
1. Total Internal	60.6	44.9	47.3	41.8	52.5
a. Retentions	24.2	16	14	9.9	18.2
b. Tax Provision	3.4	2.3	1.2	-0.9	1.2
c. Depreciation	33	26.6	32.1	32.8	33.1
2. Total External	39.3	55.1	52.7	58.2	47.5
a. Total Long term	9.8	13.9	12.7	17.5	7.8
i. New Stock Issues	8.8	13.4	6.7	5.5	2.3
ii. Debentures	1	-0.2	1.7	6.1	5.6
iii. Borrowings from Institutions	-	0.7	1.1	5.1	-0.3
iv. Other Mortgages			3.2	0.8	0.2
b. Total Short-term	29.4	41.2	40	40.6	39.8
i. Bank Borrowings	7.3	19.7	19.8	19.2	9
ii. Trade Credit	22.1	21.5	20.2	21.4	30.8

Source: Kishor, B. (1980).

Although the broad macroeconomic factors have an impact on the way firms finance their investments, there are obviously firm and industry specific characteristics, which have a bearing on the capital structure of the firms. The following two tables 3.26 and 3.27 indicate the paid up capital of come public limited companies.

Table 3.26: Paid up capital of some private sector companies (Rs. bn.) between 1950-80.

Period	Public Limited Companies		Private Limited Companies	
	Number	PUC	Number	PUC
1950-51	12568	5.665	15964	2.089
1955-56	9575	6.904	20299	3.338
1960-61	6702	9.482	19344	3.563
1965-66	6450	13.531	20137	3.997
1968-69	6535	18.339	21152	4.587
1969-70	7071	23.233	29964	6.626
1978-79	7893	26.880	42376	8.749
1979-80	8225	27.515	46730	9.068

Source: Balasubramanian, N. (1993), Corporate Financial Policies and Shareholder Returns.

Table 3.27: Paid up capital (Rs. bn.) of public limited companies between 1987-98.

Year	No. of companies	Paid up capital	As %age of total capital
1987-88	1908	556.14	12.9
1988-89	1908	609.42	12.1
1989-90	1908	670.34	11.1
1990-91	2131	820.47	11.2
1991-92	1802	86.78	10
1992-93	1802	105.11	9.7
1993-94	1720	145.22	9.6
1994-95	1720	145.22	9.2
1995-96	1730	170.83	9.1
1996-97	1930	211.43	8.4
1997-98	1948	235.89	4.3

Source: RBI Currency and Finance Bulletin, Various Issues.

Different authors have attempted to analyse empirically firm specific determinants of the D-E ratio of the Indian companies. Sinha (1994) in his study of differences in the D-E ratio of Foreign Controlled Companies (FCCs) suggests that FCCs in India have a lower D-E ratio than their Indian counterparts. According to the RBI Bulletin (1992), among Public limited companies, the average D/E ratio has been about 48% for FCCs as against 105% for ICCs (Indian Controlled Companies). Sinha (1994) points out reasons for the difference in the financial structure as; differences in the financial performance of FCCs relative to ICCs in terms

of profitability and growth,[134] FCCs may be concentrated in industries characterised by low D/E ratios, Government regulations and policies may force FCCs to adopt financial structures with low D/E ratio and the low D/E ratio may be the result of financial policies of multinationals with respect to their foreign affiliates. Almost all the factors accounting for this difference is outside the confines of "optimal capital structure" theories.

Bhat (1980) in his study of 63 firms from the engineering industry found that the firm's financial leverage is not related to its size, the negative relationship between financial leverage and coefficient of variation shows risky firms are more likely to employ low percentage of debt in their financial structure, firm's growth rate is negatively correlated to its leverage. There is a negative relationship between the dividend payout and the leverage ratio, though the cause and effect relationship between them is not clear. The earnings rate is also linked to firm's leverage, the degree of operating leverage does not influence the use of debt and financial leverage and interest to Earnings before Interest and Taxes (EBIT) ratio are negatively related.

In a study of 743 companies from 18 industrial groups, Pandey (1985) finds that all companies in the sample have about 70-80% of their assets being financed by outside debt, including current liabilities. Companies equally employed trade credit as much as bank borrowings. Although the level of loans and advances including bank borrowings has declined but it has been substituted by other sources. It can be implied that Indian companies with access to institutional finance generally borrow upto the maximum permitted level and sometimes beyond their capacities. Interest tax shields and a relatively high rate of inflation give Indian companies a tendency to make unrestricted use of debt. Higher rates of inflation should actually discourage the firms from using excessive leverage. His study also indicates that leverage and

[134] A number of empirical studies suggest that firms with high profitability and low growth tend to have low D/E ratios.

the type of industry are not related and that size cannot be considered conclusively as having an impact on the degree of leverage since his analysis also reveals that a large number of small firms employ high levels of debt.

According to RBI survey of finances of public and private limited companies the average debt-equity ratio over the period 1986-87 to 1988-89 was 87.8% for public limited companies and 76.6% for private limited companies. Among public limited companies the average debt-equity ratio is as low as 30.37% for the tea industry and as high as 159.23% for the cement industry. In the case of private limited companies the variations are even larger with the debt-equity ratio ranging from only 4% for land and estate to 330% for grains and pulses. In Sinha (1993) study on the differences between the D-E ratios of the public limited and private limited companies; debt ratio is regressed to asset type,[135] profitability,[136] risk,[137] growth[138]and size.[139] He concludes that the difference in capital structure patterns of private and public limited companies may not be due to differences in ownership patterns but because of differences in size. For public limited companies his results conclude that the debt ratio has a positive correlation coefficient of 0.67 with asset type and size has a negative coefficient.

If a larger proportion of gross fixed assets to total gross assets leads to a higher debt-equity ratio, given that the collateral value of assets is likely to be higher for these firms resulting in lower costs of financial distress, then the correlation between the D-E ratio and size (definition of it based on the gross assets) should also be positive, contrary to the results obtained by the author. His final conclusions indicate that whereas in the case of public limited companies the

[135] It is measured by the proportion of gross fixed assets to total gross assets.
[136] It is measured by the ratio of operating income defined as gross profits plus depreciation, to total gross assets and by the ratio of operating income to sales.
[137] This is measured by the standard deviation of the growth rate in gross profits.
[138] It is measured by the growth rate in gross assets.
[139] The average size of firms in the industry is measured by dividing the gross assets by the number of units included in the industry sample.

debt-equity ratio is influenced by the return on assets in the case of private limited companies it is influenced by the margin on sales.

Venkatesan (1983) studies determinants of the financial leverage and analyses the relationship of such variables like industry categorisation, size, operating leverage, debt coverage ratio etc with the financial structure. Only debt-coverage ratio among all the independent variables was found to be the important variable significantly affecting the financial structure of firms. In a study of the capital structure of the chemical industry Rao (1989) observed significant negative correlation between age and D-E ratio, retained earnings and D-E ratio, profitability and D-E ratio, but a positive correlation between size and D-E ratio.

Mathew (1991) analysed the relationship between ownership structure and financial structure and concludes that where the management stake is high, the leverage will be low and vice-versa. The analysis was based on the hypothetical relationship between ownership structure and unsystematic risk, non-manufacturing expenses, and profit appropriation policies. Majumdar and Chibber (1999) study establishes that D-E ratio and profitability are negatively related. Profitability[140] was explained by firm related, industry-related or aspects related to institutional environment.

None of these studies on the determinants of the D-E ratio of the firms show unanimity. It is difficult to arrive at a definite conclusion on these studies because they deal with a wide cross section of companies and have analysed different time periods. But there is an agreement on certain variables and their effects on the D-E ratio i.e. risk, profitability, management stake, age and growth are all negatively related to the D-E ratio. For a particular industry as a whole, D-E ratios have a different relationship with the above-mentioned variables. My survey results of LCCs show a very different scenario in that debt-equity policy is more determined by the owner-

managers on the basis of issues like, outside equity not entailing any commitments on the part of the firm, lack of close screening of a company before outside investors choose to invest in a particular firm. Thus, it can be implied that several of these factors may determine the debt-equity ratio, but the debt decision is determined non-systematically by managers across firms (Kim and Sorensen, 1986), according to the requirement of the firm and its external environment.

[140] Size, Diversity, Group, Advertising Liquidity, Excise, Time etc.

3. 4 FINANCIAL REFORMS AND THE CHANGING CAPITAL STRUCTURE OF COMPANIES

The financial reform agenda of the Indian Government in 1991-92 was rightly preoccupied with the banking sector and capital markets. Despite many shortcomings, the policy parameters defining the financial system's operating limits have generally been better managed in India's mixed economy than in much of the developing world for most of its post-independence history. Consequently, India has not suffered many of the effects generally associated with financially repressed regimes (Mckinnon, 1973, World Bank, 1990). Monetary policy has been cautiously managed with swift intervention to avert inflationary trends from getting out of control (Joshi and Little, 1994). Fiscal policy until the second half of the 1980s was managed acceptably with occasional excess spending being corrected (Acharya, 1988). But fiscal discipline vanished between 1986-91 (Jalan, 1991, Mundle and Rao, 1992). Given these macroeconomic conditions prevailing in the country, the State embarked upon the structural adjustment programme, which included financial reforms amongst other economic reforms.

By 1991 the environment in which banks operated characterised by the following:

1. Insufficient attention to prudential accounting norms and capital adequacy
2. Extraordinarily high level of bank resources were reserved through the SLR and CRR
3. Excessive recourse to subsidised credit channeled through a complex system of administered interest rates
4. Inadequate internal control and rigidities in personnel policies and management structure (Patel, 1997).

The following table 3.28 shows a comparison between the proportion of non-performing loans and the losses made by banks in different countries.

Table 3.28: Banking performance in different countries.

	Share of state-owned banks (1994)	Average rate of return on Assets (avg. 1990-94)	Non-interest Operating costs (% of total assets) avg. 90-94	Net interest margins (% of total assets) avg. 1990-94	Loan-Loss Reserves (avg. 1990-94)	Non-performing Loans (Avg. 1995-95) %age of total loans
Korea	13	0.6	1.7	2.1	1.5	1
Singapore	0	1.1	1.4	1.6	NA	NA
Indonesia	48	0.7	2.4	3.3	2.6	11.2
Malaysia	8	1.3	1.6	3.0	9.6	8.2
Argentina	36	1.4	8.5	9.2	10.2	10.5
Chile	14	1.1	3.0	6.1	3.5	1.0
India	85	-0.07	5.2	3.1	1.6(1995-96)	17.3
US	0	0.8	3.7	13.7	2.7	1.6
Japan	0	0.1	0.8	1.1	1.0	3.3

Source: Patel (1997), Emerging reforms in Indian Banking International perspectives, Economic Political Weekly.

In addition to the stipulations (Appendix- 3.1) regarding the debt-equity mix, there were some institutional and structural reforms in the financial sector, which the Narasimham Committee Report (1991) recommended. Here, only those recommendations, which are important from the point of view of the capital structure of the corporate sector, are stated below.

Lending practices of banks and financial institutions:

- the system of consortium lending was abolished and was replaced by the system of loan syndication and participation
- the practice of a sharp dichotomy between working capital finance and term loans was re-examined and the artificial segregation of business between banks and financial institutions was removed
- A Greater measure of competition between banks and financial institutions was to be promoted.

Structure of commercial banks and financial institutions:

- the banking structure should consist of,

(a) 3 or 4 large banks, including the State Bank of India (SBI), which can internationalise its operations

(b) 8 to 10 national banks with a network of branches throughout the country

(c) Establishment of several new local and region specific banks

- there should be free entry into the financial sector and the establishment of new banks in the private sector should be allowed.
- the policy with regard to allowing foreign banks to open offices in India either as branches or as subsidiaries should be liberalised. Joint ventures between foreign banks and Indian banks should be actively encouraged.
- Introduction of new accounting and prudential norms related to income recognition provisioning and capital adequacy.
- Reduction in SLR

In addition, banks were directed to maintain an 8% Capital to Risk weighted Assets Ratio (CRAR), and also to make provisions to the extent of 15% of the advances in the category of non-performing assets. Banks were permitted to approach the capital market to mobilise funds. Nevertheless many steps remain to be taken in reduce the proportion of bank's and FI's non-performing assets, which have been difficult to administer or monitor. Despite the decrease in the SLR, lending to productive sectors did not increase significantly, the increase in the availability of loanable funds being directed mainly to buy government securities.

Interest rate Policy:

- the bank rate should become a pivot for all interest rates in the financial system
- the concessional rates on the priority sector loans should be phased out

- all discriminatory and ad hoc fiscal concessions in respect of different saving instruments should be eliminated over a period of time
- the ceiling on the bank deposit rates should be raised over a period of time
- the current lending rates of the FIs and banks should not be increased further.

Most of the proposals will undercut the resource base of the developmental FIs and priority sectors could face the adverse consequences of it. But for the corporate sector, the deregulation of interest rates on long term corporate securities abolishes the interest rate ceiling on debt instruments. The lending rates of financial institutions and banks are also to be determined by market forces. So, all the corporate sector interest rates are left to the market forces. The rise in interest rates has reflected itself in the equity markets as well, equity prices has been facing a downward swing. It may be aggravated by the reduction in corporate earnings due to the expected increase in interest rates, hike in corporate taxes and reduction in depreciation. But these adverse factors can be counterbalanced by the new industrial policy, price and distribution decontrols etc.

3.5 MARKET FOR TAKEOVERS IN INDIA:

The market for takeover provides efficient firms to govern the inefficient ones. But this mode of governance has served a very limited function for the Indian corporate sector. Chandrasekhar (1994) identifies three phases of oligopolistic rivalry in the post-independence India. Till the early 1980s Indian business houses sought to preempt entry by monopolising industrial licenses. These licenses provided them with monopoly power, as subsequent entry barriers were high (due to non-availability of capital). Development of capital markets, accumulation of capital by other than traditional business houses; reduced entry barriers led to emergence of new business houses. This led to attempts of restructuring by traditional business houses to face new competition. The reforms of 1990-91 enhanced external competitive pressures as well, the Indian corporate sector now faces both internal and external competition simultaneously.

In general, a very active market for corporate control was absent in India because of the existence of tight rules and regulations[141] prior to the financial reforms of 1991-92. It was virtually impossible to replace inefficient managements. In certain cases, amalgamations were resorted to, in order to salvage operations of group companies or to arrest their tax losses (Venkiteswaran, 1993).[142] In a study of mergers in India, Kaveri (1986) found that 7 out of 9 mergers were between companies belonging to the same business group. But the introduction of the Sick Industrial Companies (Special Provisions) Act in 1985 saw corporate restructuring through mergers and acquisitions. As a result, in the late 1980s Indian economy witnessed a phase of rapid growth for some firms through takeovers and acquisitions of firms. These

[141] The provisions of the Monopolies and Restrictive Trade Practices Act, 1969 (MRTPA - all mergers and acquisitions) and Foreign Exchange Regulation Act, 1973 (FERA) controlled the activities of both Indian companies and Multinationals.

takeovers can again be categorised into three groups, entry and gradual consolidation of a few non-resident Indian groups by purchasing the foreign equity holding of mainly British controlled firms, oligopolistic strategic mergers (to increase market shares, strategies of parent MNCs often have an impact on the domestic market), growth strategy (conglomeration).

The early 1990s witnessed another wave of takeovers, which was a result of the financial liberalisation, whereby existing firms either wanted to diversify into different lines of business or to increase their market share or consolidate group companies (in order to enhance promoter holdings in the post merger company), MNCs used the acquisition route[143] to enter or strengthen their presence in Indian markets. Not all acquired firms belonged to their respective core business area. Since 1996-97 the Indian corporate sector has witnessed yet another spate of mergers and acquisitions. Given the recessionary conditions, financial restructuring,[144] ownership restructuring,[145] divestitures, joint ventures, strategic alliances and also demergers[146] have led to an increase in the M&A activity as companies tried to get rid of their non-core businesses. The following two tables 3.29 and 3.30 show the number of mergers and acquisitions that have taken place between 1991-97 after the initiation of financial reforms.

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[142] Each company is a separate tax entity and wholly owned subsidiaries are not considered as one entity with their parent companies for tax purposes.

[143] In order to cut down bureaucratic delays and the long gestation period involved in setting up manufacturing and distribution units (Venkiteswaran, 1997).

[144] Financial restructuring has been implemented through merger with a healthy unit with or without the intervention of the Board of Industrial and Financial Restructuring (BIFR) or through debt renegotiations.

[145] Changes in the shareholding structure without a change in the management, companies have issued shares to the management or the promoter s to increase their stake. The Indian affiliates of the MNCs have issued targeted shares when the ceiling on stake holding was increased to 51% from 40% (Venkiteswaran, 1997).

[146] Demerger involves spinning off of an unrelated business/division in a diversified company into a standalone new company along with a free distribution of its shares to the existing shareholders of the original company (Venkiteswaran, 1997).

Table 3.29: Distribution of Mergers and Acquisitions in India by various categories, 1991-97.

Type	Mergers	Acquisition
Horizontal	134 (53.2)	107 (73.8)
Vertical Backward	31 (12.3)	3 (2.1)
Vertical Forward	8 (3.2)	2 (1.4)
Conglomerate Related	26 (10.3)	11 (7.6)
Conglomerate Unrelated	53 (21.3)	22 (15.2)
Total	253 (100.0)	145 (100.0)

Note: Figures in the brackets denote percentages. In about 74% cases, the merging companies belonged to the same group, in 16% cases the merging companies were unrelated and 22 cases, the relationship between firms could not be established.
Source: Indian Institute of Management, Ahmedabad (IIMA) Database.

Table 3.30: Distribution of Mergers and Acquisitions in India by identity of the active company 1991-97.

Identity	Mergers	Acquisitions
Private Indian	221 (87.7)	88 (60.7)
Private Foreign	19 (7.5)	47 (32.4)
Non-Resident Indian	1 (0.4)	6 (4.1)
Joint Venture between Indian and Foreign	4 (1.6)	2 (1.4)
Others	7 (2.8)	2 (1.4)
Total	252 (100.0)	145 (100.0)

Note: Figures in the brackets denote percentages.
Source: Ibid.

During regulatory regime there were restrictions on growth in any particular industry and firms grew through diversifications. As these restrictions were removed, companies are now trying to focus on their core competencies. The institutional investors have become more effective monitors by pressurising the management to enhance shareholder value. They achieve this by selling their stakes if they disagreed with company strategy. Even family members have been seen to sell their stakes following disagreements within the family over company policy (Business Today, 1998). In all these phases of takeovers, the major player has been the government's financial institutions and banks. This gives the state considerable leverage vis-à-vis private capital and makes it an arbiter in most management tussles (Kumarasundaram, 1983).

Given that the market route of exit has become an effective mode of governance only in the last few years, but still many of the low capitalised firms exit their category through disciplinary action taken by the regulatory authority Securities Exchange Board of India (SEBI, 1998). The market route of exit has been restricted to companies where FIs have considerable stake. LCCs with

their lack of significant FI stake are not active in the market for takeovers and they continue in their status of "low-cap" firms for long period of time, till they are delisted from the stock exchange by disciplinary actions of SEBI.

Table 3.31: Companies delisted from 1995 to 1999 by SEBI.

Year of Delisting	No. of companies	Reason for Delisting
1995	5	Merger
	8	Amalgamation
	216	Non-payment of annual listing fees
1996	12	Merger
	12	Amalgamation
	91	Non-payment of annual listing fees
1997	8	Merger
	12	Amalgamation
	5	Winding up business
	173	Non-payment of annual listing fees
1998	19	Amalgamation
	1	Merger
	11	Winding up
1999	16	Amalgamation
	2	Winding up

Source: BSE Internet Report, 2000.

As is evident from Table - 3.31, the exit route for most LCCs is through the disciplinary action of delisting by the regulatory body. Amalgamations are usually mergers between companies within the same group. Thus the market exit route is not an option for the LCCs.

3. 6 CONCLUSION

This chapter looked at the different sources of finance for Indian Companies from the plan period. It also dealt with reasons which contributed towards the predominance of a particular source of funding at a particular point of time, as well as with the peculiarities of the market for corporate control in India, with firms restructuring through amalgamations within group companies.

The financial structure of Indian firms given the regulated economy rules was biased towards debt financing. Through out the 1980s capital market reforms were initiated and this led to an increase in equity financing. After the 1990-91 financial reforms, there has been a marked increase in equity financing by a large number of new companies. Regulated economy also meant high entry and exit barriers for firms. These have been now considerable reduced, which resulted in an increase in the number of firms listed on the stock exchanges and also firms exiting through market mechanisms.

This chapter looked at the different sources of finance for the Indian companies from the plan period. It also dealt with reasons, which contributed towards the predominance of a particular source of funding at a particular point of time. And also the peculiarities of the market for corporate control in India, with firms restructuring through amalgamations within group companies.

Given the macroeconomic conditions created by rules, regulations and licenses, industrial sector was a monopoly of few traditional business houses. With the reduction in entry barriers a large number of new firms are now part of the industrial sector. As many as 6000 companies at present are listed on the stock exchange. Many more are listed every year. Nearly half of these companies trade much below their par values. Many of these listed firms indulge in cheating the

investors, for example out of 3900 companies 2500 that were listed on the BSE between 1991-96 have disappeared and in most of these disappeared companies, an individual or a group of individuals have taken decisions that benefited a small select group to the detriment of the large body of shareholders (Murthy, 1999). The financial policies of these firms also point towards accumulation of returns of the firm towards the benefit of owner-family members. A significant positive relation between dividend payout ratio and insider shareholding in chapter -7 provides evidence for the above statement.

Regulatory authority SEBI is now playing a stronger role in monitoring these companies much effectively than the market mechanisms. At present for most of the LCCs the exit route is through their delisting from the stock exchange for not abiding with the rules of the exchange.

Appendix -1

A. Stipulations Regarding the D-E Mix

Price controls on public issues of equity functioned as implicit taxes and spurred financial innovation. In India before June 1992, listed companies sold shares under the dictates of the CCI, which decided when, at what price and in what volume companies could make public equity issues. The price arrived at was often at a significant discount to quoted market prices, which conferred big capital gains on recipients. The Capital Issues Continuance of control Act of April 1947 was passed to check inflationary trends and to secure a balanced investment of the country's resources in industry, agriculture and social services. In general the federal government's consent to an issue of capital is required in all cases including the banking and insurance field. In the industrial and commercial field, the consent is necessary if the capital to be issued during any 12-month period is more than Rs. 5 million with effect from April 1976. This limit was raised to Rs. 10 million in Feb. 1985. This limit has been further raised to Rs. 30 million in Feb. 1989. The minimum public offer of equity capital shall not be less than Rs. 18 million of minimum issues equity capital. From the point of view of the companies, it was considered that the practice of controlling capital issues would enable them to maintain a reasonable debt equity ratio. After 1991, existing listed companies are allowed to raise fresh capital by freely pricing their issues subject to their conforming to certain guidelines related to disclosure and investor protection.

- *Guidelines for Issue of Fresh Share Capital*

Where the issue of equity capital involves an offer for subscription by the public for the first time, the value of equity capital subscribed privately by the promoters, directors, and their

friends should not be less than 15% of the total issued equity capital, if it does not exceed Rs. 10 million, 12.5%, if it does not exceed Rs. 20 million and 10%, if it is in excess of Rs. 20 million.

The capital structure should be such that a debt-equity ratio of 2:1 is maintained. In case of capital intensive industries a higher debt equity ratio can be maintained according to each specific case. The equity-preference ratio of 3:1 was normally to be maintained. The rate of dividend on preference shares was to be within the ceiling as notified by controller of capital issues from time to time. And no premium was allowed in respect of a new company making its first issue of shares.

Under the SEBI rules, new companies making their IPOs, depending on the size of their issues, could opt either for the OTC Exchange where they can have the advantage of lower requirement for minimum issue capital or minimum public offer compared to other stock exchanges. They are allowed to go to the market with public issues at par. In this case the investor does not take any additional amount of risk other than what is inherent in any investment decision. For the first issues by existing Private Companies, the issue price is determined by the CCI largely in consultation with the company by taking the projected earnings of the company into consideration. But they are allowed to go to the market only at par. Another option for this type of issues is the OTC Exchange.

Listed companies which have made at least one issue earlier and have been paying dividends continuously will be permitted to fix the price for further issues, whether the issues are on rights basis or to the public.

Pherwani Study Group (1991) on establishment of new stock exchanges, made certain recommendations relating to the pricing of issues which suggested the application of certain valuation guidelines for determining ceiling and floor prices. For companies, which have been in

existence for less than 6 months, prior approval of CCI is required, with reference to a formula based approach.

Principles and method of valuation:

The objective of the valuation process is to make a best reasonable judgment of the value of the equity share of a company. The best reasonable judgment of the value will be referred to, as the fair value and it will be arrived at on the basis of the following:

Net Asset value[147]

Profit earning capacity value[148]

Market value in the case of listed shares[149]

- *Guidelines for Foreign Participation*

The new procedures stipulate that companies wishing to enhance their foreign shareholding upto 51% will be able to make issues at the price determined by the shareholders in a special resolution, which would be accepted by the CCI, provided it is not below the existing valuation guidelines. This will apply to private limited companies and to companies, which have

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[147] The net asset value is calculated as the total assets of the company or of the branch minus all debts, dues, borrowings and liabilities, including current and likely contingent liabilities and preference capital.

[148] The profit earning capacity is calculated by capitalising the average of the after-tax profits at the following rates:
1. 15% in the case of manufacturing companies
2. 20% in the case of trading companies
3. 17% in the case of Intermediate companies i.e. companies whose turnover from trading activity is more than 40%, but less than 60% of their total turnover. This helps in estimating the future maintainable earnings of the business.

[149] 1. The average market price is to be determined by taking into account the stock market quotations in the preceding three years (after making appropriate adjustments for bonus issues and dividend payment) as under:
a. The high and the low price of the preceding 2 years.
b. The high and the low price of each month in the preceding 12 months.
2. The average market price acts as a relevant factor while setting the fair value unless there are reasons to believe that speculative transactions or manipulative practices vitiate the market price.
3. The reasonableness of the fair value is checked against the average market price on the following lines:
a. If the average of the net asset value and the profit earning capacity value on 15% capitalisation rate is less than the average market price by about 20% only; then the average will be regarded the fair value.
b. If, however, the average of the net asset value and the profit-earning capacity value is less than the average market price by a substantial margin, by over 20% then the profit earning capacity value is to be reworked by changing capitalisation rate of 15% in the following manner;

no foreign shareholding at present. Foreign companies share participation in Indian joint ventures has been raised from 40% to 51%. The Government has allowed acquisition of additional capital by foreign companies at prevailing market prices with a discount of 10% and the freedom to sell their holdings on the same basis.

These conditions are still in operation as it has been felt that given the conditions of inefficiency, lack of transparency and prevalence of malpractice's in the Indian markets an unregulated freedom to price the issues based on imperfect market prices would place investors at considerable risk.

- *Provision of Taxation*

Computation of profits after provision for taxation is postulated on the following basis: For widely held public limited companies, provision for taxation is at the current statutory rate under the Income Tax Act. If the "Actual Tax Liability" as shown in audited accounts of the company is more than the current statutory rate, then the actuals are subject to a maximum statutory limit of income tax plus surtax. "Actual Tax Liability" means the average of the tax liability (in percentage points) for the preceding 3 years or the actual tax liability in the latest accounting year, whichever is higher.

- Rights Issues

A rights issue without a public issue coming within a period of three months after the announcement of a rights issue, the price for the issue is determined through AGM by the shareholders. If public issues come within 3 months it is treated as a composite issue. If there is a composite issue, it allows existing shareholders to benefit for having stayed with the company by giving them shares at a price lower than the price of the public issue.

If the average market price is more than 20% and 50% of the fair value, the capitalisation rate will be 12%. If the average market price is more than 50% to 75% of the fair value, the capitalisation rate will be 10%. If the average

- Debentures

During stringent money market conditions, companies find it difficult to attract equity capital or even preference capital. And since banks generally advance only on the security of floating assets, the issue of debentures is regarded as the only other suitable alternative for raising capital. No permission from the CCI is required for convertible debentures exclusively placed with the financial institutions.

Rates of Interest
a. Convertible debentures 14% for non-MRTP and non-FERA companies 12.5% for MRTP and FERA companies b. All Non-convertible debentures 14%

In 1991 all restrictions on setting interest rates on debentures were removed, the interest rate on such instruments is therefore governed by the market forces and the companies are required to obtain credit rating from the already established credit rating institutions before floating these instruments. Credit rating for public sector companies issuing bonds, private placement of NCDs with Financial Institutions and banks, (Issues of NCD upto Rs. 50 million on private placement basis including with Mutual Funds, issues of fully Convertible Debentures where these are to be compulsorily converted into equity within 18 months from the date of allotment at per-determined price),[150] is optional.

a. Issues of Fully Convertible Debentures:

For free market pricing of FCD issues, compulsory credit rating is necessary if conversion is to begin before six months. Premium amount and redemption amount on

market price is more than 75% and above of the fair value, the capitalisation rate will be 8%.

[150] Press release issued by the Department of Economic Affairs, Office of CCI on 3.10.1991.

conversion at various stages is to be determined at the outset and is to be stated in the prospectus and the interest rate is freely determined.

b. Conditions for partially Convertible Debentures:

In addition to the conditions for the convertible debentures, the discount on the non-convertible portion of the PCD in case they are traded and the procedure for their purchase on spot basis must be disclosed in the prospectus.

c. Conditions for Non-Convertible Debentures:

Same as in the case of the fully convertible debentures.

