

Finance and Corporate Behaviour in India, 1993-94 to 2016-17

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DECLARATION

I declare that the dissertation entitled “Finance and Corporate in India, 1993-94 to 2016-17” submitted by me in partial fulfilment of the requirements for the award of the degree of Doctor of Philosophy of Jawaharlal Nehru University is my own work. The dissertation has not been previously submitted for any other degree of this University or any other University.

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We recommend that the dissertation may be placed before the examiners for evaluation.

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List of Acronyms

AB	Aditya Birla
ABFSL	Aditya Birla Financial Services Ltd
ABNL	Aditya Birla Nuvo Ltd
ABFRL	Aditya Birla fashion and Retail Ltd.
ADR	American Depository ratio
Balco	Bharat Aluminum Co
BSE/NSE	Bombay/National Stock Exchange
CCC	Columbian Chemicals Co
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CIA	Capital Issue Act
COO	Chief Operation Officer
CRR	Cash Reserve Ratio
DFI	Development Financial Institutions
ECB	External Commercial Borrowing
EPFO	Employees Provident fund Organization
FICCI	Federation of Indian Chamber of Commerce and Industry
FDI	Foreign Direct Investment
FEMA	Foreign Exchange Management Act
FI	Financial Institutions
FII	Foreign Institutional Investment
FIRE	Finance Insurance Real Estate
GCF	Gross Capital Formation
GCIP	General Chemical Industrial Product Inc.
GDP	Gross Domestic Product
GDR	Global Depository Ratio
GFCF	Gross Fixed Capital Formation
GIC	General Insurance Corporation of India
GM	General Motors
GMAC	General Motors Acceptance Corporations
GMM	Generalized Method of Moments

HUF	Hindu Undivided Family
ICICI	Industrial Credit and Investment Corporation in India
IDBI	Industrial Development Bank of India
IFCI	Industrial Finance Corporation of India
IMF	International Monetary Fund
IPO	Initial Public Offering
IT	Information Technology
Indal	Indian Aluminum Co
LIC	Life Insurance Corporation
Malco	Madras Aluminum Co.
MRTP	Monopolies and Restrictive Trade Practices
NABARD	National Bank for Agriculture and Rural Development
NDA	National Democratic Alliance
NPA	Non-performing assets
NFC	Non financial firms
NRI	Non Residential Indian
OLS	Ordinary Least Square
PAC	Persons acting in Concert
PBDITA/EBDITA	Profit/Earnings Before Depreciation Interest and Tax
PAT	Profit after Tax
RBI	Reserve Bank of India
RPT	Related party transactions
SEBI	Securities Exchange Board of India
SEC	Securities and Exchange Commission
SIDBI	Small Industrial Development Bank of India
SLR	Statutory Liquidity Ratio
S&P	Standard and Poor
TCB	Thai Carbon Black
TCS	Tata Consultancy Services
TISCO	Tata Iron and Steel Company
QIB	Qualified Institutional Buyers
QIP	Qualified Institutional Placement
UCO	United Commercial Bank
UK	United Kingdom

US/USA	United States of America
UTI	Unit Trust of India
VSF	Viscose Staple Fibre
WPI	Wholesale Price Index
2SLS	Two Stage Least Square

CHAPTER 1

Introduction

Corporate behaviour in India in the recent decade has been characterized by the increasing significance of finance both in the financial sector as well as in the non-financial sector. The changes in the economic policies in the 1990s have led to the market forces increasingly determining the allocation of funds, which has implications for the cost of funds and can affect the pace of investment. This increasing significance of finance has been termed as "financialization" by some economists.

This thesis considers some aspects of the growing significance of finance in the non-financial sector and whether there is any consequent impact on the Indian economy. It considers the issue of financialization of non-financial corporations (NFCs) with respect to the Indian corporate sector, analysing changes in the firm level participation in the financial services and investment and their consequent effects on the real investment (if any) in Indian economy from the post-liberalization 1993-94 to 2016-17. It addresses the following questions:

- a) What is the evidence on greater financial engagement of non-financial firms in India?
- b) Is the Indian corporate structure different from that in the US, and would that affect patterns of financialization?
- c) How did post-liberalization policies facilitate non-financial corporations to get involved in financial activities, and did this also lead to changes in their corporate behaviour?
- d) Are the financial engagements of the non-financial firms affecting their real investment?
- e) How did these processes play out in two large business houses, those of Tata and Aditya Birla?

1.1 The concept of financialization

Financialization is a much-discussed topic in the context of the global economy (especially the developed countries) in the past few decades. The process gained momentum in the developed world after the oil price shocks of the 1970s, along with the deregulation of financial markets. It refers to the increasing significance of financial markets in the economy and greater financial dependence of both the financial and non-financial sectors. Financialization, like globalization, has been defined in many ways. According to Epstein (2005) “Financialization means the increasing significance of financial motives, financial markets, financial actors and financial institutions in the functioning of the domestic and international economies.” Dumenil and Levy (2004) define financialization as “the growth of financial enterprises, the rising involvement of non-financial enterprises in financial operations, the holding of large portfolios of shares and other securities by households, and so on.” Palley (2007) describes it as the process whereby “financial markets, financial institutions, and financial elites gain influence over economic policies and economic outcomes, which affects the functioning of the economic system at both micro and macro levels”. This “elevates the significance of the financial sector relative to the real sector, transfers income generation from the real sector to the financial sector, causes increases in income inequality and contributes to wage stagnation”. Stockhammer (2004) and Krippner (2005) use a comparatively narrower definition only related to non-financial firms. Stockhammer defines financialization as “a broad set of changes made in the relation between the ‘financial’ and ‘real’ sector, thereby giving greater weight to financial actors and motives,” whereas Krippner defines “financialization as a pattern of accumulation in which profits build up primarily through financial channels rather than through trade and commodity production.”

In the Indian context, there is strong evidence in the literature about the increasing importance of financial markets and the implications for Indian economy from the 1990s. Financial liberalization not only opened up financial markets but also had significant implications for the non-financial sector as well. There has been a rising inter-relatedness between the capital market and the non-financial corporate sector from the post-reform period. During this decade the non-financial corporate sector has been increasingly being involved in investment in financial assets and financial

subsidiaries and have derived an increasing share of income from these financial investments. In this thesis, I define financialization as the rising involvement of the non-financial enterprises in financial operations, holding increasing and significant amount of financial investments in their portfolio and earning a rising proportion of income from these financial investments. This thesis looks into whether this rising financialization has any significant impact on the real investment of the non-financial enterprises in the Indian corporate sector.

1.2 Financialization in the US Economy

The dominance of Keynesian macroeconomic policy ideas in the US after World War II and especially after the Korean War led to the emergence of a regulated system in the US. There were regulations on finance designed to prevent any financial instability, along with using state expenditure to generate demand and reduce cyclical instabilities. There was involvement of the state in key investments (especially infrastructure and heavy industries) and provision of public goods. Redistributive measures were employed through the tax system and the welfare state, and trade unions were enabled. Finance was regulated and directed toward providing impetus to production and real investment with a supportive framework that brought together the Federal Reserve and large banks and industries (Orhangazi, 2007). This structure was adversely affected in the 1970s with a stagnating economy, rising inflation and the collapse of the Bretton Woods system. The profit rate of the non-financial corporations of the US significantly declined, creating demands for the dismantling of the regulatory framework. This led to the rise of finance in a gradual and deregulated manner.

Corporate attempts to recover profitability came in with the change in relative power as anti-labour policies affected workers' bargaining power while companies sought to reallocate production worldwide in lower-cost locations. This process was accompanied with the increasing international competition among the large corporations. The Keynesian regime of regulation was dismantled through the liberalization of trade and finance, and privatization and deregulation became the centre of the policies during the 1980s and 1990s. The rise of the institutional investors like pension funds and mutual funds led to the shift of power from the hands of the corporate managers to financial markets. This led to a fundamental change in the

economy with the increased pressure of financial markets on non-financial corporations to maximize short-term profits. Waves of mergers and acquisitions provided the incentives to the managers to follow the shareholder maximization strategy. With rising mergers and acquisitions the firms grew too big and spread into diversified areas and too many different businesses. This increased difficulties for the central management team and the US manufacturing non-financial firms faced problems of excessive centralization and innovative competition from countries like Japan. Increasing international competition and price wars pushed firms to compete with further investment in cost-cutting technology. This contributed to the slow growth of aggregate demand and problems of excess capacity.

The large non-financial corporations started to switch from investment strategies based on long-term gains to those that prioritised short-term financial returns and distribution of earnings to the shareholders in the forms of dividends and share buybacks. This resulted in a significant number of non-financial firms participating in financial services and investments¹ and hence a significant proportion of the non-financial firm's profits coming from the financial earnings. In 2002 General Motors reported a 66 percent profit from its financial arm GMAC and although Ford reported a loss from its automobile operations, however, a total profit of \$1.17 billion net income came mostly from its financing operators (Hakim, 2004). Though the exact calculations are difficult, Stockhammer (2010) gave some estimations of this trend, showing that the stock market capitalization of the US economy rose from 58 percent of GDP in 1997 to 163 percent in 1999 to 383 percent of GDP in 2008 (Stockhammer E. , 2010). The share of financial profits rose from 12 percent in 1998 to 53 percent in 2001. Debts of all types ranging from companies to households all drastically rose. Business sector debt rose from 52 percent of GDP in 1976 to 77 percent of GDP in 2009. Household debt increased from 45 percent in 1976 to 96 percent in 2009, and the financial sector debt rose from 16 percent to 111 percent during the same period.

¹A few prominent examples are those from the automobile industry, home appliance, retail etc., such as General Motors, Ford Motors, General Electric, Sears' Nation. General Motors Acceptance Corporation (GMAC) established its financial arm in 1919, Ford Motors established its financial arm Ford Motor Credit in 1959. The main motive of these financial firms before the 1980s was to finance the parent firm. In the 1980s these financial institutions broadened their portfolios to include mortgage lending (which is unrelated to automobile industry) insurance banking and commercial finance.

Stockhammer (2010) made the point that financialization has given rise to two growth models: the first is the consumption-driven growth model, found in Anglo-Saxon countries; and the second is export-led growth model, found in Germany and Japan. In Anglo-Saxon countries, increased consumption has occurred mainly through increasing credit and debt. The housing and real estate booms allowed households to take out loans from the property which they could not have afforded with their income. The banks and financial institutions supported this as they thought that property prices would continue to rise. This credit financed boom was accompanied by growing current account deficits, financed by capital inflows that then fuelled the property bubble and bubbles in other markets. While Japan and Germany continued with the export-oriented growth regime, both these growth regimes are mutually interdependent. Credit-based growth can only survive if there are current account surplus economies to provide capital inflows, and conversely, the export growth regime can only survive if there are other economies to import their exports.

As Dane (2011) points out, financial deregulation, market deregulation, and minimum government intervention did not really succeed. According to him, financial globalization has caused damage to the economy through its extreme deregulation in all the sectors. Financial globalization in its next stage needs to be more cautious and bring back certain regulation: labour regulations to help minimize inequality; financial market regulation to minimize the financial expenditure of non-financial firms and increase the investment on physical capital; and credit market regulation affecting debt-driven consumption. Economies following the current account deficit model for growth have to allow free inflows of capital. Unlike national markets, which tend to be backed by domestic regulatory and political institutions, global markets are only "weakly embedded". There is no global antitrust authority, no global lender of last resort, no global regulator, no global safety net, or no global democracy. Hence, global markets suffer from weak governance and are prone to instability, inefficiency, and weak popular legitimacy.

1.3 Financialization of Emerging Economies

In emerging economies, financial liberalization was followed by fluctuations in the key macroeconomic indicators. Consumption volatility increased during the 1990s (Kose, 2003), capital flows increased and have been significantly high and

unpredictable compared to 1970s and 1980s (Gabriele. A., 2000). Stock market volatility increased as well as the volatility of sales and returns of firms in the emerging markets (Grabel, 1995). The volatility of growth doubled in the 1990s in the developing countries (Montiel, 2004). Moreover, capital flows might have had significantly high negative effects in terms of investment in trade through relative price changes, which can explain the decrease in the business savings and employment reduction of these sectors (Frenkel, 2006).

Financial liberalization in cases of Argentina, Mexico and Turkey did not show robust evidence in terms of efficiency gains of the real sector firms, despite the rising presence of foreign sector banks that comprised of 80 percent in Mexico, 50 percent in Argentina as well as Turkey (Goldberg, 2000.). With financial liberalization, the non-financial firms invested in financial instruments with relatively high and quick returns and government debt instruments in the presence of rising volatility. The presence of high public debts financed through domestic capital markets at high interest rates induced investors to choose short-term financial instruments over long gestation long-term fixed investment projects. The ratio of financial to total profits of the top 500 manufacturing firms increased from 23 percent between 1982 and 1989 to 112 percent between 1990 and 2002 (Demir, 2008).

After the Asian Financial Crisis in the late 1990s, the long-run repercussions on the Asian economies involved corporate sector restructuring and changing corporate investment patterns. The big non-financial corporations started increasingly engaging in financial portfolio management instead of investing in real physical assets in the aftermath of the crisis. There were sectoral changes in the Korean economy, such as households being net savers in the pre-crisis period moving into serious deficit positions, the government which had maintained a positive balance sheet moving to deficit, and the financial sector business repairing its balance sheet and growing rapidly after 2002 as soon as the initial financial restructuring was complete. The Korean manufacturing sector's contribution to GDP fell while the FIRE (Finance Insurance Real Estate) sector contribution rose (Shin, 2012).

Akyuz and Boratav (Boratav, 2003) note that at the beginning of the 21st century, Turkey required immediate stabilization in order to bring inflation in control, reduce unsustainable public debt accumulation and financial fragility. With the support of

IMF in 1998 the stabilization programme begun but could not improve matters fundamentally and rather, pushed the economy into recession. In 2000, not long after the adoption of the stabilization programme, the Turkish lira depreciated, interest rate rose sharply, leading the economy to contract significantly. According to them the problems encountered by Turkey were similar to other emerging economies with the stabilization programme. Relying on exchange rate for stabilisation increasingly led to appreciated exchange rates with capital inflows to finance the increasing external deficits. This increased the debts and not only made the economy financially vulnerable but also led to currency flight. In the Turkish case, the situation became worse. The authors show that the banking sector was increasingly dependent on the difference between deposit rates and T-bills increasing the inflation. So to reduce the inflation the Turkish government attempted to reduce the T-bills faster than the deposit rates, causing greater problems for the Turkish banking sector.

As a way out from these problems, the authors advocated some policies which are different from that given by Keynes. They said that a "temporary suspension of convertibility and a standstill on external debt payments would work as a practical policy option for stabilizing the exchange rate in countries facing international liquidity problems and addressing problems of domestic debt". They pointed out that at least a temporary restriction on outflow of capital would support such policies.

O'Connell (2005) opined that Argentina has been treated as one of the greatest models of neo-liberal restructuring with free capital mobility, adopting 'hard peg' and privatizing almost everything and was one of the important cases of financialization: According to him, "finance, both external and domestic, is one crucial part of the story. Argentina became one among the most highly liberalized financial systems in the world". Reason for liberalization was similar to other liberalizing emerging economies. With rising inflation, high public deficit and bad quality of many consumer goods, the reformers of Argentina promoted liberalization as the ready option. The essential constituents of Argentine liberalization that made it different from other developing economies according to O'Connell were 1) Argentine peso was pegged to the US dollar which barred the central bank from issuing pesos without being backed by foreign exchange reserves; 2) there was a full bi-monetary system giving treating peso at par with other foreign currency including US dollar; 3)

extreme privatization;4) a fractional reserve banking system also for foreign bank deposits; 5) full liberalization of domestic financial markets; 6) highly decentralized fiscal structure.

Therefore, with this extensive financial liberalization with the currency board that did not allow the central bank to issue which build-up the excessive financial fragility with the government having little power to regulate and stabilize the financial instability that resulted. On the external side with the fixed exchange rate system and open capital market piled up large debts and retained from devaluing to keep the economy domestically competitive through exports. This resulted in a full-blown financial crisis that led to a huge decline in output, employment, and incomes. According to O'Connell the Argentine economy has started improving after adopting less liberal policies, and had set an example that with financialization and neoliberalism the Argentine economy could not put forward a success story and had to look forward to alternative policies.

Barbosa-Filho (2003) described the impact of external capital flows on the Brazilian economy. He showed that external capital could impact Brazil's balance of trade and economic growth. Though he worked on Brazil his work gives an important implication to other emerging economies too on their impact of external capital flows on their economy.

Crotty and Lee (2003) saw South Korea's recent history as instructive as a case of the course and impact of financialization. They note that the "miracle" of South Korea from 1960s to 1980s was based on state-directed capitalism had overpowered neoliberalism. During this period the economy had high savings which resulted in domestic investment without dependence on foreign borrowing. Foreign capital inflows and outflows were highly restricted. The main problem faced by South Korea during that period was the excessive power lied in the hands of chaebols which could regulate the investment according to their interests. By the 1990s the domestic as well as the foreign establishments started to put pressure for providing more business opportunities, the Korean government had to deregulate their financial markets. This led to the excessive high amounts of foreign borrowing of the Korean banks and firms which eventually paved the path towards the financial crisis. What followed after that

was a six-year assault on South Korea which, according to Crotty and Lee, did not occur in recent financial history.

South Korea adopted financialization quite rapidly. Previously the domestic banks supported government strategies of industrial policies, and long-term growth had drastically changed towards consumer lending and credit companies. In the meantime, the core companies increasingly became foreign-owned and interested in short-term profits. This led to inequality leading to the prosper of domestic and foreign elites, but the economy moved towards stagnation. They argue that there are alternatives for Korea beyond this neoliberal model, which might be a more democratic version of a regulatory and planning system.

The macroeconomic aspects of financialization speak of the overall difference of the structure of the emerging economies from the developed countries and show that the policies for stabilization which might be appropriate for developed countries might not be appropriate for developing countries as well. Similarly, if we look at the microstructure of these developed countries taking into consideration the process of financialization that took place as has been earlier discussed might not occur in the developing countries. The structures of the firms in the emerging markets are different from the firms in the developed countries. While the developed economies corporate sectors are mostly dominated by standalone firms, the emerging economies corporate sector mostly dominated by business groups. The process of integration and the impact of financialization would also be quite different from that of the developed countries. Therefore simply applying the theory of the developed world in the emerging markets to find the effect would be the wrong way to assess changes. So it is important to understand the workings of the corporate sector of the emerging economies separately. The structure of the Indian corporate sector in particular is quite different from many other countries especially that of US. Hence this needs to be taken into account.

1.4 Plan of the thesis

The thesis is arranged into 6 chapters.

Chapter 2 compares the structure and organization of the US corporate sector and the Indian corporate sector, which differ significantly, and considers how this might affect the nature of financialization.

Chapter 3 focuses on the effects of increased financial engagement of non-financial firms on real investment. This is examined through two routes. First, how did the post-liberalization policies facilitate non-financial corporations to get involved in financial activities; and did this also lead to changes in their financing behaviour from internal to external finance? Second, was there any impact on real investment due to increased financial investments and increased financial income? The changes in financing behaviour are compared between the pre-reform and post-reform periods, with reference to policy changes of the 1990s still 2017. Econometrically, the impact on real investment is studied overall for all non-financial firms and separately for groups and standalone firms.

Chapter 4 deals with the Tata Group of Industries. Firms in the Tata Group of industries are engaged in a complex web of cross-holding across firms from 1995 when Ratan Tata brought in the financial restructuring of the group. Since then, the companies increased internal holdings of groups companies and had spent significant amounts from their reserves in such intra-group financial investments. The group has also been on a spree of mergers and acquisition and has been merging both domestically and internationally. Tata Group has made some of the huge acquisitions ever. However, the post acquisitions performance of the firms did not improve much, and in some cases deteriorated. In this chapter, the performance of the group as a whole, the complex cross-holding pattern and how the group used this complex pattern to rescue individual firms within the group, the mergers and acquisition and pre and post-performance of these mergers and acquisitions are discussed. Since the performance of the group is influenced by some of its important firms hence, seven major non-financial firms are also considered in detail. A regression analysis has been carried out to examine whether financial income and financial investment by the group as a whole have any significant impact on real investment and whether the

group diverts the investible funds to relatively high profitability firms. Three models are tested: the first taking all 248 non-financial firms of the Tata group, the second with 29 listed firms and the third regression to examine the impact of deviation of profits from average profits on financial investment within the group for the 25 year period from 1993-94 to 2016-17.

Chapter 5 discusses the Aditya Birla Group. This group has spread from non-financial business to financial services and had businesses spread in almost all the sectors of the economy. The group has been engaged with huge international acquisitions that have increased the debt; however, the subsequent performance of the acquiring firms did not see significant improvement. The group has also been engaged with mergers of various underperforming and highly indebted units under one parent to improve and strengthen the balance sheet of the underperforming firms. This chapter also examines separately the performance and holding the structure of the two most important companies, Hindalco and Grasim. The period of study is from 1993 to 2017. The ownership structure and the financial activities are assessed taking both the listed and unlisted non-financial firms of the group for which data are available.

Chapter 6 presents the brief conclusion and main policy recommendations.

CHAPTER 2

Comparison of US and Indian private corporate sectors

2.1 Introduction

This chapter compares the structure and organization of the US corporate sector and the Indian corporate sector. The impact of financialization depends on the structure and ownership pattern of the corporate sector in the concerned country. I begin by looking into the different structural patterns prevailing in the US and India.

There are two types of corporate structured firm: standalone and group. Standalone firms are those that function as a single entity, while groups are two or more individual firms integrated through family bonds, cross-holdings or other legal relationships. Developed countries mostly are dominated by standalone firms while several developing countries are dominated by business groups that include individual firms.

2.2 US Corporate Structure

The US corporate structure is characterized by separation of ownership and management, which has been developed over the years. Prior to 20th century, companies were mostly small, family owned and run by families. However, with time this pattern has changed with the emergence and expansion of international conglomerates that are publicly owned and publicly run. The corporate structure has increasingly developed to look after shareholder interest. For this, a two-tier management system has been developed: the board of governors or directors, followed by the upper management. Shareholders elect the board of directors or governors and the upper management personnel is hired by the board.

2.2.1 Board of Directors

The board of directors comprises two categories of representatives: first, directors from inside the company, like the Chief Executive Officer (CEO), Chief Financial Officer (CFO), managers and so on; and second outside directors chosen who are

considered to be not related to the company. The most crucial function of the board is to look after the management team so that the shareholders' interest is well served.

The board members are of three categories: Chairman, Inside Directors, and Outside Directors.

- **Chairman:** The chairman is the head of the corporation. The chairman looks after the operations of the board. The duties are mostly to maintain strong communication with the CEO formulating company's business strategies and presenting the board to the shareholders and outsiders. The chairman is elected from within the board of directors.
- **Inside Directors:**The duties of the Inside Directors are mostly to supervise and approve the high-level budget prepared by the upper management,invigilate business strategies and implement sanctioned projects. They are mostly the shareholders or high-end managers from within the firm. The inside directors provide internal context to the other members of the board. They are also referred to as executive directors if they belong to the management team.
- **Outside Directors:** Outside Directors have similar responsibilities as the inside directors in determining strategic directions and corporate policies, but they are not directly associated with the management team. The main purpose of having outside directors is to provide an unbiased and impartial perspective on issues brought to the board.

2.2.2 Management Team

The management team is the second tier of the US corporate system. It is responsible for the day-to-day activities of the company like performing operations and maintaining profitability.

- **Chief Executive Officer:** The Chief Executive Officer (CEO) is the top management officer, vested with responsibility for the corporation's entire operations. He/she is directly accountable to the chairman and the Board of Directors. It is the duty of the CEO's to contrive board decisions and sustain peaceful operations of the firms with senior management. In many

cases, the CEO is also nominated as the president of the firm and hence becomes a part of the inside directors. Nonetheless, it has been recommended that a company's CEO should not be the chairman of the company at the same time, to ensure that the chairman has a clear line of authority.

- Chief Operations Officer: The COO looks after the issues relating to marketing, sales, production, and personnel. In some cases, the COO also looks after everyday activities and provide feedback to the CEO. The COO is sometimes designated as the Senior Vice President.
- Chief Financial Officer: The main function of CFO is to analyze and review the financial data, report the financial performance, prepare budgets and monitor the expenditures and costs. The CFO has to present these reports to the board of directors at periodic intervals to the regulatory bodies such as the Securities and Exchange Commission and shareholders.

Hence management looks after the day-to-day transactions while the board ensures that the shareholders are adequately represented. However, the reality is that many boards include members of the management team and the board of directors who have the ultimate goal of maximizing shareholder value. Therefore, indirectly the duty of the management becomes that of serving shareholders rather than ensuring the performance of the company in the medium/long term.

2.3 US Corporate Ownership

US companies are mainly characterized by the separation of ownership (in the hands of shareholders) and management (in the hands of managers). There are three types of shareholders: individual shareholders, corporate shareholders, and institutional shareholders. Individual shareholders from households typically do not have much control over the management, corporate shareholders who are the members from the board of directors and can influence the management, Institutional shareholders are collective shareholders and can influence the decision making of the management. Mutual funds, public and private funds, banks, pension funds, insurance companies all come under institutional investment. Over time, individual shareholders have become indirectly involved through institutional investments.

2.3.1 How have institutional investors gained importance?

Institutional investors gained importance during the 1980s. Prior to that, from the 1950s, household shareholders dominated and owned 90 percent of corporate stocks with the view of long-term holding. However, by the 1970s, this percentage dropped down to 68 percent as institutional ownership rose. By the end of the decade the household share came down to 59 percent in 1985 and 47 percent on average in the 1990s and in 2000s it further reduced to 42 percent on average while institutional investors held 46 percent of ownership (Crotty, 2005).