- *Dividends*

Statutory restrictions on the dividends have been imposed by the Companies (Amendment) Act 1988.

Preference Shares:

Ceiling rate of dividend on preference shares was reduced to 14% from 13.5-15%.

Ordinary shares:

The profits are to be calculated after providing for depreciation and after adding to the reserves that percentage of profits as may be prescribed, but not exceeding 10%.

Percentage of dividends	Minimum %age of current profits added to reserves
Less than 10	Nil
More than 10 up to 12.5	2.5
More than 12.5 upto 15	5
More than 15 upto 20	7.5
More than 20	10

The decision to limit dividend payments seems highly arbitrary and discriminatory. It does not make any distinction between companies, which have different records of past profits and dividends in relation to the capital employed. Thus, while highly profitable companies were

required to cut down their dividend rate, moderately profitable concerns with low dividend record were affected adversely by the ordinance. This makes the moderately profitable companies to depend upon their own earnings instead of costly external finance. Dividend stipulations were not favourable to small investors.

B. Capital Market Related Issues:

The reform agenda here has focused on market regulation, primary market functioning, secondary market trading, development of a proper debt securities trading market, broker capitalisation, qualifications and behaviour broker liquidity settlements, delivery and misapplications of client funds, development of an integrated national market system; technological investment in exchanges and brokerages; and investor protection. SEBI has accordingly set up various committees to recommend on the above-mentioned issues.

SEBI has been advising stock exchanges to set up either Trade Guarantee Fund or Settlement Guarantee Fund to eliminate counter party risk. Upper limit for gross exposure of member brokers of stock exchanges was fixed at 20 times the base minimum capital and additional capital of the member broker.

By 1998, 20 stock exchanges in the country, accounting for almost 99.8 percent of the total all-India turnover, had shifted to on-line screen based trading. Rolling settlement of T+5 was made mandatory in the exchanges where trading in dematerialised securities was available since January 15, 1998. The SEBI appointed J. R. Varma Committee on Modified Carry Forward System which recommended a margin of 10 per cent on carry forward trades instead of earlier 15 percent, enhancing the over all limit of carry forward trades by a broker to Rs 200 million from the earlier limit of Rs 75 million, removal of scripwise sub-limits on carry forward positions and removal of limit of Rs 100 million for badla financier. The recommendations were accepted and

suitable directions issued to stock exchanges. Brokers were permitted to warehouse trades for firm orders of the institutional clients. The SEBI appointed a committee under the chairmanship of G. P. Gupta to study the concept of market making and to revive the institution of market makers. The recommendations are awaited.

R. Chandrasekharan committee has recommended adequate safety and security features for security certification. The action for its implementation has been initiated. All stock exchanges were required to strengthen their Investor Protection Fund and Investor Services Fund. The Stock exchanges were advised to provide a special facility for attending investor complaints and dummy terminal for showing the on-line trades.

SEBI gave approval to three intermediaries to act as Stock Lenders under the Stock Lending scheme of SEBI. Settlement of trades in the depository was made compulsory from January 15, 1998 in selected scrips for institutional investors namely domestic FIs, Banks, Mutual Funds and FIIs having a minimum portfolio of securities of Rs 100 million.

The SEBI permitted unlisted infrastructure companies making a public issue of pure debt instruments/convertible debt instrument and municipal corporations from the requirements of Rule 19(2)(b) of Securities (Contract) Regulation Rules, 1957, allowing them to list their debt instruments on the stock exchanges without the requirement for equity being listed first. The facility of book-building was extended to the entire issue size for issuer companies which propose to make an issue of capital of and above Rs. 1 bn. A Committee was set up to examine the draft regulations on Credit Rating Agencies prepared by SEBI and to recommend suitable modifications. Only corporate bodies were allowed to function as merchant bankers. This new entity would undertake only those activities which are related to securities market including issue management activity. However, such entities need to seek separate registration if they wished to

act as underwriters or portfolio managers. Merchant Bankers are prohibited from carrying on fund-based activities other than those related exclusively to the capital market. SEBI (Registrars to an Issue and Share Transfer Agents) Regulations 1993 have been amended to provide for an arms length relationship between the issuer and the Registrar to the Issue.

SEBI appointed a Committee under the Chairmanship of Dr S.A. Dave to draft the Regulations on Collective Investment Schemes. SEBI stipulated that all existing schemes would continue to mobilise funds only after obtaining a rating from any of the recognised Credit Rating Agencies. It was decided that all advertisements by existing collective investment schemes would adhere to the advertisement code prescribed by the SEBI.

Securities and Exchange Board of India (Mutual Funds) Regulations, 1996 were also amended to address certain issues that are important for investor protection. Aggregate investments by a mutual fund in listed or to be listed securities of group companies of the sponsor would not exceed 25% of the net assets of all schemes of the fund. Securities transactions with associate brokers would not exceed 5% of the quarterly business done by the mutual fund.

Unitholders' approval would no longer be required for rollover of schemes and for converting close-ended schemes into open-ended ones, provided the unitholders were given the option to redeem their holdings in full at NAV based prices. Independent trustees who are not associated with the sponsor shall now constitute two-thirds of the Board of Trustees instead of earlier provision of 50 per cent. The SEBI gave an option to the issuers to fix the minimum marketable lot on the basis of offer price subject to the condition that the marketable lot should not be more than 100 shares.

SEBI set up a working group to work out the modalities and guidelines for investment by domestic mutual funds in overseas markets. The SEBI regulations for merchant bankers, stock brokers, registrars to an issue, portfolio managers, underwriters, debenture trustees, bankers to an issue, custodian of securities, depositories, venture capital funds were amended to specifically include the concept of "fit and proper person" in their eligibility criteria that an applicant should be a fit and proper person.

SEBI instituted a number of enforcement actions against a wide range of violations. The main focus of reforms in the primary market was to safeguard and stimulate investor interests in capital issues by strengthening norms for raising standards of disclosures and streamlining procedures with a view to reducing the cost of issues. In the secondary market the emphasis remained on making the market transparent, efficient and modern. Trading infrastructure in the stock exchanges which was already modernised by replacing the open outcry system with on-line screen based electronic trading system was given further momentum and by the end of the year trading in 20 out of 22 stock exchanges were automated. The safety and integrity of the market were also further strengthened through the introduction of risk containment measures which included a comprehensive margining system, intra-day trading and exposure limits and setting up of trade guarantee funds. The clearance and settlement system, which had suffered from several bottlenecks, was considerably improved with measures taken to shorten the settlement period and accelerate the process of electronic book entry transfer through the depository. The new regulations for mutual funds (1996-97) were further refined and strengthened to help foster the growth of mutual funds and provide increased protection to the investors.

SEBI set up a committee under the Chairmanship of K. R. Chandratre, to principally look into the issue of delisting of securities by the exchanges. It recommended exchanges to collect

listing fees from the companies for three-year period in advance. Besides, companies opting for voluntary delisting should mandatorily provide an exit route to investors by offering buy-back facility to them. Given that delisting is an extreme measure of disciplinary action, which an exchange takes against a company, indiscriminate use of it could adversely affect the interests of the investors. The Committee prescribed the uniform conditions and norms under which delisting can take place and the manner in which the interests of the investors can be safeguarded in such cases.

- *Investor Protection Fund and Investor Services Fund*

All the stock exchanges are required to set up a fund called 'Investor Protection Fund'. The purpose of the fund is to provide compensation, arising out of disputes or defaults of the member brokers of the exchange to small investors. The amount of compensation available against a single claim of an investor arising out of default by a member broker of a stock exchange is Rs. 100, 000 in case of major stock exchanges, Rs. 50,000 in case of medium stock exchanges and Rs.25, 000 in case of smaller stock exchanges. Another Fund being maintained by the exchanges is the Investor Services Fund, whose purpose is to provide investor related services. A Committee was set up to bring about uniformity in the functioning of these funds. Based on the initial recommendations of the Committee, SEBI advised stock exchanges to provide various services including a desk for attending investor complaints and dummy terminals for showing the trades of the exchange. The number of Investor Service Centres set up by stock exchanges is being increased.

C. Institutions of Corporate Governance:

Institutions of corporate governance in India have been formally in place for a number of years. There are four avenues through which corporate governance structures have been institutionalised.

- *Companies Act:*

The Activities of Indian Companies are regulated through the Companies Act. 1956. This Act ensures that interests of creditors and shareholders are adequately protected. Along with this it also provides for a measure of government control over the functioning of joint stock companies. Revised Version called the Companies Bill 1997 incorporates provisions of flexibility and greater disclosure and self-regulation of Indian companies. The legal rights that the Indian Shareholders possess under the Act are:

a. Voting Rights: Every shareholder shall have a right to vote, in respect of such capital on every resolution placed before the company. All shares carry proportional voting rights. Voting through proxies is also permissible.

b. Board of Directors: Company boards are single tiered. Each company is governed by a board of directors comprising the Chairman and the Managing Director (one person can hold both posts) and other members who can be either executive or non-executive. Every public company should have at least three directors appointed by the company in general meeting. No person should be the director of more than 20 companies at one time. Directors are subject to detailed disclosure requirements with respect to their financial interests in the company.

c. Remuneration of Directors: Executive directors may be remunerated either by way of monthly payment or a specified percentage of the net profits of the company, or a

combination of both provided that except with the approval of the central government such remuneration shall not exceed 5% of the net profits if there is one director and if there are more then one director, 10% for all of them together. Non-executive directors may be remunerated either by way of monthly, quarterly, or annual payments with government approval or by way of commission by special resolution, provided that the remuneration paid to one, or all of them together, does not exceed 1% of the net profits of the company.

d. Removal of Directors: A company may, by ordinary resolution, remove a director before the expiry of his period of office subject to certain tenurial clauses like lifetime employment.

e. Annual General Meeting: Each company is required to hold a general meeting every year, i.e. annual general meeting. The board of directors is also empowered to call an extraordinary general meeting. The Companies Bill, 1997 has introduced new provisions incorporating internationally accepted corporate governance practices aimed at strengthening corporate democracy, protecting the interests of minority investors, and providing increasing flexibility to corporates in responding to market conditions (Sen et al, 1997 and Sarkar et al, 1999).

- *Securities and Exchange Board of India:*

Stock market activities are regulated by the Securities and Exchange Board of India (SEBI). The SEBI Act of 1992 gave SEBI statutory powers to protect interests of investors in securities, to promote the development of the securities market and regulate the securities market. Under the SEBI Act companies have been given the freedom subject to stringent disclosure requirements, to price their issues and raise funds to meet their various types of business requirements. SEBI guidelines also contain a stipulation as to minimum promoters' contribution and lock-in period thereof. It is to ensure that the interests of the promoters of the issuing company are fairly tied up with the interests of the minority investors.

- *Market for Corporate Control*:

Takeovers are regulated through the Substantial Acquisitions of Shares and Takeovers Regulations, first promulgated in 1994 by SEBI. It tried to create a climate in which takeovers could fulfill the function of effectively disciplining Indian firms.

a. Bhagwati Committee Draft Takeover Code:

The draft takeover code formulated by the Bhagwati Committee (1996), aims to protect the interests of shareholders, ensures fairness, transparency and equity without discouraging the process of takeover, the committee provided a framework of regulations in which takeovers could occur. Some of the recommendations of the committee were as follows;

1. Acquirers can take a company private, because it recommends doing away with the existing conditions of 20% public holding after the offer.
2. Acquirers have the option to buyout the remaining shares if the public shareholding were to fall below 10% subsequent to a public offer.
3. Preferential offers, which are clearly approved by the shareholders have been exempted from public offer requirement subject to the fact it does not lead to a change in management control (Sen et al, 1997 and Sarkar et al, 1999).

Chapter - 4

Models of Takeovers and Corporate Monitoring by Institutional Debtholders

4. 1 INTRODUCTION:

This chapter deals with models of corporate disciplining (through Takeovers and Mergers) and monitoring mechanism (through Financial Institutions). Shareholders and the stock market collectively perform functions of corporate monitoring and disciplining a firm listed on the stock market. But for the "low-cap" family owned companies the stock market cannot effectively perform the role of either monitoring or providing the exit mechanism.

This chapter attempts to explain the absence of effective disciplining by the stock market in the case of the family owned LCCs. One explanation is based on the assumption of information asymmetries and/or hidden information which prevent the emergence of a corporate control device i.e. takeovers. The essence of the model is that by indicating their willingness to sell at a certain price, informed sellers show that the stock is really worth less than that certain price and buyers, knowing that the seller would only sell if they were overpricing, refuse to trade. These information asymmetries limit trade even when differences in risk preferences and circumstances might in the case of symmetric information have led to mutually advantageous exchanges. The buyer is never sure whether the seller is willing to sell because of inside information, which lets the seller know that the buyer is overpaying, or whether there are grounds for a mutually beneficial exchange. The scepticism related to no trading derives not only from the

asymmetric information but also from the fact many people lack the training or patience to understand the consequences of policies (Stiglitz, 1989).

Another explanation concerns the lack of corporate monitoring of the low capitalised firm's policies. Block debt holders, given the ownership structure of the firm, perform corporate monitoring in India to a certain extent. This lack of interest towards monitoring LCCs results in their existence as "low-cap" firms for a long period of time, assuming that the diffused outside shareholders cannot perform the role of effective monitors due to free rider problem. Apart from outside shareholders other equity holders are the family members. It is generally accepted in the finance literature that policies of a family owned firm usually do not harm inside stakeholders. Out of 3900 companies 2500 that were listed on the BSE between 1991-96 have disappeared and in most of these disappeared companies, an individual or a group of individuals have taken decisions that benefited a small select group to the detriment of the large body of shareholders (Murthy, 1999). It is now almost impossible to trace these companies, as there are no annual reports or any other form of published information about them. Thus, only block debt holders can play an important role in effectively monitoring the firm given the existing ownership structure of the family-owned businesses (FOBs).

The structure of this chapter is as follows; the chapter has been divided into two broad sections, the first section deals with takeovers and the second one with corporate monitoring. Section -1 deals with the describing of a model of market for lemons and its applicability to the corporate control market in India, followed by concluding comments. Section -2 consists of a model, which analyses the conditions and scope of monitoring by

a block debt holder, follows this section. And the last section contains the concluding comments.

SECTION -1

Market for Lemons and Takeovers

4. 2. INTRODUCTION:

Finance literature provides a description of factors which determine takeovers and M&A activities. Firm-performance related hypotheses[151] of takeovers suggest that the stock market would be able to efficiently evaluate potential takeover targets. As Manne (1965) argues stock markets provide an objective evaluation of management performance through the price it places on a firm's equity. A low share price will create an incentive for more competent managers to take control of a firm and drive it's value back up. So, the worse a firm is managed, the lower its share price will be and therefore greater the potential capital gains to outsiders who buy the firm's stock and run it more efficiently.

Nearly 3000 Indian companies quote much below their par values, some of them as low as 20 or 30 Paise per share.[152] There are other companies, which belong to larger group, which may trade above par values, but are still considered low compared to their book values. Low stock market valuation suggests that wholesale acquisition of such companies

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[151] Inefficient management hypothesis: It represents management, which is inept in an absolute sense and is not performing up to its potential.
Differential Efficiency: If the management of firm A is more efficient than the management of firm B and if after firm A acquires firm B, the efficiency of firm B increases to the level of firm A, efficiency is increased by merger.
Growth-resource mismatch hypothesis.
Industry disturbance hypothesis
Size hypothesis
Market-to-book hypothesis: Marris' theory of takeovers, the motivating factors of takeovers can be subsumed into and conceptualised in terms of a single variable, the valuation ratio. The valuation ratio v, at any point of time, is defined as:

$$V = \frac{\text{stock-market value of a firm's equity capital}}{\text{Book-value of its net equity assets}}$$

[152] The par value is Rs. 10 and 1 Rupee = 100 paise.

offers a cheaper alternative to new Greenfield or Brownfield investment in many industries (Venkiteswaran, 1997). Accordingly, firms listed on the BSE, which trade below par values for a long period of time, should have been subjected to the market disciplinary action through takeovers or mergers. But most of the takeover activity is restricted to a select few high and mid capitalised companies while LCCs have remained immune to mergers or acquisitions.[153] On the basis of the existing hypotheses determining takeovers in the corporate world, most of the LCCs can be deemed as potential takeover targets.

It has been observed that most of the LCCs have a large shareholding by the founding family, which acts as a likely deterrent to takeovers. It is possible that firms with a larger share of insider ownership[154] are not often threatened by a hostile takeover (Weston, 1979). Quite contrary to this, the Indian corporate sector has witnessed a phenomenon in which some of the members from the major shareholding family were willing to sell their stakes if they had disagreements with company policies (Business Today, 1998). High proportion of inside shareholding may not all circumstances act as a likely deterrent of any corporate restructuring.

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[153] According to a study on takeovers in UK by Singh (1971), the stock market is a poor disciplinarian when a firm's short-term profitability is taken into account. A firm, which is not very profitable and is not interested in increasing its rate of profit, is not forced by the stock market to improve its performance in order to reduce the danger of takeover. This confirms to firms who after having achieved a certain satisfactory level of profitability are able to pursue whatever other goals they place without affecting the risk of takeover (Singh, 1971).

[154] An increase in the proportion of shares held by the large shareholder results in a decrease in the takeover premium (Shleifer and Vishny, 1986). This acts as a likely deterrent for takeovers of FOBs. Given that the ownership pattern of Indian industry is highly biased towards promoters (or foreign principals in the case of multinationals) and the government owned FIs, it was extremely difficult to effect change of control through open takeover bids (Venkiteswaran, 1993). Pound (1988) finds that the block ownership is lower in successful proxy contests than in unsuccessful contests and lower also in full control bids than in other types of proxy challenges. However, the regression tests relating block ownership to dissident victory are sensitive to the specification of the block ownership variable. In pure percentage form the coefficient on block ownership is positive and statistically significant, implying that the higher is block ownership, the lower are dissident's victory chances.

As mentioned earlier, LCCs[155] in India have not been subjected to any takeover threats, although they seem to be potential targets, which proposes that an informational asymmetric problem restricts this market phenomenon[156] from occurring. This contributes to the increase in number of LCCs on the BSE. Very often markets are characterised by asymmetric information i.e. it is impossible for an individual to determine the quality of a good acquired and it is also impossible or very costly to monitor the actions of an agent. The problem of asymmetric information arises in many situations, i.e., when an individual purchases a used car, when an employer hires workers with different skills, when insurance is provided to individuals characterised by varying degrees of risk, when credit is granted to different types of firms, or when shareholders must rely on managers to produce profits for their corporation. A large literature has identified asymmetric information as the defining characteristic of credit markets. But in the case of LCCs listed on the BSE, asymmetric information seems to be the defining characteristic of takeover markets. Raiders taking over LCCs face uncertainty about the potential target firm's intrinsic value to the extent that they cannot observe some of its characteristics and actions. However,

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[155] Venkiteswaran (1993) suggests that ideally under/non-performing companies should have contributed to an active market for corporate control in India, but this has failed to occur due to high exit barriers (Retrenching assets and labour). But these exit barriers have now been considerably reduced after the reforms of 1991-92.

[156] Stiglitz (1985) provides four reasons why takeovers have failed to be an effective control mechanism:

a. Given that insiders know more about the firm, when insiders want to sell their stake, it indicates that the firm attempting the takeover has paid too much; if insiders refuse to sell, it indicates that the raider has paid too little, takeovers are successful when the raider over pays too much.
b. If a discovery firm invites bids from other firms to takeover a particular undervalued firm; the expected profits for the first firm will be zero. It then implies the discovery firm expends its resources on evaluating the not too bad firms.
c. If the takeover is successful and as a result the market value of a share is increased, the shareholders that did not sell will free ride (Each small shareholder believes that what he does will have no effect on the outcome of the takeover). It is in the interest of each of the shareholders to hold his or her shares. If he/she believes that the takeover will be successful and his/her shares will have lesser value, he/she will sell it. Thus value-decreasing takeovers are easy compared to value-enhancing ones (there is a rational expectations equilibrium in which all value decreasing takeovers are successful).
d. Current managers are often in a position to take strategic actions that deter takeovers.

overtime in credit markets lenders resolve part of these informational problems. In the process of lending, financial intermediaries are able to gather some proprietary information about borrower's creditworthiness. Hence they acquire some degree of informational monopoly about their clients. But in the case of a takeover market, this fails to occur because the raider's incentive to investigate target management are reduced as the threat of a takeover has a disciplinary effect on the management, which reduces wealth gains from the actual takeover. As a result the raider may not be able to capitalise on private information about the inefficiency of the target (Boot, 1992).

Thus an analysis of the takeover market from the viewpoint of the "market for lemons" seems appropriate. The non-existence of takeover markets for LCCs is analogous to the phenomena of the second hand car market, where equilibrium fails to be achieved even in the presence of large number of prospective buyers and sellers. Stiglitz (1985) analysis of the failure of takeovers in monitoring the corporate sector stems from asymmetric information, but his analysis does not include the absence of takeover market due to inability of a raider in deciding upon his targets which can be restructured to suit the acquirer.

Takeover or mergers of the LCCs can lead to higher optimisation. As firms are supposed to be run more efficiently when inefficiently managed firms pass into the hands of better management. Takeovers facilitate efficient redeployment of assets of bankrupt firms (Hotchkiss and Mooradian, 1998). LCCs, which employ considerable amount of resources, fail to generate profits because of the lack of competent managerial staff as well as lack of alternative investment opportunities.[157] It was observed during the interviews with managers of "low-cap" Indian firms that they lacked formal management education. In order to reduce

wasting of valuable resources due to inefficient management, it is highly desirable that they are either taken over by or merged with other efficient managements. Mergers and takeovers are needed mostly for LCCs, but efficient companies are unwilling to invest in takeover or merger deals with LCCs. The reason being the uncertainty or risk related to achieving net present value benefits from the takeover or the merger. Again, the market for lemons syndrome seems to be the likely explanation, restricting the efficient firms from taking over LCCs. Although there is uncertainty regarding the sources of gains from takeovers, they are still desirable in order to restrict the inefficient management from managing valuable resources. But it is clear that the hostile takeovers, which allocate businesses to firms owning other related businesses, improve operating efficiency and increase market power (Bhagat et al, 1990).

This work tries to analyse the non-existence of takeover mechanism for LCCs on the BSE from the point of view of the market for lemons.

4. 3 MODEL:

Non-existence of equilibrium is possible in hidden information problems due to adverse selection. Analogous to the second hand car market, takeovers market can be thin for certain categories of firms despite presence of many potential buyers and sellers. The essence of the Lemons phenomenon is that goods of different qualities are uniformly priced, because buyers cannot realise these differences. The average quality of goods offered for sale is however, a function of the market price. Low quality goods are supplied at a low price; high qualities are added as the price rises. Then, it may happen that at any positive price demand falls short of supply, a price reduction lowering average

[157] Survey result.

quality so much as to further reduce demand. The only equilibrium is then obtained at zero prices, with zero supply.

Assumptions:

1. The target firms[158] belong to the low market capitalisation category of the stock exchange. The target firms tend to be slower growing than average (Cosh et al., 1989).
2. The acquiring firm is a well-established firm with a past record of high performance and hence, is less risky. Acquiring firms are bigger than average, and tend to be both faster growing and more profitable than companies in general. They may not always be more profitable, than the companies they acquire (Cosh et al., 1989).
3. In the target firms there is little separation between ownership and management.
4. Prohibitively high costs[159] prevent acquirer firms from conducting a thorough research into knowing individual firm qualities of potential targets listed on the stock exchange. If the acquirer firm expends its resources in gathering data about specific firm qualities, it's cost of acquiring a firm increase and it would rather divert its resources towards not so uncertain quality companies.
5. Ownership patterns of the target firm are stable.
6. The consequences of takeovers for managers of the acquired firm depend more on available resources and requirements of the managerial organisation of the acquiring company.

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[158] There is a fair degree of agreement in the literature that firms which themselves wish to sell is likely to be much greater among small firms. A number of small companies find at some point that they have reached a certain stage of development whereby further growth is possible if they merge with bigger companies (Singh, 1971).

[159] Adverse selection prevails over favourable selection because of the high cost of appraising goods (Egidi).

7. Two groups of firms, which are part of the takeover market cannot change their position[160] freely i.e. from buyer to seller and vice-versa.
8. The founding family of the target firm faces a trade-off between retaining a majority stake holding in a highly risky entity and being less than a major shareholder in low risk entity.
9. But divesting[161] the target firm after the takeover leads to no stake of the founding family of the target firm in the combined entity.

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[160] If the quality of the target firm were taken as an endogenous variable as in Kim's model (1985), then quality in this case would mean that the acquiring firm needs some minimum incentive for it to takeover. Given his second assumption that the quality of the target firm will depend on its owner through endogenous factors such as management (which may not be too efficient) of its resources etc. Kim (1985) criticises the Akerlof model on the ground that it overlooks the ability of each agent to freely choose whether to be a buyer or a seller. An agent can change his position from buyer to seller or vice versa with little or no transaction costs. This critique would not be valid for the takeover markets because even if firms could change their positions from seller to buyer and vice versa, the argument of the hidden information related to seller's firms act as a disincentive for a takeover of LCCs. In his model, a firm has 2 periods; it starts its operations in the first period and becomes part of the takeover market in the second period. In the new firm, a level of management is chosen which determines an income flow. The income flow of a target firm depends on its management in the previous period when the firm started its operations. The quality of the firm is endogenous, varying with the level of management. If x is an index denoting the quality of a firm, measuring its overall efficiency, then the quality of a firm is solely determined by the management and other accounting measures in the previous period when the firm started its operations. All firms try to maximise two-period expected utility. If an acquirer firm takes over a target firm, the acquirer firm's expected utility will be a linear function of the average quality of the target firms in the market. Kim (1985) proposes that the average quality of non-traded used cars can be either higher or lower than that of traded used cars. In some cases, the average quality of traded cars will be higher than that of non-traded cars, thus contradicting the Lemons principle. The validity of this proposition is questionable for the takeover market as it is assumed that all the firms who become part of the takeover market are LCCs. Whereas in the case of higher quality firms the target management would oppose the takeover.

[161] Heinkel's (1981) model differs from Akerlof (1972) in that sellers are able to improve the quality before sale, at a cost and a penalty on the seller forces him not to sell sub-standard quality product. A penalty on the major shareholder of the target firm would be liquidation of the acquired firm and other personal disincentives, if the acquired firm were found to be sub-standard expost. Sell offs are a pervasive consequence of hostile takeovers, and in many cases result in liquidation or a near liquidation of the target (Bhagat et al, 1990). This would provide the sellers to improve the firm's quality. Thus the sellers' profits are now contingent upon ex ante quality improvement and an expost observation of the firm's quality. The average quality of a firm (before any improvement) differs amongst all the sellers and that the acquiring firm realises such a difference exists. Two firms L and H, which are potential takeover targets; are identical in all the respects when evaluated by the first set of criteria. Given this basic quality, if both firm L and H are able to perform costly maintenance on their firms, they can raise the average firm quality. But Heinkel model assumes that there is uncertainty about product quality, as acquirers cannot observe the maintenance performed by each target management. Then in the equilibrium again there will not be any takeovers of the low capitalised firms, as acquirers cannot observe the improvement or maintenance initiated by the seller.

10. A firm has different values to buyers and sellers. A firm as a separate entity for the seller and the same firm as a combined entity to the buyer are different.

Most of the acquiring firms base their decision of determining potential targets on the basis of the stock market valuation of a firm, Tobin's Q, incompetent management, asset redeployment, taxes etc. As there is no dearth of firms on the BSE, which confirm to the earlier mentioned features[162] of a takeover target, acquiring firms will have an additional criterion to determine their potential target firm i.e. whether they will be able to restructure the target firm.

For acquirers targeting firms on the basis of the accounting measures could lead to potential misinterpretation of the real intrinsic value of the target firm in the presence of asymmetric information. Acquiring managers in friendly strategic take-overs are more familiar with the business of the target-company and have access to proprietary information in negotiations, which improves their accuracy in valuing the target. Once the kind of takeover targets have been identified on the basis of the criteria listed in the second chapter, the demand for a LCC in a takeover market will depend most strongly upon two variables,

$Q_d = D(p, \mu)$

1. Where p is the price the acquirer is going to pay for the target.

2. And μ is the average quality of the target firm, i.e. asset redeployment[163] in the new combined entity.

Profit maximisation function of the buyer:

$\text{Max } \Pi_1 = p_1 y_1 - w_1 x_1$

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[162] See chapter –2, p. no. 64 - 65.

[163] The prospective value of the target firm in the new combined entity i.e. the capacity of the target's resources to be employed efficiently in the combined firm.

Where p_1 = market value[164] of the new combined firm

y_1 = new combined firm

w_1 = cost of acquiring a target firm

x_{i1} = any ith firm which is low capitalised

Hence, the buyer's profit maximisation function depends upon the owned assets as part of the combined firm and the cost of acquiring new assets.

The availability of a firm for a takeover will depend on the following variable:

1. Price, S = S (p), the price at which shareholders who have a controlling interest in the target firm are willing to sell their shares.

Profit maximisation function of the seller:

Max $\Pi_2 = p_1y_2 - w_2x_2$

p_1 = market value of the combined firm.

y_2 = stake holding in the combined entity.

w_2 = market value of the target firm on its own.

x_2 = stake holding in the target firm.

The sellers' profits are contingent upon *ex ante* market value of the target firm on its own and an *ex post* observation of the firm's quality. The stake holding in the combined firm y_2 will be

$y_2 = 0$ when $p_1 < 0$

$y_2 = 1$ when $p_1 > 0$

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[164] Although literature on takeovers suggest that share price of the acquirer falls in the aftermath of a takeover, it is assumed here that the ability of the acquirer to restructure the target for its advantage (which is the stochastic variable) determines the market value of the combined firm.

In equilibrium the supply must equal the demand for any given quality. As the price (both selling as well as buying) falls, the quality will also fall.

The bidder and target are all initially equity firms. The bidder is able to finance a cash acquisition with internal funds or debt. The bidder knows its type but cannot credibly convey it to the target that it will not divest the target firm, whereas both the target firm and the acquirer have asymmetric information about the value of claims on a combined entity.

A market for takeovers fails to occur, because the ability to restructure the target firm to suit the acquirer is subject to random shocks. Therefore, at no price will any takeover take place in spite of the fact that at any given price there are sellers who are willing to sell their companies at a price which buyers are willing to pay.

4. 4 CONCLUSION:

Existence of numerous LCCs on the BSE can be attributed to among other things lack of takeover activities for these firms. According to the traditional criteria of determining a takeover target, most of these firms can be potential targets. But they have not been subjected to any takeover threats or any mergers. This points to the fact that the market mechanisms have failed to reduce the high number of LCCs on the BSE. The market for lemons syndrome helps to draw a parallel between the used car markets and the takeover markets.

In recent years SEBI has introduced delisting of companies from the stock exchange as a disciplinary action, which has led to a drop in the number of listed companies. A new institutional figure is required in order to restore the virtuous mechanism of favourable selection, which the market alone cannot guarantee. Adverse

selection prevails over favourable selection because of the high cost of appraising goods. Decline of the market and eventually its disappearance does not automatically lead to the rise of an alternative institution, which enables the system to achieve optimality. The mechanism of competition, which is expected to select virtuously the most competent behaviours, may be superseded by a vicious mechanism of adverse selection, which discourages the emergence of efficient and competent behaviours. Consequently the economy may remain trapped in a highly sub-optimal condition (Egidi, 1994).

SECTION - 2

Institutional Debt holders and Corporate Monitoring

4. 5 INTRODUCTION:

Monitoring in usual circumstances by large shareholders or debtholders[165] typically involves identification of companies whose actions are in conflict with their respective interests and an attempt is made to bring about change through negotiation with management, proxy fights, takeovers and involvement in the choice of board members (Admati et al, 1994). In the case of small firms which are single family-owned and the proportion of outside shareholder is small and diffused, the effect of owner-manager's actions is borne by majority family shareholders. As a result it is unlikely that owner-manager's actions become detrimental to the interests of the existing shareholders. Given this argument, it can then be deduced that there is no scope for any monitoring activity in these firms and that they are efficient with the prevailing ownership structure of the firm. But majority of the firms which formed part of the sample set for this study portray a contradictory situation as these companies have failed to sustain a continuous pattern of profits, high growth rates and the market share price is a manifestation of inefficient production (in the secondary market share prices trade at below par values). This reflects on the operational deficiencies in the firm, making a strong case for an effective outside monitoring entity.

Lenders are only concerned with the bottom part of the tail of the distribution of returns; they may require that the firm undertake projects with relatively little risk, even

[165] Block debt holders i.e. banks and FIs, frequently take large positions in a firm, the nature of the loan contract enables them to do this without undertaking undue risk. At the same time, the nature of the contract enables them to focus their attention on information gathering on a particular set of issues: those

though the expected return is much lower. One of the reasons of the low market capitalisation can be attributed to lack of monitoring by existing outside shareholders or bondholders.

For a small firm, a founder-manager who seeks funding from one or several financiers is primarily concerned with maintaining his or her private beneficial control. Usually the debt-equity ratio of a firm depends on the probability distribution of cash flows and on the firm's investment opportunities (Stulz, 1990). But in the case of firms with high inside ownership the problem of determining the capital structure often reduces to the problem of how to obtain funding which will take away as little control as possible to financiers. Most financiers insist on some form of protection, so that the final compromise regarding most financial contracts for small firms is one resembling a debt contract (Bolton and Thadden, 1998). Even though lenders are more concerned with avoiding defaults than with maximising returns, in the prevailing situation[166] they are the only outside entities who can provide monitoring of firm activities. As a result only debtholders can play an effective role in monitoring[167] a small firm's activities.

In diffusedly owned firms shareholders divide the output, net of the compensation paid to the manager and retained earnings, in proportion to their stakes in the firm. Managers choose their actions in response to the monitoring by shareholders and

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associated with the probability of default and the net worth of the firm in those low return states (Stiglitz, 1985).

[166] a. Apart from the family shareholders, other outside shareholders are diffused.
b. Most of the firms in the sample set have not shown continued profits or growth in their PAT (profits after taxes).

[167] Financial literature also refers to existence of a trade-off between concentrated ownership i.e. monitoring and diffused ownership i.e. liquidity. Presence of a large shareholder leads to following effects: Owning a larger stake makes the return on the company's share more significant for the large shareholder, hence it biases her toward intervention (Lock-in effect[167]); and if a larger fraction of the total shares is owned by the large shareholder then fewer shares are held by households, making the market less liquid in these shares (Liquidity effect) (Maug, 1998).

compensation policies, given their incentive to capture maximum possible returns from the firm's payoffs. In a small firm, most of the managers belong to the controlling family and hence they have both individual as well as familial incentives to work diligently even in the absence of any monitoring mechanisms. Inefficiency in small firms can then be attributed to as mentioned earlier (a firm's value is dependent upon) lack of investment opportunities.

An outside shareholder can provide a concentrated ownership structure under the following conditions when the returns of the firm are not too risky, when there is liquidity in the market, and the cost of monitoring is not too high. The investor who acquires a toehold before intervening in the management of the company can only gain if the market cannot detect this purchase (Kyle and Vila, 1991). Usually monitoring activities by the diffused shareholders is negligible, because a partial owner who wants to play the role of a monitor underinvests in oversight as the product of his/her vigilance is divided pro rata among all stockholders, while he/she alone bears the costs. This shows that several different initial shareholders free ride on each other's monitoring activities. Expected improvements in profits of the monitored firm are always incorporated or reflected in the share prices. The market share price is a manifestation of the free-rider problem for all gains are shared with non-monitoring shareholders (Maug, 1998).

This work tries to formulate a model depicting the scope of monitoring (by an outsider) a firm, which is operated by a group of managers belonging to the controlling shareholder family and is simultaneously owned by outside diffused shareholders and also has a presence of large creditors. One among the creditors i.e. specialised financial institutions is usually responsible for the monitoring and oversight of the firm. This firm

structure is common to most of the small sized domestic companies listed on the BSE. It also describes set of conditions in which the FI considers it is worthwhile to invest in monitoring a firm, given the relative position of a firm in the overall debt portfolio of the FI.

4. 6 MODEL:

The output of the firm depends on the owner-manager's actions and their choice of operating and investment decisions. But the value of the firm is an endogenous function of an underlying stochastic variable describing the firm's product market and also actions taken by the management. Thus the real character of the firm will include both operating choices (for example, firm size or fixed asset utilisation) and external economic factors, which affect the profitability and risk of operating cash flows (Jensen et al). Monitoring operating decisions falls on the FIs, which may or may not effectively observe the company, depending on how important the firm is to the FI.

Assumptions:

1. A model with three dates: 0, 1, and 2.
2. Capital markets are open at each date.
3. Firm's assets in place at date 1 yield a random non-negative liquidating cash flow F at date 2 which the management can either invest in new projects or payout.
4. Financial institutions or block debt holders provide debt and simultaneously hold equity in different firms at the same point of time.
5. The firm raises funds at date 0 and date 1. At date 0, investment projects are envisaged and funding is sought and at date 1 the project is implemented. And this

project is assumed to have a positive NPV.[168] At date 2, when returns of the project are realised, consumption takes place. At date 0 when the project is chosen three possibilities can arise:

a. If owner-managers and FIs are uninformed, they agree to undertake project O due to the assumed lower expected return of randomly choosing one of the N projects.

b. When owner-managers are informed and outside shareholders and FIs do not make any changes to the manager's plan. In this case of accepting of his/her project, he/she chooses his/her preferred project that increases bonus to him/her with certainty.

c. If both the manager and the block holder are informed, the latter exercises her/his control rights. She/he implements her/his preferred project that yields Ω to all shareholders with certainty and there is less scope of managers hoarding the firm's cash flows as bonuses. Monitoring[169] takes place from period 0 onwards. No further

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[168] Management utility increases with the consumption of perquisites and that this consumption is a function of date 1 investment only. Each unit of investment is assumed to produce a non-stochastic positive amount of perquisites that is an increasing function of the investment's NPV. This assumption ensures that management invests in the positive NPV projects first. It can be motivated as follows: negative NPV projects consume corporate resources in the future whereas positive NPV projects increase these resources. Consequently, management that values investment would rather invest in projects that enable it to increase future investment (Stulz, 1990).

[169] The word monitoring is used as a comprehensive label for all value-enhancing activities; it comprises intervention in a company's affairs as well as information acquisition and is also used synonymously with shareholder activism. Shareholder activism is then defined to include monitoring and attempting to bring about changes in the organisational control structure of firms not perceived to be pursuing shareholder wealth maximising goals (Smith, 1996). It is generally accepted in the finance literature that a large shareholder or debtholder has a large enough stake that it pays for him or her to monitor the activities of the incumbent management. Large investors intervene for the following reasons;

1. Monitoring a company in order to benefit from the capital gain on their shares.
2. Trading on private information in public markets (Kyle and Vila, 1991).
3. Guarding against the danger of making the company insolvent by placing a limit on dividend payments.

There are different ways in which large blockholders of shares or debt instruments bring about value-increasing changes in corporate policy;

i. When they cannot monitor the management themselves, large shareholders can facilitate third party takeovers by splitting the large gains on their own shares with the bidder.

ii. Through proxy contest, since the board of directors has the legal authority to replace the officers of the firm, gaining a majority of seats on the board is tantamount to gaining control of the operating decisions of the corporation and lastly,

trading takes place during period 0 and 1.

6. One large risk averse investor, L, called the controlling family shareholder; his/her ownership fraction is $\chi \in [0, 1]$ of the stock of an all equity corporation, as he/she has resources to hold this significant fraction of the shares.
7. The remainder of the stock is dispersed among n minor or small shareholders i.e. $(1-\chi)/n$. The pair (χ, n) is the ownership structure.
8. More than one financial institution holds debt in large blocks and one of them is assigned the role of monitoring firm activities. Usually when debt is held by a number of block holders the free rider problem becomes severe if an arrangement for the mutual distribution of monitoring activities is not agreed upon. In this model it is assumed that one of the many block holders of debt is assigned this work by which he or she becomes a nominee director on the company's board.
9. D the large debt holder has an endowment of the bonds of a firm. But bonds cannot be traded in the securities market very freely. D chooses a vector of monitoring level, m.
10. Ownership and managerial responsibilities are not very separate. And ownership patterns do not change.

The output of the firm is $x = \rho + \sigma\theta_1$,

Where σ is a constant, and θ_1 is distributed normally with zero mean and unit variance. The effort applied by the manager is ρ. The manager incurs cost $\frac{1}{2}\rho^2$ in producing effort ρ. The major shareholder family determines the base salary of the manager. The

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Through informal negotiations with incumbent management to institute changes. This means influencing policy as a jawboning mechanism. It is practically costless and is used to make less valuable improvements (Vishny and Shleifer, 1986).

manager's compensation is also contingent upon the output level, x, a bonus, ax. Coefficient a measures the power of the incentives in the contract. A compensation contract based on x will have a time lag between the application of effort and the realisation of value[170] and outside shareholders cannot observe it. The manager receives a bonus, ax, contingent on the output and a salary, b. Thus the contract offered to the manager will be $S = ax + b$.

Given that the variance of y is φ^2 at a cost, the monitoring debt holder can get a noisy signal of the output x, $y = \rho + \varphi\theta_2$ of the manager's effort level and their operating policies on the basis of performance measures. The cost of y or monitoring the owner-manager is $c\varphi^{-2}$ (Huddart, 1993)[171].

The monitoring debt holder's problem reduces to foreseeing the controlling family's choice of incentive power, a, and maximising the monitoring intensity, φ, so that he or she can avoid the costly administrative and legal expenses attached to bankruptcy. The monitoring efforts are affected by the perceived risk of uncertainty of cash flows. A larger firm with larger cash flows also has greater risks of sustaining those returns and hence, financial institutions will be more inclined to monitor it intensely. D will hold a lower fraction of small firm than that of a large firm;[172] that is, he/she will not monitor those firms for which costs of monitoring[173] are higher. As a result, it is not worthwhile for a financial institution to monitor a small firm in normal circumstances. The

[170] It depends on the market reception to the products of the firm.
[171] See Huddart (1993), p. no. 1409.
[172] A large firm usually has existed for a longer period of time with a record of past growth and profits whereas a small firm could have existed as a private limited company earlier but is newly formed public limited company with little history of production and profits and is hence subject to random stochastic shocks.

monitoring intensity, γ, depends upon the position of this firm in the portfolio of the debt holder, M/TD, where M is the proportion of the firm's debt and TD is the total debt lent by the financial institution.

If the firm faces N + 1 projects i ε {0, 1, 2, ..., N}, yielding verifiable security benefits to the shareholders and non-verifiable private benefits *ax* to the owner-managers. The project choice is observable by informed parties, but is not verifiable. The firm has stochastic returns in t = 2, 3....., which are both determined and publicly observed and for simplicity assumed to be identical. With probability P the firms earn high returns, y = R in both periods, and with probability 1 - P returns are low, normalised by y = 0. In a good state, corporate monitoring is undertaken so that the firm continues to maintain its good state. The financial institution will intervene more rigorously when a firm is in a bad state for a continuous period of time and force management to take efficient continuation/reorganisation.[174] D is assigned the role of a monitor but his or her commitment of specific monitoring levels cannot be predicted prior to period 2. If at period 2 the firm is successful with its project, then accordingly the financial institution[175] has an incentive to monitor activities of the firm so that the firm sustains its good state. If the firm's position in the financial institutions' portfolio is lower monitoring will not be sustained if the firm fails to achieve success in period 2. Thus monitoring by the financial institution depends on both the relative position of the firm in the overall portfolio of the

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[173] Banks may view requests for loans from small businesses less favourably than those from larger firms because of informational problems may. This is because smaller firms are less likely to be professionally audited, and are both difficult and costly for a bank to monitor (Bopaiah, 1998).

[174] In case of continuous losses made by a firm, FIs are forced to take part in the decision making process by which it tries to increase the mean of company's returns and reduce uncertainty of final payoffs.

[175] Burkhart, Gromb and Panunzi (1995) argue that the optimal ownership structure of a firm depends on its performance. When it is performing well, diffuse ownership may help to limit the degree of undesirable

financial institution and also the performance of the firm in period 2.

Shareholders have incentives to sell their stake as soon as the firm's profits decline so in a bad state it is not possible that there could be monitoring by shareholders. A long run association with the firm in that case is not possible until they are bound by a contract[176]. During a bad state, a large debt holder has no alternative but to monitor firm's activities, as it is difficult to find a buyer at this stage to buy his or her bonds. Intervention will occur only if the financial institution perceives that the firm can be reorganised instead of going through the costly procedure of bankruptcy.

4. 7. CONCLUSION:

In case of owner-managed corporate units listed on the BSE where the major shareholder is the family and its members occupy all the managerial positions in the firm, the possibility of monitoring by a large outside shareholder is limited. Given this situation, only financial institutions to a limited extent can perform the role of monitoring managers of these companies, as the source of debt for most of these companies are specialised financial institutions. For reasons cited in previous sections, a financial institution can retain a long-term relation with the firm and hence, can be more effective as monitors of firm's activities.

For large shareholders if stock markets are not liquid, large shareholders will engage in less monitoring. In order to avoid the commitment to monitor, they will hold more diversified portfolios; they will have smaller stakes in more companies. A more liquid stock market leads to more monitoring because it allows the investor to cover

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interference from investors. However, when a firm is performing poorly then concentrations of share ownership may be desirable to encourage active control (OECD Working Paper, No. 48).

[176] If the large shareholder is able to commit to retain a given stake in the firm or purchases of stock by the large shareholder is made pro rata from the minor shareholders.

monitoring costs through informed trading (Maug, 1998). But liquidity or the lack of it in markets does not affect the role of FIs.

Founders of a company can affect the likelihood of future monitoring by large shareholders by increasing majority requirements; provided that the required stake needed by the large shareholder does not exceed a certain threshold. This requirement extracts rents from potential monitors, providing that large shareholders are allowed to hold sufficient number of shares. This helps founders of the firm not to have a large outside shareholder, and hence the role of the FI becomes crucial. Although the role of the FI is crucial for monitoring in all states i.e. *ex ante* before the returns are realised. There are three stages when FIs find it worthwhile to monitor the activities of a firm:

1. *Ex post* i.e. after the firm realises its return and based on the success of the project,
2. When the firm is making continuous losses for a long period of time.
3. If the firm's relative position in the financial institution's total portfolio is high.

Thus, it can be deduced that monitoring by a financial institution is limited and lack of effective monitoring at all times can be attributed to the under-performance of LCCs.

Chapter - 5

Dividend Payout Policy

5. 1 INTRODUCTION:

The corporate policy on the payment of dividends occupies an important place in the overall firm's policy as it affects the market price of the firm's outstanding shares, and therefore on the change in its shareholders' wealth.[177] Hence, the well established characteristics of dividends are prevalent in the finance literature; the positive correlation between dividend change announcements and stock returns, and given the effects of dividends on the market value of shares, the reluctance of managers to change dividends.[178] Michaely, Thaler and Womack (1995) describe dividend initiations and omissions as "extremely visible, qualitative changes in the corporate policy." This chapter analyses the behaviour of the "low-cap" family owned businesses[179] through their dividend policy. Dividend payout policy to a large extent reflects functioning of a firm.

Dividend behaviour of public companies with high family ownership in this chapter has been analysed from the point of view of information asymmetry[180] and it

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[177] The concept of shareholders' wealth is the product of the number of shares owned, multiplied by the current share price. The change in shareholders' wealth over a given period of time is the ordinary share price difference at the beginning and the end of that given period, plus if the firm has distributed a portion of its net income to shareholders i.e., the sum of dividend receipts during that period. Thus shareholder wealth is the total return from holding a share of common stock. Shareholder wealth is maximised through the combination of stock price appreciation and dividend payments. The appropriate measure of a firm's financial performance is the market value of the shareholder wealth (Botha et al, 1987).

[178] As Ambarish et al (1987) suggest that some firms may choose to continue to distribute dividends, even when faced with the need to raise outside equity, as a means of boosting stock prices.

[179] Managerial risk aversion and constraints on managerial wealth limit the ability and willingness of managers to become owners. So, insider ownership is inversely related to the size of the firm (Crutchley and Hansen, 1989).

[180] The interaction between financial policies and insider ownership can be linked to informational asymmetries between insiders and external investors. The informational advantage includes information about the firm's prospects, the manager's level of effort, and perquisite consumption. Debt, dividend policies and insider ownership may have redundant benefits in reducing agency or informational asymmetry problems. At the same time, there are costs associated with using each of these tools. Insider ownership is costly to managers who become maldiversified. Debt reduces free cash flow only by creating new conflicts between creditors and owners. Similarly dividend policy

also includes valuation effect of these dividend payments. Agency theory mainly the Easterbrook hypothesis (1984) suggests that dividends can act as a means of subjecting a firm to monitoring by the capital market by forcing it to raise outside equity rather than relying on retained earnings (as a source of capital), thereby reducing agency costs. Other information asymmetric analysis suggests that managers who make dividend decisions have exclusive information about the firm, which is not available to the investors; hence the choice of dividends can be used to convey information to the market. The valuation[181] effect of dividends has been generally studied from the points of view of tax,[182] transaction costs, and liquidity. Due to the inadequacy of agency theory alone in explaining the dividend behaviour of low capitalised firms, this chapter incorporates another information asymmetry model and also the valuation effect of dividends.

Usually, dividend payouts are at the discretion of firm managers. Management, in setting dividends, focuses to maintain some stable proportionality[183] with non-transitory earnings. Hence, LCCs try either to maintain a stable dividend[184]

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reduces informational asymmetry only if dividend changes are a costly signal (Crutchley and Hansen, 1989).

[181] The capital market response to the dividend announcement is defined as the cumulative abnormal return on the announcement day and the previous trading day (Born and Rimbey, 1993).

[182] Dividend payout ratio (dividends/earnings) is the reflection of the dividend strategy of a firm. An increase in the dividend payout ratio implies a higher dividend payout strategy and will be accompanied by a decrease in the share price if taxes on dividends are greater than taxes on capital gains. If the payout ratio is a signal of investor beliefs about the future dividend policy of a firm, then it follows that investors penalise firms, which increase their dividend payouts and reward firms, which decrease their dividend payouts. Investors shunning dividends can be attributed to preferential tax treatment of capital gains compared to dividends (Divecha and Morse, 1983).

[183] A particular stylised fact has emerged over the years that firms smooth dividend payouts from the following hypotheses:

1. Managers attempt to attain some long-term payout ratio between dividends and earnings.
2. In setting dividends they focus on the change in the existing payouts rather than the level.
3. Dividend changes are likely to follow large unanticipated and non-transitory changes in earnings.
4. Managers avoid raising dividend payouts if they feel that there is a good chance of them being reversed in the near future (Cyert et al, 1996).

[184] DeAngelo and DeAngelo (1990) find that US firms tend to spread dividend reductions over more than one year, making a small cut each year rather than concentrating the dividend reduction in a single year. Using a similar economic logic, it can be deduced that low capitalised firms maintain a certain dividend payout rate throughout.

payout rate or more likely no dividends, but have taken advantage of rights issue[185] or private placement of shares for further capital. Table 5.1 shows the incidence of rights issue and Private placement of shares by companies in the sample set.

Table 5. 1: Public issues, rights issues and private placement of shares by the sample LCCs between 1991-99.

Industry Group	Public Issues	Rights Issues	Private Placement	Total
Heavy	13	3	3	19
Light	15	3	3	21
Other	15	6	2	23

Although financial literature on dividends suggests that management would try to avoid any uncertainty[186] related to payment of dividends, the same reasons do not apply to the dividend policy of LCCs. Given the high inside ownership[187] in these companies, there is a dominant tendency to accumulate free cash flow. The extent of the free cash flow is shown by calculating the proportion of dividends and retained earnings in profits after tax (PAT) as in Table 5.2.

Table 5.2: Proportion of Dividends and Retained Earnings in PAT in the sample LCCs.

Industry Group	Dividends/PAT	Retained Earnings/PAT
Heavy	0.1759	0.8212
Light	0.2757	0.7115
Other	0.1634	0.8319

[185] Residual theory suggests that when investors' are not informed well about the profitability of growth opportunities, a firm in need of finance may be forced to sell risky securities at less than a fair price. This underpricing causes a transfer of wealth from existing shareholders to new shareholders. As a result, managers avoid external financing for a project whenever possible and especially when the investment opportunity is highly profitable (Ghosh and Woolridge, 1988).

[186] For a firm avoiding uncertainty in its dividend policy suggests the following basic features:

1. Firms focus on the dividend adjustments in response to possible changes in the environment, i.e. changes in earning prospects.
2. Levels of dividends are not optimised on the basis of a long run optimisation model, but they are usually set according to industry conventions, firm history etc.
3. Firms maintain simple rules of thumb in relation to acceptable dividend adjustments. For e.g., dividend adjustments may be required to be close to some preset pay out ratio.
4. Shareholder/Investor attitudes towards given dividend adjustments may change or shift over time as their information sets and net worth evolve over time. Accordingly firms may attempt to avoid adjustments which may be reversed in the near future rather than predict shifts in shareholder responses (Cyert et al, 1996).

[187] Financial policy is used to minimise agency costs and exploit tax benefits. Empirical studies of Hansen and Crutchley (1989) and Jensen (1992) suggest that after controlling for real firm-specific attributes affecting insider ownership, neither dividend policy nor the debt policy provide any information about the level of insider ownership a firm will take. Their results support the proposition that financial decisions and insider ownership are interdependent and insider ownership has a negative influence on a firm's debt and dividend levels. The causality runs from insider ownership to financial decisions and not vice-versa.

If higher retained earnings are associated with high growth rates, then over time the proportion of dividends to PAT should have also risen. Although the proportion of retained earnings does not say much about the volume of retained earnings, it can be seen below (Table 5.3) from the correlation between lagged retained earnings and PAT how the high proportion of retained earnings are being used.

Table 5.3: Correlation between Lagged Retained earnings and PAT in the sample LCCs.

Industry	Correlation Coefficient
Heavy	.0463
Light	.7743
Other	.0461

Only light industry shows that the high proportion of retained earnings do relate to a high correlation between PAT and retained earnings. But "other" industry group shows that retained earnings may not always be ploughed back into the firm for future investments. And the growth in PAT was as follows:

Table 5.4: Growth in PAT in the sample LCCs

Industry Group	Growth in profits after tax
Heavy	-.9304
Light	.2230
Other	-.9112

Apart from the light industry the other two industry groups have had negative growth rates, which is quite surprising because firms in the "other" group were computer software companies and companies which claimed that they had surplus capital (more than their investment avenues).

The above analysis and table 5.5 show that dividends do not correlate to earnings[188](lagged) of the company.

Table 5.5: Correlation between earnings and dividends in the sample LCCs

Industry	Correlation Coefficient of earnings and dividends
Heavy	.3088
Light	.3145
Other	.3794

[188] The partial adjustment model suggested by Lintner (1956) assumes that the target level of dividends is given by: $Dt^* = rEt$
$0 < r < 1$,
Dt^* represents the optimal value of dividends associated with the current level of earnings Et, and r is the target or the optimal payout ratio.

As such the monitoring function of dividends mitigating agency costs is rendered irrelevant, as companies depend on their retained earnings[189] and for further capital needs, on rights issues and private placement of shares. Given the low correlation between earnings and dividends, the signalling feature of dividend is also not very strong for LCCs. Consequently, the effect of dividends on the stock prices is not sustained for long time.

By modelling the dividend behaviour pattern of the low capitalised companies, this chapter provides another evidence towards lack of effective monitoring by outsider investors, which adversely affects the performance of the firms. Along with the model in the previous chapter 4, section - 2 on institutional debt holders and monitoring, this chapter reinforces the fact that ineffective monitoring leads to the status quo of LCCs, given that the market based exit routes in BSE are limited.

Institutional investors wish to own stocks which are dividend paying and individual investors wish to own stocks which are not dividend paying[190] (Redding, 1997). Hence both the supply and demand factors contribute towards the family owned companies paying low dividends and also the incentive to monitor the firms' activities is reduced. Continuous low or nil dividends for a long period of time have had a negative impact on the share prices. And this leads to their low market capitalisation.

This chapter is structured in the following manner; the next section 6.2 provides a critical summary of the theories, which analyse the dividend behaviour of firms. The section 5.3 is the model, which describes the dividend policy of the low

[189] According to Easterbrook (1984) low dividend paying firms are growth firms, which seek funds regularly from the market and also that the firms with lesser rate of growth pay more dividends.

[190] Given the nature of ownership, monitoring mechanisms, and also the investors' preference for capital gains compared to dividends, announcement of dividend increases will not have a positive effect on the prices as investors would interpret this as lack of access to growth opportunities and vice

capitalised firms listed on the Bombay Stock Exchange, followed by a section on concluding comments.

5.2 THEORIES OF DIVIDEND POLICIES AND THEIR CRITIQUE:

5.1. A. AGENCY THEORY:

As equity and debt are considered governance structures, dividends also provide a governance tool to the outside shareholders. Dividends are for equity what interest is for debt. Agency theory focuses on the role of dividends as a disciplinary and monitoring mechanism. Managers choose their stock ownership in the firm, the firm's mixture of outside debt and equity financing, and dividends to reduce the costs of agency conflicts. Managerial stock ownership and dividends especially are relevant in reducing the conflict between managers and shareholders. It reduces the amount of free cash flow[191] and forces managers to submit to the discipline of the financial markets.

Easterbrook (1984) suggests that the problems associated with agency conflicts can be mitigated if managers regularly go to the investment community to raise capital. Disclosures associated with raising external capital serve as powerful monitoring opportunities. Hence dividends serve the purpose of keeping the firms in

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versa. Reduction in dividend payout ratios signal enhanced access to profitable investment opportunities (Cyert et al, 1996).

[191] Jensen (1986) argues that managers of public corporations have incentives to expand their firm beyond the optimal size even if this requires investment in negative NPV projects. Overinvestment is done using internally generated cash to avoid monitoring associated with raising capital from the markets. The free cash flow problem refers to the managers' investing this cash in negative NPV projects rather than paying it out to shareholders i.e. a lower return on reinvestments of the free cash flow than the market requires. This tendency of managers is due the following reasons:

1. Cash retention gives managers autonomy, which they would lose if they had to go frequently to the capital markets to raise new capital.
2. Increased firm size enhances corporate prestige and managers' salaries.
3. Companies tend to reward middle managers through promotions rather than bonuses, which creates a bias toward growth (Kallapur, 1994).