Institutional investment has become a highly competitive business. Institutional investors are entities that pool funds from individuals, manage them and invest in different companies. They can be private and public pension funds, mutual funds, insurance companies, private foundations, and endowments. The only concern of institutional investors is receiving high returns from the firms to pay to their customers. The high competition among non-financial corporations to attract investments by institutional investors compels firms to provide high returns. Failure to achieve high returns from the firms could lead to the withdrawal of shares. The high returns of the institutional investors often push the firms to resort to means such as rising stock prices or buyback of shares.

2.4 Evolution of the ownership structure of US companies

During the last decade of the 19th century, US industries experienced a managerial revolution similar to that of experienced by Germany and Japan (Chandler, 1990). The development of the intercontinental market linked with intercontinental communication created huge business exposure for those enterprises willing to produce and distribute.

To do this, entrepreneurs made teams of skilled managers by strategically investing in collective managerial and learning processes (Chandler J. A., 1977). Till the end of 19th century, higher formal education was not a prerequisite for the development of technology as during this time US industry was mainly beginning the transition from the machine based first industrial revolution where shop floor experience was required to science-based second industrial revolution which required formal

education. From the 19th century, this system of higher education became important and central for supplying technical and administrative personnel to the US industrial corporation. Corporations recruited this higher educated personnel and with further in-house training and on-the-job experience developed their productive skills and promoting them to middle-level and upper-level managerial positions (Lazonick & O Sullivan, 1996). Till the time of Great Merger² movement of the late 1890s and the beginning of 1900s, US industrial enterprises were characterized by the integration of asset ownership and management while the securities market rarely existed (Chandler, 1990). They relied on their own capital, retained earnings and funds from friends and family. The most successful among these owner-controlled firms were those who made investments to build up plants and equipments. With J.P Morgan initiating the process, Wall Street financed the mergers by selling the ownership stakes of capital-intensive high technology firms with integrated managerial structures to the wealth-holding public. This new combination of industrial concentration which resulted from mergers became attractive to the wealth-holding public and consequently stock holding became prevalent and disintegrated.

The purpose of public holding, rather than being the funding of capital investment by firms, became more tilted in favour of transferring equity ownership from direct investors to portfolio investors. This spread ownership across small fragmented bits among hundreds of shareholders, while decision making power lay with the professional managers who could utilize retained earnings and reallocate the corporate revenues towards more innovative and productive investments that developed the organizational and technological capabilities of the enterprise (Lazonick & O Sullivan, 1996). Capital equipments for manufacturing and innovations were financed through retained earnings and leveraged bond issues (Lazonick & O Sullivan, 1996). The majority of corporate bondholders were banks and insurance companies that made use of the household savings (Lazonick W. , 1992). Within the regulated financial regime that lasted till the 1970s, bank depositors and insurance policyholders received low yet stable returns on their savings, while industrial corporations could leverage their retained earnings at a relatively low cost to finance industrial innovation and expansion (Lazonick & O Sullivan, 1996). Till the rise of the

² The Great Merger Movement happened from in US from 1895 to 1905. During this time small firms with little market share consolidated with similar firms to form large, powerful institutions that dominated their markets.

institutional investors from 1960s, individuals and households were the primary stockholders. During the 1950s, financial institutions held around 70 percent of the corporate bonds and 2 percent of the common stock in the USA (Lazonick W. , 1992). In this era of industrial dominance, the markets were segmented for bonds and stocks, and powerful bondholders were mostly indifferent to the yields from stocks while the disintegrated shareholders were unable to influence the corporate payouts.

From the 1960s onwards, this combination of investment strategies began to change due to two fundamental reasons: foreign competition and financial institutions. Foreign competition, mainly from Japanese counterparts who had the comparative advantage of high productivity as well as low wages, became challenging for US companies. To compete with Japan, financial commitments for innovation became important for US corporations and the transfer of shareholding from individual to institutional investors from the 1960s started to weaken such financial commitments. Individual investors as compared to institutional investors possess less information regarding factors affecting stock prices, transactions costs, etc. (Lazonick W. , 1992).

With high trading of large blocks of stocks, mutual funds managers generated high returns compared to stable secure portfolios. This success of mutual funds in generating high yields led pension fund managers to increase their common stock holdings. In 1955 pension funds held 2 percent and household held 91 percent of US equity outstanding. By the 1990s the pension fund holdings increased to 28 percent while the household share fell to 47 percent (Charkham, 1994). Consequently, the role of fragmented shareholder decreased and the power of concentrated portfolio managers increased. Mutual fund institutions could attract a larger share of household savings compared to pension funds and insurance companies by providing higher returns regularly compared to the other two which usually had a long-run aspect on returns.

During the 1960s, security trading increased compared to the traditional investment banking function of IPOs and long-term corporate bond issuance. The quest for high returns by the institutional investors led the stock and bond market to integrate. High yields from the stock market build pressure on the bond market for providing similar returns, and higher returns from the secondary markets created further pressure on the rates of newer bond issuance. This led to the rise of the junk bond market from the

mid-1970s which in turn put pressure on the stock market to generate higher short-term returns which required companies to pay high dividends. Portfolio investors generating high yields reduced the ability of commercial banks, mutual funds, savings and loan companies to attract investments on the basis of old rules. Financial deregulation enabled these banks to join the search for high short-term yields.

This changing relation between the ownership and management during the 1950s, 1960s, and 1970s increased the incentives of managers to align with the forces that could provide financial liquidity. The access of top managers to a substantial amount of ownership income weakened their incentives to choose innovative investment strategies. Such owner-managers benefited from the financial institutions and the instruments that sought to generate returns from short-term investments. With rising short-term profits, the top managers saw a rise in the market value of the shares which in turn increased the dividend payment and reduced the retained earnings. This integration of ownership and control top managers set themselves apart from the rest of the organizational structure. This separation was further manifested by the explosion of executive pay, which increased by 400 percent during this time (Phillips, 1990).

Long-term development requires innovation and innovation requires a huge constant flow of funds. However, the return from research and development is uncertain and not always successful. Learning by doing is another form of innovation which also requires long-term commitments. Only banks can provide such finance for long-term commitments which are common in East Asian countries and European countries. Prior to 1970s, the US non-financial firms generated the resources internally. However, with time, the sources changed from internal resources generating from retained profits to shareholders and institutional shareholders. Lazonick and O'Sullivan argued that if this power of generating funds for the firms goes to the hands of the people whose prime concern is liquidity than financial commitment, then innovation would face severe problems.

The stock market was never as important a source of corporate finance in the USA until the 1970s. It was a market for the entrepreneurs to cash out, trade non-liquidequipment, and for households, it was a store of value for long periods. Before the rise of institutional ownership in the 1960s, stocks were mostly held by individual

shareholders for long periods of time. The stockholders held the stock for long tenure and hoped for the growth of the firms which would, in turn, raise the share prices of the firms and provide them with high dividends. However, with rising global competition, firms were forced to switch from strategies oriented to long-term growth and development to short-term survival strategies, what is termed by Lazonick and O'Sullivan as moving from "retain and reinvest" to "downsize and distribute". Crotty pointed out two disruptions in such behaviour. The stockholders now do not have any incentives to hold stocks for a longer period as they are more concerned with private gains than firm performance. Therefore, increasing stock prices is the main motive of the firms. With high power of influencing the decision, the institutional investors meet up with the management to fulfill their demand of higher prices. The earnings of management became aligned with stock prices. This motivated the management to strategies designed to raise stock prices.

The development of the firms in the US was at stake with the strategies being shifted for the vested interest of the institutional investors and the managers. Stock price boom and higher dividends became the major motivation of firms' management. However, profiting without producing is not an easy task. To provide capital gains to the shareholders as well as rising share prices, the only way is to announce buybacks.

2.4.1 Why stock buybacks increased

From 2000 onwards, there were significant increases in stock repurchase. 438 publicly listed companies in S&P Index in 1997 spent \$2.8 trillion on stock repurchase from 1997 through 2009 which was an average of \$6.4 billion per company. By 2007 the average expenditure of these companies on repurchase and dividends were \$1,213 million and \$533 million respectively (Lazonick, 2009).

Normally, after a new company gets listed in the stock market, it tends to reinvest its earnings rather than paying dividends to the shareholders. This goes on for at least the first decade after its Initial Public Offering. The only way for shareholders to gain returns would be to sell shares. Dividends and stock buybacks are two different ways of rewarding shareholders. While dividends are the returns from holding stocks, stock buybacks are the return from selling stocks. Stock buybacks occur when the management of companies seeks to increase their valuation in the market. In some

cases, companies go for buybacks when they feel their shares are undervalued in the market. In order to satisfy institutional investors and shareholders, the firms go for frequent dividend payouts and stock buybacks to reward the investors. The companies go to the extent of spending their profits on buybacks rather than on reinvestment. The purpose of the buybacks is to give a manipulative boost to the firm's stock prices. Among the highest repurchases of stocks in the US in 2000-08 were the five leading information and communication technologies companies: IBM, Microsoft, Hewlett-Packard. All these companies spent more on buybacks than on R&D. These companies have been reducing their cost by shifting employment to the lower-wage countries like India and China and have been utilising their profits for stock repurchase.

The stock repurchase was unimportant in the US prior to 1980s and was considered illegal by the Securities and Exchange Commission (SEC) if conducted on a large scale. The Securities and Exchange Act of 1934 restricts a person "to effect... a series of transaction in any security registered on a national security exchange creating actual or apparent active trading in such security or raising or depressing the price of such security, for the purpose of including the purchase or sale of such security by others" (Subcommittee on Annual Review, 1983, 1247). In 1982, with the introduction of Rule 10b-18, the SEC provided companies 'safe harbor' against charges of stock price manipulation. Under this rule, the SEC would not file any charges of manipulation if the daily open-market transaction being less than 25 percent of the stock's average daily trading volume. The Wall Street Journal reported that under the Rule 10b-18 SEC Chairman John Shad said that "buybacks would confer a 'mutual benefit' on shareholders by fueling the stock price" (Hudson 1992).

Stock repurchase under the rule of SEC requires the approval of the board of directors and must be announced publicly. However, the amount of stock to be repurchased and the rate are all in the hands of the board of directors. Therefore, only insiders have the precise knowledge of the time and magnitude of stock buybacks. The sharp upswing of buybacks increased almost nine-fold from 1991 to 1998. Dividends did not increase as fast, as stock buybacks became the prominent source of rewarding stockholders.

2.5 Corporate Sector in India

The Indian corporate sector is composed of two types of firms: standalone and business groups. Although the number of standalone entities is greater than those of affiliated into some business groups, business groups dominate the Indian corporate sector both in terms of total assets and market capitalization. As per the CMIE Prowess database, out of a total 4246 firms in 2018 that were listed in the Securities and Exchange Board of India, only 1285 firms (that is 30.26 percent of the total listed firms) were affiliated to some groups while nearly 70 percent of the total listed firms were not affiliated to any groups and were single standalone entities. 30 percent of group firms captured 83 percent of total market capitalization, while the remaining 70 percent captured only 21 percent of total capitalization. Despite a greater number of standalone firms, business groups dominate the Indian corporate landscape.

2.5.1 Evolution of business groups

Based on several historical accounts, Indian business houses can be traced back to the nineteenth century. Prior to that, the Indian corporate system was monopolized by European business, and Indian business was concentrated merely on trading and money lending. Indians could start with textile businesses only after 1854 when Cowasji Nanabhai Davar established a spinning and weaving mill. Thereafter, a few businesses started in textiles, the first being the Tatas followed by Khataus, Birlas, and Mafatlal.

Funding the business was a big issue during that time in India. Due to the lack of a proper banking system and other financial institutions to provide funds for new ventures and projects, families came forward to help out. Initially, it was the retained earnings that got reinvested. With the underdeveloped financial market and financial institutions, access to other easy and cheap financial sources was difficult for Indian entrepreneurs. With the majority of finance coming from the family, the need to procure formal ownership of family automatically followed. This was often adept with the incorporation of ventures as joint stock companies where family member started to issue share. Thus a group of companies, each with a distinct legal entity, became associated with a family that had either direct equity control (the "inner circle") or indirect control through companies that were under its direct control (the

"outer circle") (Hazari, 1966). This led to the beginning of business groups in India. Business groups were also deeply rooted in the joint family structure, bonded by relational contracts and a high degree of trust and reciprocity (Dutta, 1997). While (Granovetter, 1994; 1995) puts the bonding along geographical, political, kinship and religious lines, (Khanna & Palepu, 2000) show the bonding from economic perspectives. Khanna (2000) showed the business groups as diversified structures with legally independent firms under common administrative and financial control that often rests with a family. And finally, Leff (1978) and Khanna and Palepu (2000) saw the group as an organizational structure that came up due to missing markets and weak institutions.

The unification of firms under one umbrella was further smoothed by the managing agency system. The managing agency was involved with the responsibility of managing the affairs of a company which could be a proprietorship or a partnership firm or even could be a narrowly held joint-stock company. In return, the managing agent would receive a fee or a remuneration or a commission. Under such a system usually, a family that promoted a company or group of companies comprising family members was vested with the responsibility of managing the affairs of the company under the control of the family. The usual practice was that the managing agency which is associated with a family would comprise members of the family who would render not only managerial services but also promote other group companies by reinvesting the profits (Sarkar 2000).

The evolution of Indian business groups occurred in three phases: the pre-independence period; then from the time of independence until economic liberalization in the early 1990s; and finally from liberalization onwards. In the period of British rule, Indian businesses were dominated by European companies, which limited the development of business by Indians. Finance being another big constraint in the pre-independence period for small Indian traders, very few businesses could start up, and they were mostly in trading, money lending and textiles. The managing agencies acted as vehicles for most of the entries in trading and middlemen business in colonial India. The majority of managing agencies controlled just a few firms while a few controlled many firms. This gradually created the monopoly system and the centralization of power (Chaudhury, 1980).

In the early post Independence period, the state provided the basic stimulus to growth. It started with intensifying and widening trade protection with import substitution protecting infant industries and enabling them to grow in response to domestic demand. The state boosted the market through its current and capital expenditure while giving domestic entrepreneurs the impetus to growth by investing in crucial infrastructure and utilizing the household savings to finance the private investment involving the banking system. This strategy provided with good returns till for around a decade and a half immediately after independence where industries base was diversified, and public sector expanded rapidly providing infrastructural services, industrial raw materials, and capital goods to enhance industrial growth. This lasted till the mid-60s after which aggregate growth fell leading to stagnation. The strategy of import substitution and the state providing resources to stimulate growth no longer worked. The beginning of the 1980s saw a recovery resulting from a big increase in fiscal stimulus by the government, later the liberalization of imports of capital goods and manufacturing raw materials, and finally greater reliance on external commercial borrowing of the government to finance the growing fiscal and current account deficits.

At this time the international economic scenario was changing, with the development of the international capital market, providing greater access to private capital flows. This combination gave rise to a situation permitting the shift in the policy favouring the neoliberal economic regime and the balance of payments crisis of 1990-91 precipitated liberalizing economic reforms.

The post-liberalization industrial policy moved in three directions. First, the removal of 'reserving' and 'licensing.' This resulted in de-reservation of the areas which were earlier held by the public sector and the delicensing of industries except for nine industries. This allowed the domestic private sector to invest in capacity and production in a wide range of unrelated industries. The second was the dilution of the provision of the Monopolies and Restrictive Trade Practices (MRTP) Act, which facilitated the expansion and diversification of business groups. The third was foreign investment regulation in which automatic approval for equity investment was increased up to 51 percent. The Foreign Exchange Regulation Act was amended. This allowed the companies with foreign equity investment above 40 percent to be treated

at par with the Indian companies. Consequently, business houses got full freedom to enlarge and expand investment and diversify according to their capacities.

2.5.2 Features of Indian business groups

The most interesting feature of the Indian business groups is the control that is exercised on a group or a firm by an apex body, typically a family through equity ownership as well as non-equity channel (administrative control through the board of directors, interlocking directorships and related-party transactions³. Conceptualizing the business groups indicates three features: i) multi-company nature where a set of companies that are legally independent have coordinated activities; ii) these firms are simultaneously engaged in diversified unrelated businesses but effectively form a conglomerate⁴ despite being separate firms; and iii) these firms are under concentrated ownership structure and control. The networks of management and control between these individual firms are through family and social ties.⁵ In Indian groups, the apex body can use indirect ownership chains via pyramiding of affiliates to create a divergence between ownership and control and can informally exercise control even through minority equity shares.

A pyramid structure is one where the apex body (say A) which can be a family firm holds a majority of ownership (say 51%) in a publicly traded firm (say B) which again holds a majority stake (say 51%) in another publicly traded firm (say C) which again holds a majority ownership (say 51%) in a publicly traded firm (say D) and so on. Given that firm A has majority control in B, B has majority control over C, and C has majority control over D, and so on, A ends up controlling firm D (in this case with as

³Related parties include holding and subsidiary companies, key management personnel and their direct relatives, “parties with control” (which includes joint ventures and fellow subsidiaries), and other parties like promoters and employee trusts. Transactions that must be disclosed include purchase or sale of goods and assets, borrowing, lending and leasing, hiring and agency arrangements, guarantee agreements, transfer of research and development and management contracts.

⁴A conglomerate is a corporation that is made up of a number of different, seemingly unrelated businesses. In a conglomerate, one company owns a controlling stake in a number of smaller companies, which conduct business separately. Each of a conglomerate's subsidiary businesses runs independently of the other business divisions, but the subsidiaries' management reports to senior management at the parent company.

⁵Conglomerate diversification is growth strategy that involves adding new products or services that are significantly different from the organization's present products or services. Conglomerate diversification occurs when the firm diversifies into an area(s) totally unrelated to the organization current business.

little as 13% shares). Thus, through pyramiding, the owner at the top can successfully control all other firms below it.

Group firms in India are mostly linked through equity ownership, and the ultimate controllers of the group are the family members in the apex body of the group tree. Families typically control firms by holding financial stakes and appointing family members in the management board. Therefore, the equity stakes of the directors form a good proxy for the family's cash flow rights, which is not the case in the US. The members of the founding family inside the boards take the position of Chairman and/or CEO or as non-executive (gray) directors. Executive (inside) directors who are members of the founding family also sit on the board of other group affiliates. A study (Sarkar & Sarkar, 2009) showed that around one-fifth of the board affiliates in Indian business group firms in 2003 consists of gray directors. The study also showed that two specific characteristics of group affiliates namely the promoters directors on company boards and the presence of multiple directorships within company directors in various firms of the group. Both have a high presence in Indian business groups. Regarding the multiple directorships, the percentage of busy directors (i.e., three or more directorship) is as much as 56 percent in India, while it is just 6 percent in the US (Ferris, Jagannathan, & Pritchard, 2003). The study also showed that Indian Business groups possess high managerial integration or an "inner circle" within group affiliates and comprise 84 percent of the directorial position of inside directors. As reported by the Financial Times Asia (10th October, 1999) "the board of directors of Indian companies... are consistently filled with family members and friends, whether or not they are qualified for the position". Equity held by the 'Other' shareholders provides the information as for how much cash flow rights the family does not own. Other equity is defined as shares that are held neither by directors, nor the institutions, nor the domestic or foreign holders or the government bodies or the corporate bodies or the top 50 shareholders.

In the pyramidal structure, the ultimate owner uses indirect ownership to maintain control over a large group of companies where it has no direct ownership and less cash flow rights. Ownership is of two kinds: i) ownership by shareholders and ii) ownership by other companies of the corporate assets. The former prevails in the US while the latter prevails in India. Corporations enlarge themselves through pooling of

capital from different owners with dispersed ownership and hence comes the separation of ownership and control. In the Indian context, the ownership by companies of corporate assets in a more general sense been called inter-corporate investment where the group firms hold equity in other group firms and hence the apex body possesses the control over these firms directly or indirectly. This brings in the ownership and control under one authority.

Hence there lies a stark difference of ownership and control which exists in the US and in India. In the US (typically standalone firms) formal control and cash flow rights go hand in hand. Informal rights and cash flow rights diverge in case of management (CEO) who owns relatively small shares of the firms. However, the shareholders in these countries have the control to remove the CEO or make fundamental changes. It is for this reason that the management always works in favour of the shareholders and institutional investors who own the majority of shares. The US management, by keeping good terms with the institutional investment companies, increases their own personal earnings and remuneration. However, in India due to the presence of complicated pyramiding structure with high controlling rights, inter-corporate investment, tunneling or channeling resources are often the barriers to both financial development and real development of the firms with weak legal protection of the shareholders and imperfect capital markets (Bertrand et al., 2000). Tunneling refers to a transfer of profits by the controlling group from companies with low cash flow right to those where they have high cash flow rights at the expense of the outside shareholders. Another way of tunneling or channeling that Mazumder (2011) pointed out is through a private limited company and inter-corporate investments. According to him, a company could also do the same by creating a parallel private limited company which might appear to be standalone but is a part of the group. Tunneling of resources mostly occurs through non-operating profits. Therefore, in the Indian case buying of inputs and selling of outputs is not an important means of tunneling. This might suggest that equity prices incorporate tunneling to some extent. Tunneling reduces the transparency of how the firm's works and assessing the firms becomes difficult. Tunneling is an indispensable feature of group firms according to Bertrand.

Bertrand et al. (2002) find evidence of tunneling of resources from low cash flow firms to high cash flow firms. With 18,500 firm-year observations, the authors found a lower sensitivity of the group firms to industry shocks compared to standalone. They also found that the sensitivity is also lower in the case where the directors' shares (which can also be a proxy for ownership as they constitute a large portion of shareholding) are low. This suggests that the profits of a group firm low down in the pyramid and belonging to a particular industry responds less relative to standalone possibly because the group firms transfer the unexpected increase in profits to other member firms. This conclusion is further evidenced by the group firms' profit responding to shocks of other firms in the group which might belong to unrelated industries and have higher ownership rights and accordingly higher benefits from group.

Tunneling can be done in a clandestine manner as promoters can employ surreptitious ways to cloak the diversion of resources. In the Indian case, it is further enhanced by the opaqueness of the ownership structure due to the "fragmentation" of holding in a number of closely held entities which makes it difficult to keep track on the flow of diverted funds (Sarkar & Sarkar, 2008)

Sarkar (2010) worked on the relationship between tunneling and related party transactions (RPT) by taking a sample of 5394 Indian firms of from 2003-04 to 2004-05 and found that the group firms engage at the rate of 25 percent of assets to related party transactions with the holding companies, compared to 21 percent for standalone.

In India, where the capital market is shallow, groups may provide a valuable source of insurance to their member firms. During an emergency or less productive and less profitable years, group firms can provide financial assistance to other members of the group which the standalone firms are deprived of. Such informal insurance can take the form of resource channeling.

2.6 Ownership structure of the Indian corporate sector

Berley and Means (1932) in their work on the dispersed ownership of US corporations, noted that shareholders are the principal providers of the fund to the managers, who are the agents to channel them to proper uses and generate returns to the principal. With the separation of ownership and control, the agency problem can arise between shareholders and managers due to either asymmetric information or unobservable work of the managers. This opacity in the system leads to self-serving actions of the managers at the expense of the dispersed shareholders. Under such circumstances, corporate governance becomes necessary in terms of both internal and external mechanisms that protect the interest of the shareholders. Without such mechanisms, investors might be unwilling to provide funds to firms for investment and growth.

While separation of ownership and control are prevalent in developed countries, developing countries are mostly characterized by concentrated ownership. Under concentrated ownership, the nature of the agency problem is significantly different from the agency problem occurring with the US and other developed countries. The separation of ownership and management comes under what is termed in the literature as a Type I problem or vertical agency problem while the concentrated ownership agency problem prevailing in developing countries is termed in the literature as a Type II problem or horizontal agency problem. Type II mainly exists with two categories of principals: the controlling inside shareholders and managers (as both are the same) and dispersed minority outside shareholders. Therefore, in Type I agency problems, the separation of ownership and control has the incentive of controlling and monitoring management while in Type II agency problems the incentives of controlling shareholders who are also the managers too are high to extract and optimize private benefits for themselves at the expense of the minority shareholders (Morck & Young, 2004). For example, in developing countries and to some extent in Europe, the management mostly lies in the hands of the family and therefore by virtue of holding substantial family ownership, the controlling block and board of directors come under the family that thereby has large discretionary power over the firms' decisions.

Type I agency problem of separation of ownership and control can be solved by two monitoring means. The first one is referred to as "alignment hypothesis" or "convergence of interest hypothesis" in the literature, which offers concentrated ownership stakes to the management. This would help to align the interests of both the management and shareholders and reduce Type I agency problem (Jensen & Meckling, 1976; Morcket al., 1988). The second solution is to ensure effective monitoring. This gives the responsibility to the outside shareholders with enough voting rights to reduce the agency costs and ensure that investments are channeled efficiently (Berley & Means, 1932; Pound, 1988).

On the other hand, the Type II problem come under the entrenchment hypothesis, whereby inside shareholders even with underperformance can insulate themselves from minority outside shareholders (Densetz, 1983; Fama and Tensen 1983; Stulz, 1988). Another problem can arise in the conflict between the outside shareholders like the institutional investors with the outside minority shareholders. The interests of institutional investors can merge with inside majority shareholders (that is family members, the board of directors and promoters) who can mutually take advantage and work against the interests of minority shareholders (Dennis & Mc Connell. 2005). Roe (1994), puts forward that strategic alignment between institutional shareholders and inside shareholders of the company is possible especially when block holding institutions sell a product like debt or financial services to the company in which they own substantial shares. At the same time, in developing countries like India, which lacks a well developed managerial market, greater importance is given to trust-based contracts and has a collective tendency towards higher insider control (Sarkar & Sarkar, 2000). Even Khanna and Palepu (2000) argued that monitoring by large shareholders might not be as effective in developing countries as in developed countries, due to the presence of asymmetry of information, inadequate disclosure norms and weak enforcement, the presence of political pressure, complicated pyramidal structure and cross-holdings.