And free cash flow is measured as the ratio of (Holder et al, 1998):

$$\frac{\text{Net income + depreciation + interest expense - capital expenditure}}{\text{Total assets}}$$

capital markets and in mitigating effects of poor investment and other organisational inefficiencies associated with free cash flow.

Easterbrook (1984) also indicates that the market can monitor managers and adjust the level of risk taken by managers and different classes of investors. Accordingly, paying dividends increases the chance that external equity capital will be raised. Easterbrook (1984) indicates that by doing this, firms are constantly in capital markets and new investors can study the behaviour of managers and then decide to invest.

Sometimes firms issue new stock at or around the time they pay dividends. Firms may seek additional funds from markets after announcing dividends, and this usually signals the growth potential of the firm. If this situation is reversed, when dividends follow equity issues,[192] dividends in this case will be used as a tool to attract funds. Firms may announce a new issue earlier than dividend payouts, which is quite evident from the following table 5.6.

Table 5.6: Dividends of sample LCCs following Equity Issues after 1990.

Industry Group	Dividends after Issues	Issues after Dividends	Public Issues and no dividends
Heavy	5	6	6
Light	8	13	1
Other	5	14	3

Dividends in this case, may not provide outside shareholders with tools to monitor activities of the firm. Fluck (1995) and Myers (1995) have also presented agency-theoretic models of dividends, based on the idea that shareholders can threaten to vote to fire managers or liquidate the firm, and therefore managers pay dividends to hold off shareholders. But these models do not address the problem of free riding problem i.e. dispersed shareholders getting organised to threaten management.

[192] As Ambarish et al (1987) suggest only the high-value firms choose investment and dividends jointly to separate themselves from low value firms. But this suggests that dividends are not a residual payment as implied by classical finance theory.

When costs of flotation are taken into consideration, a firm may not prefer to go to the capital markets frequently. Crutchley and Hansen (1985) confirm firms, which expect to incur higher equity flotation costs, pay lower dividends. As flotation costs decrease with the size of offering, a firm can combine infrequent flotation with declaring dividends. Easterbrook (1984) analysis is also consistent with the observation that low dividend paying firms are growth firms,[193] which seek funds regularly from the market and also that firms with lesser rate of growth pay more dividends. Shibakawa and Iwaki (1992) also confirm these findings in their study of the Japanese firms, which do not pay high dividends to stockholders, even in the case of high earnings. But this is due to the network of mutual stock ownerships among many industrial companies and main banks. In fact this financial system contributed to the agency cost of external financing in Japan. Their paper theoretically and empirically showed the existence of hierarchy of financial sources. This indicates that large trans-company mutual stock ownerships[194] do affect leverage issues.

Rights Issues[195] and private placement of shares help to raise additional capital without any flotation costs. It can be suggested that rights issue and private placement of shares can serve the same purpose of reducing the agency costs, as there will be re-

[193] Financial literature has related dividends to the firm's future profitability. One plausible explanation for the decision to omit dividends entirely rather than maintain a reduced payout can be traced to the alternative uses for the funds. A large number of firms omit cash dividends due to financial distress. However, it is also possible that dividends are sometimes omitted for legitimate reasons other than financial distress. For example, a firm might face a profitable investment opportunity and because of borrowing constraints the firm may find it optimal to finance the project internally. Under such conditions the market might not respond to growth-motivated announcements of cash dividend omissions in the same manner in which they would react to firms omitting cash dividends due to financial distress (Christie, 1994). Greater business risk makes the expected direct relationship between current and expected future profitability less certain. So, greater business risk will be associated with lower dividend payments. Myers and Majluf (1984) also confirm that profitable firms with good investment opportunities may be forced to choose between dividend payments and capital expenditures. Frictions in capital markets lead to a sort of competition between dividends and investment projects as potential uses of profits. This competition is the reason why high growth firms with strong investment opportunities often pay low dividends.

[194] Companies of the same original family-owned business group in India are characterised by a dividend policy of each subsidiary which itself may be publicly listed is often determined by the central holding company based on the cash needs of other companies in the group (Glen et al, 1995).

examination of the manager's behaviour by existing investors. Given that outside shareholders are less informed about the profitability of growth opportunities, a firm might have to underprice its shares. This underpricing causes a transfer of wealth from existing shareholders to new shareholders. As a result, managers avoid external financing for a project whenever possible and especially when it is risky (Ghosh and Woolridge, 1988). This provides incentive for issuing of rights along with flotation costs.

Noronha et al (1996) suggests that if a firm's dividend decision is based on Easterbrook's monitoring rationale, then its dividend and capital structure decisions should also be made simultaneously.[196] Shareholders of dividend-induced monitoring not only obtain benefits, but also bear costs i.e. tax burden and flotation costs. A Rights Issue or private placement of shares does not impose any tax burden or any flotation costs as mentioned earlier on the shareholders. For firms, which are driven to the capital market by other factors such as the need to finance high growth (Easterbrook, 1984), and LCCs, which may not always use free cash flow for negative NPV investments,[197] the dividend device to control agency costs has little relevance. Table 5.7 shows the number of sample LCCs that have invested in either mergers or acquisitions since 1990.

Table 5.7: Mergers and Acquisitions by the sample LCCs since 1990.

Industry Type	No. of Companies in each group	No. of takeovers
Heavy Industry	13	3
Light Industry	11	2
Other Industry	10	1

[195] Refer to Chapter –3, Table 3.22.

[196] Validity of the monitoring rationale for dividends and the consequent simultaneity of dividend and capital structure decisions are dependent on the characteristics of the firm as they relate to its growth opportunities and to the existence of non-dividend mechanisms for controlling agency costs. Given that the free cash flow identifies takeovers and other expansionary activities as investments with negative NPVs, there are few instances of takeovers by the sample LCCs.

[197] Given high insider ownership, these firms may not invest in negative NPV projects, as it will affect the family shareholders.

Apart from dividends there are other non-dividend monitoring mechanisms i.e. incentive components of the managerial compensation package, which serves to align manager-shareholder interests and the presence of a single large outside shareholder or block debtholder, which serve as external monitors. Noronha et al (1996) also postulate that a firm with high growth opportunities and/or availability of these non-dividend-monitoring mechanisms, the dividend payout decision is unrelated to firm variables proxying for the agency cost-transaction cost trade-off. But for firms low in both attributes, the monitoring rationale for dividends is hypothesised to be valid. LCCs have a strong incentive mechanism for owner-managers to work for the value maximisation of the firm, as they are the largest stakeholders, it can be safely concluded that the dividend policy of these firms will not depend on the surrogate measure of agency costs.

Jensen (1986,1988) provides alternative explanations for dividend payments, which derive from a specific type of non-value maximising activity on part of the managers, namely the inappropriate use of a firm's free cash flow or overinvestment.[198] According to Jensen, value-maximising managers will distribute this free cash to shareholders in the form of higher dividends. Although owner-managers can be considered value maximisers, these companies maintain a low or nil dividend payout in order to create incentives for subscription of rights issue for future capital needs. This dividend policy does not play the role of an effective disciplinary mechanism but the need for further capital ensures maintenance of a steady dividend

[198] An average Tobin's Q ratio (ratio of the market value of the firm's equity and debt to the replacement cost of its asset) greater than unity is a necessary condition for a firm to be at the value-maximising level of investment and an average Q ratio less than unity is the sufficient condition for a firm to be overinvesting. Jensen (1986) suggests that value maximising firms with their P (Average rate of return on investment) >K (Cost of capital) are able to withstand capital markets' monitoring, whose investment is carried to the point where the marginal Q is unity, whether marginal investment is financed internally or externally. For value maximising firms, the level of investment is independent of the dividend. For overinvesting firms the level of investment is inversely related to the dividend.

policy[199] without any uncertainty. This steady dividend policy suggests low correlation with earnings and accumulation of free cash flow, which may be used for the personal benefit of owner-managers. Thus monitoring rationale associated with dividends is only a partial explanation of the dividend policies of LCCs.

Debt creates an incentive for owner-managers to under invest and expropriate bondholders' collateral. One way to do this is by paying out dividends. This leads to the wealth expropriation hypothesis, which suggests that dividends should increase after new debt is issued. Firms may not like to always exploit bondholders through dividend policy for two reasons; to preserve reputation and block debtholders possess enough bargaining powers to stop the firm from expropriating their wealth.[200] If managers deliberately expropriate bondholders' wealth, future capital market dealings will be more costly because of the firm's tarnished reputation. Hence both monitoring rationale of dividends and presence of debt do not guarantee dividend payouts.

Crutchley and Hansen (1989) estimated independent equations for debt,[201] dividends[202] and insider ownership.[203] They use 5 firm specific characteristics i.e.

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[199] DeAngelo and DeAngelo (1990) and DeAngelo et al (1992) investigate dividend adjustments of troubled NYSE firms and firms with losses, respectively. They report that firms cut their dividends in periods of financial distress and that there is usually a strong reluctance to omit dividends, especially when the firm has a long history of paying dividends. Moreover, dividend cuts are most often observed for firms with persistent losses, whereas firms with transitory losses usually don't cut their dividends immediately. These results imply that the interaction of losses and subsequent dividend changes convey some private information to outsiders about the managers' perception of the severity and the duration of the problem. A dividend cut may cause an immediate negative reaction from investors, but it may not have a negative impact on the current and the future business opportunities of the dividend-cutting firm. A dividend cut may not send an adverse signal to suppliers and customers to abandon their relationship with the firm immediately.

[200] See Chapter-2 for more details on agency costs of debt.

[201] Leverage ratio is measured as the average outside leverage ratio, ratio of outside debt to outside financing;
LEVERAGE = 1/no. of years. ΣLTDEBT/(LTDEBT + MVCS)
LTDEBT = total long term debt
MVCS = market value of common stock held by non-managers = TOTSHRS × MPRICES
TOTSHRS = total number of shares of common stock held by outsiders
MPRICES = year end closing market price of common stock

[202] DIVIDEND = 1/no. of years. Σ COMDIV/(TOTSHRS × MPRICES)
COMDIV = total common stock cash dividends

[203] It is measured as the average percentage of common stock held directly by the officers and directors;

earnings volatility,[204] advertising and R&D expenses,[205] flotation costs,[206] a measure of the diversification loss to managers from holding the firm's common stock[207] and firm size. But Jensen et al (1992) show empirically that a firm's debt,[208] dividend[209] and insider ownership[210] levels in addition to being related to similar firm specific attributes are also directly related to each other.

Since the agency explanation of dividend payments was not pertinent[211] enough for Indian markets, another asymmetric information model i.e. signalling theory along with the valuation of dividends was therefore included in the analysis.

5. 2. B. SIGNALLING THEORY:

The observed systematic connection between unexpected changes in the dividend payoffs and their stock prices has also focused attention on the possible signalling role

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OWNERSHIP = 1/ no. of years. Σ (O&DSHRS/TOTSHRS)
O&DSHRS = total number of shares held by officers and directors ownership
TOTSHRS = total number of outstanding shares of common stock.

[204] Earnings volatility is measured by the standard deviation of the return on assets;
EARNVOL = STD (NOI/ASSETS)
NOI = net operating income = sales less operating expenses.

[205] The level of firm's discretionary investment;
ADV + R&D = 1/no. of years. Σ(R&D + ADV)/SALES
SALES = total sales.

[206] A firm's historical average floatation cost is a preferred measure, but it is possible that many firms would not have issued stock in recent years, then the following proxy measure has to be used;
FLOTCOST = $a + b$STDRET + cSIZE
STDRET = standard deviation of common stock return
SIZE = the amount of capital raised

[207] It is measured by the ratio of the firm's equity risk premium divided by total equity risk.
DIVERSE =$(E(R_i) - R_f)/\sigma_i$
$E(R_i)$ = expected return on common stock
R_f = risk free interest rate
σ_i = standard deviation.

[208] The determinants of debt level (ratio of long-term debt to the book value of total assets) are; business risk, profitability (ratio of operating income to total assets), research and development expenditures, and fixed assets (ratio of fixed assets to total assets).

[209] Dividends (ratio of dividends to operating income) are related to a firm's future profitability, which in turn is determined by, current profitability, investment (expenditure for plant, equipment, and R&D as a percentage of total assets), growth (average of the number of years growth in sales) and business risk.

[210] The determinants of insider ownership (percentage of shares held by insiders) are; business risk (standard deviation of the first difference in operating income divided by total assets), firm size (log of total assets), the number of operating divisions of the firm (number of divisions operated), and research and development expenditures (ratio of R&D expenses to total assets).

[211] Use of rights issue for further capital needs, dividends follow new equity issues, presence of debt, will render the monitoring rationale of dividends ineffective.

of dividends in a world where managers are better informed about their firm's economic prospects. Unexpected changes (Miller) in dividends provide the market with clues about unexpected changes in earnings, which in turn trigger price movements that look like responses to dividend decisions. Bhattacharya (1979, 1980) argues that firms pay dividends because dividends signal the private information of managers and thus help market participants value the firm.

This section also explains the impact of dividend announcements on stock prices. Capital market response to dividend announcements is defined as the cumulative abnormal return on the announcement day and the previous trading day (Born and Rimbey, 1993). Since dividend payouts are unexpected the entire amount of the dividend yield is unexpected. The market reaction to a dividend change is a function of the unanticipated news content and the intensity of the market reaction is a function of how much information is revealed. So a simultaneous announcement of growth prospects[212] can reduce the adverse impact of dividend reductions (Ghosh and Woolridge, 1988).

Miller and Rock (1985) argue that once the investment decision of a firm is made unanticipated dividends signal changes in the earnings and the cash flows. Given that information asymmetries exist between managers and investors, Miller and Modigliani (1961) suggest that investors will interpret a change in dividends as a change in management's view of future profit prospects of the firm. Fama and Babiak (1963) find a relation between annual dividends and earnings that is consistent with

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[212] Simultaneous announcement variables:

1. Cases where dividend cut/omission is preceded by announcements of loss or lower earnings, downward revisions in firm outstanding debt by rating agencies (the coefficient will be positive).
2. The effect of poor earnings announced simultaneously with the dividend reduction. Simultaneous reporting of earnings decline and a dividend cut causes more adverse stock market reaction than that caused by isolated events. The coefficient for this variable is predicted to be negative.
3. Whether management offers any rationale for the dividend decision other than a change in expected earnings. Growth motivated dividend cuts are interpreted favourably by the market so that the coefficient of this variable should be positive (Ghosh and Woolridge, 1988).

the view that dividend-paying firms increase their dividends only when management is relatively confident that the higher payments can be maintained. If managers have information about the future and/or current cash flow that investors do not have, investors will interpret a dividend increase as a signal that management anticipates permanently higher cash flows, and a dividend decrease as a signal that management expects permanently lower cash flows.

In a firm, which is initially owned by a large inside shareholder and managed by an incumbent manager, who seeks funding for an investment opportunity, the shareholder and the manager have private information regarding the firm's prospects. This asymmetry of information in capital markets engenders an adverse selection problem. Announcements of dividend changes convey information to the market. Information asymmetry models argue that as managers know more than investors do about the firm's prospects dividends reveal some of that information to the market. It also helps explain the observed reluctance of managers to change dividends. Thus, dividend-signalling models describe how managers can optimally convey their private information to lesser informed outside investors (Bessler and Nohel, 1996). Cash flow volatility[213] is the sole source of quality difference among firms. Firms then use levels of debt and dividends to convey information to the market regarding variance of their underlying cash flow or firm's risk (Brick et al, 1998 and Healy and Palepu, 1990).

According to Noe and Rebello (1996), when shareholders dictate the financial decisions, the optimal policy calls for minimising managerial rent appropriation via a strategy of high dividends and complete reliance on competitively priced external debt financing. When management determines financial policies all equity structures that maximise managerial rent appropriation are optimal. Given the ownership

structure in LCCs, the family shareholders who are also managers in the firm dictate financial decisions; the optimal policy in this case would be equity structures, which maximise inside shareholders' rent appropriation.

The cash flow signalling hypothesis also predicts that announcements of dividend changes by firms with average Tobin Q's less than unity (over investing firms) will cause investors to revise their cash flow expectations in the same direction. As a result the average return in response to announcements of sizeable dividend changes is larger for over investing firms than for value maximisers (with average Q's greater than unity). Accordingly as Kallapur (1994) suggests the stock price reaction to dividend changes is significantly larger for firms with Tobin's Q less than unity. In the presence of free cash flow problem, Earnings Response Coefficients (ERCs) depend positively on payout ratios because shareholders prefer that earnings be paid out as dividends rather than be wastefully retained. Announcements of dividend changes by over investing firms will also change investors' expectations about the size of the firm's future investment in negative-net-present-value projects. An increase in dividends, all else being equal reduce the extent of over investment and increase market value of the firm. A decrease in the dividend will have the opposite result (it signals that more negative-net-present-value projects will be undertaken). A positive association between dividend-change announcements and stock price movements supports the free cash flow hypothesis. John and Williams (1985) and Ambarish et al (1987) also predict a positive association between dividends and stock prices.

Whereas announcements of dividend changes by value-maximising firms, therefore, will have no impact on investors' expectations about investment policies, and should on average have no effect on the firm's stock prices. For firms with

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[213] Financial signalling models generally assume that firms have identical cash flow variances but

average Tobin's Q greater than unity,[214] agency and signalling hypotheses predict that announcements of large dividend increases will have little or no impact on investors' current cash flow expectations.[215] For the same firms the predicted impact on returns of announcements of dividend changes is larger in absolute value for dividend decreases than for increases (Lang and Litzenberger, 1989). As a result any change in the dividend policy has an immediate effect on the share prices but this effect is not sustained for a long time given that the financial press coverage of LCCs is very scant as shown in table 5.8.[216]

Table 5.8: No. of News items covered by the different financial press of the sample LCCs.

Year	No. of news items of each Industry Group		
	Heavy	Light	Other
1996	-	-	1
1997	14	8	11
1998	7	5	4
1999	25	13	31
2000	-	3	4

In firms with lower levels of agency conflict and information asymmetry as in the case of Japanese firms, Dewenther and Warther (1998) suggests that dividends do not act as a signal of information or as a disciplinary mechanism and that Japanese managers may not fear adjusting dividends in response to earnings changes. As a result they are less averse to cutting dividends and they cut their dividends more often and they respond to poor performance by cutting dividends more quickly than their

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different means.

[214] Assuming that LCCs are value maximising given high insider ownership, investment in negative NPV projects would be limited.

[215] Announcements of dividend changes of value maximising firms signal change in cash flows or earnings from current assets and vice versa, but the net present value of future investments is assumed to be unaffected (Lang and Litzenberger, 1989).

[216] Most of the news covered by the financial press of these sample companies are restricted to the 5 IT companies in the "other' industry group. In the "heavy" industry group, only 6 companies were covered by the financial press. Out of 34 companies 23 companies were in the news during this time period. The same news about a company covered by different newspapers gives the number of news items about a company.

US counterparts. For these firms the dividend yield[217] will not be a correct measure of the dividend intensity, but the payout ratios will be (Dewenter and Warther, 1998).

The above-mentioned reasons are applicable to LCCs and they provide no incentive for them to pay dividends. Thus distribution of firm's residual returns does not depend on either the traditional agency or signalling explanations. Thus, there is a strong tendency to appropriate firm's undistributed returns for personal consumption of owner-managers.

Shareholders' reaction to dividend changes depends on their interpretation of changes in related interactive variables. According to Kane et al. (1984) the interaction effects of contemporaneous dividends and earnings announcements, and not these variables individually, are significant in explaining immediate stock market response to dividend change announcements.

Investors' dividend preferences[218] that invest in LCCs are not likely to prefer dividends due to the associated tax penalties, whereas institutional investors often prefer dividends, both for tax and for fiduciary reasons.

5. 3 MODEL:

This section builds a model of the dividend paying behaviour of LCCs. Given that the monitoring rationale of dividends is limited and these firms being value maximisers, the dividend policy is characterised by a lack of pressure from outside investors to pay dividends and a tendency to accumulate residual returns for the personal benefit of the owner-managers.

[217] A company's dividend yield equals the dividend paid in the period prior to the omission or the annual dividend announced in the initiation announcement, divided by the stock price the day before the announcement.

Assumptions:

1. Firms are assumed to maximise the wealth of shareholders who are price takers. Given the market manipulations[219] in the stock exchange, a firm can be defined as an entity participating in financial markets, like an active, strategic trader[220] manipulating the market to its shareholders' advantage.

"The corporation acts as a 'manipulator' of its share value price in financial markets and attempts to maximise the price taking shareholders' wealth" (Chatterjea et al, 1994).

2. Agency problems exist between the outside shareholders and family shareholders or the owner-managers.
3. The choice of dividend policy is made by the owner-managers who in order to minimise the cost of equity capital enact dividend policies in accordance with their investors' wishes[221] and the need for future capital.
4. The owner-managerial compensation scheme takes the form:

   $C = mV_0 + mV_1 + S$

   Where V_0 is the firm's perceived announced value at time 0, V_1 is the true realised value of the firm at time 1. Assuming that the owner-manager receives in each

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[218] Dividend preferences of investors are correlated with the size of the companies in which they choose to invest (Redding, 1997).

[219] Market manipulations can be classified into three categories:
Action based manipulation: Manipulation based on actions that change the actual or perceived value of the assets of the firm.
Information based manipulation: Manipulation based on releasing inside information or spreading false rumours.
Trade based manipulation: Manipulation due to buying or selling securities, without taking any actions to alter the value of the firm or to release false information, which changes its value.
The first two categories of manipulations are termed as fraud. Manipulations of these two kinds can happen when the manipulator camouflages his actions with less innocuous deeds or projects a false image to the other market participants.

[220] The corporation can be viewed as an action based manipulator. The actions involves its real investment decisions i.e. taking on all projects with positive net present value and financial restructuring decisions like the choice of debt/equity ratios and dividend decisions. A Corporation can also be considered as information based manipulator i.e. that the information it controls flows from its production and investment decisions. Lastly, it can also be viewed as a trade based manipulator, trading its equity and debt to maximise share price.

period a constant proportion m, of the firm's value. Managers are compensated as a function of the asset size of the firm (Walkling and Long, 1984). As the owner-manager's compensation is directly tied to the value of the firm, there is no incentive to deviate from the objective of firm value maximisation. S is the salary.

5. The investor population can be grouped into two classes: individual investors and institutional investors.
6. An individual investor is likely to own fewer shares than an institutional investor, while individual investors are not likely to prefer dividends due to the associated tax penalties; institutional investors often prefer dividends, both for tax and for fiduciary reasons. The dividend-averse small investors choose to purchase small company stocks. Stock of large companies are purchased by large dividend-loving investors who are attracted by their superior market depth[222] (Redding, 1997).
7. An investor's portfolio allocation decision between a large or a small company stocks will depend on the scale of his investments, on the transaction costs resulting from the imperfectly liquid markets and the difference in expected returns[223] on the two sizes of company shares.
8. The value of the firm in each period is assumed to depend on its investment decision at time 0. The investment decision produces the following stochastic earnings X, which is realised at the end of the period:

   $X(e) = \alpha + e$

   Where α is the mean earnings and e is the random error term. The quality of the firm, which is given exogenously, is unalterable by the manager. The owner-

[221] Dividend preferences of investors are correlated with the size of the companies in which they choose to invest.
[222] Market depth is defined as the size of extra demand required to push up the market price by one unit of currency.
[223] The gross return from investing a portfolio of size i in shares of type j is therefore the appreciation of a share multiplied by the number of shares held.

manager will choose the level of dividends that maximises the level of his or her compensation. As dividend payment increases, the level of compensation decreases at a constant rate.

9. When the size of a firm increases it improves its access to the capital markets as the average fixed costs of flotation decrease.

The value of a firm at a particular point of time depends on:

$V = X/K + I (R-K/K) T$

The first term is the contribution of the firm's existing assets to its market value and the second is the net present value of future investment[224] (Lang and Litzenberger, 1989). And for a given debt-to-asset ratio, a firm's exogenous growth rate G driven by retained earnings and debt at a specific dividend payout rate P is given by

$G = (1 - P) R$

Where,

X = expected earnings from existing assets

K = cost of capital

R = average rate of return on equity[225]

I = anticipated level of current investment

T = firm's finite growth horizon

(1- P) = Retention rate

P = payout rate

Each firm has a target payout rate P so that its target dividend at time t is the target payout ratio times earnings at time t or PX_t. Firms usually do not move immediately to the new target dividend, but instead smooth out changes in their

[224] Usually investment bankers and other financial intermediaries certify the net present value of the future investment, evaluate proposed projects and declare that the new securities are backed by represented earnings potential.

[225] Net income to shareholders/common equity.

dividends by moving part of the way to the target dividend each year. The return on equity is low in the small capitalised companies because the net income for the outside shareholders is restricted by the accumulation of free cash flow by the family shareowners, hence in order to maintain a higher G the payout rate needs to be either low or nil.

P = f (A)

P = the dividend payout rate (ratio of the five year arithmetic average of a firm's dividend divided by the five-year average of income available to common stockholders.)

A = vector of variables proxying for the equity agency costs-transaction costs tradeoff.

P = f (INH, FI, G1, G2, FK, SIV)

INH = fraction of insider holding

FI = fraction of block debt holder holding

G1 = previous five year average growth rate of revenues

G2 = forecasted future five year average growth rate of revenues

FK = future capital needed for new projects

SIV = Simultaneous information variables associated with earnings, i.e. financial press coverage of a firm's performance.

The speed with which the managers adjust dividends is captured by the speed-of-adjustment parameter c, which indicates how responsive a firm's dividends are to changes in earnings.[226] A higher value of c indicates a speedier adjustment (Dewenther and Warther, 1998). But in the case of LCCs, dividends are not highly

[226] Lintner's (1956) study suggests that major changes in earnings not related with existing dividend rates are the most important determinant of the company's dividend decisions. However, because managers believe that shareholders prefer a steady stream of dividends, firms tend to make periodic

correlated to earnings (given that the controlling family's interest in accumulating free cash flow) the value of c will be low.

$D_t = D_{t-1} + a + c\ (PX_t - D_{t-1})$

D_t and D_{t-1} are dividends at time t and t-1

X_t = earnings at time t

P = payout ratio

c = speed of adjustment

a = intercept term

5. 4 CONCLUSION:

The study of the dividend policy given the varied characteristics of the firm suggests that small changes in the dividend payouts do not affect the stock price considerably, unless the dividend changes are drastic. Dividend policies have a monitoring role according to the agency theory. Firms usually float new equity issues after the announcements of dividend payouts. New equity issues guarantee a review of the firm's policies by the investors. This entails the monitoring mechanism of the dividend payouts.

But dividend payouts may not have the ability to monitor firm activities in all circumstances. Firms in India, which are family controlled, restrain from paying dividends. For any further need of capital, may depend on rights issues or private placement of new shares. This saves the firm from not incurring any flotation costs and the investors save on taxes. Rights issues also have a monitoring function like that of dividends but in a very restricted sense, i.e. review of firm's policies by the existing shareholders. There is a large tendency in these firms to pay very little dividends or no dividends and thereby accumulate free cash flow. This free cash flow is not always

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partial adjustments toward a target payout ratio rather than dramatic changes in payout. Thus, in the short run, dividends are smoothed to avoid frequent changes.

used for negative NPV projects; and thus in the traditional sense these companies would be value maximising firms. But non-distribution of residual returns of the firms for personal consumption of the owner-managers is something which none of the outside stakeholders can curb.

Chapter - 6

Analysis of Survey Results

6. 1 INTRODUCTION:

This study analyses the low average market capitalisation of the BSE and it proposes that two of the main factors contributing to the low average capitalisation stem from the fact that monitoring by outside shareholders and block debt holders is restricted. Lack of effective monitoring is reflected in the nature of the dividend policy, which affects the market value of a company. In addition to testing these hypotheses empirically on the basis of the independent variables suggested in other studies, it was considered important to understand the management's perception about the above-mentioned critical factors. As the Indian industrial structure is peculiar given the macroeconomic environment, within which it functions, owner-managers may or may not consider certain variables, which are emphasised in the literature as valid. In order to get an insight into factors, which owner-managers of the Indian domestic firms consider important in determining their policies, it was necessary to conduct a personal-interview-based survey of these aspects. I asked a sample of corporate financial managers[227] what factors they considered most important regarding the dividend policy, which in effect helped to account for the factors determining their firm's dividend policy.

Objectives of this questionnaire survey were as follows:

1. To get an insight of the factors related to dividends i.e. non-payment of dividends rights issue etc.
2. To examine the management's perception of signalling and clientele effects.

[227] Financial managers usually were employees of the firm and were not part of the major shareholding family.

3. To also examine the dynamics of monitoring role of the financial institutions.

Pandey (1985) conducted a survey on the managers' conceptual understanding of the cost of different sources of capital. He suggests that the factors influencing financing decisions are highly complex and subjective in nature since capital markets in India are underdeveloped. 87% of the managers from the total sample of 30 Indian companies regarded ordinary share capital as the most expensive and 77% of them regarded long-term debt as the cheapest source followed by bank borrowings. The common arguments of managers for preferring borrowings were, tax deductibility of interest on debt, higher return to shareholders due to gearing, complicated procedures for raising equity capital, no dilution of ownership and control, equity financing entails permanent commitment as compared to debt. In addition to these, companies regarded internal and external factors, which influenced the financing choice. The internal factors were driven by the purpose for which funds were needed i.e. earning capacity, existing capital structure, ability to generate cash flows, investment plans etc. The external factors were capital and money market conditions, stipulations regarding debt-equity mix and convertibility clause etc. majority of the managers regarded quality of management, profitability and security as important factors, which helped FIs and the banks in making lending decisions.