Table 2.1 Ownership Pattern of Groups in India

Ownership Structure of Indian Corporate Sector	Non-Group			Group		
	2015	2010	2005	2015	2010	2005
Ownership Structure						
Promoters (In %) - Shares held	46.61	45.21	44.7	55.49	53.70	49.9
Indian Promoters (In %) - Shares held	45.65	44.10	37.3	52.70	50.33	41.37
Indian Promoter Individuals & HUF (In %) - Shares held	32.14	31.50		18.54	18.34	
Indian Central & State Govt. Promoters (In %) - Shares held	4.91	3.55		7.81	5.150	
Indian Promoter Corporate Bodies (In %) - Shares held	23.90	22.18		38.88	37.01	
Indian Promoter FIs & Banks (In %) - Shares held	2.51	4.81		2.75	2.62	
Other Indian Promoters (In %) - Shares held	18.11	15.50		12.46	9.71	
Foreign Promoters (In %) - Shares held	11.58	11.56	13.6	15.65	17.32	19.06
Persons acting in concert as promoters (In %) - Shares held			15.5			13.55
Non-promoters (In %) - Shares held	53.98	54.56	55.5	44.40	46.10	50.21
Non-promoter Institutions (In %) - Shares held	4.95	5.34	5.1	10.38	11.29	10.63
Non-promoter Mutual Funds/ UTI (In %) - Shares held	1.98	2.27	1.70	2.67	3.53	2.62
Non-promoter Banks, FI's, Insurance Cos. (In %) - Shares held	1.69	2.06	3.07	2.87	3.94	5.54
Non-promoter FIIs (In %) - Shares held	5.32	5.38	3.39	7.56	7.25	5.21
Non-promoter Venture Capital Funds (In %) - Shares held	1.51	2.13		0.9	1.04	
Non-promoter Foreign Venture Capital (In %) - Shares held	3.48	7.72		1.93	1.94	
Non-promoter Qualified Foreign Investor - Institutions (In %) - Shares held	0.57			2.47		
Non-promoter Non-institutions (In %) - Shares held	51.13	51.47	52.3	35.87	36.77	40.28
Non-promoter Corporate Bodies (In %) - Shares held	11.11	10.45	12.16	7.99	8.85	10.32
Non-promoter Individuals (In %) - Shares held	35.64	36.48	37.70	22.42	23.01	26.14

Source: Prowess Database

The ownership structure of the Indian corporate sector can be separated broadly into two constituents: insiders and outsiders. Insiders control the functioning of the firms such as managers who run the day-to-day activities and who also own significant shares of the firms. According to the definition in Clause 35 of Listing Agreement of different types of owners, insiders are classified as promoters and Persons acting in Concert (PAC), while outsider owners are essentially non-promoters who are further classified into institutional non-promoters and non-institutional non-promoters. The reform of Clause 35 which got into effect from March 2001 recategorizes major blockholding into these two main groups: promoters (insiders) and non-promoters (outsiders), which requires them to disclose the identity of the shareholders holding greater than one percent equity and submit quarterly reports of shareholder information instead of annual reporting.

The strength and magnitude of insider control can be understood by the ownership structure of 4249 non-financial listed firms divided into groups and non-groups using data from Prowess database for the three years 2015, 2010 and 2005, to find the trend of insider holding and institutional holding. Among the 4249 firms, 1288 firm belong to groups, and 2850 firms are standalone and are not affiliated to any group. Promoter holding constituted 55 percent of groups in 2015, which increased from 50 percent in 2005; while promoter holding in standalone firms constituted 47 percent in 2015 rising from 45 percent in 2005. Individual and Hindu Undivided Family (HUF) and corporate bodies held the majority of shares. HUF comprise of family which consists of all persons lineally descended from a common ancestor and include their wives and unmarried daughters. Hence HUF holdings all come under majority shareholding. Holding in corporate bodies reveals the cross holding of the firms within the group. Corporate holdings in group firms are significantly higher than in non-group firms. On the other hand, Individual and HUF holding is higher in non-group firms as compared to group firm. This is because family holdings in the group are small and indirect and the majority of holdings are held through inter-corporate investment, while in a non-group firm with fewer opportunities of complex indirect holding structure, the direct holding is higher. Thenonpromoterholding reduced in both group and standalone from 2005 to 2015. The fall in the group was higher with a drop of 6 percentage points while in standalone it was only 2 percentage points. The entire drop in the non-promoter holding was due to the fall in the holdings by the individual

shareholders whereas the non-promoter institutional holding slightly decreased and the fall in non-promoter noninstitutional holding remained high from 40 percent to 35 percent in groups. Hence though the promoter holding increased and the non-promoter holding decreased over the period the non-promoter institutional holdings did not see much fall while the individual holdings fell for both group and non-group. FIIs constituted not only the highest percentage of institutional holding but over the years the FII holdings increased for both group and non group.

The impact of outside institutional holdings has been examined by various authors to find out whether high block holdings are associated with higher firm value (efficient monitoring hypothesis) or no effect on firm value (strategic alignment hypothesis) or firm performance. The institutional holding rose from 5 percent to 7 percent in case of groups and from 3 percent to 5 percent in case of non-groups from 2005 to 2015. The rising percentage of FII opened up the economy to increased volatility and short termism due to its speculative nature as a result increased the vulnerability from external shock. Khanna and Palepu (2000) on the other hand argued that it is mostly due to the fact of institutional investors being government or quasi-government, which makes them reluctant to monitor or have any incentive as their tenure of contract or remuneration does not depend on portfolio performance, in stark contrast with the US.

With the low outsider control and substantial inter-corporate investment, the management has extremely large powers to take decisions, sometimes even in a clandestine manner. Tunneling, channeling and related party transactions among the cross holding companies are common through earnings manipulation and internal capital market for intra-group borrowing and holding. Group firms get financial assistance from other group firms in times of need. Hence for group firms, apart from the external finance and the internal own firm finance, there exists another form of assistance from other group firms.

Hence there are completely different structures of the US corporate Sector and the Indian corporate sector. Factors affecting the US corporate sector might not directly affect the Indian corporate sector in a similar manner or would affect it through different routes. Hence financialization in the Indian corporate sector also would not be expressed in the same way as in the US corporate sector. Financialization in Indian

non-financial firms would operate through the business groups and hence would function differently.

2.7 Conclusion

The main difference between the US corporate system and Indian corporate system lies in the structure of the firms. The firms in the US are mostly standalone firms with a few conglomerates working as business groups, while in India, business groups are the rule rather than the exception. In the US, separation of ownership and management prevails while in India concentrated ownership prevails. The large institutional investors overpower the management and board of directors in the US. They can enforce their decisions on the management, and the management aligns with the shareholders for their benefit. The institutional investors' motives are high dividend receipts and share price hikes. Hence, the US management has to go for policies and strategies that provide constant flows of dividend payments and capital gains. They seek every possible means to raise share prices, like huge buybacks instead of reinvesting in productive means, which are harmful to the development of the firms as well as the economy. The strategy of the firms shifted from 'retain and reinvest' to 'downsize and distribute.' This reduces the growth and development of the economy.

In India the situation is different. Indian business groups are mainly characterized by concentrated ownership whereby the management and owners coincide. The power lies with the apex body, which consists of the shareholders and owners of the firms. They are the promoters and insiders. Firms hold shares in other firms within the group through a system of complex inter-holding and inter-corporate investment. Pyramiding and cross-holding retain the ultimate controlling power in the hands of the apex body, which is mostly bound together by family ties. The presence of a complicated web of cross-holding makes it difficult or impossible for the outside minority shareholders to get information about the inside management and to influence the decisions of the management. Dividend payments are mostly received by the majority of shareholders who are the corporate bodies within the group. The dividend payment of one firm is the dividend income of the other. This enables easy mobilization of resources through non-operating channels within the group and easy

cash flow as well as non-cash flow facilities due to the presence of complex interrelated party transactions.

This makes the question of the impact of financialization a particularly interesting one for the case of India. If present, financialization would occur through a different route than that of US. Due to the complex ownership structures of the business groups, it is necessary to study the groups separately to understand the manner and magnitude of financial transaction that occurs and whether that can be called 'financialization'. It is also worth asking whether the increase in foreign ownership of Indian corporates (including through the portfolio capital route) has changed this pattern. To get a clearer picture the next three chapters deal with the financing behavior of the non-financial firms of the Indian economy in the aggregate, and the two most important business houses Tata and Birla.

CHAPTER 3

Financing and Corporate Investment in India

This chapter focuses on the effects of increased financial engagement of non-financial firms on real investment. This is examined through two routes. First, how did post-liberalization policies allow non-financial corporations to get involved in financial activities; and did this also lead to changes in their financing behaviour from internal to external finance? Second, was there any impact on real investment due to increased financial investments and increased financial income? The changes in financing behaviour are compared between the pre-reform and post-reform periods, with reference to policy changes of the 1990s in the post-reform period till 2017. The answers to these questions reveal significant differences in the Indian case compared to, for example, the US experience. Despite the evidence of rising financial investments by non-financial firms and significant increases in financial income, these investments have mostly been made within group firms or subsidiaries, which have then increased financial income from within the group. The structure of the Indian business group is somewhat like a conglomerate in other economies, albeit one where individual companies are linked rather than merged into one company. As a result, investment decisions of the individual companies within the group reflect the decisions of the group as a whole. Investment occurs in those ventures that are deemed profitable, which could require movement of financial resources across companies within the group, which then causes within-group financial investments to rise.

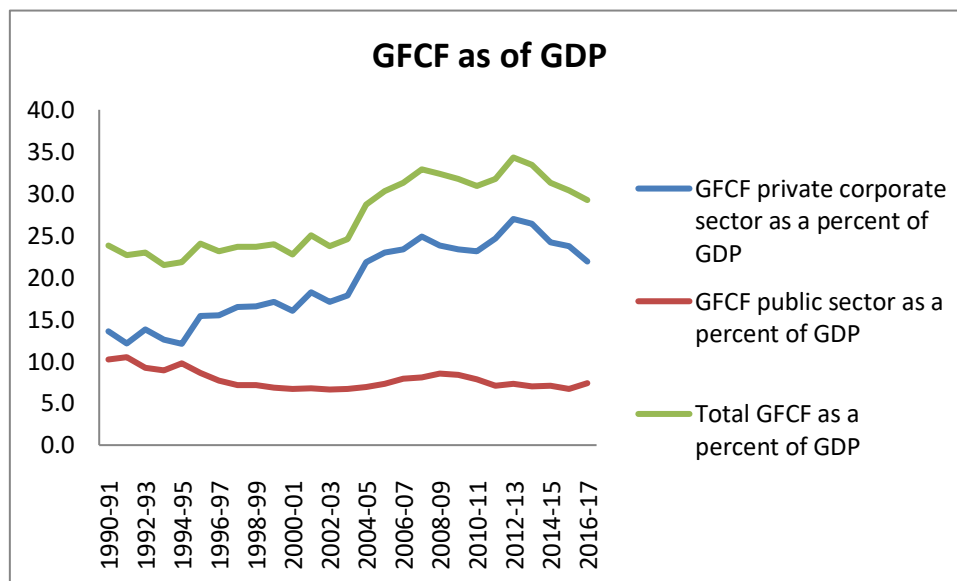
Econometrically, the impact on real investment is studied overall for all non-financial firms and separately for group firms and standalone firms. Group firms are the firms which are reported in CMIE prowess data base as ownership associated with any group and standalone firms are private firms which are not associated with any groups. The empirical results show an insignificant relation of financial income coming from financial investment with real investment, while for group firms, financial investment coming from within group firms show a positive relation with real investment.

The data have been taken mainly from three sources: CMIE Prowess database, RBI and SEBI. A total of 4095 listed non-financial firms are selected to analyse the overall impact of financing behaviour on real investment.

3.1 Overview

In the recent past India has experienced a drop in investment as a proportion to GDP with a fall in the share of Gross Fixed Capital Formation (GFCF) to GDP. Investment, which showed a sharp rise from 2002-03 till 2007-08 in the boom period, slowed down thereafter. The investment-to-GDP ratio plummeted from 34.3 percent in 2012-13 to 29.3 percent of GDP in 2016-17. The contribution of the private corporate sector fell from 27 percent to 21.9 percent in the same year while the contribution of the public sector stagnated (Fig 3.1). There has been a fall in addition to fixed capital with a rise in addition to financial capital. RBI data show a rise in the financial components of total assets and a corresponding decline in the share of physical assets held by non-financial firms.

Fig 3.1 Gross Fixed Capital Formation a Proportion to Gross Domestic Product

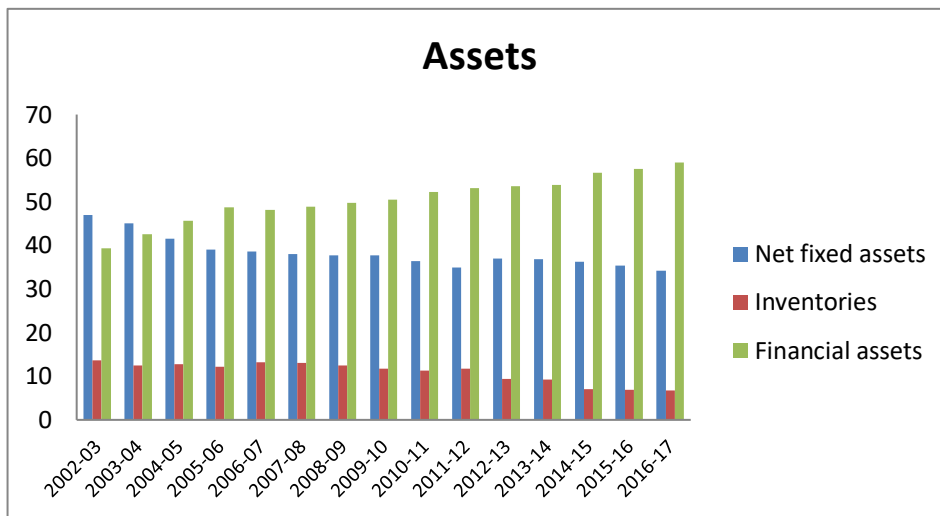


Source: CSO

Net fixed assets fell from 49 percent of total assets in 2002-03 to 34.2 percent in 2016-17, while financial assets rose commensurately (Fig 3.2). Financial assets consist of financial investments, loans and advances and cash balances of firms, among which the share of financial investments rose sharply from 10 percent to 28 percent, while loans provided and cash balances remained constant. The distribution of

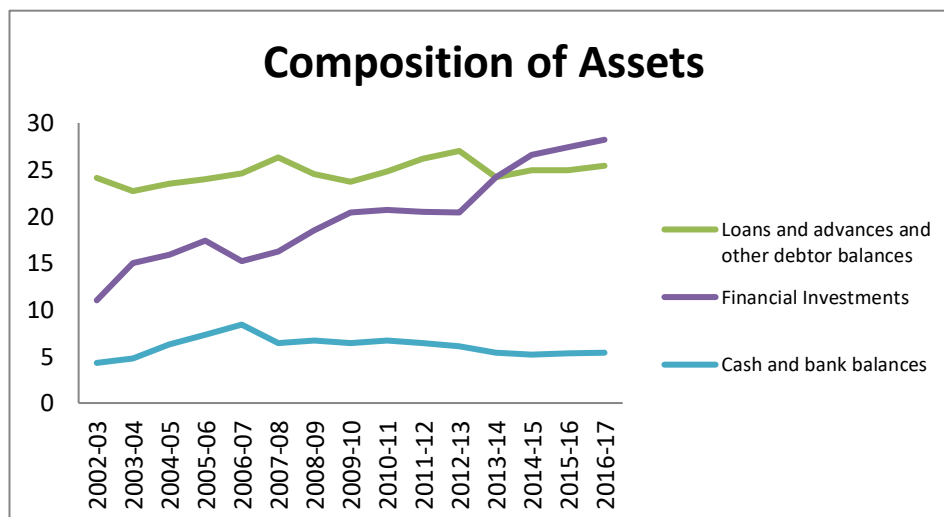
investible resources of non-financial public limited companies has been biased towards financial assets; however, the share of industrial securities reduced and was replaced by securities held by financial institutions and financial securities in shares and debentures of the subsidiaries (Fig 3.4) which rose from 23 percent in 2002-03 to around 60 percent in 2015-16. Firms significantly increased their investments in group subsidiary firms, which increased the income coming from these financial assets from 2006-07 till 2010-11 after which it came down (Fig 3.5).

Fig 3.2 Physical and Financial Assets



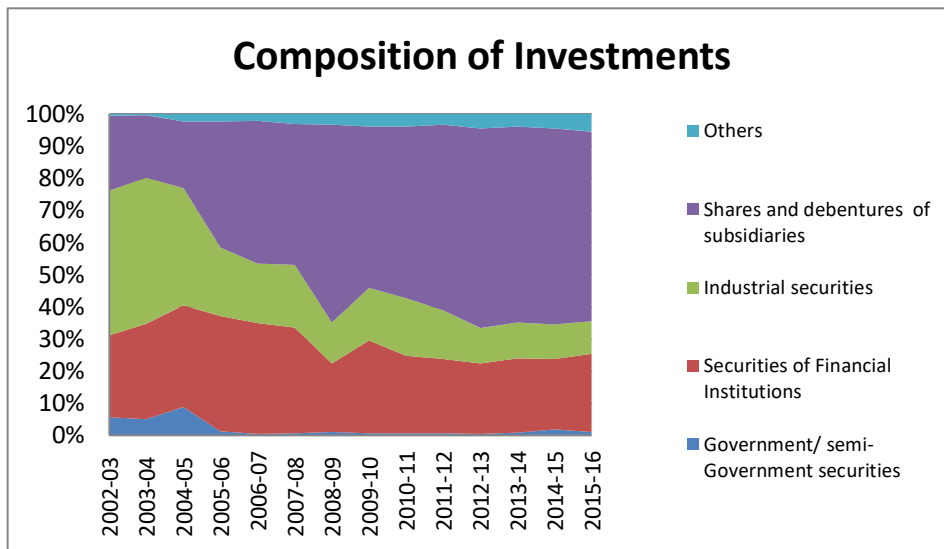
Source: Finances of non-government non-financial public Ltd. companies, RBI, several years

Fig 3.3 Composition of Financial Assets



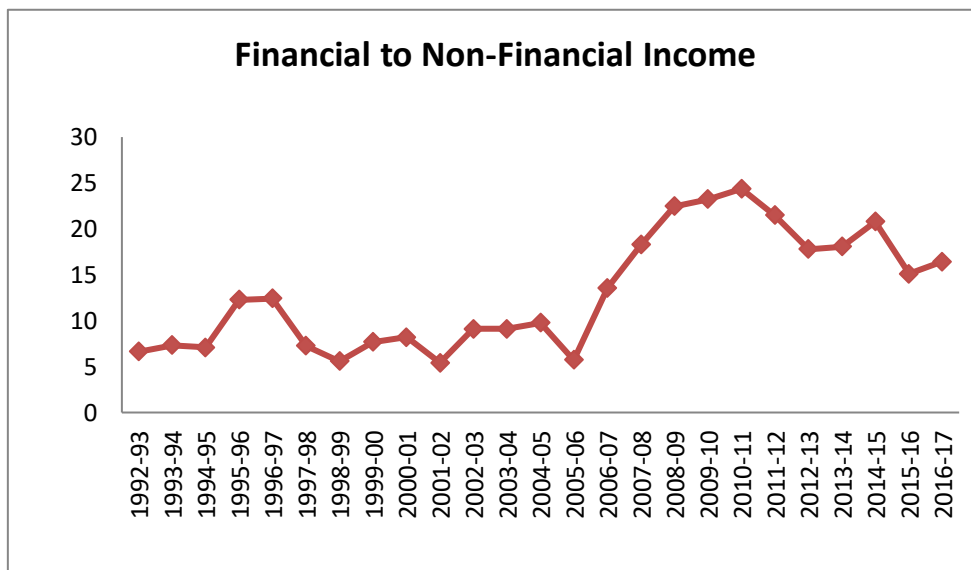
Source: Finances of non-government non-financial public Ltd. companies, RBI, several years

Fig 3.4 Composition of Investments



Source: Finances of non-government non-financial public Ltd. companies, RBI, several years

Fig 3.5 Financial to Non-financial Income



Source: Prowess

As already discussed in the previous chapter, the Indian corporate sector is dominated by group firms, which account for 83 percent of market capitalization. Since business group firms often share a common brand name with the decision making power at the apex, they mostly rely on one another for financing. These groups often diversify across different related and unrelated industries and follow complex management and ownership strategies. Though business groups release their respective firms' financial statements at regular intervals and are responsible to the outside shareholders, the objectives of the business groups are guided by the goals and strategies of the group

as a whole. Hence to judge a firm by the standard measures without understanding the objectives of different interrelated firms would be an inappropriate measure. For instance, a financial arm of a particular business group might not have the sole objective of earning financial income and maximizing shareholder value but may also serve the purpose of pooling resources and bridging the gap of internal financial requirements. In fact, the financial subsidiaries of business groups came up essentially to pool resources easily and utilize these resources accordingly in different related and unrelated industries without having to face many regulations.

Since business groups tend to diversify into different related and unrelated industries, there is a tendency of the groups to divert resources towards high profit industries. The group tries to channelize the investible funds to those activities where the expected rate of return is high. The presence of an internal capital market within the group allows the group to launch new ventures in which both the member of the family of the associated group and other firm members can acquire ownership stakes. This further facilitates the resources to invest in profitable ventures. This is a part of the growth process of the business groups. If in a particular area the performance is not good enough and the group wants to take out money from that area and put it into a new or different area, the firms either do it by diversifying into a new area (which is typical of giant business groups) or start a new firm (typical for small and medium sized groups) and invest money in the form of equity. This would appear as financial investment which would generate financial income, but the reality is the group has actually invested for expansion as part of its growth and development to garner real returns. Moreover, groups mostly provide loans to the subsidiaries at a considerate interest rate with other forms of intangible benefits, the motive behind being not to earn financial return but essentially to facilitate growth of the subsidiaries.

The transfer of funds from one industry to other industry within a group essentially would not affect the real investment of the group as a whole. If a group is taking out money out of profit from a particular firm of the group and investing wherever the profit is high then the reason behind the money being shown in the profit and loss statement would be essentially because the group has taken out the money from one firm and invested it in another firm. This would not necessarily impact aggregate real investment. For example, suppose there are three industries (A, B, C) where a group is

operating with three firms (X, Y, Z) respectively in each of these industries. Now the group finds that the demand growth and return of industry A is less than that of B hence it takes out money from firm X in industry A and invests it in firm Y in industry B. The profit comes back to the group from firm Y in industry B. The decision to invest further lies with the decision making authority whether to invest more in industry B or in industry C in firm Z which may have even better demand growth and return. Hence the real investment of the group as a whole is not affected by the transfer of financial resources from one firm in a particular industry to another firm in another industry within the same group.

In US, on the contrary, firms' financial investments are typically for the sole motive of earning financial income, which has a detrimental impact on the real investment. Higher income from the financial investments leads firms in the US to increasingly invest in financial investments, which motivates US firms to divert resources towards financial engagements rather than investing in the real sector. However, in the Indian case we find though financial income is rising this might not have any significant impact on real investment. Further, the financial investments of the group within the subsidiary firms would positively impact the real investment. Kakani (2000) found a negative relationship between the diversification of business groups and shareholder maximization. According to him, the more the business groups diversify into different industries, the less the firms focus on maximising shareholder value.

Studies also show a positive relationship with a diversification profit margin. However, since the shareholders of the groups are mostly members of the proprietary family, dividend payments are made according to the decision of the apex body without having much pressure from the outside shareholders. This helps the firms in two ways: firstly, with a high number of insider shareholders, issuing debt or equity becomes relatively easier for the firms; and secondly, the firms need not face pressure from outside shareholders to pay high dividends and hence can utilize these funds for investible purposes.

The financing pattern of Indian business firms has changed from the pre-liberalization period to the post-liberalization period along with policy changes, as firms relied more on external finance for both physical and financial investment in recent decades.

3.2 Financing pattern of Indian Corporate sector

The Indian corporate sector predominantly relies on financial institutions to finance its investment. The Indian financial system mainly consists of large commercial banks (banking sector), other financial institutions including term-lending institutions, investment institutions, specialized financial institutions, state-level development banks, nonbank financial institutions, and the capital market.

Commercial banks and cooperative banks generally fulfilled the requirements of the corporate sector in the pre-reform period. Post-independence, the corporate sector was heavily dependent on public financial institutions and banks for finance. The capital market was not of much importance during this time; indeed, it was practically non-existent. Development finance institutions (such as IDBI, SIDBI, ICICI, IFCI, NABARD) that were created in this period emerged as the most important sources of finance for the corporate sector, providing medium and long-term loans for industrial development. Insurance, pension funds and mutual fund institutions, though present in small scale, were regulated by the government, and included Life Insurance Corporation (LIC), General Insurance Corporation of India (GIC)⁶, Employees Provident Fund Organization (EPFO) and Unit Trust of India (UTI). In the post-liberalization period, commercial banks diversified into several new areas, such as merchant banking, venture capital, mutual funds and other financial services.

Over the years, significant changes took place in the financing pattern of the corporate sector. In order to understand these changes, data from 1960 to 2017 are examined. Decadal averages and overall averages are compared between pre and post-liberalization periods. In the pre-liberalization period, internal sources of funds were predominant. In the decade of the 1960s, internal sources of funds were 52 percent, which reduced to 50 percent in the following decade and came down to 32 percent in the 1980s (Table 3.1). On average, corporate sector investment was funded around 45 percent internally. Within the internal sources of funds, equity funding was very low with 7 percent, 5 percent and 1.7 percent shares in the respective decades with an average of 4.6 percent over the three decades. Reserves and surplus remained the highest sources of internal resources throughout these decades. In the 1960s,

⁶ India nationalized Life Insurance Corporation in 1956 and General Insurance in 1973.

reserves and surplus provided 22 percent, in 1970s 23 percent and in 1980s 26 percent of the internal sources of funds (Table 3.2). Provision was high in the pre-liberalization period, out of which depreciation was a large part. Out of the external sources of funds, borrowing remained the most important source throughout the pre-liberalization period. In the decade of 1960s, it was 27 percent. In the next decade, it fell to 22 percent with a significant rise in the following decade to 37 percent. On average, borrowing remained 29 percent of the total fund mobilized.

In 1969 the Government announced the nationalization of 14 banks, to ensure better coverage of branch network to regional areas, better mobilization of financial savings by the formal sector through bank deposits and provide credit in favour of neglected and disadvantaged sections. In other words, the government's decision to nationalize banks was largely motivated by the need to seize control over the access and allocation of the savings from the big house business interests, which very much dominated in the post-independence period. The post-nationalization period saw significant expansion of branches of both regional rural banks and scheduled commercial banks and increase in credit deployment to non-priority sectors such as agriculture, small-scale industries and other priority sectors.

In the post-liberalization period, the sources of funds changed from internal to external. Immediately after the liberalization in the early 1990s, several regulatory reforms in the financial sector encouraged more reliance on external sources. First, the reduction of government intervention in allocating credit such as bringing down the Statutory Liquidity Ratio (whereby the banks need to hold a certain percentage of their deposits in specified financial assets like government securities) led to the increase in the volume of the credit to the private sector. Second, the insurance bill passed in 1999 allowed the entry of foreign depositors in the Indian Insurance market. Indian nationalized banks including State Bank of India were allowed to sell equity up to certain limits while private investors were allowed to enter the banking sector. Foreign banks were given higher access to domestic market both in terms of subsidiaries and opening up branches, subject to the same rules as domestic banks. Third, the financial reforms increased the degree of external openness and facilitated Indian nationals to acquire assets and liabilities in foreign currencies and also the foreign residents to acquire assets in domestic financial markets. Indian companies

could now access the foreign capital market through Euro-equity shares. The regulations governing Non Resident Indian (NRI) investment in domestic companies were relaxed. Foreign institutional investors were allowed to register and invest in the Indian stock market, subject to a ceiling which was around 24 percent and could be increased to 40 percent with the approval of the General Body of shareholders. In 2001, this limit was further raised to 49 percent. Individual Foreign Institutional investors were allowed to hold 5 percent of equity in a firm, which was raised to 10 percent in 1996. The government reduced the tax on the capital gains, which allowed foreign and NRI investors to choose to invest in high return companies and for short duration to earn capital gains.

From under 50 per cent in the 1970s, external sources of funds rose to 68 percent in 1980s and 66 percent in the following decade. In the 2000s, external sources of funding declined to 54 percent and then went up again in the next decade to 62 percent. The average for the post-liberalization period was around 61 percent of the total funding. Among the external sources of funds, the most interesting changes occurred with respect to equity shares, which increased to 19 percent of the total funding (Table 3.1) in the 1980s and 29 percent in the 1990s (Table 3.3). In the following decade, it fell to 15 percent and the decade next to 13.5 percent of the overall funding. The average remained around 15 percent of the total funds and around 25 percent of the external funds. Among this 25 percent of equity issued, fresh issues were around 5 percent while the rest was 20 percent from premium. Premium from shares from external sources of fund moves from 2.6 percent on average in pre reform period to 20 percent in post reform period. This is largely because of the change in the rule of stock market or from the scams like Harshad Mehta and Ketan Parek or the boom that came out. For example a firm can go to the market and issue a 10 rupee share and sell at 300 rupees. The amount of control the firm is giving away is determined by the number of the 10 rupee share but in return what the firm is getting is Rs 300 per share and the difference goes into share premium reserve. Hence though the cost of capital is very low the premium was very high.

Reserves and surplus remained important sources of funds in the post-reform period. They increased from 10 percent of the overall funding sources on average in the pre-reform period to 16 percent in the post-reform period.

Banks and Development Financial Institutions

Borrowing has constituted the highest proportion of total funding and external funding, including both borrowings from banks and other financial institutions. Though borrowing reduced in the 2000s to 19 percent, it went up in the following decade to 31 percent. On average, borrowing was the highest source of funds throughout the period of study, accounting for an average of 29 percent of total funding in the pre-liberalization period and falling to 27.4 percent in the post-liberalization period. Borrowings can be short term and long term. Long-term borrowings are mainly for development purpose while the short-term borrowings are mainly for non-development purpose such as various immediate payments.

The post-independence period saw the rise of development banks initiated by the government for several reasons: the inadequate accumulation of the internal capital of the firms; the absence of along-term finance market which could provide easy access to bond or active equity markets for long-term investment; and the divergence between individual and social returns on many forms of long-term investment (such as in infrastructure) which meant that private financial markets would not always meet social and developmental requirements. The dominance of small and medium size depositors of commercial banks who save for shorter period and expect their savings to be relatively liquid made it difficult for the banks to provide long-term loans to industries and infrastructural sector. Hence commercial banks deploying loans to long-term projects can result in "maturity mismatch" (Chandrasekhar and Ghosh, 2018). To fill this gap, the government initiated development banks to lend for long-term development purposes. Funds for these development banks came from multiple sources such as government budgets, surpluses of central bank and bond subscribed by other financial institutions. This led to the increase in the borrowing of non-financial companies from development finance institutions, from an average of 3.7 percent in the 1960s to 13 percent in the 1980s of the total external funds mobilized. Thereafter there were reductions in borrowing from commercial banks from an average of 34 percent in the 1960s to 18 percent in the 1980s. In the post-liberalization period, the government chose to dismantle the development banks. Some were completely abolished while others like IDBI and ICICI were allowed to transform and function as commercial banks. This led to a fall in the borrowing from the

development financial institutions from 12 percent in 1990s to -3.4 in the 2000s and a rise in the borrowing from commercial banks from 16 percent in the 1990s to 36 percent in the next decade, partly because the development financial institutions had become commercial banks.

The banking sector saw a structural break in 2003 which saw a shift in the lending strategies. The restructuring of the commercial banks in the 1990s required the non-performing assets of the banks to reduce and an increase in the capital adequacy ratio. This led banks to hold on their lending. Following the restructuring, the credit-deposit ratio of the commercial banks declined from 60.4 percent in 1990-91 to 51.7 percent in 1998-99 along with a substantial increase in the loanable funds due to the periodic reduction of the CRR and SLR by RBI (Appendix A3.1). According to Chandrasekhar and Ghosh (Chandrasekhar & Ghosh, 2018), this fall in the credit-deposit ratio was due to the banks investing in government securities, which increased their risk-free returns. The earnings of the banking sector from investing in government securities as a percentage of total earnings from all assets of the commercial banks increased from 23 percent in 1990-91 to 40 percent in 2003-04. However, after that, there was a rise in the credit deployment of the commercial banks. Eventually, the rise in the credit of the banks led to an increase in non-performing assets (NPA) of the banks. The NPA ratio to advance of the public sector commercial banks, which declined from 23 in 1991 to 2 in 2008-09 showed a gradual increase thereafter, to 9.3 in 2015-16 and 12.5 in 2016-17 (Appendix A3.2). This sudden increase in the ratio of public sector banks NPA was due to the RBI's mandate that the hidden NPAs were to be reclassified as restructured standard assets by March 2017.

The problem of NPAs in the 1990s brewed due to the bad assets in the priority and non-priority sector loans to agriculture and small-scale industry while the loans after 2003 were mostly dominated by the bad assets brewing from the large loans from relatively few large corporates. Between 1995 and 2008, priority sector loans increased from 50 percent of the NPAs in public sector banks to 61. From 2008, this proportion started to decline. One of the possible reasons for this was the corporate debt restructuring scheme that the government came up which allowed the banks to restructure large default loans by extending repayment periods, lowering interest rates, partial conversion to equity and providing additional credit. These measures

were expected to reduce the financial pressure on the firms and strengthen them to resume meeting normal debt service commitments. Hence the government treated the restructured loans of the firms as "standard assets" and not "nonperforming assets."

However, it was soon discovered that even after the restructuring, the borrowing firms were not in a position to resume debt repayments and the defaults continued. The RBI, realizing that the continuous postponement of these bad debts could result in accumulation of stressed assets in the bank balance sheets that could be sufficient enough to create a systemic problem in 2015, came up with an asset quality review to reclassify the restructured assets. This resulted in a sharp rise in thenon-performing assets in 2015-16 and 2016-17. The large borrowers who were provided 56 percent of gross advances of the scheduled commercial banks accounted for 87 percent of gross non-performing assets. Therefore, post liberalization, the banks piled up huge debts from a few large borrowers.

Non-financial public limited corporations have been increasingly engaging in financial activities, with less industrial investment. This was also related to the cost of borrowing, as capital inflows were associated with lower interest rates and greater access to capital markets. The real interest rate which is the cost of borrowing did not fall, which induced the firms to access more to capital markets. From the post-liberalization period, the basic argument behind the financial liberalization has been a reduction in the real interest rate. With the increase in capital inflows, the Indian real interest rate would come at par with the world interest rate. However, this did not happen. The real interest rate did not fall to the extent expected. The real interest rate fell in the mid of 2000s due to the fall in the nominal interest rate till 2005-06.

Table 3.1 Sources of fund

Sources of Funds								
Average	1960-61 to 1969-70	1970-71 to 1979-80	1980-81 to 1989-90	Average Pre-Liberalization	1990-91 to 1999-2000	2000-01 to 2010-11	2011-12 to 2016-17	Average Post-Liberalization
A. Internal Sources	51.9	50.6	32.2	44.9	33.8	45.8	39.62	39.74
Of which: a) paid up capital	7	5.1	1.7	4.6	1.1	0.4	2.4	1.3
b) Reserves and Surplus	13.5	11.5	7.7	10.9	13.3	16.7	20.68	16.89
c) Provisions	31.4	34	22.6	29.33	19.3	28.7	13.4	20.4
B. External Sources	48.1	49.4	67.8	55.1	66.2	54.2	62.38	60.9
Of which: a) Equity	5.1	2.1	6.7	4.6	19.2	15	13.5	15.9
b) Borrowings	27.6	22.1	37.3	29	32.2	18.9	31.3	27.4
c) Trade dues and current liabilities	15.4	25.3	23.8	21.5	14.8	20.3	17.58	17.5
(A+B)	100	100	100	100	100	100	100	100

Source: Finances of Large Public Ltd. Companies, several years

Table 3.2 Internal Sources of Fund

Internal Sources of Funds								
	1960-61 to 1969-70	1970-71 to 1979-80	1980-81 to 1989-90	Average Pre-Liberalization	1990-91 to 1999-2000	2000-01 to 2010-11	2010-11 to 2016-17	Average Post-Liberalization
Paid up capital	11.5	9.7	7.3	9.5	3.2	2.1	6.3	3.8
Reserves and Surplus	21.9	22.9	25.7	23.5	39.7	41.7	57.5	46.3
Provisions	65.6	68.4	67.5	67.1	57.1	56.2	35.61	49.6
Of which: Depreciation	66.5	58.6	65.6	63.5	54.5	42.3	42	46.2
Total	100	100	100	100	100	100	100	100

Table 3.3 External Sources of fund

External Sources of funds								
	1960-61 to 1969-70	1970-71 to 1979-80	1980-81 to 1989-90	Average Pre-Liberalization	1990-91 to 1999-2000	2000-01 to 2010-11	2010-11 to 2016-17	Average Post-Liberalization
Fresh Issue of Share Capital	NA	5.2	8.4	6.5	29	23.6	21.8	24.7
Of which: a) Net Issues	NA	4.2	3.8	4	7.3	5.7	1.4	4.8
b) Premium on shares	NA	0.8	4.4	2.6	21.7	17.9	20.2	20
Borrowings	55.7	42.4	55.2	51.1	48.5	35.9	50.19	44.8
From a) Banks	34.1	23	17.7	25	15.8	36.3	30.61	27.7
b) Other FIs	3.7	-0.3	12.8	5.4	12	-3.4		4.3
c) Other borrowings	16.8	19.8	25	20.5	20.7	3		11.8
Trade Dues and Current Liabilities	31.6	52.6	35.9	40	21.8	39.5	28.19	29.8
Of which: Sundry Debtors	26.9	35.3	20.8	27.6	15.9	23.2		19.5
Total	100	100	100		100	100	100	

Source: Finances of Large Public Ltd. Companies, several years

Capital market

The increase in the external sources of funds has largely come from the capital market, which started gaining importance after 1993, with the reduction of barriers for FII inflows to enable them to make portfolio investments in the Indian stock market. These included the replacement of Capital Issue Act (CIA) 1947⁷ with SEBI in 1992 and several other policy changes. Under the purview of CIA, the equity market⁸ was segmented and operated under entry barriers, traditional practices and administrative control regarding new issues. There were entry barriers not only for the institutional investors to invest in domestic issues but also for the domestic firms to raise funds from abroad. Firms were not allowed to issue equity at a premium on their own. The

⁸ As debt market for the private sector was yet to be developed

CIA determined the amount of premium that firms could charge, which restricted the number of issues in the market. Interest rates on debentures were also freed on August 1991 to raise funds from the capital market with attractive rates depending on the credit ratings.

Until the 1980s, the Indian stock market was dominated by large financial institutions and Insurance companies and the Unit Trust of India, and the investments were long-term in nature and for development purposes. The returns from the investments were mostly in the form of dividends rather than capital gains. Therefore these investments were mostly made in large companies with strong fundamentals for a longer period of time. In the early 1990s, the stock market saw huge speculative transactions in a wide range of new shares. During the earlier part of the period, any firm could list itself in the stock market. Further, transactions were in relatively small lots and the returns came mostly in the form of capital gains rather than dividend returns. This entry of small investors had two effects. First, since these small investors were driven predominately by the market, share price movements were influenced by herd behaviour. Second, since the Sensex indicates the movement of leading companies, it could not capture the movement of shares of small companies. With high returns appearing in the form of capital gains in the stock market, a substantial number of small investors shifted from bank deposits which were their principal assets (Chandrashekhar, 2011). However, this came to an end with the stock market scam of 1992, and the relatively safer investment in mutual funds institutions increased instead. This made the principal buyers of shares, those institutions who are choosy about the shares to buy.

In the same year, CIA was abolished, and SEBI was formed. New capital issues were brought under the regulatory authority of SEBI. SEBI with its new framework did not control the price of new issues. The vested role of SEBI was to ensure that the firms disclose all the necessary and sufficient information required to undertake issue in the capital market. Another part of the liberalization policy has been the reduction of the barriers with respect to FIIs in 1993 to make portfolio investment in the stock market. Soon India became one of the attractive destinations for global portfolio investment managers, which like the financial institutions were also choosy about the companies to invest and invested mostly in the big leading firms. But these investments were

highly volatile in nature and dependent on global factors such as the opportunities and risks in the other competing and emerging markets. Net FPI flow in India increased from Rs 318 billion in 2006-07 to Rs 1106 billion in 2007-09 while reducing to Rs - 650 billion in 2008-09. The flight of 2008-09 is due to crisis struck in the western world. Since then, Indian stock markets have been volatile (Table 3.6), as the motive of most such investments are short-term capital gains. The competitive environment forced the domestic financial institutions also to start active trading in the domestic market, increasing the volatility of the markets and eventual drying up of the primary issues market.

3.3 Resources mobilized from the stock market

To understand the changes in the stock market and the amount of resources mobilized from the stock market, it is necessary to look at trends in new capital issues along with total issues. This is an indicator of the extent to which the financial sector is injecting new resources to production agents. The average number of new equity issues per year declined from the 1990s to 2000s and further declined in the recent decade (Table 3.4). There was a shift away in the issue from preference and debenture shares to equity shares. Although there was an increase in total issues from Rs 43 billion in 1990-91 to Rs 600 billion in 2016-17 (Appendix A3.3), the decadal average remained around Rs 115 billion in the 1990s to Rs 250 billion in the 2010s. The rise was largely due to new issues by existing companies in the stock market. The fall in the number of equity issues in the later decades indicate that there were other new avenues for the public limited companies to generate their necessary financial resources, such as mutual funds and private placements domestically and FDI, ECB, ADR/GDR internationally.

**Table 3.4 New Capital Issues by Non-Government Public Limited Companies
(Rs Billion)**

	Equity Shares		Preference Shares		Debentures		Total		New		Existing	
	No. of issues	Amount	No. of issues	Amount	No. of issues	Amount	No. of issues	Amount	No. of issues	Amount	No. of issues	Amount
1980-89	438	7	5	0	76	13	520	21	314	5	206	1667
1990-99	659	64	3	0.4	83	50	745	115	196	23	549	9285
2000-09	69	165	1	5	4.4	18	73	189	43	98	30	9141
2010-17	69	166		0	13	83	82	249	53	104	28	144

Source: RBI

3.3.1 Private Placements

The other source of resource mobilization domestically is through private placements. The sources of funds data show a rise in external sources, among which new issues also rose (Table 3.3). However, there are no details of whether those have been from IPO or private placements⁹. This is important because, despite the fact that issues from new IPOs were lower, overall sources from the capital market were high. This discrepancy emerges due to the equity and debt issued through private placements. Private placement issues of non-financial firms increased from Rs 62 billion in 2002-03 to Rs 1118 billion in 2016-17, while the number of issues went up from 296 to 600 in the same period (RBI, 2017). The total amount raised from financial and non-financial firms in both public and private sectors rose more than tenfold from Rs 639 billion to Rs 6673 billion over this same period. Private placement issues can be of both equity and debt. Equity from private placement includes QIBs (Qualified Institutional Buyers), preferential allotment, etc. SEBI introduced QIB in May 2006, which is a new route for the domestic corporate sector to mobilize resources. These are offered by companies to a group of preferred investors, which can be individual or institutional investors such as banks, mutual funds, etc. and need not be registered with SEBI. The companies prefer QIBs rather than going for public issues as they are quicker and enable them to raise capital from the domestic market without submitting any pre-issue filings to market regulation. Similarly, debt from private placements

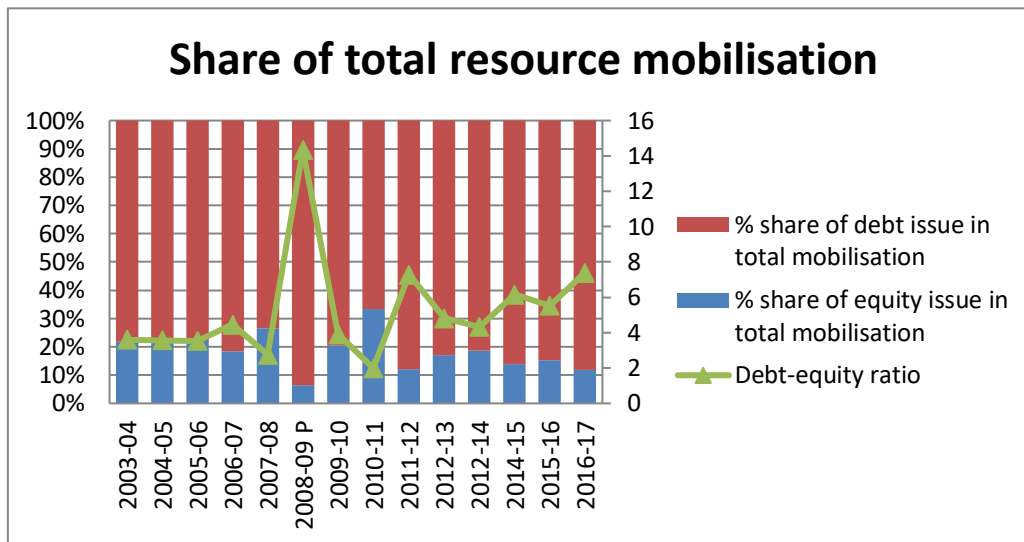
⁹Private placement is a particular type of securities which are offered through private offering to a small number of preferred investors.

comes in the form of bonds and debentures offered by companies to preferred individuals or institutional investors. The Indian capital market is predominantly characterized by private placements of debt.

From the point of view of firms, some advantages of private placements over public issues are (Pal, 2007) that: (a) they are cost-effective sources of finance; (b) they can be customized according to the requirements of the firm; and (c) they are less regulated than the market for public issues. Due to these advantages, private placements are more popular than public issues. In the Indian capital market, the popularity of private placements is due to another important reason. The Indian corporate system is characterized by business groups, and the boards of directors are dominated by family and close relatives, therefore these groups prefer to issue funds from within. Very large firms and groups use public issuance of funds while other firms mostly prefer private placements for external resources. This allows the groups to issue funds from within the group as the shareholders mostly comprise the other group firms. This further allows the firms to move resources from one entity to another entity where the rate of return is high. Within private placements, debt issuance from private placements is much higher than equity issuance. Only 20 percent of the capital market funds is mobilized through equity while the rest is mobilized by debt. The debt to equity ratio has risen from 3 to 7 between 2003-04 and 2016-17 (Fig 3.6)¹⁰. The IPO issue from the primary market has been considerably lower. RBI data show that IPO issues have been below Rs1 lakh crore in real terms throughout the period of study, while private placement debt has risen significantly. Private placement debt in 2002-03 was Rs1 lakh crore and rose to Rs6 lakh crore (deflated by WPI) in 2016-17 (Fig 3.7) a rise of six times in 14 years. Hence, while IPO for new issues is still at a nascent stage in India and does not contribute much, debt through private placement mobilizes a significant amount.

¹⁰ The debt to equity ratio in 2008-09 is exceptional as the stock market crashed in 2008 as a result the equity has been very low and the debt-equity ratio too high.

Fig 3.6 The share of Total Resource Mobilization

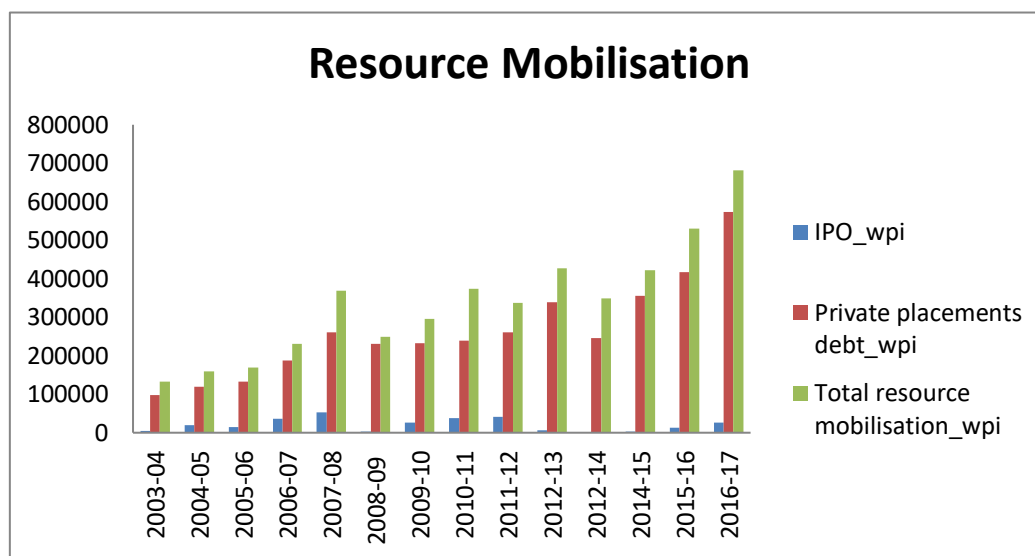


Source: RBI

3.3.2 Bond Market

Bond market was another important source of finance. In the pre liberalization period, with mixed economy paradigm, Indian capital market structure was mostly publicly owned. Public limited companies used to raise capital through debt securities. In fact the bond market started growing from the 1980s mainly due to policies to boost debt-based investment. In 1980 the debt-equity norms for issuing debentures were diluted from 1:1 ratio to 2:1 ratio. In 1982, Indian nationals abroad were allowed to invest in domestic debentures, although subject to some conditions. In 1984, the debenture issue norms were relaxed to include modernization, financing mergers and acquisitions and restructuring a firm's capital structure; and the ceiling on the interest rate on debentures was raised (Ghosh, 1991). Other policies like tax exemption on dividend income came as a boost to equity financing.

Fig 3.7 Resource Mobilization in the non financial private sector from IPO and Private Placements Debt

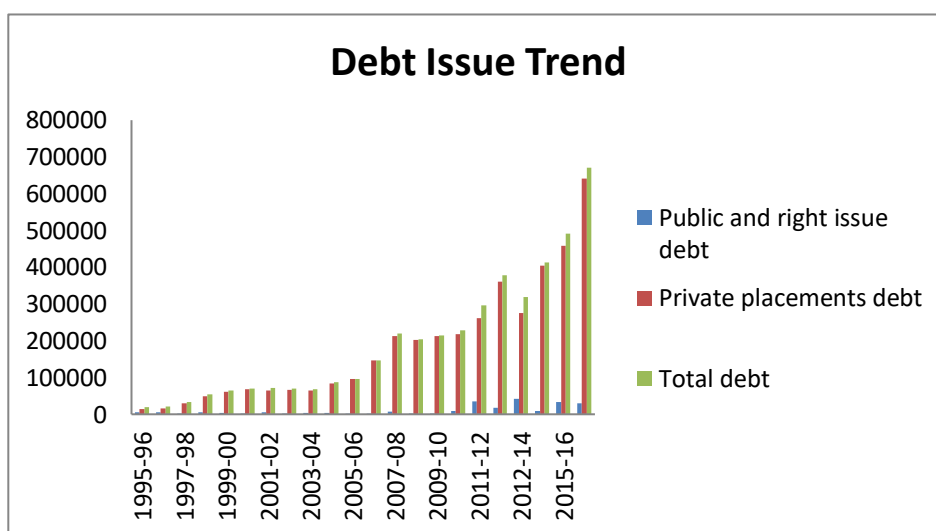


Source: RBI

On the demand side, there has been a number of policies favouring household investment in the capital market, both in the form of equity purchases as well as mutual funds, pension funds, etc. The reduction in interest rates also negatively affected the returns from bank savings, which induced households to save in capital markets that were perceived to give higher returns. Due to these reforms the state owned public sector units began to issue PSU bonds. However, such debt instruments remained mostly illiquid. After the abolition of CCI, corporate bond issue somewhat expanded but these remained mostly in the domain of private placements. With the closure of DFIs and merged into commercial banks leaving only two financial institutions (ICICI and IDBI) with the burden of financing private investment and specially capital intensive sectors and hence are left in the hands of the banks specially public sector banks. But with relatively illiquid funds there arises maturity mismatches which resulted in rising non-performing assets of the commercial banks. Hence there required another avenues to provide long term finance in the infrastructure with long periods of gestation lags. This led RBI to develop the bond market to substitute DFIs. The corporate bond market can be expanded mainly through four channels: first, by making it easier to acquire bonds. This can be done by allowing FPIs in corporate bonds. Second, by increasing the liquidity of corporate bonds such as allowing these bonds to be considered as collateral or/and allowing

brokers to participate in the corporate bond market. Third, measures to encourage banks to allow new bonds and fourth, by allowing banks to provide partial credit enhancement scheme. In 2015 the RBI introduce the scheme of partial enhancement scheme where banks were allowed to provide bonds to corporate entities on the special purpose ground. The debt market raised from Rs19335 crore in 1995-96 to Rs146471 crore in 2006-07 to Rs670044 in 2016-17 (Fig 3.8). Around 90 percent of the total debt mobilised and 80 percent of total fund mobilised from the capital market are through private placements debt. Though mobilization through debt market has increased undoubtedly, however, it still comprise of very little portion of GDP. In 2015 corporate bond was only 17 percent of GDP (Chandrasekhar, 2016).