But there has been a marked change in the above-mentioned managerial perceptions as a result of the financial reforms of 1991-92. In the interviews that I conducted during 1997-98, managers felt that raising equity finance was not difficult anymore, for tapping further growth opportunities equity finance was considered vital and that the permanent commitment towards outside shareholders was just payment of dividends.

The remaining portion of this chapter consists of three sections. Section 6.2 sets

forth the survey design. Section 6.3 and 6.4 outlines with the theoretical underpinnings of the dividend policy and monitoring by debt holders respectively, section 6.5 presents the research findings. Section 6.6 discusses conclusions and limitations of this study.

6.2 SURVEY DESIGN:

6.2.A. DATA:

The firms surveyed were listed on the Bombay Stock Exchange.[228] A total of 34 firms were surveyed on the basis of availability of data and access to managerial staff for the interviews. The choice of the companies included in the study was randomly selected from a group of firms, which did not belong to any of the indices calculated by the BSE[229] or the Standard & Poor (S&P). These indices highlight a particular

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[228] BSE started compiling and publishing the BSE 30 index number (Sensex) of equity prices from 1986. All the scrips included in the Sensitive Index are part of the specified group shares consisting of 150 scrips. The selection has been made on the basis of liquidity, depth, and floating-stock-adjusted depth and industry representation. The financial year of 1978-79 is the base year. Considerations for the choice were the price stability during that year and proximity to the period of introduction of the index. The compilation of the index values is based on the 'weighted aggregates' method (The price of a component share in the index is weighted by the number of equity shares outstanding so that each scrip will influence the index in proportion to its respective market importance). The current market value for any particular scrip is obtained by multiplying the price of the share by the number of equity shares outstanding. The index on a day is calculated as the percentage of the aggregate market value of the equity shares of all the companies in the sample on that day to the average market value of the same companies during the base period. This method of compilation has the advantage that it has the necessary flexibility to adjust for price changes caused by various corporate actions. The methodology of calculation is the same as the one employed in many of the popular indices such as the Standard & Poor USA, Dow Jones Index, HangSeng Index, New York Stock Exchange (NYSE) Composite Index and FT-SE 100 Index. It measures wealth whereby the prices are weighted by market capitalisation. In such an index the base period values are adjusted for subsequent rights and new issue of equity. This adjustment prevents a distorted picture and gives an idea of wealth created for shareholders over a period.

[229] BSE National Index: BSE started compilation and publication of an index series called "BSE National Index" from 1989. The equity shares of 100 companies from the "Specified" and the "Non-Specified" list of the five major stock exchanges, viz. Mumbai, Calcutta, Delhi, Ahmedabad and Madras have been selected for the purpose of compiling the BSE National Index. The criteria for selection had been market activity, due representation to various industry-groups and representation of trading activity on major stock exchanges.

BSE-100 Index

BSE-200: A new broad-based index series reflecting the present market trends in a more effective manner and providing a better representation of the increased equity stocks, market capitalisation and also the newly emerged industry groups. BSE has launched from 1994 two indices i.e. the BSE-200 and the DOLLEX. Besides market capitalisation, the market activity of the companies i.e. volumes of turnover and certain fundamental factors were considered for the final selection of the 200 companies.

firm's market capitalisation, turnover volumes, liquidity, industry representation, depth etc. Once a preliminary set of "low-cap" firms was chosen, the next task was to check if data was available for the selected companies. Availability of data became an important criterion on the basis of which firms were retained in the final sample set. LCCs have very limited coverage in the financial press, and on further inspection it was realised that companies did not maintain a very good record of their accounts. It proved difficult to gather past data on the firm's performance.

It is quite possible that the agency costs of equity are higher in firms, which could not provide continuous data. The last criteria was accessibility of their managerial staff for the personal interviews and upon further pursuance, it was recognised that certain firms did not exist any longer or were in the process of being liquidated, but they were still listed on the BSE. The earlier sample set of 80[230] companies was then reduced to 34 companies. Out of these 34 companies 3 have been de-listed (2 in 1998 and 1 in 1999) and one was taken over. This sample size cannot be deemed as representative of the whole universe of LCCs in the BSE, rather this study is indicative of the functioning of an LCC.

6.2. B. INDUSTRY GROUPS:

The 34 firms belonged to a varied selection of industry groups i.e. pharmaceuticals, chemicals, heavy machinery, fertilisers, trading, paper and paper products, off-shore drilling, granite and marble, steel, textiles, capital services,

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Dollex: BSE felt the need to design a yardstick by which growth values can be measured when the investment and the return are expressed in dollar terms, given the participation of foreign investors and foreign financial institutions in the country. This was facilitated by the introduction of a dollar-linked version of the 'BSE-200'.
BSE 500
S&P Mid Cap
There are 598 companies listed on all these indices, all the indices have overlapping listed companies.

[230] It was realised that some of the 80 companies did not exist anymore although BSE provided its price. There was no way to contact those companies, follow-up of their existing contact addresses did

electronics, cement, colour prints, batteries, gas, non-conventional energy sources, ferro alloys, wires and cables, bearings. These industries were then divided into three broad industrial groups. This was done in order to circumvent the problem of lack of adequate number of firms in each individual category. Steel, cement, heavy machinery, ferro alloys, wires and cables, off shore drilling, and bearings were grouped as Heavy Industry. Whereas textiles paper and paper products, chemicals, colour print technology, batteries and electronics were categorised as light industry. Remaining firms were highly distinct and diversified firms, which were classified as "Other" industrial group. This category included firms from the industries like, capital services, information technology, non-conventional energy sources, gas and trading. The 34 companies when divided among the three industry groups yielded the following percentages: 11 Light Industry (32.35%), 13 Heavy Industry (39.18%), and 10 in "other" group (29.41%).

6.2. C. NATURE OF THE FIRMS:

Most of the firms in the sample set existed as private limited companies and had made their first public issue in the late eighties or early nineties. As a result for most companies the data points were limited and also not all data points begin in the same year.

Table 6.1: Year of Incorporation of the sample LCCs

Industry Group	Incorporation Year in 80s and 90s	Public limited company in 90s
Heavy	8	4
Light	9	7
Other	7	6

It can be deduced then that as these firms are newly established public companies they tend to face initiation problems and as a result under perform. But it may not be true of all the companies in the sample set, because the sample set consists

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not yield any results i.e. they were untraceable.

of companies that have become public limited enterprises recently but show a steady growth in income and profits. The gestation period is industry specific and as such firms in the computer software and textiles sectors have shown steady increase in their profits even though they were established fairly recently, at the same time other manufacturing units in heavy machinery, energy resources seem to be affected by initiation problems. But it needs to be added here that firms involved in the production of heavy machinery who are part of an already established business house have also failed to achieve the consistent growth rates. Many of the firms are also separate entities of already established business houses. One interesting aspect of the conglomerates, often based on an original family-owned business, is that the dividend policy of each subsidiary which itself may be publicly listed is often determined by the central holding company based on the cash needs of other companies in the group (Glen et al, 1995). Firms in the sample set belong to a varied cross section of industry groups i.e. manufacturing, mining, computer software, pharmaceuticals, textiles and garments, NBFCs (Non-bank financial companies) etc. All the firms in the sample have a high proportion of inside shareholding and a very marginal stockholding by the Financial Institutions and Banks. There are few companies in the sample where the insider shareholding is less compared to the others in this case 25% or more stock is owned by other corporate bodies.

Table 6.2: Percentage Equity Ownership in the sample LCCs.

Industry Group	Average Percentage Shareholding by Insiders	Average Percentage shareholding by the FIs
Heavy Industry	26.36%	13.60
Light Industry	37.99	6.77
Other Industry	25.44	4.98

6.2. D. QUESTIONNAIRE:

A personal interview based questionnaire was designed to obtain information about the dividend payout policy and FI's monitoring. The questionnaire consisted of

two parts:

i. A general query of the firm which included questions about such items as the firm's D-E ratio, ownership structure in the firm, sources of finance, decision making hierarchy etc. This was crosschecked with the published data for authentication to the other responses.

ii. Open-ended queries related to the various factors related to the dividend policy and financial institution's role in the firm.

A preliminary test of the questionnaire was conducted among 5 of the selected firms; the modified responses of these firms in the second round of the interviews were included in the final sample. The survey was conducted between Dec. 1997 and May 1998.

6.3 THEORETICAL ISSUES RELATED TO THE DIVIDEND POLICY:

The corporate policy on dividend payouts occupies an important place in the overall firm's policy as it affects the market price of its outstanding shares, and therefore on the change in its shareholders' wealth[231]. Hence, the well established characteristics of dividends are prevalent in the finance literature; the positive correlation between dividend change announcements and stock returns, and given the effects of dividends on the market value of shares, the reluctance of managers to change dividends. Michaely, Thaler and Womack (1995) describe dividend initiations and omissions as "extremely visible, qualitatively changes in corporate policy." As Ambarish et al (1987) suggest that some firms may choose to continue distributing dividends, even when faced with the need to raise outside equity, as a means of

[231] The concept of shareholders' wealth can be expressed as the product of the number of shares owned, multiplied by the current share price. The change in shareholders' wealth over a given period of time is the difference in ordinary share prices between the beginning and the end of that given period, plus if the firm distributed a portion of its net income to shareholders - the sum of dividend receipts during that

boosting stock prices and thereby reducing dilution.

Dividend behaviour has been analysed from different points of view i.e. Information Asymmetry, Agency Conflicts, Residual and also Self-control theory. The Agency theory mainly Easterbrook's hypothesis (1984) suggests that dividends act as a means of subjecting a firm to monitoring by the capital market by forcing the firm to raise outside equity rather than relying on retained earnings as a source of capital, thereby reducing agency costs. And hence, new equity issues are announced around the time of dividend payments.

Management in setting dividend payouts tries to maintain a steady rate. From the study of Cyert et al (1997), it can be hypothesised that firms try to smooth dividend payouts, i.e. managers attempt to attain some long-term payout ratio between dividends and economic earnings, in setting dividends they focus on the change in the existing economic payouts and not the level, and they also try to avoid raising dividend if they stand a good chance of being reversed in the near future. Dividend changes are likely to follow large unanticipated and non-transitory changes in economic earnings. Stylised facts to the above mentioned hypothesis comes from the study of DeAngelo and DeAngelo (1990) and DeAngelo (1992) on dividend adjustments of troubled NYSE firms and firms with losses. Their study concludes that US firms tend to spread dividend reductions over more than one year, making a small cut each year rather than concentrating the dividend reduction in a single year. They report that firms cut their dividends in periods of financial distress and that there is usually a strong reluctance to omit dividends, especially when the firm has a long history of paying dividends. Moreover, dividend cuts are most often observed for firms with, in retrospect, persistent losses, whereas firms with transitory losses usually

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period.

do not cut their dividends immediately. These results also imply that the interaction of losses and subsequent dividend changes convey some private information to outsiders about the managers' perception of the severity and the duration of the problem. A dividend cut may not have a negative impact on the current and the future business opportunities of the dividend cutting firm; i.e. a dividend cut may not send an adverse signal to suppliers and customers to abandon their relationship with the firm immediately.

Dewenther and Warther (1998) find that close ties between managers and investors substantially reduce information asymmetries and agency conflicts. Their study suggests that due to lower levels of information asymmetry and agency conflict in Japanese firms, dividends do not act as a signal of information or as a disciplinary mechanism and the Japanese managers need not fear adjusting dividends in response to earnings changes. And they are less averse to cutting dividends and they cut their dividends more often and they respond to poor performance by cutting dividends more quickly than their US counterparts. As pointed out in earlier chapters, the intensity of agency conflicts in the small-scale family owned enterprises is low and hence, dividends do not play a role as a signal of information to the investors. Investors' dividend preferences[232] that invest in small companies are not likely to favour dividends due to the associated tax penalties, whereas institutional investors often prefer dividends, both for tax and for fiduciary reasons. For these firms the dividend yield[233] will not be a correct measure of the dividend intensity, but the payout ratios will be.

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[232] The dividend preferences of investors are correlated with the size of the companies in which they choose to invest (Redding, 1997).

[233] A company's dividend yield equals the dividend paid in the period prior to the omission or the annual dividend announced in the initiation announcement, divided by the stock price the day before the announcement.

6.4 THEORETICAL ISSUES RELATED TO MONITORING:

The word monitoring is used as a comprehensive label for all value-enhancing activities; it comprises intervention in a company's affairs as well as information acquisition and is also used synonymously with intervention and shareholder activism. There are different ways in which large block holders of shares or bonds bring about value-increasing changes in corporate policy:

1. When they cannot monitor the management themselves, large shareholders can facilitate third party takeovers by splitting the large gains on their own shares with the bidder,

2. Through a proxy contest, since the board of directors has the legal authority to replace the officers of the firm, gaining a majority of seats on the board is tantamount to gaining control of the operating decisions of the corporation and lastly,

3. Through informal negotiations with incumbent management to institute changes. This means influencing policy as a jawboning mechanism. It is practically costless and is used to make less valuable improvements (Vishny and Shleifer, 1986).

An outside block shareholder has more incentives in a liquid market to speculate rather than monitor. And he/she may behave like an arbitrageur, which frequently turns over his/her portfolio of stocks in order to capitalise on all possible short-term gains (Shleifer and Vishny, 1990). The large shareholder because of his/her position may receive information about the value of the firm before other market participants and as a result it creates information asymmetry for other market participants at the stock market (Burkart et al, 1997). A block shareholder can sell his claims as soon as he or she perceives a bad return state and in other states can speculate on the basis of his or her exclusive access to the private information about the firm. Thus a large shareholder does not always guarantee monitoring and liquidity or lack of it in the

market does not change monitoring behaviour of the large shareholder. A block debt holder can only monitor a firm in this situation, as a block shareholder fails to emerge ex-ante after trading in the stock market (Huddart, 1993).

Firms in countries where the stock market is poorly developed are forced to rely more extensively on debt (King, 1977). Creditors in those circumstances who make longer-term loans commonly place appropriate claims against durable assets. As the exposure to risk increases, these debt-holders become more concerned with the details of the firm's operating decisions and strategic plans. And with high debt-equity ratios the lenders become more like shareholders and greater consultation between the management and its principal creditors takes place. Thus, long-term lenders usually carefully align incentives and protect themselves with safeguards. In these atypical circumstances, lenders are also represented on the board of directors in a voting capacity (Williamson, 1985). For lenders who commonly make short-term loans for general business purposes, proof that the firm is currently financially sound, coupled with short maturity, provides protection for them. And as a result they do not need additional representation on the board. A banking presence becomes very crucial when firms are experiencing adverse conditions. But this changes as evidence of recovery progresses, when the lender does not have to play a very effective role in monitoring the firm's activities.

The above paragraphs justify the role of a block debt holder in monitoring a firm in different states. In normal circumstances the monitoring is restricted to jaw boning whereas in other adverse conditions it involves active participation in decision making or facilitating other efficient managements to take over the inefficient firm.

6. 5. RESULTS:

6.5. A. APPROACH TOWARDS THE ISSUES INVOLVING DIVIDEND POLICY:

The study's objective was to investigate financial managers' perceptions of above-mentioned theoretical issues related to the factors influencing dividend policy. The respondents were asked to indicate their agreement or disagreement about each of the 11 closed-ended statements. Table – 6.3 provides summary statistics on the responses to each of the 11 statements related to the dividend policy.

There is a strong agreement for statements 1, 2, 5, 7, 9 and 11. This implies that although most managers agree that dividends do affect the share prices but are of the opinion that investors need to judge the company not only from the point of view of dividends but also from other attributes of the firm. They perceive no adverse impact of dividend cuts as outside shareholders realise the intrinsic value of the firm who want to have a long-term investment plan with a firm. Easterbrook's analysis of dividends as a means of monitoring the firm's activities by the market is not true of Indian corporate sector. Thus the findings of Ambarish (1987), Cyert et al. (1997) and DeAngelo et al. (1990) do not hold good for the Indian companies. Family shareholders make all the decisions related to the firm; all decisions related to the firm and the choice between debt and equity also depend on the promoters' policies. The managers i.e. who were just employees, did not play any role in the decision making process. Managers whose responses were not valid for the statement 9, equity issues in their cases were used for the following:

1. Because of restrictions on drawing funds for working capital purposes from banks and financial institutions especially the IT companies, firms with growth opportunities, find the restrictions hampering their growth chances and hence depend on equity finance.

2. Newly established companies, which have not started any production, use the equity finance for buying machinery, factory buildings, stocks and other assets.
3. Recognition of the company was an important consideration for a public issue although their need for public funds was not imperative.

There is a strong disagreement about statements 3, 4, 8, and 10. This corroborates to their agreement with the above-mentioned statements. This implies that they want investors not to judge the firm only from the dividend payouts, which could be misleading because if the firm has any growth opportunity, they would rather divert the dividend payments towards new investment opportunities. Thus, non-payment of dividends, drastic cuts and fluctuating dividend payouts are all justified by the managers on the ground that the earnings are retained for the investment purposes.[234] Strong agreement with statement 5 proves this. Although the financial literature suggests that managers are reluctant to cut dividend payments drastically as it adversely affects the share price of their firm. The above-mentioned propositions suggest that the discretionary behaviour of owner-managers is dominant in formulating policies of the firm and as a result few of the hypotheses suggested in the traditional literature are valid for LCCs. This discretionary behaviour can then be extrapolated to the accumulation of free cash flow for the benefit of the owner-managers.

Managers did not express any strong opinion about rights issue and its valuation effect. They thought that rights issues were one of the ways by which their existing shareholders could be rewarded but were not sure of its valuation effects on the outstanding shares.

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[234] Refer to Chapter – 5, tables 5.2 and 5.4.

Table 6.3: Results of responses related to dividend policy

Statements	Agree	Dis-agree	Invalid	Mean	S.D.	Prob. χ^2	Industry group
1. Reasons for dividend policy changes should be adequately disclosed to the investors, which also contribute to transparency.	17.64 %		11.76%	3.333	1.414	3.380	O
	11.76	5.88%	20.58	4.333	2.516		H
	14.70		17.64	3.666	0.707		L
2. Dividend payout affects the price of the common stock and also future public issues.	23.52		5.88	3.333	4.242	2.849	O
	23.52	11.76	2.94	4.333	3.511		H
	23.52	2.94	5.88	3.666	3.785		L
3. Dividend payments provide a signalling device of the future prospects.	5.88	17.64	5.88	3.333	2.309	7.324	O
	2.94	23.52	11.76	4.333	3.511		H
	17.64	8.82	5.88	3.666	2.081		L
4. Management should be responsive to its shareholders' preferences regarding dividends.	11.76	8.82	8.82	3.333	0.577	7.236	O
	2.94	23.52	11.76	4.333	3.511		H
	17.64	11.76	2.94	3.666	2.516		L
5. New capital requirements of the firm generally have an effect on modifying the pattern of dividend payouts.	20.58	2.94	8.82	3.666	3.055	2.233	O
	14.70	2.94	20.58	4.333	3.055		H
	17.64	2.94	8.82	3.333	2.516		L
6. Does a Rights issue achieve the desired impact on the stock price as the dividends?	11.76		14.70	3	0.707	.2009	O
	14.70		26.47	4.666	2.828		H
	11.76		20.58	3.666	2.121		L
7. Financing decisions should be independent of a firm's dividend decisions.	17.64	8.82	2.94	3.333	2.516	2.387	O
	29.41	2.94	5.88	4.333	4.932		H
	20.58	8.82	2.94	3.666	3.055		L
8. A firm should strive to maintain an uninterrupted record of dividend payouts.		17.64	11.76	3.333	1.414	2.770	O
		26.47	11.76	4.333	3.535		H
		29.41	2.94	3.666	6.363		L
9. Equity is meant for expansion, high capital intensive and risky investments.	23.52	5.88		3.333	4.242	2.940	O
	23.52	8.82	5.88	4.333	3.214		H
	20.58	11.76		3.666	2.121		L
10. Concern about maintaining or increasing stock price.	11.76	17.64		3.333	1.414	8.135	O
	2.94	26.47	14.70	5	4		H

		23.52	2.94	3	4.949		L
11. All the decisions pertaining to the firm's policies are determined by the controlling family shareholders.	26.47	5.88		3.666	4.949	7.525	O
	17.64	20.58		4.333	0.707		H
	23.52	2.94	2.94	3.333	4.041		L

O = Other industry, H = Heavy Industry, L= Light Industry

6.5. B. APPROACHES TO ISSUES RELATED TO MONITORING BY THE FINANCIAL INSTITUTIONS:

The second objective of this survey was to investigate financial managers' perceptions of FI's in monitoring firms. Managers were again asked to indicate their agreement or disagreement about each of the 8 closed-ended statements. Table 6.4 provides summary statistics of the responses to each of the 8 statements related to monitoring by FIs.

There is a very strong agreement for statements 2 and 8, which suggests that most firms used debt for working capital purposes and buying fixed capital. Debt has been used for mainly capital expenditure of tangible and durable tools of production and the preference for debt was due to debt tax shield. FIs in normal conditions examined the firms' progress through informal inquiries. Strong agreement with statements 1, 3 and 7 suggests that in addition to informal inquiries about the firm's performance, officials from FIs visited the factories occasionally. In most firms FIs are nominee directors on the board of directors, in addition to professional directors (including technical directors and industrialists). In certain companies they have more than one nominee director participating in the board. Some managers also believed that by appointing an official from the FI helped the firms to secure more loans. This suggests that small firms face problems of accessing different sources for funds. A member from the FI on the board of a firm ensures access to funds from the FI. This also helps the firm to acquire funds during adverse states. When the firm is likely to go bankrupt, it is

difficult to acquire equity finance for reasons suggested by Myers (1977), during this time managers are forced to depend on debt from banks and financial institutions.

There is a strong disagreement for statement 4. Neither the FI nominee directors on the board or the FIs in general played any role in any decision-making process of the firms in normal circumstances. To a large extent, a loan from FIs did not automatically imply effective monitoring by the outside stakeholder. This suggests that the importance of a firm to a FI determined monitoring of that firm.

Most of the responses related to FIs were not valid for most of the firms because these firms considered debt from banks and FIs as expensive. They did not depend on any long-term debt from FIs; their sources of finance were equity and bank loans for working capital. As Williamson (1985) suggests short-term lenders do not require any additional representation on the board of a firm.

In situations where firms were making continuous losses for long periods of time, FIs played a greater role as members of the board of directors and contributed in the decision making process. Although the evidence to this is very limited because for most firms this query was not valid, some of the managers of these loss-making companies agreed to the fact that FIs played an important role in their restructuring process.[235]

Table 6.4: Results of responses related to FIs

Statements	Yes	No	Invalid	Mean	S.D.	Prob. χ^2	Industry group
1. Do FIs visit the factories?	5.88%		23.52%	3.333	4.242	7.274	O
	23.52	5.88%	8.82	4.333	3.214		H
	17.64	2.94	11.76	3.666	2.516		L
2. Do they enquire into the progress of the company?	14.70		14.70	3.333	0	3.767	O
	26.47	2.94	5.88	4	4.358		H
	23.52	2.94	5.88	3.666	3.785		L

[235] This provides evidence to the fact that agency costs of debt are absent in normal circumstances for the LCCs and the costs might rise with the rise in the market value of a firm and that only FIs can provide monitoring in adverse situations.

3. Are they on your board?	2.94	11.76	11.76	3	1.732	6.080	O
	11.76	2.94	8.82	2.666	1.527		H
	17.64	20.58	11.76	5.666	1.527		L
4. Do they play a role in the decision making process in the firm?	2.94	14.70	11.76	3.333	2.081	1.837	O
	11.76	17.64	8.82	4.333	1.527		H
	5.88	14.70	11.76	3.666	1.527		L
5. In case of the company making loss continuously, do they play a role in decision making then?			26.47	3		6.428	O
	8.82	5.88	23.52	4.333	3.214		H
			32.35	3.666			L
6. Do they ever pressurise the board to change its existing policies?	2.94	5.88	20.58	3.333	3.214	6.320	O
	11.76	2.94	23.52	4.333	3.511		H
		14.70	17.64	3.666	0.707		L
7. Does it help to acquire additional funds from the FIs if they have their nominee director on the board?	5.88		23.52	3.333	4.242	3.729	O
	14.70	5.88	17.64	4.333	2.081		H
	11.76		20.58	3.666	2.121		L
8. Debt is acquired for working capital and fixed capital purposes?	20.58		8.82	3.333	2.828	2.158	O
	23.52	5.88	8.82	4.333	3.214		H
	26.47	2.94	2.94	3.666	4.618		L

6. 5. C. INDUSTRY INFLUENCE ON DIVIDEND POLICY:

This study's another objective was to investigate differences in managers' attitudes across the three industry groups. Rozeff (1982) concluded that a company's industry does not help to explain its dividend payout ratio. Chi-square analysis was used to test the differences in these responses among the three industry groups. Further Chi-square tests were performed using pair-wise comparisons between the industry groups on all statements. The null hypothesis being that there is no association between the responses and the difference in industry groups. This suggests that the dividend policy is determined by firm factors rather than by industry related factors. Kim and Sorensen

(1986), in their empirical study test whether the cross-sectional variations of corporate leverage ratios can be related to agency costs. They conclude that although several of the variables determine the debt decision, the debt decision is determined non-systematically by managers across firms. Likewise, dividend policy is also determined by non-systematically by owner-managers, irrespective of the industry groups.

Results reveal that the industry group had no significant differences in responses related to dividend policy determinants at the .05 levels. Only with regard to the statement 8 related to dividend policy, we can reject the null hypothesis at .05 levels. And the same is evident for the responses related to monitoring by the financial institutions.

6. 6 CONCLUSION:

Before drawing any conclusions, several limiting aspects of this survey are mentioned as follows:

This survey typically involves selection bias on the basis of data and access to managers. Although steps were taken to ensure to include as many companies as possible in the final sample, this study is no exception. The companies for which continuous data was not available could be the worst cases of agency conflicts. Views for this survey in most cases were obtained from the financial managers who did not form part of the major shareholding family. These managers were involved in providing inputs and implementation of policies of the board. As a result of random selection of the firms in the first instance, not all industry groups are represented in this study. The other drawback is that firms were classified very broadly in three groups, and in the "Other" group, there are companies as varied as IT, NBFC, Non-conventional energy sources etc. This is has significantly effected the Chi-Square results.

Respondents believed that dividend policy affects share value but also think that by proper information dissemination, they can convince the investors of their growth opportunities. With regard to rights issue, the survey does not provide any evidence to reasons behind the issue of rights issue.

Agency theory of debt suggests of a conflict of interest between debt holders and shareholders. Debt holders of LCCs in India i.e. FIs are not in a vulnerable position in a conflict of interest situation. FIs monitor the firms only during adverse states and in other states are not actively involved in oversight. This is true of LCCs because their individual debt with the FI does not form a major proportion of FI's overall loan portfolio. The conflict of interest between inside shareholders and outside shareholders is more prominent in LCCs. Given that most of the managers feel that higher risks can be taken with equity finance, a project if successful, returns are retained by the inside shareholders i.e. accumulation of free cash flow, which may not be used for takeovers or mergers as suggested by Jensen (1986).

Chapter- 7

Econometric Analysis

7. 1 INTRODUCTION:

Agency conflicts are measured with the help of mainly three surrogate measures, which are prevalently referred to in the literature (Prowse, 1990, Titman and Wessels, 1988; Smith and Watts, 1986; Long and Malitz, 1985). The three measures are as following:

- I Agency measure: 1 – (Gross Fixed Assets/Total Assets)

This represents the proportion of company's assets not tied up in fixed plant and equipment. Monitoring the usage of fixed assets, either if they are sold or if they are used for a different purpose is relatively easy. It therefore reduces the possibilities for shareholders to engage in wealth transferring investment projects. To the extent that the company's assets don't comprise of such assets, whose application is easy to monitor, there is a potential for wealth appropriation and hence can be used as a surrogate measure of principal-agent conflict situations.

- II Agency measure: Cash and marketable Securities/Total Assets

It attempts to assess the extent of liquidity in the company's assets. This has been used as a proxy for the ease with which the assets can be manipulated and hence render monitoring an expensive activity for the debtholders.

- III Agency measure: Sales and Promotion expenses/ Total sales

It measures the extent of promotional activity required to support the sales activity of the company. The effectiveness of such expenses cannot be easily established, hence difficult to monitor by outsiders (including debt holders). A firm

that has substantial expenses under sales and promotion has a wide range of options to indulge in discretionary behaviour.

But none of these measures were useful to measure the free cash flow syndrome that is predominant in a family owned business. The dividend policy is dominantly affected by the free cash accumulation behaviour of the family shareholders and the monitoring rationale of it is rendered irrelevant. Rest of this chapter is structured in the following manner; section 7.2 outlines the hypotheses of this thesis, which are tested empirically in this chapter. An explanation of the nature of the data, sample and characteristics of the firms included in the sample is given in section 7.3. This is followed by section 7.4, which gives a brief description of the variables in the model determining the dividend policy of a firm. The next section 7.5 deals with the methodology used for the econometric analysis, results and its economic interpretation. Section 7.6 provides concluding comments.