Fig 3.8 Debt Issue



Source:RBI

3.3.3 Mutual Funds

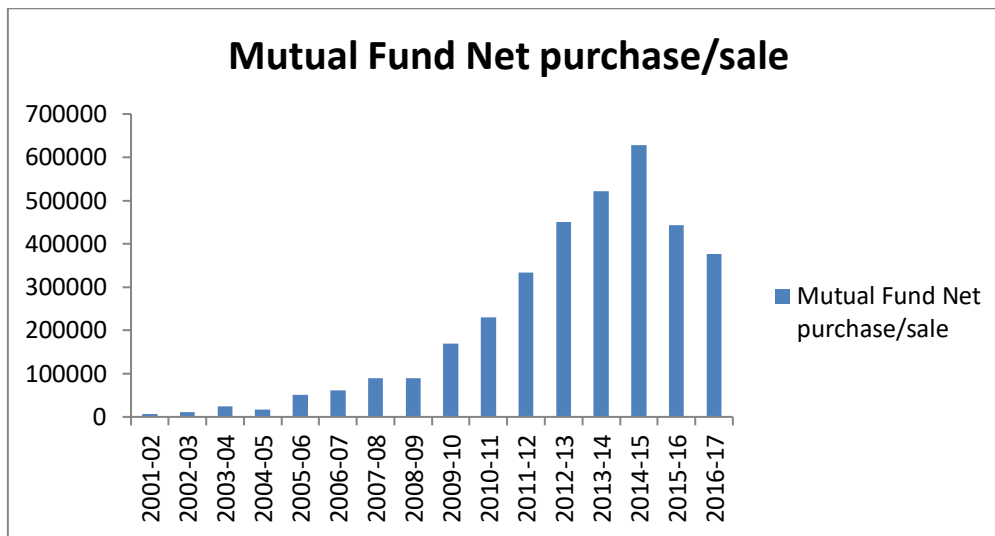
Mutual funds investment started in the Indian securities market from 1964 with UTI (Unit Trust of India) and was established through the Indian Trust Act, which gave certain tax benefits to investors. Later from 1987 and till 1992, public sector banks and insurance companies were allowed to setup mutual funds. In the pre-liberalization period, UTI was the only mutual fund agency for resource mobilization. Public sector banks and government financial institutions were the sole institutions that were allowed to sponsor mutual funds. In the post-reform period, with the notification of SEBI (Mutual Fund) Regulation in 1993, the entry of the private sector was allowed. The regulation also prescribed the disclosure and advertisement norms for mutual funds.

Table 3.5 Mutual Funds (Rs Billion)

Year	UTI	Bank-sponsored mutual funds	FI-sponsored mutual funds	Private sector mutual funds	Total
1980-81	0.52	-	-	-	0.52
1990-99	25	4	3	33	63.7
2000-09	15	37	19	363	435.7
2010-17	27	117	-12	749	881.9

Registered FIIs in SEBI, whether listed or unlisted, were allowed to invest in domestic mutual funds. The mutual fund market saw a substantial increase, from Rs 75 billion in 1990 to Rs 220 billion in 2000 and further to Rs 3434 billion in 2016 (Appendix A3.4) with an average of Rs 63 billion in the 1990s to Rs 881 billion in the 2010s (Table 3.5). After the introduction of private mutual funds, the total mutual fund transaction increased considerably. Private mutual funds have seen a huge increase in resource mobilization starting from Rs 15 billion in 1993-94 to Rs 2743 billion in 2016-17 (Appendix A3.4). The big business houses opened up financial arms of their own to mobilize resources from outside the companies. Almost all big groups set up their own financial entities, which increased the resource mobilization from these entities and reduced the resource mobilization from bank-sponsored mutual funds. These included Aditya Birla Financial Service, Tata Capital, L&T Infotech of Aditya Birla, Mahindra Finance, Bajaj Finance Ltd and many others. Previously these big giants had to be dependent on the banks and financial institutions for raising funds from mutual funds. The private mutual funds companies of the business groups can pool resources and are utilised as per requirements of the group. This increased the ease of the business houses to mobilize funds from the market through their own arms. Ninety percent of total mutual funds come from private mutual funds. After the entry of private mutual funds, the share of both financial institutions (FI) sponsored mutual funds, and bank-sponsored mutual funds did not see much increase. In fact, the increase in net mutual fund transactions came from 2009 onwards (Fig 3.9). This is due to the amendments that SEBI (Mutual Fund) Regulation came up with in April 2008 to permit mutual funds to launch real estate mutual funds.

Fig 3.9 Net purchase/sale of Mutual Fund



Source: SEBI

3.3.4 Foreign Fund Mobilization

Apart from domestically raised resources, firms also seek international funds mobilized through instruments like ADR/GDR, External Commercial Borrowings (ECB) and Foreign Direct Investment (FDI). ADR are American depository receipts, and GDR are global depository receipts through which foreign investors can invest in Indian companies. Foreign fund resources comprise around 40 percent of the total non-bank funds mobilized in the corporate sector.

Table 3.6 Foreign Fund Mobilization

Year	Foreign Sources (Rs billion)	ECB	ADR/GDR		Short-term Credit from abroad	FDI to India	Net FPI to India
			Issues excluding banks &FIs				
2007-08	3,093	912	118		689	1,374	1106.19
2008-09	1,702	380	48		-312	1,586	-650.45
2009-10	2,198	120	151		349	1,578	1539.67
2010-11	2,381	539	92		426	1,324	1393.81
2011-12	2,304	421	27		306	1,550	855.71
2012-13	3,123	466	10		1,177	1,470	1464.67
2013-14	2,203	661	1		-327	1,868	296.80
2014-15	2,265	14	96		-4	2,159	2578.53
2015-16	2,459	-388	0		-96	2,943	-272.03
2016-17	2,758	-509	0		435	2,833	504.82
2017-18	3,385	-51	0		896	2,540	1426.32

Source: RBI

During the initial years of liberalization the ADG/GDR rose significantly. Net resource mobilization through ADR/GDR doubled from Rs500 billion in the 1990s to

Rs1246 billion between 2000-01 and 2008-09 (Bhawani, 2012). However, it fell to Rs 377 billion between 2009-10 and 2014-15 and dried up after that. The share of ECBs also rose from 2010-11 to 2013-14. It was 29 percent of the total foreign resources in 2007-08 after which it fell to 14 percent in 2014-15 and became negative from 2015-16 onwards. However, during this period, FDI increased tremendously.

It was expected that FDI inflow would increase the domestic investment rate above the domestic saving rate and that FDI would bring along with it newer technology, greenfield investments and increase exports. Foreign investments were allowed up to 100 percent in most industries through automatic approval route and FDI up to 74 percent was permitted in telecommunication services. In 2001, further amendments on FDI policies was made to open up to 100 percent in housing, hotels, city, resorts and infrastructural facilities. 100 percent FDI through automatic route was approved for mass rapid transport systems and in real estate and pharmaceuticals.

The initial year' of liberalization a significant amount of inflows occurred under the FDI window. It rose to \$2 billion in the middle of the 1990s and reached \$4 billion in 2000-01 and up to \$6 billion in 2004-05 after which it saw a huge rise touching \$22 billion in 2006-07, \$34.8 billion in 2007-08 and \$35 billion in 2008-09. In 2014 again there was an upsurge in the FDI inflow. This was due to some of the amendments in the previous policies.

From 2014 to 2016 there have been periodic revisions to FDI policy. In 2014, the cap on FDI in defence and railway infrastructure was relaxed. Defence till 2001 was under 26 percent cap which was increased to 49 in 2014, and then 100 percent in 2016 through government route to access modern technology. In the pharmaceuticals and medical devices sector, FDI was allowed up to 49 percent in brownfield investment and beyond 49 percent of acquisition by the foreign investors required government approval. In 2016 this limit was increased to 74 percent through the automatic route. For single-brand retail, the cap for FDI was relaxed to 100 percent in 2018. In agriculture and animal husbandry, although the sector was already open to 100 percent FDI, the rule was that foreign participation in the production of floriculture, horticulture, development of seeds and cultivation of vegetables and mushrooms was "under controlled conditions." In 2016, this condition was removed in developing genetically modified seeds. For security and broadcasting carriage

services, the cap was increased from 49 percent to 74 percent. However, despite these moves, the share of FDI in manufacturing investment declined during 2014-16 in comparison to the previous two years. The share of FDI in manufacturing investment in 2014-16 was 29.1 percent, compared to 47.8 percent during the previous two years(Rao & Dhar, 2016).

Hence, the financing pattern of non-financial corporations changed from internal to external sources with the series of policy changes that the government came up with from the 1990s. These changes increased the reliance of the corporate sector on capital markets other than borrowing, which continued to provide consistent and significant external finance. Within the capital market the most interesting part has been that IPO issues did not improve while there was a significant rise in the private placements issue. This shows that non-financial firms comprising mostly of groups could benefit out of the system. Since private placement issues can be customised according to the requirements of the firms and with the significant number of shareholders coming from within the group, raising money from private placements became prevalent in the groups. The mutual funds also showed increase and almost all business groups set up their individual financial arms to raise investible funds.

In the next section, some empirical tests are undertaken on investment of Indian non-financial firms. The tests are firstly on allnon-financial firms, and secondly on group and standalone firms separately.

3.4 Theoretical Specification

In this section, I have constructed a simple investment model that can capture the impact of financializationif any on real investment. This investment model includes both real and financial determinants of investment. Real sector determinants are sales and profits while financial determinants are financial income and financial investment in group. The fourth variable, financial investment in other group companies, is only measured for group firms. All the variables are taken in one year lag.

The equation is as follows:

$$\frac{I}{K} = f\left(\frac{S}{K} + \frac{P - \text{Fin Inc}}{K} + \frac{\text{Fin Inc}}{\text{Fin Inv} + \text{LA}} + \frac{\text{Fin Inv grp}}{K}\right)$$

where,

I=real investment

K=Gross fixed Asset

S=sales

P= profit

Fin Inv= Financial investment

Fin Inc= Financial Income

LA= Loans and advances provided

Fin InvGrp= Financial investment by other group companies

3.4.1 Expected signs of the variables

Sales

Sales in the previous year are expected to have a direct positive relationship on real investment. The sales ratio to fixed capital has been taken. This can also be seen as a proxy for capacity utilisation.

Profit

Profits reported by the firms in the annual balance sheets are inclusive of financial income in a particular year. To find the impact of profits coming from the real sector on real investment I have subtracted the financial income from profits. P-Fin Inc I the previous year is expected to have a positive impact on real investment.

Financial Income

Financial income comprises of dividend income from financial investments and interest income from the loans and advances provided by the firms. Higher financial income can have a positive impact on real investment from the supply side in terms of availability of resources for investment. On the other hand, high returns from financial

investment could compete with returns from real investment and thereby could have a negative impact on real investment on the demand side.

Financial Investment by group companies

Financial investment by other group companies captures the investment by others of the group in that particular company. It is expected to have a positive relation with real investment of that company.

3.4.2 Data

The non-financial firm-level data are taken from CMIE prowest database. A total of 4095 listed non-financial firms are taken. The total period of study is from 1993 to 2017. The period of study is taken from post-liberalization period in order to capture the changes in financial behaviour of the non-financial firms after several financial reforms and financial policy changes that occurred including the registration of SEBI in 1992. The individual firm-level analysis has many advantages over aggregate time series data. Aggregate time series data suffers from the loss of information due to aggregation. Moreover, the cross-section variation in panel data increases the accuracy of parameter estimates while taking heterogeneity into consideration.

3.4.3 Methods

The regression is done on two sets. Firstly it is done on the overall listed non-financial firms to find the impact of financing behaviour on real investment. The second regression is done dividing the firms into the group and standalone firms, with the expectation that the financial and investment behaviour of group firms is different from standalone firms.

3.4.4 Regression Results

Table 3.7 gives the result of the overall non-financial firms with three models: overall, group and standalone.

	Overall		Group		Standalone	
real_inv	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.
lsales_gfa	.0001886 (***)	.0000501	.000384 (**)	.0002855	.073492 (***)	.0175276
L1.fi_finv	-.0003516	.004923	-.1544399	.2890503	-.0131151	.0105029
L1.p_fi_k	.0000439 (**)	.0003362	.0767006 (***)	.0057433	.0852733 (***)	.0174101
L1.invest_grp_gfa			.0005335 (***)	.0001164		

Overall model

Sales for the overall model are significant, with the expected sign though the coefficient is quite small. Profits coming from the real sector are also significant and positive, implying higher non-financial profit would lead to higher real investment. However, the financial income coming from financial investments and loans provided come out to be insignificant implying that financial income does not affect real investment.

Group firms

The coefficient for sales is positive, but the coefficient is small, similar to the overall model. Profits too are significant and positive while the financial income is insignificant implying financial income has no impact on real investment in the group firms. However, financial investment within the group has a positive impact on the real investment, as expected. Therefore, inter-corporate investment from within the group has a positive impact on real investment by a company.

Standalone firms

Sales are positive, and the coefficient is comparatively higher than that for group firms. Profit is positive and significant with somewhat higher impact. The financial income for standalone does not impact real investment.

3.5 Implications for financialization

The Indian economy in the recent phase has experienced a fall in the contribution of the gross fixed capital formation to GDP. It has been argued that this is due to non-financial firms increasingly engaging in financial activities and diverting the investible funds more towards investment in securities. On first examination, this seems to be validated by the behaviour of non-financial firms, as the net fixed assets declined as well as the investment in the industrial sector fell while there was a continuous rise in the financial assets of the non-financial firms. This was because of financial investments. However, a deeper examination reveals a more complex pattern that does not fall into the type of financialization described for the US and other developed economies. Financial investments of non-financial firms have been mostly in shares and debentures of subsidiaries or other firms belonging to the same business group. The business groups have been investing within the group in those firms where the rate of return was expected to be higher, and using financial investments to transfer the required resources across firms. This is in turn reflected as a high proportion of financial investment, but it is actually real investment in profitable activities of other firms in the group.

Therefore, while superficially it appears that Indian firms have been investing more in financial assets to get higher financial incomes, suggesting that they have been moving towards financialization similar to that of US firms, the reality is somewhat different. Within business groups that still dominate the Indian corporate scene, firms have been investing in other group companies as part of an overall groups strategy, so as to get a high rate of return in particular industries. Returns from such investment are also expressed as financial income, which therefore seems to be increasing.

Over the entire period of the study, the financing behaviour of the non-financial firms changed, and there has been an increasing reliance on external finance in the post-

liberalization period. The capital market gained importance and non-financial firms' engagement in the capital market raised. However, unlike in the US, Indian firms mostly raised funds from private placement while the resources mobilized from mutual funds also increased.

Results of the econometric investigation show that there was a positive relationship with sales and profit of the overall, group and standalone firms. These had a greater impact on standalone firms than group firms. Meanwhile, income from financial investment and loans and advances provided by the firms did not have any significant relationship with the real investment. On the other hand, the financial investment of other firms inside the group has a positive relation with the real investment.

The increasing engagement in financial activities of the non-financial firms as a result affecting the real sector is a phenomenon that has long been found among US non-financial firms. However, there is a vast difference in the structure of the US corporate structure and Indian corporate structure. The dominance of standalone firms (often conglomerates) in the US has combined with shareholder activism to compel the management to provide huge dividends to the shareholders. It has also generated a shareholder oriented strategy of 'downsize and distribute' shifting from 'retain and reinvest' which has been seen to be harmful to the long-term development of firms. The increasing dividend and interest income as a proportion of profit is an indication of the dominance of short-term profit orientation of the management which has been detrimental to the economy. By contrast, the Indian corporate sector is dominated by business houses and the ownership as well as control tends to be vested with family owners. Therefore shareholder activism is low. The dividend income and interest income mostly circulate within the group. The financing pattern also changed from internal to external finance with increasing reliance on the capital market. While it appears that capital market issues are being used for financial investment rather than real investment, much of this is investment within the group. This means that the reasons for the slowdown in real investment in India must be sought in causes that go beyond financialization *per se*.

With this high prevalence of business groups, it is important to consider in more detail how the business groups function. Hence two big groups have been chosen for further study: The House of Tata and the Aditya Birla Group. The next two chapters deal with these two giant business houses and their complexity of the ownership structure, financing behaviour and investment pattern.

CHAPTER 4

The House of Tata

4.1 Introduction

The House of Tata had its origins in 1868 when Jamsetji Nusserwanji Tata laid its foundation. Since then, the Tata way of doing business has remained the role model to be followed among many Indian corporate houses. The group currently operates over 100 countries across six continents and contains 29 listed companies with a market capitalization of \$144.79 billion (as of March, 2018). The group is operated through the holding company, Tata Sons and 66 percent of the share capital of Tata Sons is held by the Tata Trust.

Firms in the Tata Group of industries are engaged in a complex web of cross-holding across firms from 1995, when Ratan Tata brought in the financial restructuring of the group. Since then, the companies increased internal holdings of group companies and have spent significant amounts from their reserves in such intra-group financial investments, which in turn increased the income coming from these investments. For individual companies in the group, real investment fell in absolute term, and an increasing proportion of profit came to consist of financial income, but all of this largely represented intra-group activity. This was a part of the strategy of the group as a whole to transfer investible resources to those activities that were anticipated to provide higher returns. Therefore, despite the fact that financial investment and the associated income were high and growing in these companies, the process is significantly different from that described by financialization theory. The group has also been on a spree of mergers and acquisition both domestically and internationally. Tata Group has made some of the largest acquisitions ever by Indian corporations, which increased the stock of debt of the firms. However, the post-acquisition performance of the firms did not improve significantly, and in some cases, it deteriorated. In this chapter, the performance of the group as a whole, the complex cross-holding pattern and how the group used this complex pattern to rescue individual firms within the group, the mergers and acquisition and pre and post-performance of these mergers and acquisitions are discussed. Since the performance of the group is influenced by some of its important firms hence, seven major non-

financial firms are considered in detail. A regression analysis has been carried out to examine whether financial income and financial investment by the group as a whole have any significant impact on real investment and whether the group diverts the investible funds to relatively high profitability firms. Three models are tested: the first taking all 248 non-financial firms of the Tata group, the second with 29 listed firms and the third regression to examine the impact of deviation of profits from average profits on financial investment within the group. The data source is the CMIE Prowess database, for the 25 year period from 1993-94 to 2016-17.

Section 4.2 gives a short description of the evolution of the House of Tata Section 4.3 shows the complex ownership structure of Tata group; Section 4.4 deals with the performance of the group as a whole; Section 4.5 shows how the funds are transferred within group firms; Section 4.6 includes the case studies of seven firms; Section 4.7 analyses the mergers and acquisition of the group; Section 4.8 contains the regression analysis and Section 4.9 provides a conclusion.

4.2 The Tata Group

Tata group of companies was founded in 1868 by Jamsetji Nusserwanji Tata. He started his textile business in 1869 in Chinchpokli in Bombay, and by 1874 he started a fresh enterprise in Nagpur, the Central India Spinning, Weaving and Manufacturing Company. By 1880 he set up a steel plant. In 1902 he opened Taj Hotel, the first luxury hotel in India. After Jamsetji's death in 1904, his son Sir Dorab Tata took over as chairman. Under his chairmanship, the group opened and expanded into diversified ventures such as steel in 1907, electricity in 1911, consumer goods in 1917 and aviation in 1932. Sir Dorabji died in 1932 when Sir Nowroji Saklatwala became the chairman. He carried on with the expansion and entered into another set of ventures, such as chemicals in 1939, technology in 1945, cosmetics in 1952 manufacturing in 1954, tea in 1962 and software services in 1968. In 1945 the Tata Group established Tata Engineering and Locomotive Company which was later renamed as Tata Motors in 2003. In 1991 Ratan Tata joined as chairman under whom the group continued expanding. The acquisitions under Ratan Tata's time are discussed in detail later in this chapter.

Ratan Tata introduced the Tata Brand in 1995 to bring the companies of Tata under one umbrella and increase the collective identity. The companies under the Tata group are to subscribe to the Tata Brand Equity scheme where they are supposed to pay a fee against the Tata name. Each company that would subscribe the scheme would derive the benefits of the Tata Brand and require to subscribe to a code of conduct to ensure uniform quality and ethical business practices.

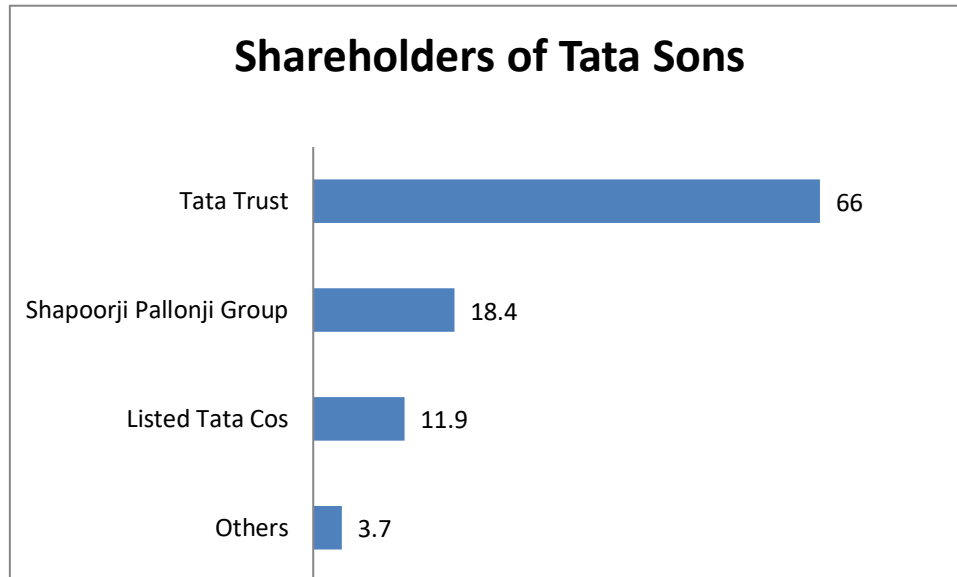
Tata Sons and Tata industries, the two holding companies of Tata group, did not hadenough power to control the rest of the companies. The holding companies had a very little shareholding in companies like TISCO (Tata steel) and Telco (Tata Motors). The holding of Tata Sons in TISCO was 2.5 % and in Telco was 1.8% in 1995 and hence Ratan Tata found that these firms could afford to disagree with the Tata Sons' decisions, while in other firms Tata sons held 0.1 percent to 15 percent of share in the group companies. Hence, he brought in a financial restructuring process. He introduced the scheme which was known as "Tata Brand Equity and Business Promotion Agreement." Ratan Tata started the process by seeking royalty from the companies using the Tata brand name. Tata Sons estimated that publicizing Tata Brand would require Rs 300 million every year. Hence the subscription fee for using the Tata Brand name was decided from 0.10 percent to 0.25 percent of net income of each company before tax. In 1995 Tata Sons invited the group companies to subscribe to a rights issue and received Rs 300 crore. This money was then used to increase the shareholding of Tata Sons in the group companies so as to legally assert its power over the group companies. By 2000 this number changed to 14.17 percent in Tata Motors and 19.86 percent in Tata Steel.

4.3 Ownership Structure of Tata Group

The ownership structure of Tata is complex. The business group is a pyramidal structure with the holding firm at the apex. The Tata Group has two branches: Tata Sons and Tata Industries. Tata Sons is the holding company of the Tata Group. It is an unlisted company in which the majority stake is held by Tata Trust, a philanthropic trust endowed by the members of Tata Family. The two biggest stakeholders of the Tata Trust are Sir Dorabji Tata Trust and Sir Ratan Tata Trust. Tata Trust holds 66 percent of Tata Sons, the ShapoorjiPallonji group and family hold 18.4 percent of

Tata Sons, listed Tata Companies hold 11.9 percent and others hold 3.7 percent of Tata Sons (Fig 4.1)

Fig 4.1 Shareholders of Tata Sons

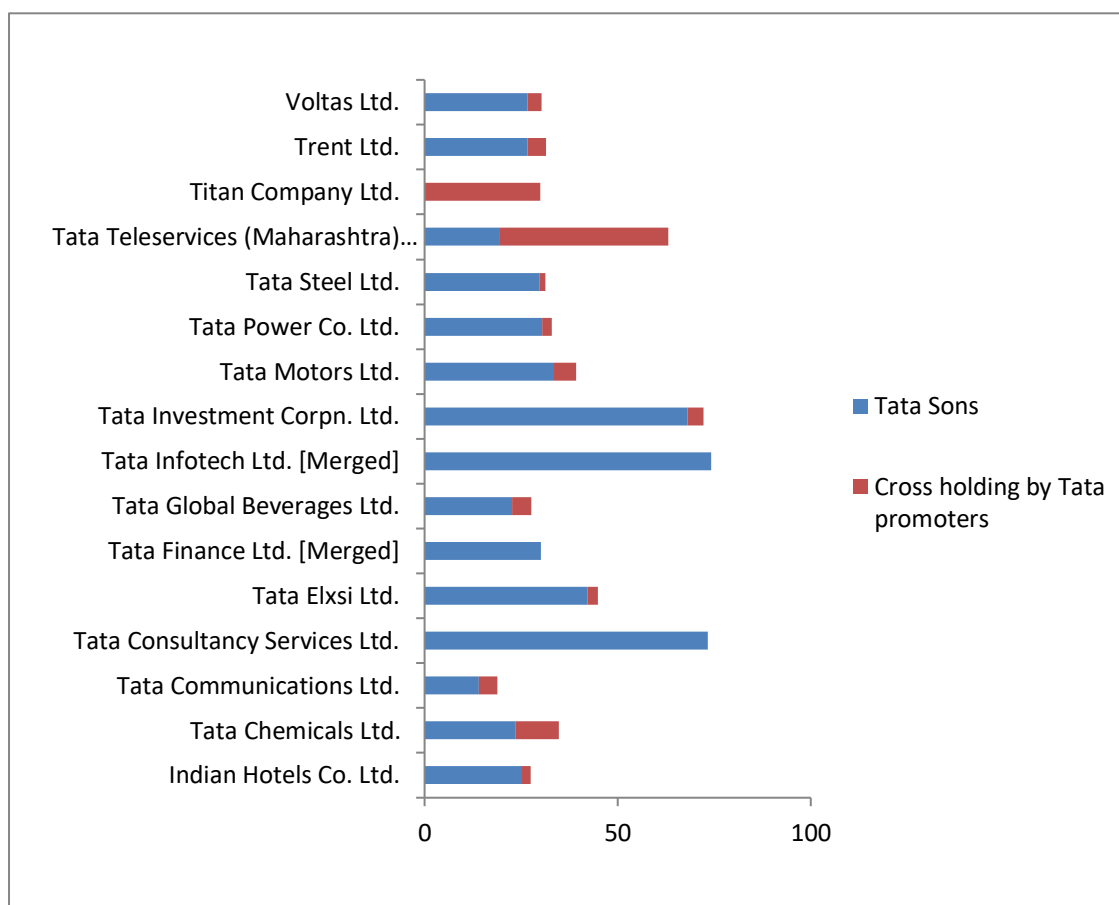


Source: Prowess Database

The promoters of the Tata Group strategize to hold most of their group companies through Tata Sons directly and also through other listed and unlisted firms indirectly through cross-holdings. The Tata Sons direct holding and the cross holding by the promoters of the group until 2017 are shown in Figure 4.2. Tata Sons holds around 30 percent of the equity in listed firms of the group, which is enough to exercise control over these firms directly. The cross-holdings of promoter listed firms in one another are quite small except for two companies. The cross holding among listed companies is given in Table 4.1.

Table 4.1 shows that in all those listed promoters where Tata Sons does not hold equity directly, it exercises significant control through those listed firms where it holds directly. For example, Tata Sons does not hold equity in Nelco directly, but Tata Power holds around 48 percent of equity in Nelco and Tata Sons holds around 40 percent in Tata Power. In those firms where Tata Sons holds significant shares directly, other promoter firms do not hold much equity. For example, Tata Investment Corporation Ltd and Tata Tea together hold only around 6-10 percent share in Tata Chemicals, while Tata Sons hold 40 percent of shares directly. In this way, Tata Sons exercises significant control over all the listed firms.

Fig 4.2 Holdings of Tata Sons



Source: Prowess Database

Table 4.1 Cross holding pattern of Tata listed firms by other Tata listed firms (Holding within the group).

Company Name	Equity Owner Name	Equity Owner Type	2001	2005	2010	2014
Automobile Corpn. Of Goa Ltd.	Tata Motors Ltd	Promoters			42.37	46.4
C M C Ltd. [Merged]	Tata Consultancy Services Ltd	Promoters		51.12	51.12	51.1
Nelco Ltd.	Tata Power Co. Ltd.	Promoters	48.64	48.64	48.64	48.6
Rallis India Ltd.	Tata Chemicals Ltd	Promoters	9.4	9.4	50.06	50.1
Rallis India Ltd.	Tata Tea Ltd.	Promoters	24.52	24.52		
T R F Ltd.	Tata Iron And Steel Company Ltd	Promoters	34.77	34.77	34.78	32.6
Tata Chemicals Ltd.	Tata Investment Corpn. Ltd.	Promoters	9.81	8	6.48	6.18
Tata Chemicals Ltd.	Tata Tea Ltd.	Promoters	4.21	7.15		
Tata Coffee Ltd.	Tata Global Beverages	Promoters	50.59	50.67	57.48	57.5
Tata Global Beverages Ltd.	Tata Chemicals Ltd	Promoters	7.68	7.68	6.98	6.98
Tata Global Beverages Ltd.	Tata Investment Corpn. Ltd.	Promoters	6.14	5.46	4.45	4.35
Tata Investment Corpn. Ltd.	Tata Chemicals Ltd.	Promoters	15.37	15.37		
Tata Investment Corpn. Ltd.	Tata Tea Ltd.	Promoters		7.53		
Tata Metaliks Ltd.	Tata Iron & Steel Co. Ltd.	Promoters	46.66	46.66	46.66	46.7
Tata Motors Ltd.	Tata Steel Ltd.	Promoters	9.15	8.95		5.4
Tata Sponge Iron Ltd.	Tata Iron & Steel Co. Ltd.	Promoters	39.74	39.74	39.74	51

Tata Steel Ltd.	Tata Motors Ltd.	Promoters	4.68	4.66		
Tata Teleservices (Maharashtra) Ltd.	Tata Power Co. Ltd.	Promoters		10.84	7.24	7.02
Tayo Rolls Ltd.	Tata Iron & Steel Co. Ltd.	Promoters	36.53	36.53	54.45	54.5
Tinplate Co. Of India Ltd.	Tata Iron & Steel Company Ltd		30.6	42.88	73.4	
Titan Company Ltd.	Tata Investment Corpn. Ltd.	Promoters	1.65	1.42	1.94	1.94
Trent Ltd.	Tata Investment Corporation Ltd	Promoters			3.66	4.58
Voltas Ltd.	Tata Investment Corpn. Ltd.	Promoters	3.89	3.29	2.89	3.01

Source: Author calculation from Prowess Database

Table 4.2 shows holdings by unlisted companies. For those firms where neither Tata Sons nor other listed firms have any shares, unlisted firms together hold a significant amount of shares. However, this holding is not concentrated in one or two firms but are held in small amounts by a large number of firms. For example, unlisted firms together hold 75 percent of the equity in ArtsonEngineering Ltd. The situation is similar in Automotive Stampings. On the other hand, unlisted holdings are low in Indian Hotels Co. as Tata Sons holds 25 percent equity in this company.

Table 4.2 Cross Holding Pattern of Listed Tata firms by Unlisted Tata firms

Company Name	Unlisted	2001	2005	2010	2014
Artson Engineering Ltd.	U			75	75
Automobile Corpn. Of Goa Ltd.	U	21.92	1.92		
Automotive Stampings & Assemblies Ltd.	U		81.35	37.5	75
Benares Hotels Ltd.	U	31.15	31.15	31.16	31.16
Indian Hotels Co. Ltd.	U	3.93	3.82	4	2.45
Nelco Ltd.	U	3.15	1.26	1.44	1.44
Nilachal Refractories Ltd.	U	51.83	51.83		
Oriental Hotels Ltd.	U	5.44	11.69	12.66	12.66
Rallis India Ltd.	U	1.35	2.53	0.57	0.04
Tata Communications Ltd.	U		45	33.24	31.1
Tata Investment Corpn. Ltd.	U	7.28	5.66	3.51	3.63
Tata Teleservices (Maharashtra) Ltd.	U		47.91	37.65	36.54
Titan Company Ltd.	U	8.59	8.74	10.02	5.42
Trent Ltd.	U	3.44	6.34	3.23	2.32
Voltas Ltd.	U		1.88	3.95	3.51

Source: Author calculation from Prowess Database

Table 4.3 shows outside firms (non-group firm) holdings in Tata group companies. It is noticeable that outside holding has reduced over the years. In almost all firms where outside firms had significant holdings, these have reduced. Hence the Tata group has not only increased the Tata Sons holding over the years but also increased cross-holding among group firms and reduced holdings by those outside the group. This facilitates the group control in exerting power and helps to protect firms from hostile takeovers. With high cross holding, the group can also divert reserves from one firm to another from low profitable business ventures to relatively

highprofitability business ventures and also in times of need to make use of the capital markets by raising required funds from within the group accordingly.

Table 4.3 Other Companies holdings in Tata Listed Firms

Company Name	Listed/Unlisted	2001	2005	2010	2014
Artson Engineering Ltd.	Others	29.55	35.06	2.16	1.08
Automobile Corpn. Of Goa Ltd.	Others	48.63	39.92	27.21	13.39
Automotive Stampings & Assemblies Ltd.	Others	43.03		51.02	
Benares Hotels Ltd.	Others	126.89	41.9	37.05	37.75
C M C Ltd. [Merged]	Others	93.15	40.04	35.74	34.61
Indian Hotels Co. Ltd.	Others	27.01	35.27	28.54	25.16
Nelco Ltd.	Others	10.98	3.82	6	5.11
Rallis India Ltd.	Others	41.12	60.03	25.05	19.95
T R F Ltd.	Others	98.94	19.24	24.37	28.97
Tata Chemicals Ltd.	Others	31.48	31.19	32.4	27.88
Tata Coffee Ltd.	Others	24.88	23.91	30.44	15.3
Tata Communications Ltd.	Others	114.01	59.75	34.86	34.92
Tata Consultancy Services Ltd.	Others		1.33	4.14	3.46
Tata Elxsi Ltd.	Others	5.53	22.96	19.77	7.16
Tata Global Beverages Ltd.	Others	28.68	36.3	28.93	21.29
Tata Investment Corpn. Ltd.	Others	26.29	15.56	4.61	2.48
Tata Metaliks Ltd.	Others	8.95	16.37	4.94	3.71
Tata Motors Ltd.	Others	67.11	122.01	28.15	11.48
Tata Power Co. Ltd.	Others	29.71	32.07	20.08	33.63
Tata Sponge Iron Ltd.	Others	36.96	6.89	20.98	19.73
Tata Teleservices (Maharashtra) Ltd.	Others	92.56	13.67	12.12	11.76
Tayo Rolls Ltd.	Others	20.47	22.56	17.98	17.98
Tinplate Co. Of India Ltd.	Others	82.07	74.02	18.81	2.79
Titan Company Ltd.	Others	50.94	48.56	47.1	46.32
Voltas Ltd.	Others	35.91	54.96	29.15	29.48

Source: Author calculation from Prowess Database

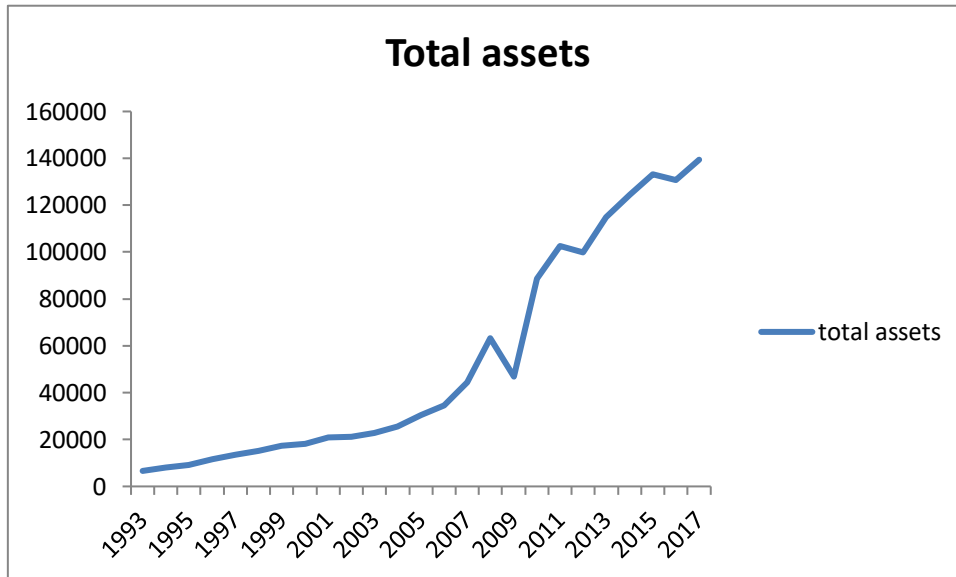
Since the majority shareholders are promoters of the group, any right issues and bond issues or any other form of raising funds can be done quite easily within the group without hindrance from minority or outside the group shareholders.

4.4. Performance Indicators

To judge the performance of the group and to understand individual firms I have looked into factors like sales, profits, physical assets and financial assets, financial investment and real investment. Tata effectively works as a conglomerate rather than as individual firms. Therefore, it is advisable to look at the performance of the group as a whole. Tata companies are highly diversified and spread across unrelated industries in 7 important sectors. These are steel, automobiles, chemicals, power, tea, hotels and IT. Within each of these sectors, Tata firms are big giants, and so individual firms are also analyzed. In the overall group analysis, variables are

normalized by assets, since firms differ in size and individual characteristics specific to the industry. Ratios are taken to make the indicators comparable.

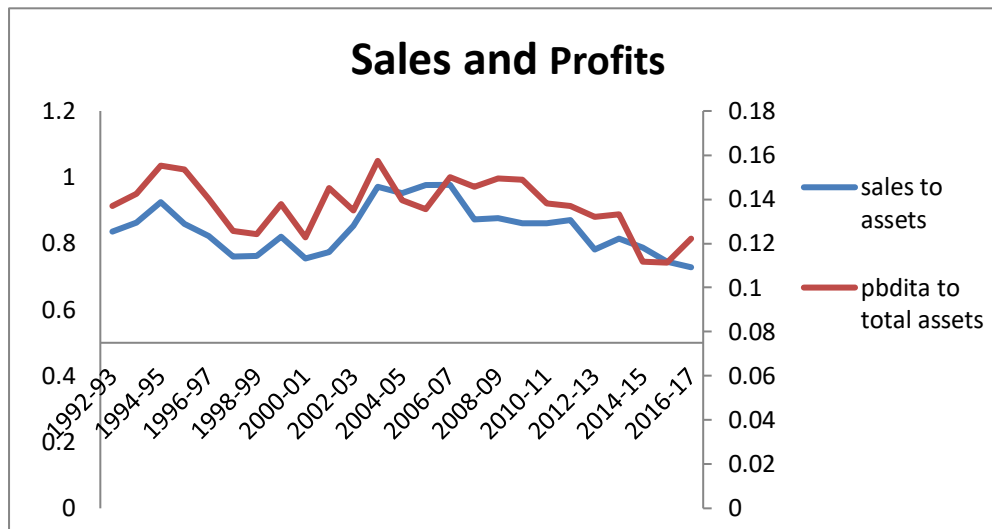
Fig 4.3 Total Assets



Source: Prowess Database

Sales have been consistently hovering around 80 percent to 100 percent of total assets. They fell in the fiscal year 2000-01 and then rose in 2004-04 until 2007-08 after which there has been a gradual slowing till 2016-17 (Fig 4.4 Left axis). The rise in sales was in the boom period of the Indian economy with high demand. The gradual fall was from 2008-09 when the crisis struck the western world. Tata Steel had at this time bought Corus, and Tata Motors bought Jaguar. Both the companies' counterparts in Europe and UK struggled due to the crisis, which affected the parent firm. Again in 2014-15, slowdown in China's demand (the world's biggest automobile market) for luxury Jaguar and Land Rover also affected sales of Tata Motors in India. The profits have been consistent from 1997-98 to 2010-11 with a slight increase from 2004-05 to 2008-09 after which there was a decline in 2014-15 (Fig 4.4 Right axis). The decline mainly came from the Teleservices Ltd which had been facing a fall in profit due to high telecom sector competition. Teleservices Ltd reported a loss of Rs 4,887 crore in the fiscal year 2014-15. In the fiscal year 2013-14 the loss reported was Rs 4,155 crore. The sales and profits moved broadly in similar directions.

Fig 4.4 Sales and Profit to Assets Ratio



Source: Prowess Database

The physical assets of the Tata group declined relatively while the financial assets of the group increased during the period (Fig 4.5). The physical assets declined till 2003 and then became stagnant while financial assets continued to grow.¹¹ The group holds around 30 percent in group companies and increases or decreases holdings depending on the need. For example, in 2007 the Tata Sons sold 27.63 percent of the TCS share and reduced the shareholding to a little above 50 percent. Tata Sons used the money to pay the debt of Tata Steel's buy of Corus and also buy stakes in Tata Steel. Reducing the Tata Sons holding in TCS from 78 percent to 51 percent did not imply loss of control over TCS while the money was used to repay the debt and also to invest.

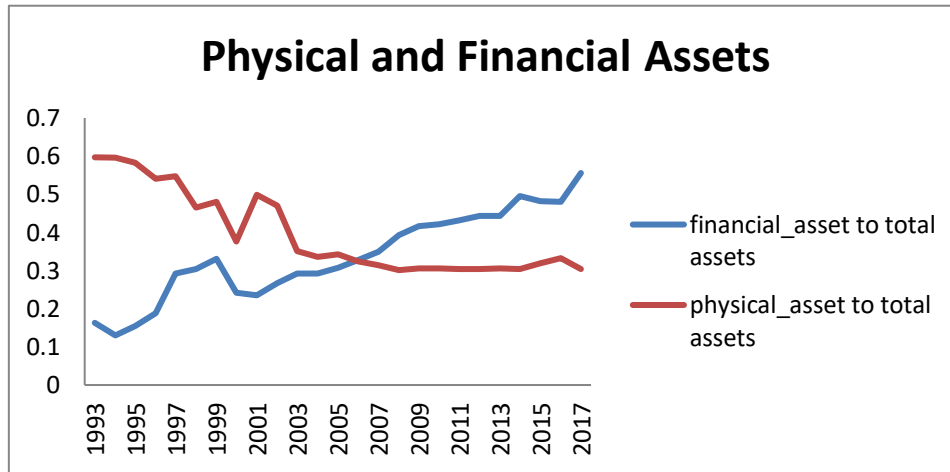
The investment within the group serves two purposes: first, it increases the holding within the group company and second these investments can be utilized in relatively higher profitable industries, which increases the profit of the whole group. Higher equity base would also allow the acquiring companies to borrow more money from banks¹². So Tata group's shareholding within the group changes according to the need

¹¹Physical assets comprise of net fixed assets and capital work in progress. Financial assets comprise of financial investment, loans, and advances provided and cash balance in hand. The two do not add up to 100 as there are other components of total assets which are not taken into account such as investment logged in securities, investment outside India, etc. These comprise a very small percentage. Hence only those components are taken for analysis which comprise of a higher percentage.

¹²<https://www.livemint.com/Money/Bze6HF1GnTxxwMFszJCO/Tatas-buy-more-in-group-cos-but-trim-TCS-stake.html>

of the group. However, in general, it remains around 30 percent of direct and cross-holdings.

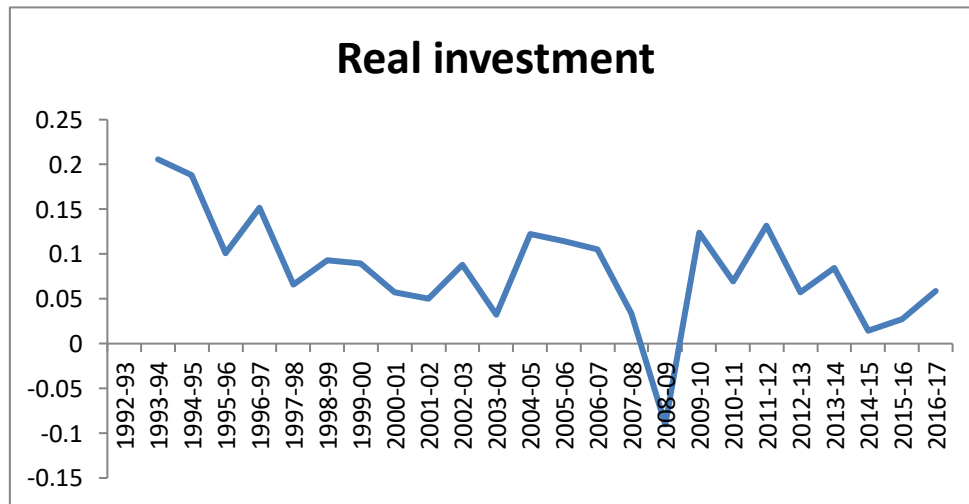
Fig 4.5 Financial Assets and Physical Assets



Source: Prowess Database

Since the physical assets of the group have declined hence the real investment also declined till 2003-04 after which it fluctuated. The real investment went to negative territory in the year 2008-09 which was the crisis year.

Fig 4.6 Real Investment



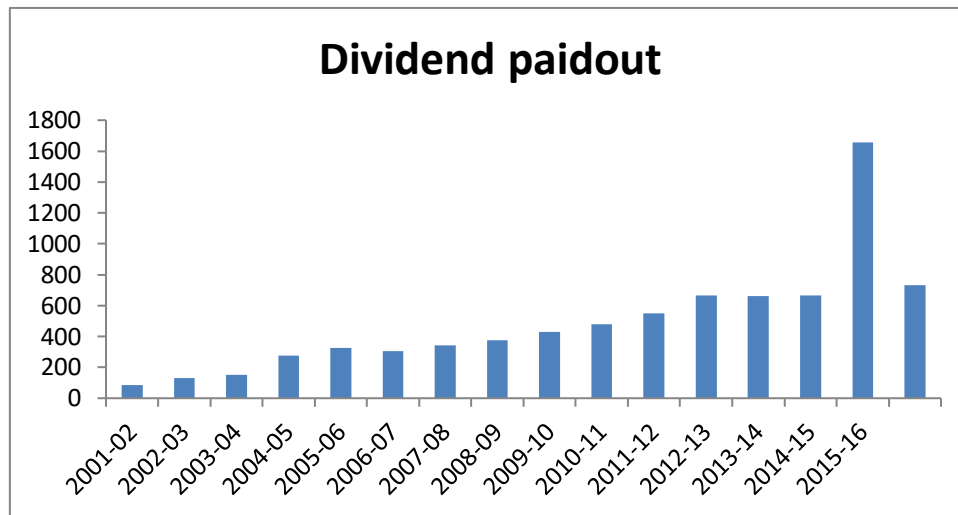
Source: Prowess Database

4.5 Transferring funds across group firms

Tata Sons is the holding company of the group; the earnings are derived primarily from dividends earned from the group companies which are in turn distributed to its shareholders, that is Tata Trust. When Ratan Tata was the chairman of Tata Sons, he was also the chairman of Tata Trusts. Hence, the interest of Tata Trust has never been

compromised at the cost of the interest of Tata Sons. He ensured that there was a consistent flow of dividend to Tata Trusts from Tata Sons. The dividends paid and the dividends earned of Tata Sons are provided in the table.

Fig 4.7 Dividend Payout of Tata Sons



Source: Prowess Database

The dividend payout consistently rose throughout the period except for the fiscal year 2015-16, when there was a special dividend from TCS where Tata Sons holds 73.5 percent of shares. From 2001-02 to 2003-04, the dividend payout was around Rs 120 crore. From 2004-05 to 2008-09 the dividend payment was on average Rs 325 crores, 2009-10 to 2011-12 it was on average Rs 485 crores, and after that, the dividend payment has been around Rs 680 crores except for 2015 (Fig 4.7). The dividend received of Tata Sons has grown in a consistent manner as well. Till 2011-12, the dividend was around Rs 1500 crore while it increased from 2012-13 onwards and the average dividend received from 2012-13 to 2014-15 has been around Rs 4200 crores (Fig 4.8). Tata Sons has mostly received dividends from two of its firms, Tata Consultancy Services, and Tata Motors Ltd. Together TCS and Tata Motors provided 73 percent of Tata Sons dividend income in 2008 which increased to 95 percent in 2016. Tata Sons use this central pool of investible funds according to the needs of the group. Tata Sons has used this money for investing in different industries where the relative profitability is higher while increasing its holding in the group companies and also spending a substantial amount in rescuing the firms out of debt if the firms are not capable of refinancing debt on their own. Due to its large mergers and acquisitions, the Tata group has accumulated a significant amount of debt. In 2008,

Tata Motors Ltd. took \$3 billion in bridge loans to buy Jaguar and Land Rover from Ford Co., and in 2007 Tata Steel bought Corus for \$12 billion. The two purchases amounted for two-thirds of the total acquisitions of the group until then¹³. Though the group won global recognition, its debt increased significantly (Fig 4.10). To refinance the debt, the Tata group has increasingly relied on the financial sector by issuing debt and equity. Tata Motors issued debentures worth of Rs 5000 crore in 2008. In the same year, Tata Motors raised Rs 4,150 crore in rights issues to fund its \$3 billion acquisition of Jaguar and Land Rover. In 2009, Tata Motors again raised Rs 2000 crore from overseas GDRs to refinance the debt. In 2009, Tata Motors raised another Rs 4200 crore through non-convertible debentures to pay the loan. However, by 2009, it could only repay \$1.1 billion of its loan. For Tata Steel as well, the debt has been high. In 2014-15, the consolidated debt of Tata Steel stood at Rs 71,578 (Appendix A4.1) crore, and the finance cost was Rs 4,847 crore every year. In 2015, Tata Steel refinanced loans of \$1.1 billion through a subsidiary of Tata Steel, Abuja Investment Co. In 2015, Tata Steel sold Tata Motors' share worth of Rs 2500 crore. Tata Steel sold 38.5 million shares of Rs 1250 crore to undisclosed institutional investors and sold another 37.9 million shares of Rs 1250 crore to Tata Sons to reduce net debt in the balance sheet. Then in 2016, Tata Sons bought back shares in Tata Motors at a premium of 7 percent to raise its holding from 26.98 percent to 28.71 percent. Hence the non-financial firms of the Tata group have increased their engagement in financial activities, but these flows were mostly within the group for refinancing the debt emerging from the big mergers and acquisitions made. Given the profits that some of the Tata firms are generating especially TCS and Tata Motors (TCS being the most successful software company in the country) the group was expected to have much higher expansion by investing in physical assets, but they have not been able to do that due to the high debt that the group needs to service. This high debt stock of the group and the utilization of the capital market fund to service the past debt might have a negative impact on long-run development, because of the need to service the additional debt in the future.