7.2. HYPOTHESES:

The hypotheses brought forward by this thesis are as follows: if accumulation of free cash flow is dominant in the firms, then the dividends should be weakly correlated with earnings.[236] The other variables, which influence dividend payout ratio are insider ownership, FI's stake in the firm, past and forecasted growth in earnings, future capital needed for new projects, simultaneous information variables associated with earnings etc. Future capital needs are proxied here by rights issues or private placement of shares. The simultaneous information related variables help reduce the adverse impact of dividend reductions. Hence, dividend payout ratio is determined by inside shareholding, FI's shareholding, past earnings of the firm and forecasted earnings of the firm for the five years, future capital needs and information variables.

$DPR = \beta_0 + \beta_1$ P. EARN $+ \beta_2$ FIS $+ \beta_3$ INSIDER $+ \beta_4$ F. EARN $+ \beta_5$ F.COV $+ \beta_6$ RIGHTS $+ \mu$

Where,

DPR = Dividend payout ratio

FIS = Financial institution's stake in the firm

INSIDER = stockholding of the family members in the firm

P.EARN = Past growth of earnings

F.EARN = Forecasted growth of earnings

F.COV = Financial press coverage of a firm

RIGHTS = Rights issue or private placement of shares

μ = Error term

The second hypothesis is related to Bank and NBFI's role in monitoring firms. It is suggested that the level of monitoring is directly proportional to the percentage of ownership of these institutions in a firm. It is the not the stockholding of the FI which determines the monitoring *ex ante*, but the position of a particular firm in the FI's portfolio. The FIs and banks have a marginal stockholding in most of the firms in the sample set.[237] The external monitors consist of FIs and diffused shareholders and due to their small stockholding in the firms, they have no incentives to monitor the firm activities. Given the lack of monitoring and tendency of the family shareholders to accumulate free cash flow, the firm's returns are not distributed amongst outside shareholders.

The final hypothesis deals with the market for corporate control, despite the presence of many LCCs, the takeover market is not very active in BSE. The reason for

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[236] Refer to Chapter-5, Table – 5.5.
[237] Refer to Chapter -6, Table - 6.3.

this, stems from the "market for lemons" syndrome, whereby LCCs are considered equivalent to second hand cars and due to asymmetric information, equilibrium in the market for takeovers fails to achieve in spite of presence of many buyers and sellers. But this hypothesis[238] is not empirically dealt with in this thesis.

7.3 EMPIRICAL ANALYSIS:

7.3.A Data:

Data on the firm's performance was mainly collected from two sources, i.e. PROWESS and individual company accounts. PROWESS is an online database of the Centre for Monitoring Indian Economy Pvt. Limited. Data for the econometric analysis consisted of parameters representing financial performance of a company. A personal interview based survey of managers of these companies was carried out to gather insights into the position, status and power of managers and also certain subjective estimates of the firm i.e. decision making hierarchy. In addition, the questionnaire was designed to gather understanding of the managerial preferences regarding different financial instruments i.e. debt or equity, information dissemination about the firm's policies, firm's relation with FIs and nationalised banks etc. This data source was the only accessible integrated database, which provided information about a range of firms for the past few years. The companies' annual reports were not available on a continuous basis over the entire period of 1990-99.

7.3. B SAMPLE PERIOD:

The empirical analysis is done for the period between 1990-99; the choice of this period stems from the fact that the initial part of this period witnessed an introduction of radical financial reforms, which sought to change the financing pattern of the Indian companies. The reforms of 1991-92 ended the state-regulated environment in

[238] But none of the companies had felt a threat of a takeover or friendly merger.

which most companies; financial institutions, banks and stock markets functioned. As a result many of the firms, which existed as private limited companies in the past could access the equity markets and thus became public limited companies.[239] The number of companies as a result listed on the BSE increased from 1031 companies in 1981 to 5860 in 1998. Prior to these reforms the period between 1981-90 was a period of gradual but significant financial changes and although effects of these reforms were witnessed throughout the decade, 1990 can be taken as a year by which time many of the reforms had had their impact on the financial system. The peculiarities of the capital structure cannot be attributed entirely to a bias towards equity financing resulting in the aftermath of an overhaul of the then existing financial system. During the period of 1981-90 capital markets were becoming a significant source of funding corporate growth. Most of the companies in the sample set existed as private limited companies during this period. So the sample period provided appropriate conditions to study the capital structure features in Indian firms, as equity markets had become an important source of finance for the corporate sector by this time.

7.3. C SELECTION OF THE SAMPLE:

The choice of the companies included in the study was randomly selected from a group of firms, which had very low market capitalisation over a period of time. Once a preliminary set of "low-cap" firms was chosen, the next task was to check if data was available for the selected companies. Availability of data became an important criterion on the basis of which firms were retained in the final sample set. LCCs have very limited coverage in the financial press, and on further inspection it was realised that companies did not maintain a very good record of their accounts. It rendered gathering of past data on the firm's performance difficult. The last criteria was access

[239] Refer to Chapter - 6, Table- 6.2.

to their managerial staff for the personal interviews and upon further examination, it was recognised that certain firms did not exist any longer or were in the process of being liquidated. The earlier sample set of 80 companies was then reduced to 34 companies. The sample is thus influenced by both availability of data and access to their respective managerial staff. Although these availability constraints have introduced a significant bias in the sample, it is equally distributed amongst different industry groups.

7.3.D NATURE OF THE FIRMS:

Most of the firms in the sample set existed as private limited companies and had made their first public issue in the late eighties or early nineties. And as a result the data for most of these companies is available from early nineties onwards. The firms in the sample set belong to a varied cross section of industry groups i.e. manufacturing, mining, computer software, pharmaceuticals, textiles and garments, NBFCs (Non-bank financial companies) etc. The firms were broadly divided in three industry categories, heavy, light and other industry. All the firms in the sample have a high proportion of inside shareholding and a very marginal stockholding by the Financial Institutions and Banks. Out of the 14 firms in the heavy industry group, 6 firms had family ownership between 20%-75%, and 4 have ownership percentage between 5-20. In the same group 4 firms had FIs' and banks' stake ranging between 10-35%. In the light industry group consisting of 9 firms, 7 had family ownership ranging from 15-75%, there is only 1 firm which has 35% bank stake. In the last category of 'other' industry group, which had 11 firms, 6 had a family stake between 20-70%, and the bank's stake ranged from 1-10%. There are few companies (5 firms of the heavy industry group and 2 from the light industry group) in the sample where the insider shareholding is less compared to the others in this case between 25-50% of

the stock was owned by other corporate bodies. Equity holding pattern of 6 firms was not known.

Under performance of most companies in the sample can be attributed to initiation problems given that most companies were established in the early nineties or late eighties. But it may not be true of all the companies in the sample set, because the sample set consists of companies that have become public limited enterprises recently but show a steady growth in income and profits. The gestation period is industry specific and as such firms in the computer software and textiles sectors have shown steady increase in their profits even though they were established fairly recently, at the same time other manufacturing units in heavy machinery, energy sources seem to be affected by initiation problems. But it needs to be added here that firms involved in the production of heavy machinery who are part of an already established business house have also failed to achieve consistent growth rates. Many of the firms are also separate entities of already established business houses.

7.3.E BSE SENSEX COMPANIES:

In order to check the robustness and the applicability of this model on dividend payout a comparative analysis was done with the data of the 30 top listed companies (Sensex) of BSE. The companies in the BSE Sensex also belong to a cross section of industry groups and they have been broadly classified in three groups i.e. heavy, light and other. There are 12 firms in the 'heavy' industry group, 9 firms in 'light' industry and 9 firms in 'other' industry. The nature of the top listed companies is summarised in the following table 7.1:

Table 7.1: Equity ownership pattern in BSE SENSEX companies.

Industry group	Insider ownership	FIs stake	Foreign Holdings
Heavy	3.69%	35.91	30.42
Light	2.26	19.81	40.03
Other	7.02	40.24	15.48

There are 6 companies out of the 30 companies, which have more than 45% of their stake with foreign holdings and 6 companies where the government stakeholding is more than 50%.

Table 7.2: Ratio of dividends and PAT and retained earnings and PAT in BSE SENSEX companies:

Industry Group	Dividends/PAT	Retained Earnings/PAT
Heavy	.3142	.6749
Light	.4539	.5315
Other	.1922	.8004

Table 7.3: Correlation between retained earnings (lagged) and PAT in BSE SENSEX companies:

Industry Group	Correlation Coefficients
Heavy	.7204
Light	.5894
Other	.7087

Tables 7.2 and 7.3 suggest that the high rate of retention of earnings show a high correlation with profits after tax in the next year. This would imply that retained earnings are being used for future investments rather than for the benefit of the owner-managers of the companies.

Table 7.4: Growth in PAT in the BSE Sensex Companies:

Industry Group	Growth in PAT
Heavy	.3595
Light	.3943
Other	.3620

Table 7.5: Rights, Private Placement and Public Issues of BSE SENSEX companies between 1991-99.

Industry Group	Rights Issue	Private Placement	Public Issues	Total
Heavy	9	54	79	142
Light	5	14	17	36
Other	8	49	65	122

Table 7.5 shows that rights issues and private placement of shares is a widely employed by BSE SENSEX companies as well LCCs.[240]

[240] Refer to Chapter - 5, Table - 5.1,

7.4 VARIABLES:

The following are the list of the variables, which explain the first hypothesis, and additionally about the financial institution's role in monitoring the firms.

1. Dividend payout rate: The dividend payout rate i.e. ratio of dividend payments and earnings is the dependent variable relating to the first hypothesis. For firms, which have low agency conflicts, the payout ratio is a correct measure of the dividend intensity (Dewenther and Warther, 1998). The variables, which determine dividend pay out rate in the model are growth in the past earnings, forecasted growth of earnings, news related to the firm, inside ownership, FI's stake in the firm. In the agency framework, mainly Easterbrook's hypothesis (1984) suggests that dividends can act as a means of subjecting a firm to monitoring by the capital market by forcing the firm to raise outside equity rather than relying on retained earnings as a source of capital, thereby reducing agency costs. Outside debt is difficult to attain for most of the low capitalised companies as they are not considered credit-worthy by the financial institutions and are thus forced to rely on outside equity. Announcements of dividend changes by over investing firms will change investors' expectations about the size of the firm's future investment in negative-net-present-value projects. As a result an increase in the dividend will, all else being equal, reduce the extent of over investment and increase the market value of the firm. Validity of the monitoring rationale for dividends and the consequent simultaneity of dividend and capital structure decisions are dependent on the characteristics of the firm as they relate to its growth opportunities and to the existence of non-dividend mechanisms for controlling agency costs. By encouraging firms to seek additional funds from the market, they result in evaluation of the firm's activities by the investors. In the case of family owned firms listed on BSE, dividends may not fully play the role of a monitor, but

they still assure that firms may at least depend on rights issue for further needs of capital, if not, on other new capital issues. In this case of rights issues, firm's activities are assessed by the existing shareholders.

2. Past growth in Earnings: The partial adjustment model suggested by Lintner (1956) assumes that the target level of dividends is given by:

$Dt^* = rEt$

$0 < r < 1,$

Dt* represents the optimal value of dividends associated with the current level of earnings Et, and r is the target or the optimal payout ratio (Lintner, 1956).

But dividend changes are likely to follow large unanticipated and transitory changes in economic earnings. Given that growth in earnings can be volatile depending on the firm's performance in the market, firms try to smooth dividend payments through time. Managers attempt to attain some long-term payout ratio between dividends and economic earnings and they avoid raising dividend if they stand a good chance of being reversed in the near future (Cyert et al., 1996). Likewise, dividend reductions are spread over more than one year, making a small cut each year rather than concentrating the dividend reduction in a single year. It is also possible that in order not to cut dividends firms may use the accumulated earnings of the past years to pay dividends in the current year. Dividends in the absence of any free cash flow accumulation by firm's insiders should be positively related to the growth in earnings. Past performance of the firm determines how the earnings are distributed. When the earnings are declining, the firm may decide to invest its current earnings in improving its productive capacity for which it may need additional finance. Most of the family controlled firms use dividends as a last measure to attract investors if their equity issues are not being subscribed well. For additional finance, firms depend on rights

issue and to provide an incentive for prospective subscribers they announce payment of dividends after the announcement of rights issue. These companies do not hesitate to cut dividends if the firm does not anticipate any additional need for further finance from the market. Thus dividends are not paid on continuous basis and there are wide fluctuations in the dividend payouts. The past growth rate of earnings and dividend payouts will be negatively related unless it is accompanied by increase in dividends.

3. Forecasted growth rates of earnings: For this variable data availability restricted further calculations. From the queries addressed to managers related to target growth rates and their firms achieving them, it was seen that almost 60% of the firms did not meet their targets. Most managers agreed that targets were not achieved on a continuous basis, which shows that any forecasted growth of revenues could give spurious results. In the heavy industry category out of 13 firms 3, in the light industry group of 10 firms 5 and in the 'other' industry group, 5 out of 11 firms were achieving their target growth rates. This variable is of importance to firms, which formulate their dividend policies judiciously, keeping in mind the adverse impact of sudden decrease in dividend payouts. The forecasted growth of earnings should be positively related to dividend payout ratio.

4. Inside ownership: This variable plays an important role in the dividend policy. Studies of insider ownership[241] and financial policy assume that any causality among these choices runs from insider ownership to financial policy. Insider ownership is

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[241] But Demsetz and Lehn (1985) make a persuasive case that insider ownership choices are endogenous outcomes of value-maximising behaviour. The four real determinants according to them, of insider ownership are:
Business risk
Firm size
The number of operating divisions of the firm
Research and development expenditures
These variables capture various real attributes that help to determine the benefits and costs of insider ownership.

typically viewed as exogenous and its determinants are not subjected to economic analysis. Rozeff (1982) found a negative relationship between insider ownership and dividend payments among firms. Firms that use a high percentage of insider stock ownership to reduce agency costs tend to pay small dividends while firms with low stock ownership are characterised by high dividend ratios. Rozeff (1982) developed a model of a firm, which chooses dividend payout ratio to minimise the sum of its agency costs and transactions costs, where transaction costs are an increasing function of the dividend payout ratio. Rozeff (1982) concludes that an increase in insider stock ownership leads to lower agency costs and therefore, to a lower optimal dividend payout ratio. Going to the capital markets to raise new funds has associated transaction costs. Of course, raising the dividend payout ratio increases the need to obtain new equity capital through new stock issues; therefore, transaction costs are an increasing function of the dividend payout ratio. But in the low capitalised firms, the relation between insider ownership and the dividend payout is manifested in the following two ways. Transaction costs argument is valid here as well but the strong presence of family shareholders makes accumulation of free cash flow very dominant. Although free cash flow may not be always utilised for takeovers or mergers, in most cases it is a source of finance for future investments. The return on equity[242] of the family owned shares determines the value of inside share ownership. But the share capital owned by the insiders (Directors, relatives and top 50 shareholders) was calculated at current market prices, to provide market value of the insider share ownership. If the insider ownership is high, then the tendency of accumulating

[242] ROE = PAT(Profit after Taxes)/NW(Net Worth)
Net worth = Reserves and surplus + Share capital. In order to calculate NW for this case, the share capital of only family members was taken. In India, the term reserves and surplus is used for retained earnings, Pandey (1995).

earnings is higher. The proportion of dividends in earnings is reduced which leads to a positive relation between insider ownership and dividend payouts.

5. Rights Issue: Rights Issues or private placement of shares are important for small family owned companies because the inside shareholders do not prefer losing control through dispersion of their company stock. Although monitoring by outside shareholders is restricted in this case, rights issue provides opportunities for the existing shareholders to evaluate the firm's performance. Due to investors' lack of information about the profitability of firms' investments, a firm needing finance may be forced to sell risky securities at less than a fair price. This under pricing causes a transfer of wealth from existing to new shareholders. Consequently, managers avoid external project financing whenever possible and particularly if the investment opportunity is highly profitable (Ghosh and Woolridge, 1988). Easterbrook's hypothesis of dividend induced monitoring suggests that after the announcement of dividends firms usually float new issues of capital and hence dividends usually precede new equity issues. Although in most firms the relation between the two variables i.e. dividends and announcements of rights issue is positive, the order of occurrence is opposite of what is cited in the Easterbrook's hypothesis. This shows that firms consider dividends as important tools to attract investors, but the monitoring rationale of it becomes irrelevant. By paying dividends after the announcement of public issues suggest that outside investors may be misled and may not consider other characteristics of the firm before subscribing to the rights issues. Announcement of dividends after equity issues may discourage outside investors to undertake effective evaluation of the firm's policies. Rights issue or private placement of shares saves the firm of flotation costs. The firm's purpose of paying dividends is to encourage already existing shareholders to subscribe to the rights issues. So the relation between

dividends and rights issue or private placement of shares is positive. Dummy variables were used to quantify both the rights issues (R1) and whether dividends followed rights issues or vice-versa. Dummy variables i.e. RD or DR (according to the order of occurrence of rights issues and dividends) were also introduced to check the order of occurrence, which would determine the monitoring rationale of dividend payouts. RD would be an indication that dividends will be paid so the relationship between RD and dividend payout will be positive. The relationship between DR and dividend payout will also be positive and this will suggest that the monitoring rationale of dividend payouts is strong.

6. Financial Institution's role: For small firms, a founder-manager who seeks funding from one or several financiers is primarily concerned with maintaining his or her private beneficial control. Most financiers insist on some form of protection, so that the final compromise regarding most financial contracts for small firms is one resembling a debt contract. The equity holding pattern of LCCs is thus biased towards family ownership with diffused outside shareholders. In these circumstances, only a block debt holder can monitor the firm effectively as there is no scope for an outside large shareholder to emerge and as debt holder has limited claim on the returns of the firm, their intervention cannot constrain the managerial initiative. A block debt holder with a sufficiently large stake may be willing to monitor the firm and guide managerial decisions. Block debt holders recognise that their loans to companies having greater scope for wealth appropriation are more vulnerable and hence act by increasing their proportionate holding of equity to have increased control.

The FI's stake is calculated by dividing the product of shares held by them in a particular firm and the current share price of that particular firm by the sum total of the quoted (equity) investments of FIs in the entire corporate sector. This provides the

relative position of a firm in the FI's portfolio. The relative position would determine the monitoring of the firm by the FI. The wealth expropriation hypothesis suggests that dividends increase after new debt is issued. But firms may not like to always exploit bondholders through dividend policy for two reasons; to preserve reputation and block debt holders possess enough bargaining power to stop the firm from expropriating their wealth[243]. This bargaining power is exercised with companies having a higher position in the FI's portfolio and dividends will be lower. But if a firm's position in the FI's portfolio is lower, there is less monitoring of the firm and firms will pay dividends based on their discretion.

7. News about the firm: Coverage of the firm's policies in the financial press affects the share prices of the firm in the market. Lintner (1956) argued that investors would welcome the decision of a firm to change its dividends only if the dividends are related to the firm's earnings or some other public information pertaining to the company. When management offers rationale for the dividend decision other than the earnings, it may adversely affect the market value of the outstanding equity, at the same time growth motivated dividend cuts are interpreted favourably by the market. The simultaneous information variable reduces the adverse impact of dividend cuts. The higher news coverage of a firm will lead to more information available to the investors and dividend payments are justified through the information variable. Dummy variables were used for this explanatory variable to quantify the type of news, which would affect the market favourably or adversely. N1 and N2 are the two dummy variables, which depict good news or bad news respectively. The relationship between good news and dependent variable is positive whereas the relationship between bad news and dividend payments is negative. XN shows the number of times

[243] See Chapter-2 for more details on agency costs of debt.

the financial press has covered a particular company and it has a positive relationship with the dependent variable.

7.5 METHODOLOGY:

The nature of this data combines both time series and cross sectional characteristics. This analysis is based on panel data or the longitudinal data. In this case it models heterogeneity across firms in their dividend payment behaviour. There were many missing data points in this data set, which is not very uncommon in panel data sets. And accordingly, sizes of the group differ across groups. This data is an unbalanced panel. Given the nature of the data, it was transformed into log form before the regression analysis. Groups in this study were the individual firms, which were again categorised into three main industry groups i.e., heavy, light and other (which included many IT firms). In order to differentiate the firms on the broad industry categories, dummy variables were included. The data was stored in long form.

The basic model of the panel data is of the following form:

$y_{it} = \alpha_i + \beta\, x_{it} + \nu_{it} + \varepsilon_{it}$

In this model, $\nu_i + \varepsilon_i$ is the residual, ν_i is the unit-specific residual; it differs between units but for a particular unit, its value is constant. ε_i is the usual residual with properties like mean 0, uncorrelated with itself, uncorrelated with x, uncorrelated with ν and is homoscedastic. There are 5 regressors in x_{it}, not including the constant term. x_{it} is the value of x for firm i at time t. The individual effect is α_i, which is taken to be constant over time and specific to the individual cross-sectional unit i. When the α_i's are same across all units, ordinary least squares provides consistent and efficient estimates of α and β. The fixed effects approach takes α_i to be group specific constant

term in the regression model. The random effects approach specifies that α_i is a group specific disturbance, similar to ε_{it}.

The variable name corresponding to index *i* in x_{it} is 'id' in the sample, which identifies the firms by numbers. The variable name corresponding to index *t* in x_{it} is 'year' in the sample, which records the time or the year.

Both fixed and random effect models have been estimated in this chapter. It has been suggested that the distinction between fixed and random effects models is an erroneous interpretation.[244] The fixed effects estimator by using OLS estimates the following equation:

$$(y_{it} - \bar{y}_{it}) = (x_{it} - \bar{x}_{it})\beta + (\varepsilon_{it} - \bar{\varepsilon}_{it})$$

In this case the firm specific residuals are treated as fixed and estimable.

Whereas the random effects estimator estimates the following equation:

$$(y_{it} - \theta\ \bar{y}_{it}) = (1 - \theta)\ \alpha + (x_{it} - \theta\ \bar{x}_{it})\beta + [(1 - \theta)\ \nu_i + (\varepsilon_{it} - \theta\ \bar{\varepsilon}_{it})]$$

The random effects[245] estimator produces more efficient results with small sample properties. Hausman Test is done to check for the equality of the coefficients estimated by the Fixed and Random effects estimators. If the coefficients differ significantly, either the model is misspecified or the assumption that the random effects ν_i is uncorrelated with the regressors x_{it} is incorrect. It measures the appropriateness of random-effects estimator.

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[244] According to Mundlak (1978), individual effects should always be treated as random. The fixed effects model is simply analysed conditionally on the effects present in the observed sample. Certain institutional factors or characteristics of the data argue for one or the other, but unfortunately this approach does not always provide much guidance. Fixed effects model assumes that the error terms are independent through the cross section and time. Whereas random effects model assumes that individual effects are uncorrelated with other regressors and it may suffer from the inconsistency due to omitted variables. Hausman test is based on the difference between the two estimates of fixed and random effects model. Under the null hypothesis the two estimates should not differ systematically.

7.6 RESULTS AND ANALYSIS:

The following tables 7.6 and 7.7 shows the results of the panel data analysis by both the fixed effects and random effects estimation.

Table 7.6: Results of panel data analysis of BSE Sensex Companies.

BSE SENSEX Companies (Fixed Effects Estimation):									
Variables	Insh	Patgr	Fis	N1	N2	XN	R1	Constant	R^2
Coefficient	.0007864	-.0018701	-.0062869	.0006929	-.000056	.00010445	-.0015714	1.023246	.2016
Std. Error	.0032139	.0004438	.002902	.0009054	.0009479	.0002669	.0008888	.0045975	
t-values	.245	-4.214	-2.166	0.765	-.060	.391	-1.768	224.695	
	.805	.000	.032	.445	.953	.696	.079	.000	
BSE SENSEX Companies (Random Effects Estimation):									
Coefficients-	-.0008246	-.0019067	-.0039439	.0006084	-.0000518	.0001586	-.0015445	1.023259	.2830
Std. Error	.0012604	.0004384	.0012475	.0008934	.0009342	.0002589	.0008653	.0030457	
z-values	-.654	-4.349	-3.161	.681	-.055	.613	-1.785	252.527	
	.513	.000	.002	.496	.956	.540	.074	.000	
Difference in the Coefficients	.001611	.0000366	-.0002343	.0000845	-4.64e-06	-.0000541	-.0000269		
Other Industry Group in BSE SENSEX (Fixed Effects Estimation):									
Coefficients	.003371	-.0013146	-.0065959	-.0001757	.000579	-.0001538	.000011	1.024313	.5769
Std. Error	.0013306	.0006551	.0011567	.0007337	.0007107	.0002298	.0006457	.0022961	
t-values	2.534	-2.007	-5.702	.239	.815	-.670	.017	446.105	
	.015	.050	.000	.812	.419	.506	.986	.000	
Other Industry Group in BSE SENSEX (Random Effects Estimation):									
Coefficients	.0005001	-.0021762	-.0011507	-.0000925	.001147	.000152	.000479	1.011154	.2023
Std. Error	.0005388	.001054	.000513	.0011703	.001159	.000322	.000945	.0020977	
z-values	.928	-2.065	-2.243	-0.079	.990	.472	.507	482.030	
	.353	.039	.025	.937	.322	.637	.612	.000	
Difference in the Coefficients	.002871	.0008617	-.005445	.0002682	-.000568	-.000305	-.000468		
Light Industry Group in BSE SENSEX (Fixed Effects Estimation):									
Coefficients	-.005827	-.001136		.0002036	-.002958	.0005073	-.000911	1.030999	.2056
Std. Error	.003307	.0005535		.0015718	.001681	.000374	.0015554	.0061398	
t-values	-1.762	-2.053		.130	-1.759	1.356	-.586	167.919	
	.084	.045		.897	.084	.181	.560	.000	
Light Industry Group in BSE SENSEX (Random Effects Estimation):									
Coefficients	-.0024491	-.001129	-.0047271	-.0002071	-.003593	.0005259	-.002329	1.03978	.2922
Std. Error	.0030959	.0006088	.0035553	.0017056	.0018171	.000412	.001654	.0080369	
z-values	-.791	-1.853	-1.330	-1.21	-1.978	1.276	-1.408	129.376	
	.429	.064	.183	.903	.048	.202	.159	.000	
Difference in the Coefficients	-.0033787		-7.24e-06	.0004107	.000635	-.000018	.001417		
Heavy Industry Group in BSE SENSEX (Fixed Effects Estimation):									
Coefficients		-.002765	-.011617	.0006224	.000251	-.000214	-.003037	1.053456	.2701
Std. Error		.001157	.0037162	.0017436	.001928	.000639	.009128	.0122557	
t-values		-2.390	-3.126	.357	.130	-.335	-1.575	85.957	
		.019	.003	.722	.897	.739	.120	.000	
Heavy Industry Group in BSE SENSEX (Random Effects Estimation):									
Coefficients	.000814	-.0031936	-.0046242	.0008954	.001197	.000136	-.001738	1.027603	.0867
Std. Error	.001949	.001227	.0025036	.0018511	.002012	.0006375	.001928	.0081773	
z-values	.418	-2.602	-1.847	.484	.595	.214	-.902	125.666	
	.676	.009	.065	.629	.552	.831	.367	.000	
Difference in the Coefficients		-.0004277	-.0069932	-.000273	-.000946	-.000350	-.001298		

[245] Random effects estimator is a (matrix) weighted average of the estimates produced by the between and within estimators.

Table 7.7: Results of panel data analysis of the sample LCCs.