In 2018 TCS announced Rs 16,000 crore buyback to reward its shareholders. It approved a proposal to buyback up to 7.61 crore shares or 1.99 percent of the total

¹³<https://www.livemint.com/Companies/6G0h2xoFzpLm93EyKIpxIj/Tata-group-scaling-that-mountain-of-debt.html>

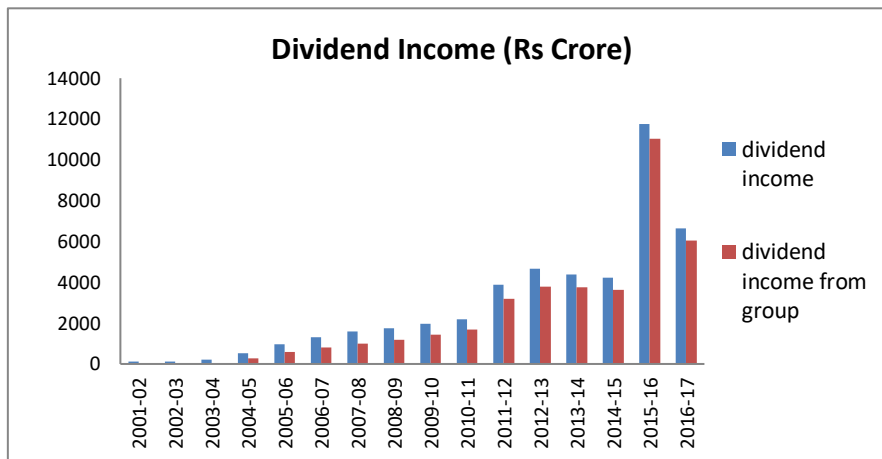
paid-up equity share capital at Rs 2,100 per share. In the previous year too, TCS had made a buyback of a similar amount in which Tata Sons, the holding company had made over Rs 10,278 crore by tendering over 3.60 crore share at Rs 2,850 per equity share¹⁴. These shares accounted for 64.2 percent of the total shares bought back by TCS in the 2017 buyback offer. Since its listing in 2004, TCS has returned 60 percent of the total cash flow or Rs 98,192 crore to the shareholders through dividend payout or share buybacks¹⁵. And since Tata Sons hold 72 percent of TCS's shares, the lion's share has always been with Tata Sons. Hence the group has also started engaging in buybacks to reward its shareholders, which are mostly within the group. In the same year, Tata Sons sold a small share in TCS to raise Rs 9,000 crore. In its selling 28.27 million shares that is 1.48 percent in TCS, these amounts were used to clear up the debt of Tata Teleservices and to some extent of Tata Motors.

Tata Sons have stepped forward to buy the shares and provide the money to repair the balance sheets of Tata group companies. Since the majority shareholders of Tata group are the group firms and the subsidiaries that these firms hold, raising frequent funds for repaying debts has been easier for the group. According to the financial analyst Kotak Nathan, if the company fails to continue with raising the required amount due to "significant drying up of debt capital market of deterioration in the domestic or global demand environment" then Tata Sons need not have to worry as the shareholders and promoters of the group are the members of the group.

¹⁴<https://www.livemint.com/Money/xtGm6VlmMwHqWKiCm2ATjN/Why-is-Tata-Sons-selling-stake-in-the-goose-that-lays-golden.html>

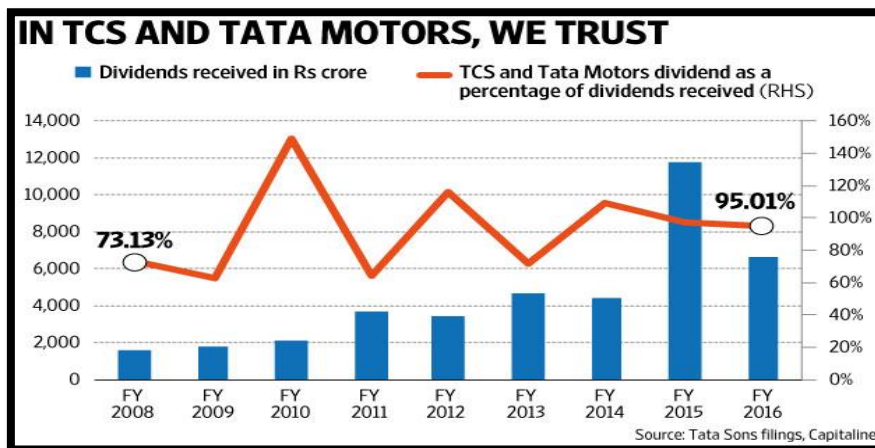
¹⁵<https://www.livemint.com/Companies/nXC4cibK9ImdrbJQVrpVON/TCS-promoters-to-participate-in-Rs16000-crore-buyback-offer.html>

Fig 4.8 Dividend Income of Tata Sons



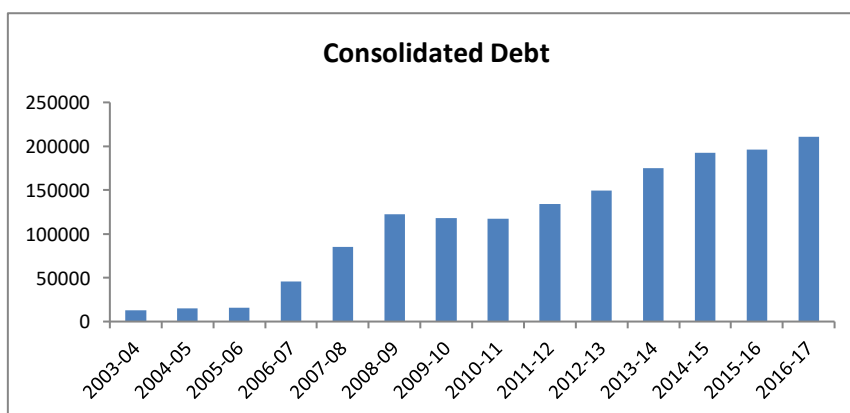
Source: Prowess Database

Fig 4.9 Dividend Received from TCS and Tata Motors



Source: taken from Livemint

Fig 4.10 Consolidated debt

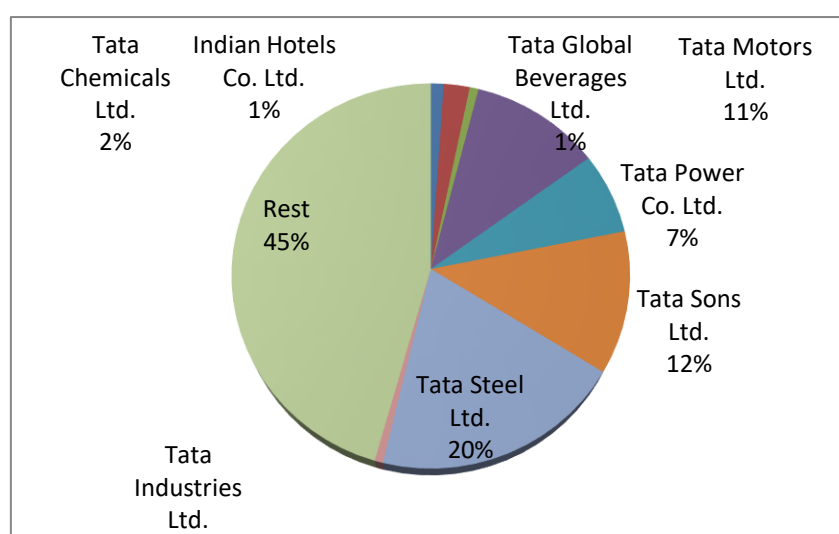


Source: Annual Statement of Tata from several years

4.6 Case Studies

Though there are 250 non-financial firms bearing the Tata brand name, a few firms are the important players in the group, which influence the group performance altogether. Together they comprise 42 percent of the total assets of the group out of 248 non-financial firms. Hence it is necessary to look into the performance and holding structure of these important players to have a better understanding of how the group is operating.

Fig 4.11 Share of different companies in Total assets



In this section, a brief introduction is given on each firm, and then the performance of the firms is discussed with special emphasis on the group financial investment. The next section shows the holding structure of seven firms.

4.6.1 Tata Chemicals

Tata Chemicals Ltd. was founded by J.R.D Tata in 1939 at Mithapur. Tata Chemicals produces its product in three categories: living essentials (consumer salt, pulses, and water purifier), industry essentials (soda ash, allied chemicals, and industrial salt) and farm essentials (fertilizers and customized fertilizers). Tata Chemicals claims it is the largest chemical company of India and the world's second largest producer of soda ash.

In 2011 Tata Chemical Ltd acquired 100 percent stake in British Salt, a UK based chemical company. The acquisition amount was Rs 650 crore (93 million GBP). The

entire acquisition was made through a leveraged buyout. In 2005 the company acquired Brunner Mond, soda ash and sodium bicarbonate producer company based in UK, Netherlands, and Kenya. It acquired 63.5 percent stake of Brunner Mond in 2005 and later fully acquired the company with an amount of Rs 3.9 billion. In 2008 Tata Chemical acquired another big company The General Chemical Industrial Product Inc. (GCIP) for \$1 billion. GCIB was one of the largest producers of soda ash in the US. This made Tata the second largest producer of soda ash in the world. This acquisition made it possible to access soda ash reserves in US, Magdi, Kenya, and Wyoming at a very low cost and reach the markets of North America, Latin America, and the Far East.

Other financial investments of Tata Chemicals have also been quite significant. The financial investment within the group increased from 15 percent on average between 1993-97 to 66 percent on average between 2013-17 of the total reserves of the firm. These investments are in the group firms of Tata. This amount is equivalent to a rise from 5 percent to 33 percent from 1993-97 to 2013-17 of total assets of the firm. The dividend income increased considerably in the post-crisis period, and the dividend payment also rose significantly from 2002 onwards.

Table 4.4 Tata Chemical Ltd.

Tata Chemicals Ltd.	1993-97	1998-02	2003-07	2008-12	2013-17
Sales	9606.38	14985.88	30222.34	65509.18	80143.54
PBDITA	4845.34	5645.82	6500.52	12426.68	13573.22
Net worth	10210.38	16658.16	20401.04	42779.2	61367.92
Total assets	26833.36	34966.82	42231.8	94497.64	130296.8
Loans & advances	879.16	3554.7	6305.24	4718.08	14941.26
Loans provided to group companies	203.72				
Financial Investments	3105.36	3426.14	8397.44	45342.34	49441.32
Investments in group companies	1411.2	2238.07	5140.66	43270	42923.98
percent investment in group to total assets	5.25	6.40	12.17	45.78	32.94
percent invest in group from reserve	15.87	14.80	27.97	107.27	65.59
Interest income	123.78	170.58	247.86	189.7	85.42
Dividend income	332.32	233.32	446.64	1066.1	1183.72
Dividend from group companies					439.64
Dividend paid and proposed	803.2	957.4	1360.26	2302.7	3019.88
div payout ratio	0.31	0.54	0.43	0.24	0.49
Overseas investments in group companies				37274.5	34161.72
Investment outside India				37274.5	34161.72

Source: Annual Statement of Tata Chemicals, several years

4.6.2 Tata Global Beverages

Tata Global Beverages was established in 1983 formerly as Tata Tea. Tata Tea changed its name to Tata Global Beverages in 2010. It produces tea, coffee, and water.

Tata Global Beverages entered in the tea business in 1991 and had grown with acquisitions and joint ventures. Tata Global Beverages has become the second tea company in the world and one of the market leaders in the domestic tea market. The largest acquisition was of Tetley, with Tata acquiring 100 percent of its stake in 2000 for an amount of US\$450 million. There were several other small and medium-sized acquisitions, such as the acquisitions of Good Earth in 2005, Eight O'Clock in 2006 and Coffee Brand Grand in 2009. In 2007, the company expanded its business from tea and coffee to mineral water from Mount Everest. In 2010 Tata Global Beverages formed a joint venture with PepsiCo. In 2012 it came to joint venture with Starbucks coffee.

The financial investment increased from Rs 1507 million between 1993-97 to Rs 25288 million between 2013-17, a very significant rise, out of which the group investment rose from 18 percent of total assets to 47 percent in these years. The dividend income was mostly from group firms and dividend paid out has also been high in the post-crisis period.

Table 4.5 Tata Global Beverages Ltd.

Tata Global Beverages Ltd.	1993-97	1998-02	2003-07	2008-12	2013-17
Sales	4815.28	8498.02	8893.24	16065.3	27797.4
PBDITA	1162.52	1994.96	2426.46	4193.74	5118.24
Net worth	2827.72	6955.16	10972.1	19629.0	27013.4
Total assets	5885.82	11857.9	17788.4	39853.2	46812.2
Loans & advances	543.04	1352.78	1132.36	10077.2	9415.58
Loans provided to group companies	193.94	92.4	249.94	130.85	199.14
Loans to group as a prop of total assets	3.29	0.77	1.40	0.32	0.42
Financial Investments	1507.8	4796.84	11205.1	22146.2	25288.7
Investments in group companies	1074.38	4308.02	9872.46	21424.5	22379.2
percent investment in group to total assets	18.25	36.33	55.49	53.75	47.80
Interest income	71.54	124.88	174.4	294.54	159.7
Dividend income	189.6	289.38	463.18	980.46	1123.68
Dividend from group companies		279.7	242.82	710	909.04
Dividend paid and proposed	277.44	484.24	607.18	1409.96	1396.24
div payout ratio	0.51	0.45	0.38	0.53	0.45
Investment outside India		4680	6919.7	14396.1	14307.6
Overseas investments in group companies	4680	6919.7	14396.1	14307.58	

Source: Annual Statement of Tata Global Beverages, several years

4.6.3 Tata Motors Ltd

Tata Motor was established in 1945 in the name of Tata Engineering and Locomotive Co. Ltd. In 2003, the company changed its name to Tata Motors. Tata Motors has

several manufacturing plants in Jamshedpur, Pune, Lucknow, Sanad, Pantnagar, Dharwad, while outside India it has manufacturing units in Argentina, South Africa, Thailand, and United Kingdom. Tata Motors was the first Indian company to have its name listed in the New York Stock Exchange in 2004 and emerged as an international automobile company. In 2004 it acquired Daewoo commercial vehicles, a South Korean company which was the world's second-largest truck producer. In 2008 Tata Motors acquired Jaguar Land Rover. In 2009 it fully acquired Hispano Carrocera. Tata Motors was entirely a commercial vehicle manufacturer until 1991 when it first launched passenger vehicles with Tata Sierra. In 1998 Tata Motors launched Tata Indica, the full passenger car and in 2008 it launched Tata Nano.

The investment of Tata Motors in the group firms increased from 6 percent on average between 1993-97 to 29 on average percent between 2013-17 out of total assets, and the dividend income from this was high while the dividend payout has not been significant due to negative profits after tax.

Table 4.6 Tata Motors Ltd.

Tata Motors Ltd.	1993-97	1998-02	2003-07	2008-12	2013-17
Sales	58670.54	77029.54	200948.02	418686.12	445672.7
PBDITA	8198.68	9113.64	24868.8	48372.5	30895.4
Net worth	16943.62	28086.12	45124.02	148897.96	195312.6
Total assets	51582.06	90510.12	136862.2	452401.44	582142.32
Loans & advances	2839.82	7956.74	32947.7	40754.76	36462.92
Loans provided to group companies	33.08	1933.78	2501.46	4840.8	4818.9
percent loans provided to group of assets	0.06	2.14	1.83	1.07	0.83
Financial Investments	4329.14	11330.2	23514.9	166666.12	179278.22
Investments in group companies	3029.72	6852.08	17172.12	163370.82	168921.76
percent investment in group to total assets	5.87	7.57	12.55	36.11	29.02
Interest income	155.9	552.5	2264	4030	2368.26
Dividend income	264.56	307.76	991.88	2140.86	13324.16
Dividend from group companies			385.6	1306.02	12972.94
Overseas investments in group companies			2077.28	110173.94	116314.18
Investment outside India			2077.28	110173.94	116314.18
pat	3437.02	-180.72	11579.48		-12841.22
Dividend paid and proposed					

Source: Annual Statement of Tata Motors, several years

4.6.4 Tata Steel Ltd.

Tata Steel was established in 1907 as Tata Iron and Steel Company (TISCO) by Jamsetji Nusserwanji Tata. Tata Steel group is among the top ten global companies.

Tata Steel acquired 100 percent of Corus, an Anglo-Dutch company in 2007, a company around five times bigger than Tata Steel. The deal was completed at a price of \$12 billion and takeover of all its debt. The desire to acquire this company arose because Corus was the fifth largest steel producer in the world and would give Tata a platform to enter the European market.

Investment of Tata Steel has also been high within group firms. The financial investment within group firm increased from 3 percent between 1993-97 to 28 percent in 2013-17 of total assets. Around 58 percent of reserves on average in 2013 to 2017 has been used to invest in financial securities of group firms. The dividend income from the group has increased significantly. The dividend payment has also been high out of the profits after tax.

Table 4.7 Tata Steel Ltd.

Tata Steel Ltd.	1993-97	1998-02	2003-07	2008-12	2013-17
Sales	47952.22	65795.62	148946.62	289018.74	460509.2
PBDITA	9094.6	12428.58	51302.42	110200.08	119706.2
Net worth	28864.44	36466.24	75572.24	371962.6	566726.0
Total assets	81238.06	120085.2	191047.82	772560.92	1126103
Loans & advances	3521.1	7250.5	15544.72	71284.34	64221.46
Loans provided to group companies	222.67	161.65	3261.18	28991.00	9197.32
loans to group as a percent of total assets (%)	0.27	0.13	1.71	3.75	0.82
Financial Investments	4023.74	7594.14	32084.74	442634.54	367392.1
Investments in group companies	2563.86	4002.08	19739.58	355432.86	318760
percent investment in group to total assets	3.16	3.33	10.33	46.01	28.31
invest in group as prop of reserve	9.69	10.01	27.39	99.73	58.07
Interest income	589.42	440.2	484	1807.62	897.78
Dividend income	284.82	447.26	1453.86	1664.42	3022.98
Dividend from group companies		55.575	62.7	673.92	3006.85
Overseas investments in group companies			4351.3	313713.85	293536.36
Investment outside India			4351.3	313713.85	293536.36
pat	3198.26	3570.48	27922.44		44628.96
Dividend paid and proposed	1204.48	1588.98	6094.2	11083.38	8690.52
div payout ratio	0.377	0.445	0.218		0.195

Source: Annual Statement of Tata Steel, several years

4.5.5 Tata Power

Tata Power started as Tata Hydroelectric Power Supply Company in 1910. Its operations spread to Singapore Indonesia and South Africa. Tata Power has also made huge investments in securities of the group firms, which increased from 5 percent in 1993 to 41 percent in 2017 out of total assets. The dividend income in the last few

years has been high and mostly from group firms while dividend payments have also been high.

Table 4.8 Tata Power

Tata Power Co. Ltd.	1993-97	1998-02	2003-07	2008-12	2013-17
Sales	10268.92	21894.78	43467.82	71421.06	80859.82
PBDITA	3324.88	8228.5	13524.48	20695.34	31477.84
Net worth	9518.48	26113.86	52814.66	103948.7	149885.8
Total assets	19755.72	52658	94733.12	189436.4	337759.9
Loans & advances	1483.4	4656.72	6733.9	21355.38	34101.8
Loans provided to group companies	62.55	1137.44	2342.56	15143.84	21404.52
Loans to group as a prop of total assets	0.317	2.160	2.473	7.994	6.337
Financial Investments	3805.58	15058.5	31331.8	70599.2	147513.6
Investments in group companies	1040.82	4361.22	20733.28	60951.68	138746.2
percent investment in group to total assets	5.27	8.28	21.89	32.18	41.08
invest in group as prop of reserve	12.05	17.55	40.64	61.87	96.66
Interest income	191.28	352.32	1165.34	1414.34	5744.34
Dividend income	193.82	687.82	415.34	2097.7	4463.5
Dividend from group companies			97.24	1965.98	4349.18
Overseas investments in group companies				4335.6	14246.74
Investment outside India				4335.6	14246.74
pat	1247.36	2955.1	5843.42	2898.7333	9547.74
Dividend paid and proposed	255.94	665.44	1545.4	2753.12	3335.18
div payout ratio	0.21	0.23	0.26	0.95	0.35

Source: Annual Statement Tata Power, several years

4.6.6 Indian Hotels Company Ltd.

The Indian Hotels Company Ltd. and its subsidiaries are together known as Taj Group. The Group claims to be Asia's largest and finest group of hotels. This firm has also reported a high share of investment within group. The investment in group out of total assets increased from 12 percent between 1993-97 to 50 percent between 2013-17. Dividend paid out of this firm has been high.

Table 4.9 Indian Hotels Company Ltd.

Indian Hotels Co. Ltd.	1993-97	1998-02	2003-07	2008-12	2013-17
Sales	4010.96	6144.28	9488.5	16683.32	20998.32
PBDITA	1594.74	2185.08	3325.2	5782.98	5235.7
Net worth	3810.06	9023.02	12832.64	28746.16	26794.1
Total assets	6652.48	15307.16	26644.1	60801.6	68746.76
Loans & advances	1582.88	3809.08	7041.52	9969	13255.2
Loans provided to group companies	1073.74	1546.14	3567.44	5551.86	9330.5
percent loans provided to a group of assets	16.14	10.10	13.39	9.13	13.57
Financial Investments	884.8	3561.12	7129.82	27158.24	28185.2
Investments in group companies	861.6	2734.66	6246.72	19843.74	34963.46
percent investment in group to total assets	12.95	17.87	23.45	32.64	50.86
Interest income	81.08	192.06	194.76	245.6	367.88
Dividend income	24.32	93.7	177.3	371.86	317.04
Dividend from group companies			60.5	89.6	187.52
Investment outside India			2049.06	17194.36	30194.76
Overseas investments in group companies			2044.34	17194.36	30194.76
Dividend paid and proposed	232.86	392.52	584.66	851.2	
div payout ratio	0.25	0.34	0.40	0.71988	0

Source: Annual Statement of Indian Hotels, several years

4.6.7 Tata Consultancy Services

Tata Consultancy Services (TCS) was established in 1968 as software exporting industry, and over the years it has grown to be the largest IT company of not only in India but in Southern Asia. The net worth of the company has risen from Rs 367 million from 1998-02 to Rs 616736 million in 2013-17. Investment in group increased from around Rs 1500 million to around 28000 million from 1998 to 2017. There has been a huge rise in dividend payment from Rs 7425 million in 1998-02 to Rs 96417 million in 2013-17.

Table 4.10 Tata Consultancy Services

Tata Consultancy Services	1998-02	2003-07	2008-12	2013-17
Sales		105068.4	322536.7	828383.6
PBDITA	12.78	32449.64	108210.2	294803.1
Net worth	367.58	55882.52	210122.5	616738.6
Total assets	1188.9	77020.92	290157.1	763824.8
Loans & advances	4.02	10101.68	50057.68	105106.6
Loans provided to group companies		2769.35	5155.2	
Investments in group companies		15054	57493.6	28535.12
Investments		23120.1	63275.76	227158.2
Interest income		207.725	4404.94	18268
Dividend income	12.42	375.42	7439.98	12504.16
Dividend from group companies		47.075	7176.66	12474.5
Investment outside India		11772.05	18613.84	21844.24
Profit after tax	10.6	25659.02	83294.06	218386.9
Dividend paid and proposed	11.425	7425.16	34599	96417.92
Loans to group as a prop of total assets		0.027261	0.020103	
percent investment in group to total assets		0.284599	0.212327	0.041049
div payout ratio	0.926915	0.231241	0.330261	0.335023

Source: Prowess database

4.6.8 Holding Structure

The holdings of the six most important firms from 2001 are given in the following chart. It is seen that in all the firms the promoter holdings increased, and the non-promoter holding decreased. Within the promoter holdings, the highest proportion of shares are held by group firms. In almost all the firms the entire promoter holdings are held by such corporate bodies. This is enough for the group to have control over the decision making of the firms.

The non-promoter holdings have reduced in all the six firms. The non-promoter shares are held by three categories: non-promoter institutions, non-promoter non-institutions, and non-promoter individuals. Among these, in all the firms the holdings of the non-promoter institutions have increased while the non-promoter non-institutions has reduced. The shares held by mutual funds and bank insurance have decreased while shares held by FIIs have increased significantly, typically more than threefold.

The shares of non-promoter non-institutions and non-promoter individuals have fallen, and holdings of non-promoter corporate bodies (firms outside the group) reduced significantly. The Tata group firms gradually withdrew their share from non-group corporate bodies and individual shareholders and transferred it to group corporate bodies.