Sample Companies listed at BSE (Fixed Effects Estimation):									
Variables	Insh	Patgr	FIS	N1	N2	XN	R1	Constant	R^2
Coefficient	.1157031	.0494889	-5.101681	-.034643	-.069958	.0263914	.1785598	4.174967	.1411
Std. Error	.3475205	.0107172	7.083855	.2014095	.1753129	.0568762	.128951	7.03357	
t-values	.333	4.618	-.720	-0.172	-.399	.464	1.385	.594	
	.740	.000	.472	.864	.690	.643	.168	.554	
Sample Companies listed at BSE (Random Effects Estimation):									
Coefficients-	.1731286	.0506186	-2.85927	-.035185	-.079729	.0114559	.1802839	1.948696	.1787
Std. Error	.2151695	.0101627	6.591608	.1860379	.1626795	.0546611	.1225901	6.574718	
z-values	.805	4.981	-.434	-.189	-.490	.210	1.471	.296	
	.421	.000	.664	.850	.624	.834	.141	.796	
Difference in the Coefficients	-.057425	-.0011297	-2.242411	.0005423	.0097704	.0149355	-.001724		
Other Industry Group in the Sample (Fixed Effects Estimation):									
Coefficients	.6167767	.0317195	-270.048	.3395433	-.644659	.0334012	.151624	268.6781	.1870
Std. Error	.0013306	.0006551	.0011567	.0007337	.0007107	.0002298	.0006457	.0022961	
t-values	.726	1.219	-.954	.674	-1.615	.367	.615	.949	
	.472	.231	.346	.505	.115	.716	.543	.349	
Other Industry Group in the Sample (Random Effects Estimation):									
Coefficients	-.2360139	.0538042	-370.4608	.254466	-.617047	.0466475	.04669319	370.1538	.2441
Std. Error	.6112084	.0224907	257.803	.3614991	.3216553	.0835412	.2236417	257.658	
z-values	-.386	2.392	-1.437	0.704	-1.918	.565	.209	1.437	
	.699	.017	.151	.481	.055	.572	.835	.151	
Difference in the Coefficients	.8527907	-.0220847	100.4361	.0850773	-.027611	-.0132464	.104931		
Light Industry Group in BSE SENSEX (Fixed Effects Estimation):									
Coefficients	-1.2142047	.0328785	10.17959	.2555758	.8169529	-.2526515	.8878132	-9.413455	.2632
Std. Error	.7899959	.0221093	33.57596	.252344	.26448221	.1062363	.1939012	33.51674	
t-values	-1.537	1.487	.303	1.013	3.089	-2.378	.453	-.281	
	.130	.143	.763	.316	.003	.021	.652	.780	
Light Industry Group in BSE SENSEX (Random Effects Estimation):									
Coefficients	-.53651941	.0553747	-32.33844	.1036163	.5336411	-.2756131	.16696929	32.39493	.3235
Std. Error	.4765948	.0209075	28.52404	.2462529	.24116291	.0998215	.17581684	28.53988	
z-values	-1.126	2.649	-1.134	.421	2.213	-2.761	.950	1.135	
	.260	.008	.257	.674	.027	.006	.342	.256	
Difference in the Coefficients	-.67768467	-.6224962	42.51803	.1519596	.2833118	.0229616	-.079156		
Heavy Industry Group in BSE SENSEX (Fixed Effects Estimation):									
Coefficients		-.002765	-.011617	.0006224	.000251	-.000214	-.003037	1.053456	.2701
Std. Error		.001157	.0037162	.0017436	.001928	.000639	.009128	.0122557	
t-values		-2.390	-3.126	.357	.130	-.335	-1.575	85.957	
		.019	.003	.722	.897	.739	.120	.000	
Heavy Industry Group in BSE SENSEX (Random Effects Estimation):									
Coefficients	.000814	-.0031936	-.0046242	.0008954	.001197	.000136	-.001738	1.027603	.2214
Std. Error	.001949	.001227	.0025036	.0018511	.002012	.0006375	.001928	.0081773	
z-values	.418	-2.602	-1.847	.484	.595	.214	-.902	125.666	
	.676	.009	.065	.629	.552	.831	.367	.000	
Difference in the Coefficients		-.0004277	-.0069932	-.000273	-.000946	-.000350	-.001298		

Random-effects estimator performs better than that of fixed effects estimator in terms of both R^2 and F-statistic. A higher R^2 suggests that there is strong evidence that the variation in industry groups helped towards a better fit. The fixed effects estimation drops the two variables name1 and name2, which mark the type of the industry group

in the data. These two variables were dropped because there is no variation in the data through time. The F statistic[246] is a test that the coefficients on the regressors are all jointly zero. The model is significant for both the firms in the BSE Sensex and in the sample. The goodness of fit R^2 is higher for BSE Sensex companies than for the sample LCCs. The t-test suggests that for BSE Sensex companies' coefficients i.e. inside shareholding, bad news, extent of new coverage are significant. For the sample LCCs coefficients of variables like inside shareholding, good and bad news, extent of news coverage and financial institutions were significant.

Table 7.8: Summary of the relationship between dividend payouts and other regressors.

Variables	Hypotheses	BSE Sensex companies	Low capitalised firms in the sample
Growth in earnings	-ve	-ve	+ve
Inside shareholding	+ve	-ve	+ve
Further capital needs	+ve	-ve	+ve
Financial Institutions	-ve and +ve	-ve	-ve
Information variable Good News	+ve	+ve	-ve
Bad News	-ve	-ve	-ve
Extent of news	+ve	+ve	+ve

Given the difference in the structure of the BSE Sensex companies and LCCs, it is not surprising that the relationship between regressors and the dependent variable is opposite. If the growth in earnings has a negative relationship unlike as suggested in the hypotheses, this would mean that the dividend payments are increasing (the proportion of dividends in the earnings is low[247] but it keeps a steady growth). In the BSE Sensex companies, inside shareholders do not accumulate the earnings for their personal benefit the relationship between inside shareholding and dividend payouts is negative. For these companies further capital needs may not be related to the dividend payments, when required they float either public issues or rights issues.[248] The role of FIs is negative for BSE companies because their position is the FI's portfolio is high and accordingly

[246] See Appendix -7.1for the F-statistics.
[247] See Chapter-5, Table 5.1.

agency costs of debt will be higher and as a result dividend payout will be lower. But in the case of the low capitalised firms, their position is low in the FI's[249] portfolio and as a result agency costs of debt will be lower and firms are at their discretion to pay dividends. Bad news about a firm and the extent of the news coverage affects all the firms in the same manner. But good news affects negatively dividend payouts in the low capitalised firms because the dividend payment behaviour is erratic[250] and that is why good news cannot provide well enough signal of dividend payout.

As mentioned earlier, if the model is correctly specified and if v_i is uncorrelated with x_{it}, then the subset of coefficients that are estimated by both the fixed-effects estimator and the random effects model should not statistically differ. The hypothesis that the coefficients are the same cannot be rejected in both the cases of BSE Sensex firms and LCCs in the sample. The test[251] did not list name1 and name2, because it compares only those coefficients estimated by both techniques. The difference in the coefficients between the fixed and random effects model are systematic. This suggests that both the individual firm specific and the time specific error terms are related to the regressors, which the fixed effects model controls. Given that the Hausman test

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[248] Flotation costs may not deter these companies from issuing new public issues.

[249] In most firms FIs have nominee directors on the board of the company, in addition to professional directors including technical directors and industrialists. And in most cases their work is restricted to personal visits to the company and project appraisals. The board of directors meets once in three months. In certain companies there are more than one nominee director from the FIs as members of the board. Having nominee director from the FIs did not always help in getting additional loans from the FI. In situations where the firms are making losses for a continuous period of time FIs play a greater role as the members of the board of directors and contribute in the decision making process. So, FIs provide ex ante monitoring on the basis of the firm's position in their overall portfolio. And the ex post monitoring depends on the firm's performance in time 1 and accordingly firms are monitored in time 2, irrespective of the firm's position in the overall portfolio of the FI (Information gathered from the questionnaire survey of managers).

[250] Non-payment of dividends is justified by the managers of these firms on the ground that the earnings are retained for future investments. They see no adverse impact of this as they believe that outside shareholders realise the intrinsic value of the firm who have a long- term investment plan with a particular firm. Uncertain dividend payouts suggests that managers show no inhibition towards cutting dividends drastically although it could affect their share prices in the market (Information gathered from the interview-based survey of the managers).

[251] See Appendix –7.1 for the test statistics of Hausman Test.

statistic is low suggesting that the coefficients are same, it can be safely concluded that the present model with its variables is not misspecified.

Table 7.9: Summary of the relationship between dividend payouts with other regressors in the Heavy industry group.

Variables	Hypotheses	BSE Sensex companies	Sample LCCs
Growth in earnings	-ve	-ve	+ve
Inside shareholding	+ve	dropped	+ve
Further capital needs	+ve	-ve	+ve
Financial Institutions	-ve and +ve	-ve	-ve
Information variable Good News	+ve	+ve	-ve
Bad News	-ve	+ve	-ve
Extent of news	+ve	-ve	+ve

The R^2 is higher in the case of fixed effects estimation. The dropped variable suggests that the market value of inside shareholding did not change considerably between 1991-99. The relationship between regressors and the dependent variable here is similar to the overall sample set.

Table 7.10: Summary of the relationship between dividend payouts with other regressors in the Light industry group.

Variables	Hypotheses	BSE Sensex companies	Low capitalised firms in the sample
Growth in earnings	-ve	-ve	+ve
Inside shareholding	+ve	-ve	-ve
Further capital needs	+ve	-ve	+ve
Financial Institutions	-ve and +ve	-ve	-ve
Information variable Good News	+ve	-ve	+ve
Bad News	-ve	-ve	+ve
Extent of news	+ve	+ve	-ve

The R^2 is higher in the case of random effects estimation. The relationship between the regressors and the dependent variable is similar to the overall sample set.

Table 7.11: Summary of the relationship between Dividend Payouts with other regressors in the Other Industry Group.

Variables	Hypotheses	BSE Sensex companies	Low capitalised firms in the sample
Growth in earnings	-ve	-ve	+ve
Inside shareholding	+ve	+ve	-ve
Further capital needs	+ve	+ve	+ve
Financial Institutions	-ve and +ve	-ve	-ve
Information variable Good News	+ve	+ve	+ve
Bad News	-ve	+ve	-ve
Extent of news	+ve	-ve	+ve

The R^2 is higher in the case of fixed effects estimation. The relationship between the regressors and the dependent variable is also similar to the overall sample set.

For dividend payments to be effective monitoring mechanisms they have to be paid before any new rights issue is announced. To check for this, regressions were run with variables RD and DR, XRD and XDR denote the extent of RD and DR respectively i.e. the number of times. The results are as follows:

Table 7.12: Results of regression with variables RD and DR.

BSE Sensex Companies				
Fixed Effects Estimation		R^2 = .2030		
Variable	Coefficient	Std. Error	t- Value	
RD	-.001864	.0027038	-.689	.492
XRD	.0002943	.0020694	.142	.887
Random Effects Estimation		R2 = .2153		
Variable	Coefficient	Std. Error	z- value	
RD	-.0023875	.0027978	-.853	.393
XRD	.0005846	.0021434	.273	.785
Hausman Test		Chi = 0		
Variable	Difference	Prob. > Chi = 1.00		
RD	.0005236			
XRD	-.002903			
Fixed Effects Estimation		R^2 = .2024		
Variable	Coefficient	Std. Error	t-value	
DR	.0012282	.0017653	.696	.488
XDR	.0002813	.000351	.801	.425
Random Effects Estimation		R^2 = .2014		
Variable	Coefficient	Std. Error	z-value	
DR	.0012205	.0018143	.663	.507
XDR	.0000201	.0003558	.056	.955
Hausman Test		Chi = 0		
Variable	Difference	Prob. > Chi = 1.00		
DR	7.78e-06			
XDR	.0002612			
Sample Companies				
Fixed Effects Estimation		R^2 = .4720		
Variable	Coefficient	Std. Error	t-value	
RD	-.023596	.1036318	-.228	.826
Random Effects Estimation		R^2 = .1129		
Variable	Coefficient	Std. Error	z-value	
RD	.0248793	.0762246	.326	.744
Hausman Test		chi = 3.72		
Variable	Difference	prob> chi = .8118		
RD	-.0484753			

The above table suggests that for BSE Sensex companies the announcement of rights issue followed by dividends has a negative relationship, rights issue cannot be

taken as an indication for dividend payments. But this relationship is not significant. Although the relationship between DR and dividend payments is positive, the relationship is not significant. In the case of LCCs in the sample, the relationship between dividend payments and RD is both negative and positive (the relationship is significant in both the cases) when estimated by Fixed Effects and Random Effects Estimation respectively. Nothing can be deduced conclusively because both tests provide significantly different results.

Correlations may not always imply causation. The Granger (1969) approach to the question of whether x causes y is to see how much of the current value of y can be explained by past values of y and then to see whether adding lagged values of x can improve the explanation. y is said to Granger-caused by x if the coefficients on the lagged x's are statistically significant. Since the data here was in the panel data form, to run the Granger test, the data was pooled in a time series format. It was done by averaging the data of one year of all the firms in a particular category i.e. 'H', 'O', or 'L'. Granger test led to spurious results i.e., simultaneous tests on y and x led to the conclusion both were Granger caused because coefficients on both lagged x and y were statistically significant respectively. The inconclusive results could be due to the method of pooling the data in to time series.

7.7 CONCLUSION:

From this econometric analysis the direction of the movement of the variables can be established, which confirm to the central hypothesis of the thesis. And the results are significant. Fitness of good is moderately high. The comparative analysis also helped to confirm that the model is robust. The opposite relationship between the regressors and the dependent variable in both the samples, corroborate this. The inclusion of 'forecasted growth of earnings' could have improved the results further.

For this data for some more years is required. Hausman test suggests that the model is parameterised well.

But results obtained for the rights issue and its indicativeness of dividend payments are not conclusive. Given that the sample size was small, compared to the number of LCCs firms listed on the BSE, the results although significant cannot be generalised to all LCCs.

Appendix - 7.1

Section-1

1. BSE SENSEX Companies
(26 vars, 266 obs)

Fixed-effects (within) regression

sd(u_id)	= .0073067	Number of obs	= 224
sd(e_id_t)	= .0052853	n	= 30
sd(e_id_t+u_id)	= .0090179	T-bar	= 7.46667
corr(u_id, Xb)	= -0.2575	R-sq within	= 0.2016
		between	= 0.0503
		overall	= 0.0955
		F(7, 187)	= 6.75
		Prob > F	= 0.0000

dividend	Coef.	Std. Err.	t	P>|t|	95% conf.	Interval
insh	.0007864	.0032139	0.245	0.807	-.0055537	.0071266
patgr	-.0018701	.0004438	-4.214	0.000	-.0027457	-.0009946
fis	-.0062869	.002902	-2.166	0.032	-.0120118	-.000562
n1	.0006929	.0009054	0.765	0.445	-.0010933	.0024791
n2	-.0000564	.0009479	-0.060	0.953	-.0019263	.0018134
xn	.0001044	.0002669	0.391	0.696	-.000422	.0006309
r1	-.0015714	.0008888	-1.768	0.079	-.0033248	.0001821
name1	(dropped)					
name2	(dropped)					
_cons	1.033031	.0045975	224.695	0.000	1.023961	1.0421
id	F(29,187) = 8.334		0.000	30 categories)		

Random-effects GLS regression

sd(u_id)	= .006137	Number of obs	= 224
sd(e_id_t)	= .0052853	n	= 30
sd(e_id_t + u_id)	= .0080992	T-bar	= 7.37273
corr(u_id, X)	= 0 (assumed)	R-sq within	= 0.1985
		between	= 0.3594
		overall	= 0.2830
theta		chi2(9)	= 59.27
min 5% median 95% max		Prob > chi2	= 0.0000
0.6406 0.6683 0.7087 0.7087 0.7087			

dividend	Coef.	Std. Err.	z	P>|z|	95% Conf.	Interval
insh	-.0008246	.0012604	-0.654	0.513	-.0032948	.0016457
patgr	-.0019067	.0004384	-4.349	0.000	-.002766	-.0010474
fis	-.0039439	.0012475	-3.161	0.002	-.006389	-.0014987
n1	.0006084	.0008934	0.681	0.496	-.0011425	.0023594
n2	-.0000518	.0009342	-0.055	0.956	-.0018828	.0017792
xn	.0001586	.0002589	0.613	0.540	-.0003488	.000666
r1	-.0015445	.0008653	-1.785	0.074	-.0032405	.0001515
name1	.0101331	.0030457	3.327	0.001	.0041637	.0161025
name2	.0055483	.0028433	1.951	0.051	-.0000245	.0111211
_cons	1.023259	.0040521	252.527	0.000	1.015317	1.031201

Hausman specification test

dividend	Coefficients ---- Fixed Effects	Random Effects	Difference
insh	.0007864	-.0008246	.001611
patgr	-.0018701	-.0019067	.0000366
fis	-.0062869	-.0039439	-.002343
n1	.0006929	.0006084	.0000845
n2	-.0000564	-.0000518	-4.64e-06
xn	.0001044	.0001586	-.0000541
r1	-.0015714	-.0015445	-.0000269

Test: Ho: difference in coefficients not systematic

chi2(7) = (b-B)'[S^(-1)](b-B), S = (S_fe - S_re)
= 3.43
Prob>chi2 = 0.8427

2. Other Industry group in BSE SENSEX Companies
(26 vars, 77 obs)

Fixed-effects (within) regression

sd(u_id) = .0075591
sd(e_id_t) = .0020101
sd(e_id_t + u_id) = .0078218
corr(u_id, Xb) = -0.9055

Number of obs = 64
n = 9
T-bar = 7.11111
R-sq within = 0.5769
between = 0.0215
overall = 0.0904
F(7, 48) = 9.35
Prob > F = 0.0000

dividend	Coef.	Std. Err.	t	P>|t|	95% Conf.	Interval
insh	.003371	.0013306	2.534	0.015	.0006957	.0060463
patgr	-.0013146	.0006551	-2.007	0.050	-.0026318	2.68e-06
fis	-.0065959	.0011567	-5.702	0.000	-.0089217	-.0042701
n1	.0001757	.0007337	0.239	0.812	-.0012995	.0016509
n2	.000579	.0007107	0.815	0.419	-.00085	.0020079
xn	-.0001538	.0002298	-0.670	0.506	-.0006158	.0003081
r1	.000011	.0006457	0.017	0.986	-.0012872	.0013093
_cons	1.024313	.0022961	446.105	0.000	1.019696	1.028929
id		F(8,48) =	13.465	0.000	(9 categories)	

Random-effects GLS regression

sd(u_id) = 0
sd(e_id_t) = .0020101
sd(e_id_t + u_id) = .0020101
corr(u_id, X) = 0 (assumed)

Number of obs = 64
n = 9
T-bar = 6.94853
R-sq within = 0.2395
between = 0.1176
overall = 0.2023

theta

min	5%	median	95%	max
0.0000	0.0000	0.0000	0.0000	0.0000

chi2(7) = 14.20
Prob > chi2 = 0.0477

dividend	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
insh	.0005001	.0005388	0.928	0.353	-.0005559	.0015561
patgr	-.0021762	.001054	-2.065	0.039	-.0042419	-.0001105
fis	-.0011507	.000513	-2.243	0.025	-.002156	-.0001453
n1	-.0000925	.0011703	-0.079	0.937	-.0023863	.0022013
n2	.0011473	.0011593	0.990	0.322	-.0011249	.0034195
xn	.000152	.0003221	0.472	0.637	-.0004793	.0007833
r1	.0004791	.0009455	0.507	0.612	-.0013741	.0023322
_cons	1.011154	.0020977	482.030	0.000	1.007042	1.015265

Hausman specification test

dividend	Fixed Effects	Random Effects	Difference
insh	.003371	.0005001	.002871
patgr	-.0013146	-.0021762	.0008617
fis	-.0065959	-.0011507	-.0054452
n1	.0001757	-.0000925	.0002682
n2	.000579	.0011473	-.0005683
xn	-.0001538	.000152	-.0003058
r1	.000011	.0004791	-.0004681

Test: Ho: difference in coefficients not systematic

chi2(7) = (b-B)'[S^(-1)](b-B), S = (S_fe - S_re)
= 5.57
Prob>chi2 = 0.5909

3. Light Industry Group in BSE SENSEX Companies
(26 vars, 80 obs)

Fixed-effects (within) regression

sd(u_id)	= .0072136	Number of obs	= 69
sd(e_id_t)	= .0051053	n	= 9
sd(e_id_t + u_id)	= .0088375	T-bar	= 7.66667
corr(u_id, Xb)	= 0.0089	R-sq within	= 0.2056
		between	= 0.1401
		overall	= 0.1674
		F(6, 54)	= 2.33
		Prob > F	= 0.0451

dividend	Coef.	Std. Err.	t	P>|t|	95% Conf.	interval
insh	-.0058278	.003307	-1.762	0.084	-.0124579	.0008023
patgr	-.0011363	.0005535	-2.053	0.045	-.0022461	-.0000265
fis	(dropped)					
n1	.0002036	.0015718	0.130	0.897	-.0029476	.0033548
n2	-.0029581	.0016813	-1.759	0.084	-.0063289	.0004128
xn	.0005073	.0003741	1.356	0.181	-.0002427	.0012573
r1	-.0009119	.0015554	-0.586	0.560	-.0040302	.0022065
_cons	1.030999	.0061398	167.919	0.000	1.01869	1.043309
id	F(8,54) =	10.979	0.000	(9 categories)		

Random-effects GLS regression

sd(u_id)	= .0036386	Number of obs	= 69
sd(e_id_t)	= .0051053	n	= 9
sd(e_id_t + u_id)	= .0062693	T-bar	= 7.63636
corr(u_id, X)	= 0 (assumed)	R-sq within	= 0.1941
		between	= 0.3719
		overall	= 0.2922

theta

min	5%	median	95%	max		
0.5315	0.5315	0.5556	0.5556	0.5556	chi2(7)	= 17.67
					rob > chi2	= 0.0136

dividend	Coef.	Std. Err.	z	P>|z|	95% Conf.	Interval
insh	-.0024491	.0030959	-0.791	0.429	-.008517	.0036188
patgr	-.001129	.0006088	-1.855	0.064	-.0023222	.0000641
fis	-.0047271	.003553	-1.330	0.183	-.0116909	.0022367
n1	-.0002071	.0017056	-0.121	0.903	-.0035499	.0031358
n2	-.0035937	.0018171	-1.978	0.048	-.007155	-.0000323
xn	.0005259	.000412	1.276	0.202	-.0002816	.0013334
r1	-.0023295	.0016547	-1.408	0.159	-.0055727	.0009137
_cons	1.03978	.0080369	129.376	0.000	1.024028	1.055532

Hausman specification test

dividend	---- Coefficients ---- Fixed Effects	Random Effects	Difference
insh	-.0058278	-.0024491	-.0033787
patgr	-.0011363	-.001129	-7.24e-06
n1	.0002036	-.0002071	.0004107
n2	-.0029581	-.0035937	.0006356
xn	.0005073	.0005259	-.0000186
r1	-.0009119	-.0023295	.0014176

Test: Ho: difference in coefficients not systematic

chi2(6) = (b-B)'[S^(-1)](b-B), S = (S_fe - S_re)
= 8.45
Prob>chi2 = 0.2070

4. Heavy Industry group in BSE SENSEX Companies
(26 vars, 109 obs)

Fixed-effects (within) regression
sd(u_id) = .0085681
sd(e_id_t) = .0065669
sd(e_id_t + u_id) = .0107952
corr(u_id, Xb) = -0.6620

Number of obs = 91
n = 12
T-bar = 7.58333
R-sq within = 0.2701
between = 0.0014
overall = 0.0310
F(6, 73) = 4.50
Prob > F = 0.0006

dividend	Coef.	Std. Err.	t	P>|t|	95% Conf.	Interval
insh	(dropped)					
patgr	-.0027659	.0011572	-2.390	0.019	-.0050722	-.0004595
fis	-.0116174	.0037162	-3.126	0.003	-.0190238	-.0042111
n1	.0006224	.0017436	0.357	0.722	-.0028525	.0040973
n2	.000251	.0019281	0.130	0.897	-.0035917	.0040937
xn	-.0002141	.0006394	-0.335	0.739	-.0014884	.0010602
r1	-.0030375	.0019289	-1.575	0.120	-.0068818	.0008068
_cons	1.053456	.0122557	85.957	0.000	1.02903	1.077881
id	F(11,73) = 5.945			0.000	(12 categories)	

Random-effects GLS regression
sd(u_id) = .0041657
sd(e_id_t) = .0065669
sd(e_id_t + u_id) = .0077767
corr(u_id, X) = 0 (assumed)

Number of obs = 91
n = 12
T-bar = 7.52239
R-sq within = 0.2214
between = 0.0032
overall = 0.0867

theta

min	5%	median	95%	max
0.4588	0.4588	0.5132	0.5132	0.5132

chi2(7) = 16.94
Prob > chi2 = 0.0178

dividend	Coef.	Std. Err.	z	P>|z|	95% Conf.	Interval
insh	.0008142	.0019494	0.418	0.676	-.0030065	.0046349
patgr	-.0031936	.0012275	-2.602	0.009	-.0055994	-.0007878
fis	-.0046242	.0025036	-1.847	0.065	-.0095313	.0002828
n1	.0008954	.0018511	0.484	0.629	-.0027328	.0045235
n2	.0011971	.0020122	0.595	0.552	-.0027467	.0051408
xn	.0001364	.0006375	0.214	0.831	-.001113	.0013858
r1	-.0017389	.0019284	-0.902	0.367	-.0055186	.0020408
_cons	1.027603	.0081773	125.666	0.000	1.011575	1.04363

Hausman specification test

dividend	Fixed Effects	Random Effects	Difference
patgr	-.0027659	-.0031936	.0004277
fis	-.0116174	-.0046242	-.0069932
n1	.0006224	.0008954	-.000273
n2	.000251	.0011971	-.000946
xn	-.0002141	.0001364	-.0003505
r1	-.0030375	-.0017389	-.0012986

Test: Ho: difference in coefficients not systematic

chi2(6) = (b-B)'[S^(-1)](b-B), S = (S_fe - S_re)
= 1082.40
Prob>chi2 = 0.0000

5. Sample LCCs
(18 vars, 208 obs)

Fixed-effects (within) regression

sd(u_id) = .4718377
sd(e_id_t) = .741759
sd(e_id_t + u_id) = .8791116
corr(u_id, Xb) = 0.0856

Number of obs = 208
n = 34
T-bar = 6.11765
R-sq within = 0.1411
between = 0.1476
overall = 0.1482
F(7, 167) = 3.92
Prob > F = 0.0006

dividend	Coef.	Std. Err.	t	P>|t|	95% Conf.	Interval
insh	.1157031	.3475205	0.333	0.740	-.5703966	.8018028
patgr	.0494889	.0107172	4.618	0.000	.0283302	.0706475
fis	-5.101681	7.083855	-0.720	0.472	-19.08713	8.883768
n1	-.034643	.2014095	-0.172	0.864	-.4322799	.362994
n2	-.0699589	.1753129	-0.399	0.690	-.4160741	.2761562
xn	.0263914	.0568762	0.464	0.643	-.0858976	.1386804
r1	.1785598	.128951	1.385	0.168	-.0760244	.4331441
name1	(dropped)					
name2	(dropped)					
_cons	4.174967	7.03357	0.594	0.554	-9.711206	18.06114

id | F(33,167) = 1.681 0.018 (34 categories)

Random-effects GLS regression

sd(u_id) = .3345141
sd(e_id_t) = .741759
sd(e_id_t + u_id) = .8136991
corr(u_id, X) = 0 (assumed)

Number of obs = 208
n = 34
T-bar = 5.18362
R-sq within = 0.1396
between = 0.2476
overall = 0.1787

theta

min	5%	median	95%	max
0.1569	0.1569	0.3289	0.4056	0.4056

chi2(9) = 37.41
Prob > chi2 = 0.0000

dividend	Coef.	Std. Err.	z	P>|z|	95% Conf.	Interval
insh	.1731286	.2151695	0.805	0.421	-.2485959	.594853
patgr	.0506186	.0101627	4.981	0.000	.0307	.0705372
fis	-2.85927	6.591608	-0.434	0.664	15.77858	10.06004
n1	-.0351853	.1860379	-0.189	0.850	-.3998129	.3294423
n2	-.0797293	.1626795	-0.490	0.624	-.3985753	.2391166
xn	.0114559	.0546611	0.210	0.834	-.0956778	.1185897
r1	.1802839	.1225901	1.471	0.141	-.0599882	.420556
name1	.0856867	.2008266	0.427	0.670	-.3079261	.4792995
name2	-.2640339	.1996005	-1.323	0.186	-.6552436	.1271758
_cons	1.948696	6.574718	0.296	0.767	-10.93751	14.83491

Hausman specification test

dividend	---- Coefficients ---- Fixed Effects	Random Effects	Difference
insh	.1157031	.1731286	-.0574254
patgr	.0494889	.0506186	-.0011297
fis	-5.101681	-2.85927	-2.242411
n1	-.034643	-.0351853	.0005423
n2	-.0699589	-.0797293	.0097704
xn	.0263914	.0114559	.0149355
r1	.1785598	.1802839	-.001724

Test: Ho: difference in coefficients not systematic

chi2(7) = (b-B)'[S^(-1)](b-B), S = (S_fe - S_re)
= 4.34
Prob>chi2 = 0.7396

6. Other Industry group in the Sample:
(18 vars, 53 obs)

Fixed-effects (within) regression
sd(u_id) = .3482378
sd(e_id_t) = .7532603
sd(e_id_t + u_id) = .8298619
corr(u_id, Xb) = 0.0053

Number of obs = 53
n = 10
T-bar = 5.3
R-sq within = 0.1870
between = 0.0863
overall = 0.1784
F(7, 36) = 1.18
Prob > F = 0.3368

dividend	Coef.	Std. Err.	t	P>|t|	95% Conf.	Interval
insh	.6167767	.8489889	0.726	0.472	-1.105052	2.338606
patgr	.0317195	.0260187	1.219	0.231	-.0210488	.0844878
fis	-270.0248	283.0749	-0.954	0.346	-844.1274	304.0778
n1	.3395433	.503831	0.674	0.505	-.6822733	1.36136
n2	-.644659	.3992509	-1.615	0.115	-1.454377	.1650595
xn	.0334012	.0910131	0.367	0.716	-.1511819	.2179843
r1	.151624	.2467065	0.615	0.543	-.34872	.6519681
_cons	268.6781	283.0016	0.949	0.349	-305.2757	842.6319
id	F(9,36) =	0.882	0.550	(10 categories)		

Random-effects GLS regression
sd(u_id) = 0
sd(e_id_t) = .7532603
sd(e_id_t + u_id) = .7532603
corr(u_id, X) = 0 (assumed)

Number of obs = 53
n = 10
T-bar = 4.43896
R-sq within = 0.1541
between = 0.4599
overall = 0.2441

theta

min	5%	median	95%	max
0.0000	0.0000	0.0000	0.0000	0.0000

chi2(7) = 14.53
Prob > chi2 = 0.0424

dividend	Coef.	Std. Err.	z	P>|z|	95% Conf.	Interval
insh	-.2360139	.6112084	-0.386	0.699	-1.43396	.9619325
patgr	.0538042	.0224907	2.392	0.017	.0097233	.0978851
fis	-370.4608	257.803	-1.437	0.151	-875.7455	134.8238
n1	.254466	.3614991	0.704	0.481	-.4540593	.9629913
n2	-.6170476	.3216553	-1.918	0.055	-1.247481	.0133852
xn	.0466475	.0825412	0.565	0.572	-.1151302	.2084252
r1	.0466931	.2236417	0.209	0.835	-.3916367	.4850228
_cons	370.1538	257.658	1.437	0.151	-134.8466	875.1543

Hausman specification test

dividend	Fixed Effects	Random Effects	Difference
insh	.6167767	-.2360139	.8527907
patgr	.0317195	.0538042	-.0220847
fis	-270.0248	-370.4608	100.4361
n1	.3395433	.254466	.0850773
n2	-.644659	-.6170476	-.0276113
xn	.0334012	.0466475	-.0132464
r1	.151624	.0466931	.104931

Test: Ho: difference in coefficients not systematic

chi2(7) = (b-B)'[S^(-1)](b-B), S = (S_fe - S_re)
= 5.97
Prob>chi2 = 0.5427

7. Light Industry Group in the Sample:
(18 vars, 73 obs)

Fixed-effects (within) regression
sd(u_id) = .3254332
sd(e_id_t) = .5651985
sd(e_id_t + u_id) = .6521934
corr(u_id, Xb) = -0.0765

Number of obs = 73
n = 11
T-bar = 6.63636
R-sq within = 0.2632
between = 0.0419
overall = 0.2124
F(7, 55) = 2.81
Prob > F = 0.0143

dividend	Coef.	Std. Err.	t	P>|t|	95% Conf.	Interval
insh	-1.214204	.7899959	-1.537	0.130	-2.797391	.3689831
patgr	.0328785	.0221093	1.487	0.143	-.0114296	.0771865
fis	10.17959	33.57596	0.303	0.763	-57.10813	77.46731
n1	.2555758	.252344	1.013	0.316	-.2501328	.7612845
n2	.8169529	.2644822	3.089	0.003	.2869188	1.346987
xn	-.2526515	.1062363	-2.378	0.021	-.4655538	-.0397493
r1	.0878132	.1939012	0.453	0.652	-.3007735	.4763999
_cons	-9.413458	33.51674	-0.281	0.780	-76.5825	57.75558
id	F(10,55) = 1.267			0.272	(11 categories)	

Random-effects GLS regression
sd(u_id) = 0
sd(e_id_t) = .5651985
sd(e_id_t + u_id) = .5651985
corr(u_id, X) = 0 (assumed)

Number of obs = 73
n = 11
T-bar = 6.21246
R-sq within = 0.2124
between = 0.7047
overall = 0.3235

theta

min	5%	median	95%	max
0.0000	0.0000	0.0000	0.0000	0.0000

chi2(7) = 31.08
Prob > chi2 = 0.0001

dividend	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
insh	-.5365194	.4765948	-1.126	0.260	-1.470628	.3975893
patgr	.0553747	.0209075	2.649	0.008	.0143968	.0963526
fis	-32.33844	28.52404	-1.134	0.257	-88.24452	23.56765
n1	.1036163	.2462529	0.421	0.674	-.3790305	.5862631
n2	.5336411	.2411629	2.213	0.027	.0609705	1.006312
xn	-.2756131	.0998215	-2.761	0.006	-.4712596	-.0799666
r1	.1669692	.1758168	0.950	0.342	-.1776255	.5115639
_cons	32.39493	28.53988	1.135	0.256	-23.54221	88.33206

Hausman specification test

dividend	Fixed Effects	Random Effects	Difference
insh	-1.214204	-.5365194	-.6776846
patgr	.0328785	.0553747	-.0224962
fis	10.17959	-32.33844	42.51803
n1	.2555758	.1036163	.1519596
n2	.8169529	.5336411	.2833118
xn	-.2526515	-.2756131	.0229616
r1	.0878132	.1669692	-.079156

Test: Ho: difference in coefficients not systematic

chi2(7) = (b-B)'[S^(-1)](b-B), S = (S_fe - S_re)
= 10.71
Prob>chi2 = 0.1520

8. Heavy Industry group in the Sample:

Fixed-effects (within) regression
sd(u_id) = .6302754
sd(e_id_t) = .7900713
sd(e_id_t + u_id) = 1.010673
corr(u_id, Xb) = -0.2255

Number of obs = 79
n = 13
T-bar = 6.07692
R-sq within = 0.2865
between = 0.0627
overall = 0.1851

F(7, 59) = 3.38
Prob > F = 0.0042

dividend	Coef.	Std. Err.	t	P>|t|	95% Conf.	Interval
insh	.513058	.4962788	1.034	0.305	-.4799936	1.50611
fis	-9.033839	7.896505	-1.144	0.257	-24.83471	6.76703
patgr	.058816	.0141603	4.154	0.000	.0304813	.0871506
n1	-.499978	.3739409	-1.337	0.186	-1.248232	.2482759
n2	-.0124302	.2870909	-0.043	0.966	-.5868977	.5620374
xn	.1086334	.1195691	0.909	0.367	-.1306238	.3478906
r1	.1723965	.2405098	0.717	0.476	-.3088625	.6536556
_cons	7.475628	7.803139	0.958	0.342	-8.138417	23.08967
id	F(12,59) = 2.253			0.020	(13 categories)	

Random-effects GLS regression
sd(u_id) = .4034724
sd(e_id_t) = .7900713
sd(e_id_t + u_id) = .8871317
corr(u_id, X) = 0 (assumed)

Number of obs = 79
n = 13
T-bar = 4.91892
R-sq within = 0.2814
between = 0.0860
overall = 0.2049

theta

min	5%	median	95%	max
0.1893	0.1893	0.3756	0.4534	0.4534

chi2(7) = 25.05
Prob > chi2 = 0.0007

dividend	Coef.	Std. Err.	z	P>|z|	95% Conf.	Interval
insh	.3243138	.2803185	1.157	0.247	-.2251003	.873728
fis	-5.821824	7.53062	-0.773	0.439	-20.58157	8.93792
patgr	.0576977	.0137224	4.205	0.000	.0308023	.084593
n1	-.4941851	.3543849	-1.394	0.163	-1.188767	.2003965
n2	.0047254	.2784916	0.017	0.986	-.5411081	.5505589
xn	.0972128	.1093923	0.889	0.374	-.1171922	.3116177
r1	.2773814	.2347768	1.181	0.237	-.1827727	.7375355
_cons	4.34876	7.519148	0.578	0.563	-10.3885	19.08602

Hausman specification test

dividend	Coefficients: Fixed Effects	Coefficients: Random Effects	Difference
insh	.513058	.3243138	.1887441
fis	-9.033839	-5.821824	-3.212015
patgr	.058816	.0576977	.0011183
n1	-.499978	-.4941851	-.0057929
n2	-.0124302	.0047254	-.0171555
xn	.1086334	.0972128	.0114206
r1	.1723965	.2773814	-.1049849

Test: Ho: difference in coefficients not systematic

chi2(7) = (b-B)'[S^(-1)](b-B), S = (S_fe - S_re)
= 19.90
Prob>chi2 = 0.0058

Section -2

1. BSE Sensex Companies

a. Regression with variable RD

```
Fixed-effects (within) regression
sd(u_name1)                   =  .0027985      Number of obs =      114
sd(e_name1_t)                 =  .0056793            n =        2
sd(e_name1_t + u_name1)       =  .0063314            T-bar =       57
corr(u_name1, Xb)             =    0.1121      R-sq within   =  0.2030
                                               between  =  1.0000
                                               overall  =  0.2122
                                               F(  8,   104) =    3.31
                                               Prob > F =  0.0021
------------------------------------------------------------------------------
dividend |  Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
---------+--------------------------------------------------------------------
    insh | .0005924  .0007044   0.841   0.402   -.0008045    .0019894
   patgr |-.0018233  .0004353  -4.188   0.000   -.0026865   -.0009601
     fis |-.0021207  .0009457  -2.242   0.027   -.0039962   -.0002452
      n1 | .0003388  .0013207   0.257   0.798   -.0022801    .0029578
      n2 |-.0003328  .0013457  -0.247   0.805   -.0030015    .0023358
      xn | .0004263  .0003574   1.193   0.236   -.0002824    .0011351
      rd |-.001864   .0027038  -0.689   0.492   -.0072257    .0034977
     xrd | .0002943  .0020694   0.142   0.887   -.0038093    .0043979
   _cons |1.01857    .0035059 290.530   0.000   1.011618    1.025523
------------------------------------------------------------------------------
   name1 |      F(1,104) =      8.902   0.004          (2 categories)


Random-effects GLS regression
sd(u_name1)                   =         0      Number of obs =      114
sd(e_name1_t)                 =  .0056793            n =        2
sd(e_name1_t + u_name1)       =  .0056793            T-bar = 39.0351
corr(u_name1, X)              =  0 (assumed)   R-sq within   =  0.2001
                                               between  =  1.0000
                                               overall  =  0.2153
------------------- theta --------------------
min      5%       median        95%       max     chi2(  8)  =   28.81
0.0000   0.0000     0.0000     0.0000    0.0000   Prob > chi2 =  0.0003
------------------------------------------------------------------------------
dividend |Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
---------+--------------------------------------------------------------------
    insh | .0006286  .0007304   0.861   0.389   -.0008029    .0020601
   patgr |-.0018264  .0004514  -4.046   0.000   -.0027111   -.0009417
     fis |-.0027414  .0009567  -2.866   0.004   -.0046164   -.0008663
      n1 | .0004705  .0013687   0.344   0.731   -.0022121    .0031531
      n2 |-.0005022  .0013942  -0.360   0.719   -.0032348    .0022304
      xn | .0004178  .0003706   1.127   0.260   -.0003085    .0011442
      rd |-.0023875  .0027978  -0.853   0.393   -.0078711    .003096
     xrd | .0005846  .0021434   0.273   0.785   -.0036165    .0047856
   _cons |1.020611   .0035656 286.239   0.000   1.013622    1.027599
------------------------------------------------------------------------------
```

Hausman specification test

dividend	---- Coefficients ---- Fixed Effects	Random Effects	Difference
insh	.0005924	.0006286	-.0000362
patgr	-.0018233	-.0018264	3.07e-06
fis	-.0021207	-.0027414	.0006207
n1	.0003388	.0004705	-.0001317
n2	-.0003328	-.0005022	.0001694
xn	.0004263	.0004178	8.52e-06
rd	-.001864	-.0023875	.0005236
xrd	.0002943	.0005846	-.0002903

Test: Ho: difference in coefficients not systematic

chi2(8) = (b-B)'[S^(-1)](b-B), S = (S_fe - S_re)
= 0.00
Prob>chi2 = 1.0000

b. Regression with variable DR

Fixed-effects (within) regression
sd(u_name1) = .0030882
sd(e_name1_t) = .0057226
sd(e_name1_t + u_name1) = .0065027
corr(u_name1, Xb) = 0.0305

Number of obs = 111
n = 2
T-bar = 55.5
R-sq within = 0.2024
between = 1.0000
overall = 0.1921
F(8, 101) = 3.20
Prob > F = 0.0028

dividend	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
insh	.0008944	.0007198	1.243	0.217	-.0005335	.0023222
patgr	-.0017241	.0004433	-3.890	0.000	-.0026034	-.0008448
fis	-.0019922	.0009587	-2.078	0.040	-.003894	-.0000904
n1	.0001447	.0013679	0.106	0.916	-.0025688	.0028582
n2	-.0004663	.0013805	-0.338	0.736	-.0032049	.0022722
xn	.0004195	.0003613	1.161	0.248	-.0002972	.0011361
dr	.0012282	.0017653	0.696	0.488	-.0022736	.00473
xdr	.0002813	.000351	0.801	0.425	-.000415	.0009776
_cons	1.015728	.0038857	261.401	0.000	1.00802	1.023436
name1	F(1,101) =	9.978	0.002		(2 categories)	

Random-effects GLS regression
sd(u_name1) = 0
sd(e_name1_t) = .0057226
sd(e_name1_t + u_name1) = .0057226
corr(u_name1, X) = 0 (assumed)

Number of obs = 111
n = 2
T-bar = 38.7387
R-sq within = 0.1940
between = 1.0000
overall = 0.2014

theta

min	5%	median	95%	max
0.0000	0.0000	0.0000	0.0000	0.0000

chi2(8) = 25.72
Prob > chi2 = 0.0012

dividend	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
insh	.0008813	.0007508	1.174	0.240	-.0005903	.0023528
patgr	-.0017755	.000462	-3.843	0.000	-.0026811	-.0008699
fis	-.0026853	.000973	-2.758	0.006	-.0045933	-.0007773
n1	.0004578	.001423	0.322	0.748	-.0023313	.0032469
n2	-.0005909	.001439	-0.411	0.681	-.0034121	.0022303
xn	.0004239	.0003768	1.125	0.261	-.0003147	.0011625
dr	.0012205	.0018413	0.663	0.507	-.0023884	.0048294
xdr	.0000201	.0003558	0.056	0.955	-.0006774	.0007175
_cons	1.01841	.0039552	257.487	0.000	1.010658	1.026162

Hausman specification test

dividend	Fixed Effects	Random Effects	Difference
insh	.0008944	.0008813	.0000131
patgr	-.0017241	-.0017755	.0000514
fis	-.0019922	-.0026853	.0006931
n1	.0001447	.0004578	-.0003131
n2	-.0004663	-.0005909	.0001245
xn	.0004195	.0004239	-4.39e-06
dr	.0012282	.0012205	7.78e-06
xdr	.0002813	.0000201	.0002612

Test: Ho: difference in coefficients not systematic

chi2(8) = (b-B)'[S^(-1)](b-B), S = (S_fe - S_re)
= 0.00
Prob>chi2 = 1.0000

2. Sample LCCs

a. Regression with Variable RD

Fixed-effects (within) regression

sd(u_id)	= .3465291	Number of obs =	37
sd(e_id_t)	= .141793	n =	23
sd(e_id_t + u_id)	= .3744165	T-bar =	1.6087
corr(u_id, Xb)	= -0.2917	R-sq within =	0.4720
		between =	0.0005
		overall =	0.0107
		F(7, 7) =	0.89
		Prob > F =	0.5569

dividend	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
insh	.2264016	.2539821	0.891	0.402	-.3741707	.8269739
patgr	.0065384	.0099189	0.659	0.531	-.0169161	.0299929
fis	-1.444955	12.13134	-0.119	0.909	-30.13102	27.24111
n1	.2099988	.131087	1.602	0.153	-.0999727	.5199703
n2	.1821182	.1621549	1.123	0.298	-.2013171	.5655536
xn	.0033561	.0208372	0.161	0.877	-.0459162	.0526283
rd	-.023596	.1036318	-0.228	0.826	-.2686462	.2214543
_cons	.601744	11.94956	0.050	0.961	-27.65448	28.85797

id | F(22,7) = 5.541 0.013 (23 categories)

Random-effects GLS regression

sd(u_id)	= .3116116	Number of obs =	37
sd(e_id_t)	= .141793	n =	23
sd(e_id_t + u_id)	= .3423551	T-bar =	1.27189
corr(u_id, X)	= 0 (assumed)	R-sq within =	0.3795
		between =	0.0677
		overall =	0.1129

theta

min	5%	median	95%	max		
0.5858	0.5858	0.5858	0.7459	0.7782	chi2(7) =	6.89
					Prob > chi2 =	0.4404

dividend	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
insh	.0179145	.1375878	0.130	0.896	-.2517525	.2875816
patgr	.0007446	.0088181	0.084	0.933	-.0165385	.0180277
fis	6.722001	7.613303	0.883	0.377	-8.199799	21.6438
n1	.2009551	.1167197	1.722	0.085	-.0278114	.4297215
n2	.1740876	.1186503	1.467	0.142	-.0584627	.406638
xn	.0028908	.0194932	0.148	0.882	-.0353152	.0410969
rd	.0248793	.0762246	0.326	0.744	-.1245181	.1742767
_cons	-7.383189	7.560729	-0.977	0.329	-22.20194	7.435567

Hausman specification test

dividend	Fixed Effects	Random Effects	Difference
insh	.2264016	.0179145	.2084871
patgr	.0065384	.0007446	.0057938
fis	-1.444955	6.722001	-8.166956
n1	.2099988	.2009551	.0090438
n2	.1821182	.1740876	.0080306
xn	.0033561	.0028908	.0004652
rd	-.023596	.0248793	-.0484753

Test: Ho: difference in coefficients not systematic

chi2(7) = (b-B)'[S^(-1)](b-B), S = (S_fe - S_re)
= 3.72
Prob>chi2 = 0.8118

b. Regression with variable DR

Fixed-effects (within) regression
sd(u_id) = .3465291 Number of obs = 37
sd(e_id_t) = .141793 n = 23
sd(e_id_t + u_id) = .3744165 T-bar = 1.6087
corr(u_id, Xb) = -0.2917 R-sq within = 0.4720
between = 0.0005
overall = 0.0107
F(7, 7) = 0.89
Prob > F = 0.5569

dividend	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
insh	.2264016	.2539821	0.891	0.402	-.3741707	.8269739
patgr	.0065384	.0099189	0.659	0.531	-.0169161	.0299929
fis	-1.444955	12.13134	-0.119	0.909	-30.13102	27.24111
n1	.2099988	.131087	1.602	0.153	-.0999727	.5199703
n2	.1821182	.1621549	1.123	0.298	-.2013171	.5655536
xn	.0033561	.0208372	0.161	0.877	-.0459162	.0526283
dr	.023596	.1036318	0.228	0.826	-.2214542	.2686462
_cons	.578148	611.89235	0.049	0.963	-27.54279	28.69908
id	F(22,7) =	5.541	0.013		(23 categories)	

Random-effects GLS regression
sd(u_id) = .3116116 Number of obs = 37
sd(e_id_t) = .141793 n = 23
sd(e_id_t + u_id) = .3423551 T-bar = 1.27189
corr(u_id, X) = 0 (assumed) R-sq within = 0.3795
between = 0.0677
overall = 0.1129

theta

min	5%	median	95%	max	chi2(7) =	6.89
0.5858	0.5858	0.5858	0.7459	0.7782	Prob > chi2 =	0.4404

dividend	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
insh	.0179145	.1375878	0.130	0.896	-.2517525	.2875816
patgr	.0007446	.0088181	0.084	0.933	-.0165385	.0180277
fis	6.722001	7.613303	0.883	0.377	-8.199798	21.6438
n1	.2009551	.1167197	1.722	0.085	-.0278114	.4297215
n2	.1740876	.1186503	1.467	0.142	-.0584627	.406638
xn	.0028908	.0194932	0.148	0.882	-.0353152	.0410969
dr	-.0248793	.0762246	-0.326	0.744	-.1742767	.1245181
_cons	-7.35831	7.540113	-0.976	0.329	-22.13666	7.42004

Hausman specification test

dividend	Coefficients: Fixed Effects	Coefficients: Random Effects	Difference
insh	.2264016	.0179145	.2084871
patgr	.0065384	.0007446	.0057938
fis	-1.444955	6.722001	-8.166956
n1	.2099988	.2009551	.0090438
n2	.1821182	.1740876	.0080306
xn	.0033561	.0028908	.0004652
dr	.023596	-.0248793	.0484753

Test: Ho: difference in coefficients not systematic

chi2(7) = (b-B)'[S^(-1)](b-B), S = (S_fe - S_re)
= 3.72
Prob>chi2 = 0.8118

Chapter 8

Concluding Comments

This thesis proposed to look into the causes of the low average market capitalisation or the existence of large number of LCCs on the Bombay Stock Exchange compared to other stock exchanges in the world including emerging as well as the developed stock markets.

This phenomenon was analysed by an "entry and exit" model of firms to the "low-cap" category. The entry factors being enhanced by the liberalised legal requirements and a decrease in the bureaucratic hurdles. However, this thesis does not deal with the causes of facile entry of firms on the exchange. At the same time the exit factors have been market driven unlike in the past when there were many legal restrictions.

The performance of a firm on the stock exchange was analysed from the point of view its financial policies. Formulating financial policies (real investment decisions i.e. taking on all projects with positive net present value and financial restructuring decisions like the choice of debt/equity ratios and dividend decisions, information dissemination decisions i.e. that the information it controls flows from its production and investment decisions, trade related decisions i.e. trading its equity and debt to maximise share price) usually involve taking into account interests of all the stakeholders and here conflicts between different stakeholders come to the fore.

The principal-agent framework helped outline some of the inherent conflicts in the firm structure. Thus the ownership structure of LCCs was analysed from the point of view of agency theory. The ownership of LCCs is biased towards the family

insiders. In the presence of different forms of conflicts policies of the firm are determined, which have an affect on the firm's outstanding equity.

The financial policy on debt brings in conflicts of interest between the debt holders and the shareholders. Whereas the agency costs of equity brings to the fore, the conflicts of outside shareholders and inside shareholders. There is not yet a complete theory or strong empirical evidence showing how agency costs determine an optimal debt-equity ratio. In a developing country context of India, the agency conflicts between different claimants took a different form compared to that suggested in the traditional agency literature, but it still provided with the broad framework of specific areas of conflict, which helped deal with the outliers as well. Agency theory on its own had its limitations in trying to fully understand the nature of financial policies of LCCs in India. In explaining the causes of the existence of large number of LCCs in BSE, this thesis has identified specific features of a firm's policy, which reflects risk avoidance on the part of owner-managers. This could be well applicable to other emerging markets. Firms in emerging markets face a financial system which is either repressed or is in transition, where internal incentive mechanisms and governance systems are weak, external regulatory bodies exist because market mechanisms do not deliver.

8.1 CONCLUSIONS DRAWN FROM EACH CHAPTER:

The chapter 1 provided a broad outline of the research problem and the analytical framework of the thesis along with a description of the BSE.

The chapter 2 provides an analysis of the differing nature of agency conflicts in a developing country compared to that of a developed country. This chapter presents a systematic framework in trying to explain the nature of financial system and the firm structure in a developing country. It describes the characteristics of specific conflicts

of interest between different stakeholders of a firm when formulating its financial policies and performance. This chapter concludes that the pecking order amongst the stakeholders influences the firm's policies. The dominance of a stakeholder and his or her bargaining power affects a firm's financial policy and consequently its performance on the stock market.

The chapter 3 provides a description of the financial structure within which the Indian firms operate. It broadly outlines the different sources of finance for Indian companies and their ownership pattern. It also provides a framework of the features of the financial reforms initiated in the early nineties, which have had a considerable impact on the financial structure. The previous chapter analysed these stylised facts mentioned in this chapter.

The chapter 4 provides with the models of takeovers and monitoring by FIs. Presence of LCCs does not automatically mean that efficient companies will takeover the inefficient companies. This may fail to occur because of the presence of asymmetric information. In addition to factors mentioned in the literature on the determination of potential targets of takeover, this chapter also mentions the ability of the raider to restructure the target to suit to its needs. Information asymmetry involved in determining the asset redeployability of the target firm in the combined entity restricts an active market for takeovers from occurring. Monitoring of a company by block debt holders may not depend on the firm level of debt itself as mentioned in the literature, but it depends on the proportion of this level in the overall debt provided by the debt holder. Thus many of the LCCs may not face any agency costs of debt. Lack of monitoring by FIs provides the firms opportunities to engage in risky activities, which affect the firm performance.

The Chapter – 5 describes the dividend policy of LCCs with the help of stylised facts outlined in the third chapter. The dominance of the inside shareholders is evident in their dividend policy, whereby the returns of the firm are appropriated by the inside shareholders for their personal benefit. The high proportion of retained earnings and its low correlation with future earnings proves the presence of accumulation of free cash flow. Moreover, the monitoring rationale of dividends is very much irrelevant in LCCs. Due to rights issues, much of the effectiveness of the dividend payments and subsequent floating of new issues is very weak. Most of the LCCs announce dividend payments after the announcement of rights issue, in this case dividends are used as a tool to attract funds without the existing shareholders carefully studying the performance of the firm. Rights issues would be an indicator of announcement of dividend payments. But the econometric results for this proposition were weak

The chapter -6 shows the results of the interviews based survey. The insights obtained from this survey point out that debt and equity are used for purposes which have not been stressed in the literature. Most managers agreed that outside equity could be put to highly risky activities because there is no monitoring from the outside shareholders and there is no commitment towards the outside shareholders. Debt was used to a limited extent so that it did not bring in any interference of the debt holders.

The chapter - 7 carries out an empirical analysis of the dividend policy with the help of panel data analysis. Although the results of the econometric tests are significant, it cannot be regarded very conclusive given the limited data with which the analysis was carried out. This limited data was in part due to many of the LCCs not maintaining a good record of their accounts and their managers refusing interviews,

which could also imply that the management did not want to divulge any information related to the firm other than which was publicly available.

8.2 CONCLUSION OF THE THESIS:

This thesis in general, concludes that lack of effective monitoring and the exit mechanisms of the market leads to a large number of LCCs in the BSE. Lack of effective monitoring manifests itself in the dividend policy of these firms. The function of monitoring by the dividend policy itself is very weak for LCCs. Lack of effective monitoring from outside shareholders is due to the free rider problem. Debt holders determine the extent of their monitoring on the basis of the relative position of a firm in their overall portfolio. The importance of a firm to the block debt holder may increase with increase in the firm's market value and accordingly its position in the overall portfolio of the block debt holder. Since LCCs have a very low relative position in the portfolio of the block debt holder, there is no effective monitoring. The market driven exit mechanisms of takeovers and mergers fail to occur because of asymmetric information problems, this phenomenon is analogous to the market for lemons syndrome.

The structure of the firm in developing country has never been analysed from the point of view of agency theory. As mentioned earlier nature of agency conflicts in a developing country are very different from that of a developed country. Thus thesis provides with different definitions of both agency costs of debt and equity, which are more appropriate with the situation related to debt financing and equity financing in India.

Data collected from interviews and the subsequent empirical work done in this thesis has never been the focus of any serious study in India. The data collected is scant compared to the proportion of the low capitalised companies after many attempts

at collecting more data. This suggests that the rules of compulsory disclosure and audit have not been very effective. Moreover, there are also concerns regarding the audit, whether auditors 'work with' owner-management rather than 'working for' the outside shareholder body. As the empirical analysis is based on very few companies the results obtained cannot be generalised. Further research would involve empirical work with a more extensive database.

8.3 AREAS OF FURTHER RESEARCH AND POLICY IMPLICATIONS:

Although agency theory provided a broad framework to analyse the interface between capital markets and the firm, it does not encompass certain specific features of the financial system in a developing country and behavioural characteristics of owner-managers of FOBs. Agency theory was particularly inadequate to deal with the nature of the dividend policy of FOBs and in the analysis of the free cash flow. The inadequacy suggests that agency theory does not incorporate contingency-based risk-taking attitude of agents. In the case of LCCs this contingency-based risk taking by owner-managers is in accordance with avoiding risk attached to stochastic future corporate returns. It has already been suggested by some organisation theorists that a comprehensive view of managerial risk choices should integrate risk, performance attributes of the choice situation, and internal governance structure. This is easier said than done, as this implies heavy information and cost requirements. Further theoretical wok in this direction would be to incorporate principles of portfolio theory into the agency framework.

The policy implications, which can be drawn from these hypotheses, are very limited. These hypotheses highlight the inadequacy of the market forces in disciplining LCCs. This is the reason why the regulatory body of the BSE is forced to intervene from time to time. But this intervention has not helped in bringing about any change in

the policies of the firm. Thus neither the body of legal duties owed by directors or the senior executives nor the government's regulatory regimes has been effective in motivating owner-management in the case of LCCs to maximise outside shareholder returns.

Although monitoring by institutional stakeholders fits within a broad tapestry of devices, which operate to reduce the divergence between the interests of owner-managers and outside shareholders, this has remained inadequate to bring about any significant change. This is partially due to the fact that after discontinuation of refinance from the state many FI's have had to depend themselves on stock markets for additional finance. FIs' performance is based on their monitoring companies who have borrowed from them and they have in turn concentrated on few big companies where they invest a large proportion of their capital. The market forces, which serve to align the interests of managers and shareholders i.e. takeovers, product market and market for managerial talent, have also been quite ineffective.

SEBI has concentrated on the exit of LCCs from the exchange i.e. delisting and creation of "Z category" scrips. It needs to equally consider on entry factors. Foremost in this line of thought is to introduce stringent rules of entry for firms on the BSE. These rules need to involve careful scrutiny of the performance of a firm for the past 5 years before it is allowed to make its IPO. In a situation where intervention by both the market forces and the regulatory authority has not helped to achieve the desired results, the number of LCCs may not decline in the short run.

As listed companies on the exchange, activities of LCCs and their market performance can be effectively monitored with the formation of an index for LCCs. Given that the number of LCCs is so large in the BSE, they could be segregated on the basis of industry groups. Segregation on the basis of industry groups can easily detect

firms which would be outliers to any trend. Simultaneous implementation of disciplinary measures involving entry, monitoring of the listed firms and exit will be more effective than the lackadaisical attempt at delisting companies from the exchange.

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