Table 4.11 Ownership structure	Indian Hotels Co. Ltd.				Tata Chemicals Ltd.				Tata Global Beverages Ltd.				Tata Motors Ltd.				Tata Power Co. Ltd.				Tata Steel Ltd.			
	2001	2005	2010	2015	2001	2005	2010	2015	2001	2005	2010	2015	2001	2005	2010	2015	2001	2005	2010	2015	2001	2005	2010	2015
Total Shares (In %) - Shares held	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Promoters (In %) - Shares held	35	36	29	38	30	27	28	31	30	29	35	35	25	32	37	34	32	32	31	33	26	27	31	31
Indian Promoters (In %) - Shares held	35	35.8	29	38	30	27	28	31	29	28	35	35	25	32	37	34	32	32	31	33	26	26	31	31
Indian Promoter Individuals & HUF (In %) - Shares Held																								
Indian Central & State Govt. Promoters (In %) - Shares Held																								
Indian Promoter Corporate Bodies (In %) - Shares Held			29	38			28	31			35	35			37	34			31	33			31	31
Indian Promoter FIs & Banks (In %) - Shares Held																								
Other Indian Promoters (In %) - Shares Held							0.2	0.2							0.07	0.06			0.03	0			0.1	0.1
Foreign Promoters (In %) - Shares Held																								
Foreign Individuals (NRIs) Promoters (In %) - Shares Held																								
Foreign Promoter Corporate Bodies (In %) - Shares Held																								
Foreign Promoter Institutions (In %) - Shares Held																								
Promoter Qualified Foreign Investor (In %) - Shares Held																								
Other Foreign Promoters (In %) - Shares Held																								
Persons acting in concert as promoters (In %) - Shares Held									0.35															
Nonpromoters (In %) Shares held	65	64	70	62	70	73	72	69	70	71	65	61	75	68	51	44	68	68	65	67	74	73	68	67
Non-promoter Institutions (In %) - Shares held	29	36	43	42	27	29	44	47	30	44	44	34	31	35	36	37	35	41	48	51	33	38	45	41
Non-promoter Mutual Funds/ UTI (In %) - Shares held	8.9	4.3	7	8	3	4	8	11	5	5	9	4	6	2	2	2	6	1	7	1	10	4	3	3
Non-promoter Banks, FI's, Insurance Cos. (In %) - Shares held	14	18	22	15	23	21	22	15	21	18	26	9	17	12	16	8	22	22	22	21	19	18	21	22
Non-promoter FIs (In %) - Shares held	6	14	14	18	0.3	3	13	19	4	20	8	17	6	21	18	23	6	18	18	26	3	15	20	13
Non-promoter Venture Capital Funds (In %) - Shares Held																								

4.7 Mergers and Acquisitions

The Tata group has always been eager for mergers and acquisitions and has rarely missed an opportunity to merge or acquire another firm when it was seen to have potential. The most important M&As are discussed while the rest are given in the Appendix (Table A4.2)

The first big merger came in 2000 when Tata Tea acquired Tetley. Tata outbid bigger global players like Sara Lee and Nestle to acquire Tetley and paid GBP 270 million for this acquisition. The deal was a leveraged buyout. This is a financial transaction in which the company is purchased with a combination of equity and debt, so that the cash flow of the purchasing company can be used as collateral to repay the borrowed money. The cost of debt is lower than of equity because the interest payment for the debt reduces the corporate income tax liability whereas dividend payouts to the shareholders do not. Hence this reduces the overall cost of the acquisition.

In 2003, Tata Communications acquired the US-based business networking service provider, Gemplex. In 2004, Tata Motor acquired Daewoo Motors, South Korea for US \$120 million. In 2005 there was a series of mergers and acquisitions some of which are shown in Appendix (Table A4.2).

2007 was one of the most ambitious years for the Tata group where it made some of the biggest acquisitions ever. Tata Steel acquired Corus for US \$12 billion, through a combination of leveraged buyout and borrowing from different banks. This huge acquisition was seen as a prestige project for Indian producers to enter the European market and therefore state-owned Indian banks funded this acquisition, which was seen as overpriced by some experts. In the same year, Tata Chemicals acquired General Chemical Industrial Products for \$1010 million and TCS acquired Citigroup Global Services in the US.

In 2008 Tata Motors acquired Jaguar Land Rover from Ford Motors. The deal was financed at a price of US \$3 billion which was paid through a short-term bridge loan. The deal was transformational in the sense that the acquisition almost doubled the revenues of Tata Motors and it also diversified into a new area of low-cost small cars. However, the

acquisition was followed by the global financial crisis, which affected the performance of both Jaguar and Land Rover. The right issues were supposed to refinance the bridge loans, however, with the sudden financial crisis, Tata Sons absorbed all the shares and saved Tata Motors from falling into crisis. The shares of Tata Sons in Tata Motors increased from 30.7 percent to 39 percent. This is the advantage of being part of a group where at the time of crisis the other members of the group can come to the rescue.

However, the mergers and acquisitions did not improve the performance of the group. The pre and post performance of the group's biggest mergers and acquisitions through different big firms are shown in the table.

Table 4.12 Pre and Post Performance of Mergers and Acquisitions

Company name	Acquired firm	sales to assets ratio		profit to assets ratio		real investment		physical assets	
		pre	post	pre	post	pre	post	Pre	post
Tata Chemicals Ltd.	General Chemical (2007)	0.46	0.66	0.16	0.12	0.11	-0.01	0.35	0.43
	British salt (2010)	0.51	0.63	0.16	0.1	0.1	-0.04	0.38	0.41
Tata Steel Ltd.	Corus (2007)	0.64	0.41	0.15	0.13	0.1	0.12	0.59	0.43
Tata Global Beverages Ltd.	Tetley (2000)	0.86	0.52	0.21	0.11	0.11	-0.02	0.28	0.16
Tata Motors Ltd.	Daewoo (2004)	1.01	1.03	0.12	0.11	0.13	0.1	0.36	0.36
	Jaguar & Land Rover (2008)	1.13	0.85	0.14	0.08	0.12	0.11	0.34	0.39
Tata Communication	Genplex	1	0.35	0.23	0.14	0.18	0.04	0.28	0.42
	British telecom	0.79	0.3	0.2	0.15	0.12	0.03	0.29	0.47

Table 4.12 gives the pre and post-performance of mergers and acquisitions through sales, profits, real investment and changes in physical assets. For Tata Chemicals which has made two big acquisitions in 2007 and in 2010, sales to assets ratios for both increased post-acquisition. However, the return on assets fell on average, and real investment turned negative in the post-acquisition period for both. The physical assets improved. The biggest acquisition was that of Corus which was 5 times bigger than Tata Steel at the time of the acquisition. Tata group claims that after the acquisition of Corus, the company's production of steel reached the world's fifth rank. However, the sales to assets ratio as

well as the profit to assets ratio fell post the acquisition. Real investment increased slightly, and there was a reduction in physical assets. In 2016, Tata Steel planned to sell its biggest acquisition of 2007 after heavy debt. From 2011 till 2016, it had to spend GBP 2 billion as impairment charges¹⁶ and another GBP 2 billion as working capital and capital expenditure. Tata Steel net debt stood at \$11 billion in 2016 which was around 10 times the firm's EBDITA. By 2018 July, Tata Steel sold off 50 percent of its stake in Corus.

Tetley Tea in 2000 for \$435 million was another big acquisition of Tata group through Tata Global Beverages. In this case, also the performance of the firm did not see any improvement in the post-acquisition period. Both the sales to assets ratio and return on assets declined, real investment became negative, and physical assets fell.

Acquiring Jaguar and Land Rover were considered as another huge achievement of the Tata group. The collaboration of Tata Motors with Jaguar Land Rover has given Tata motors (a commercial vehicle maker) the opportunity to grow in the passenger vehicle market. However, here too the sales to assets ratio and return on assets fell. Real investment remained constant while the physical assets improved. The acquisition of South Korean company Daewoo, on the other hand, showed a slight increase in the post sales to assets ratio compared to pre-sales-assets ratio. The fall in the return to assets ratio was less compared to that of post acquisitions of Jaguar and Land Rover. Real investment and physical assets remained constant. Tata Communication also made some big acquisitions (along with other smaller acquisitions) like those of Gemplex and British Telecom. The performance has fallen significantly in the post-acquisition period. Hence very few of the acquisitions that the group made has led to significant improvement in performance.

¹⁶ Impairment is an accounting principle that describes a permanent reduction in the value of a company's asset, normally a fixed asset. When testing for impairment, the total profit, cash flow, or other benefit that's expected to be generated by a specific asset is periodically compared with that same asset's book value. If it's found that the book value of the asset exceeds the cash flow or benefit of the asset, the difference between the two is written off and the value of the asset declines on the company's balance sheet.

4.8 Regression Results

Model 1

$$\frac{I}{K} = f\left(\frac{S}{K} + \frac{P - \text{Fin Inc}}{K} + \frac{\text{Fin Inc}}{\text{Fin Inv} + \text{LA}} + \frac{\text{Fin Inv grp}}{K}\right)$$

where,

I=real investment

K=Gross fixed Asset

S=sales

P= profit

Fin Inv= Financial investment

Fin Inc= Financial Income

LA= Loans and advances provided

Fin InvGrp= Financial investment coming from group

4.8.1 Expected Signs

The dependent variable is the real investment, defined by the change in gross fixed assets while the exogenous variables are sales, profit, financial investment coming from group companies and financial income from dividend and interest. All the variables are taken with one year lag.

Sales and profits of the previous year are expected to have a positive relationship with real investment in the current year. Signs of financial income of previous year and financial investments coming from groups are ambiguous. If financial income is high, then it is expected to have a positive impact on real investment from the supply side due to higher availability of investible resources, but returns from financial investment could compete with returns from real investment and hence can have a negative impact on real investment. Financial investment coming from the group if invested in real assets are expected to have a positive impact.

Table 4.13 Regression result

	Overall		Listed firms	
real_inv	Coef.	Std. Err.	Coef.	Std. Err.
L1.S/k	.2644082 (***)	.0788178	.2728353 (**)	.2067863
L1.fi_finv	-.0731986	.081868	-4.705209	2.03514
L1. (P-Fin Inv/k)	1.114461 (**)	.5796818	.0844167 (***)	.0015637
L1.Fin InvGrp/k	.0330868	.0303418	.0117226 (***)	.0001781

This first regression takes into account all the 248 non-financial firms and second regression takes only 29 listed firms for a period of 25 years from 1993 to 2017. The results show sales and profits have positive effects on real investment. Financial income does not affect real investment while financial investment by group companies in that particular firm has a positive impact on real investment. This implies that rising financial investments which are happening mostly in group companies are not made for the sole purpose of earning financial income but for the purpose of investing in the real assets of the group.

Model 2

The third regression is done to find whether Tata Group has a tendency to divert the investment towards those firms where the profitability is high. For this, I have taken deviation of each firm's profit from the average profit of the group of each year and regressed it on investment coming from the group. This would show the extent of money a firm is getting from intragroup firms if the relative profitability of that firms is high compared to the average profit of the group. The result shows a positive relation implying that higher the profitability from a particular firm, the more investment of the group is diverted towards that firm.

Table 4.14 Model 2

invest_grp	Coef.	Std. Err	P> z 	[95% Conf. Interval]	
deviatn_mean	.3.11123	.1220233	0.000	2.871282	3.351178

4.9 Conclusion: Implications for financialization

Tata Sons under the Chairmanship of Ratan Tata has changed the holding pattern of the group which prevailed earlier and focused on a complex cross-holding structure where the group firms hold high stake within group firms to keep the decision-making power in the hands of the holding company. The ownership structure of the group is designed in a manner that the apex body would have full control over the firms and their subsidiaries directly or indirectly. The dividend income earned by the Tata Sons from the group companies has risen consistently. This has led Tata Sons to channelize the resources to higher profitable avenues from less profitable business and also come in rescue to the high indebted firms. This has increased the financial investment of the group. The financial investment within the group of sevenmajor firms also increased significantly, but the fact is these investments in equity and debenture of the group are being utilized for investing in real assets of those firms where the group found it profitable. Financial income associated with these financial investment has also risen, butthese income does not affect the real investment negatively.

This analysis suggests that Tata group has been investing in group firms as well as acquisitions of unrelated firms over the period. Since the group has been earning significant profits from some firms like TCS (which is the most successful software company of the country) as well as Tata Motors and other Tata companies, the group could have been expected to spend more on new greenfield projects or investing in new fixed assets. However, the group is unable to do so as a significant proportion of the profits are required to service debts that came up due to the big acquisitions the group made. Hugeinvestments were made within the group, as well as acquisitions. Such

investment within the group increased financial income, and mobilizing funds from the capital market increased financial payments.

This is clearly very different from the financialization in the US and other developed countries that have been described by Orhangazi(Orhangazi, 2007), Stockhammer (2005) and Lazonick (2011) where the stagnancy of the firms has been due to high dividend payments and buybacks of the firms to satisfy the shareholders whose motive has been short-term gains rather than long-term development. In case of Tata Group, the fall in the real investment was due to the high repayments of debts the group had to service through the profits earned for the huge acquisitions that the group made, after which the firms did not perform as well as was expected. Tata Sons have the obligations to pay a significant amount of dividend to the shareholders Tata Trust which is also being serviced through the profits earned by the group. Here the management and the shareholders are within the single unit with the majority of the shareholders being the Tata Trust, hence the management works in accordance with the motivations of the group. The group has also maintained high and complex cross-holdings to be able to transfer resources as required according to the perceived needs of the group. This kept the decision-making power at the hands of the apex body or/and for raising finance through issuing debt or equity for the requirements of the particular firms inside the group or/and for channeling resources from one firm to another through systems of complex structure or/and to service the huge debt that the group has been incurring. In addition, the group firms spent substantial amounts on the acquisition of foreign firms to internationalize their brands and get access to global markets. With this, although the world ranking position of the group increased, real investment in new greenfield projects did not see a significant rise given the high profits coming from some of the Tata companies. This was due to the high debt servicing requirements of the group. Therefore, the apparent increase in both financial income and financial payments of the non-financial firms of the Tata group cannot be called financialization similar to that in the US.

CHAPTER 5

The Aditya Birla Group

This chapter considers the Aditya Birla group, the third largest business group in India after the Reliance group and the house of Tata. The group had a total market capitalization of Rs 3.03 trillion as of August 2018. This group has spread from non-financial business to financial services and has businesses in almost all the sectors of the economy, from textiles to non-ferrous metals, cement, viscose filament yarn, branded apparel, carbon black and insulators, chemical fertilizers, sponge iron, insurance, asset management, telecommunication, financial services and many more. In 2018 there were 76 non-financial and 37 financial services firms in the group, out of which six non-financial firms and two financial firms are listed in the BSE or/and NSE. The financial assets of the group increased at a faster rate than physical assets and the financial income coming from these financial assets also increased and comprised a significant proportion of profit. However, this is because inter-corporate investment inside the group increased substantially. There have also been mergers of various underperforming and highly indebted units under one parent to improve and strengthen the balance sheet of the underperforming firms. These mergers have increased the promoter holding of the group from 31 percent to 39 percent. The group has also been engaged in huge international acquisitions which have increased the debt; however, the subsequent performance of the acquiring firms did not see any significant improvement. In this chapter, the performance and holding structure of the two most important companies, Hindalco and Grasim are also examined separately.

The period of study is from 1993 to 2017. The ownership structure and the financial activities are assessed taking both the listed and unlisted non-financial firms of the group for which data are available: the data are taken from the CMIE Prowess database and the yearly annual statements of the firms of the group. All the variables are presented in ratio form or in absolute values deflated with the WPI. The process of normalizing the data is necessary as the firms differ in their size, total assets, and fixed assets. The most common variables used to normalise in the literature are gross fixed assets or total assets or sales.

The analysis is divided into two parts: first, trend analysis of the whole group as well as the two most important firms separately; and second, regression analysis to examine the impact of financial activity and financial income on the real investment. Due to the difficulty of accessing data for the unlisted firms with respect to both the ownership structure and financial statements, the regression analysis is limited to those unlisted firms that have provided data for a period of six consecutive years during the period of study.

In Section 5.1, a brief history of the Aditya Birla group is provided. Section 5.2 deals with the performance and different mergers and acquisitions of the group, while Sections 5.3 looks into Hindalco and Grasim separately. Sections 5.4 deals with model specification and regression results respectively. Section 5.5 provides conclusions.

5.1 History of the Aditya Birla Group

The business culture of Birla group started six generations before the present generation headed by Kumar Mangalam Birla. Seth Shivnarain, the son of Shobharam Birla (who worked as a *muni* or head clerk in a banking firm in Pilani, Rajasthan), moved to Bombay in 1857 and started a business in opium trading.

As early as 1875, Shivnarain started engaging his son Baldeodas (who was just 12 years old at that time) into the business and together they set up a *gaddi* (a term used by Marwaris for an independent firm) and named it "Shivnarain Baldeodas" in 1879. They started with speculation of opium. Gradually from speculation they moved to trading of opium. They started making good profit and gradually they expanded their business in Calcutta, which at that time was the centre for opium trading. The Birlas emerged as one of the dominant players in opium trading in Calcutta. By 1890 "Shivnarain Baldeodas" began active trading in Bara Bazar, Calcutta and became one of the four top opium traders who were known as "Bara Chaurasia" (gang of four). Jugalkishore, the eldest son of Baldeodas, also joined the business at a very early age like his father and formed the *gaddi* named "Baldeodas Jugalkishore". Soon the other sons of Baldeodas, namely Rameshwaradas and Ghanshyamdas, also joined the business. Jugalkishore and

Ghanashyamdas were in charge of Calcutta while Rameshwaradas was in charge of Bombay.

Ghanashyamdas (G.D.) Birla had an interest in the national movement and in the political affairs of the nation. His interest and active participation in politics helped the expansion and success of the Birla business empire. The drastic turning point in the fortunes of the Birlas came with the onset of the World War I, during which the Birlas made huge profits expanding from opium trading to metal trading to jute trading to cotton trading.

During World War II as well, the Indian business community made huge profits due to wartime expansion. There was an immense demand for steel, coal, jute for gunny bags, khaki uniforms, leather for shoes, paper, etc. The Birlas took this opportunity to expand and make profits as already they existed as traders in most of these sectors.

By the end of the 1940s, the Birla business had expanded greatly, and G.D. Birla distributed the responsibilities of managing the different companies to different sons. The New Asiatic Insurance Company was under Laxmi Niwas, the eldest son; the sugar mills were given to Krishna Kumar (K.K) Birla, the second son; Kesoram Cotton was given to Basant Kumar (B.K), the third son. Jute Mills were given to Madhav Prasad (M.P), the second son of Rameshwaradas. Ganga Prasad, the son of Braj Mohan, was also given some responsibilities in the management.¹⁷

After Independence in 1947, under the regulated and Nehruvian socialist regime, the Birlas still managed to make profits. Between 1951 and 1958, the number of Birla firms increased from 61 to 105, as the group expanded into industries like jute, cotton, staple fibers, textiles, tea, cement, paper, sugar, insurance, banking, newspapers, airlines, automobiles, aluminum fertilizers, chemicals, and also expanded to non-profit areas such as education. Its share capital increased by 276 percent, from 24.8 crore to Rs 68.6 crore from 1947 to 1958 (Nayak, 2009).

The Federation of Indian Chamber of Commerce and Industry (FICCI) was formed in 1927 as a platform for representing new business interest as against the older European

¹⁷ The life stories are mostly taken from Kudaisya, (2003) and Nayak, 2005.

business interests. After independence, it became the platform to present private business interests as against government business interests. At the juncture of independence, big industrialists like Birla, Tata took the initiative to formulate the Bombay Plan, which was also known as Tata-Birla plan. This mainly focused on the development of India through industrial development plan giving little importance to agriculture, but ascribing a significant role to the state as an enabler of private investment, particularly through infrastructure provision.

In the period of the mixed economy-based planning regime, the Birlas found a different path for expansion: acquiring industrial licenses and other forms of state favour as strategies to gain and retain control over particular markets. To handle the financial needs of the business house, G.D. Birla incorporated the United Commercial Bank (UCO) in 1943. Until the nationalization of private banks in India in 1969, UCO bank financed most of the requirements of the group (Nayak, 2009). The Monopolies Enquiry Commission Act 1965 announced that 56 per cent of the total financial assistance from national banks had gone to large business houses, among which the Birlas alone received 25 per cent of the total bank finance. Analysis of Law Department data by the Dutt Committee (1967) reported that in just four years between 1963 and 1967, the assets of the top 20 business houses expanded by 54 per cent. Among them, the Birlas increased their assets by 96.6 per cent (Nayak, 2009).

In the mid-1960s, Aditya Vikram Birla joined his father, B.K. Birla and started his business career at the age of 24 years. Aditya Birla joined that branch of the family business which then consisted of Grasim, Hindalco and Indian Rayon. He was placed in charge of these companies, which subsequently formed the basis of the Aditya Birla Group. During his lifetime, Aditya Birla opened around 70 manufacturing units over a period of 25 years.

Aditya Birla was more focused on expanding the business internationally and started several new plants outside India. He mainly focused on South East Asian and African countries. In 1969 the Aditya Birla group launched its first subsidiary in Thailand, Indo Thai Synthetics, to produce and export synthetic yarn in Thailand. In 1974 he launched

two more subsidiaries in Thailand: Thai Rayon which launched viscose rayon staple fibre and marketed on a global basis as Birla Cellulose; and Century Textile Company, which operated a dyeing and weaving plant producing Centex branded fabrics including polyester, rayon, linen and later lycra. In 1975 the company launched a joint venture in The Philippines to produce spun yarn. By 1976, Aditya Birla expanded the four most important ventures in Southeast Asia, namely Indo-Thai Synthetics, Century Textile and Thai Rayon in Thailand and P.T. Elegant Textile Industry in Indonesia. By the end of 1978, the group's Thai holdings included Thai Carbon Black (TCB) founded in 1978. This became the basis of the groups' Philippine Holdings under the Indo-Phil name. In 1978, the Aditya Birla group expanded its business empire in Malaysia with the edible oil producing subsidiary, Pan Century Edible Oil. In the 1980s, the Aditya Birla group continued to expand internationally and started its plant in Indonesia. In 1982 he set up PT Indo Bharat Rayon in Indonesia. In 1984 the group expanded into the production of sodium phosphate for the detergent industry, establishing Thai Phosphate and Chemicals. In 1987 it launched another unit for textiles in Thailand, Thai Acrylic Fibre and in 1989, it further expanded its chemical market in Thailand by founding a joint venture, Thai Peroxide Co. with United States FMC Corporations.¹⁸

Within India, the group expanded widely and rapidly. In 1985, Grasim added cement production, launching Vikram Cement plant in Madhya Pradesh. By 1990, the operation tripled its production capacity. During 1990, Grasim added other diversified businesses including the merchant exporter Birla International Marketing Corporation in 1992, and Vikram Ispat, a gas-based sponge iron factory in 1993. Grasim expanded its cement holding to two new cement plants, Grasim Cement in Raipur and Aditya Cement in Shambupura in 1995.

In 1995, Kumar Mangalam Birla took over the responsibilities of the Birla Group after his father Aditya Birla. Apart from this inheritance, he was the only grandson of B.K. Birla and therefore inherited Kesoram Century as well. His first diversification was in telecommunications, forming a joint venture with AT&T in 1995, which merged with Tata Communication in 2000. Other new markets which Birla diversified into include

¹⁸See appendix for other instances of its international expansion.

software development and IT services, which were grouped under Birla Technologies Ltd in 2001. The company also entered the power generation market through a joint venture with Powergen PLC. In 1999, Birla included financial services, forming a joint venture with Canada's Sun Life Assurance. In the mid 2000s the group led by Kumar Mangalam Birla continued to expand its business internationally. It expanded to the North American market, acquiring Atholville Pulp Mill in New Brunswick, Canada in 1998. This was its major foreign acquisition, which made Birla the world's leading producer of viscose staple fibre. In 2003 it bought Nifty copper mill in Australia. This purchase enabled the Birla group to integrate with international copper markets and supply raw material to India from abroad. Later in 2003 it bought another Australian copper mine at Mt. Gordon. In the same year Birla also extended to the mainland Chinese market and established a carbon production unit, Liaoning Birla Carbon. In 2005, the company acquired St. Anne Nackawic Pulp Mill in Canada and in 2006 the company announced plans to build \$350 million viscose staple fibre plant in Laos.

5.2 Performance and Mergers and Acquisitions of The Aditya Birla Group

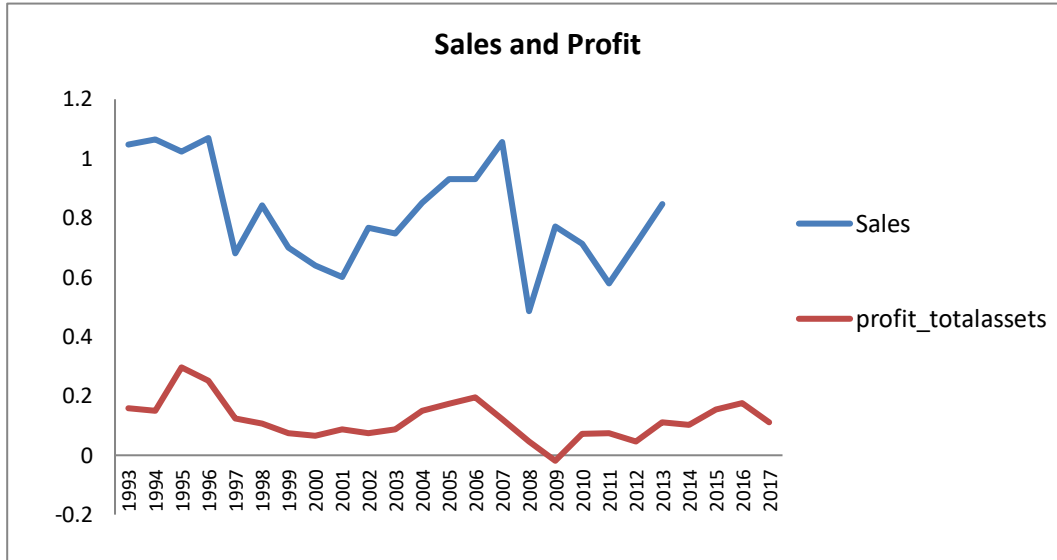
The Aditya Birla Group is among the top three conglomerates of the country. It possesses the typical characteristics of an Indian business group, such as a pyramidal system with the family at the apex, controlling all the firms through direct or indirect ownership control. The ownership structure of Aditya Birla is slightly different from that of the Tata group. While there is a significant amount of cross-holding across firms in the Tata group with control by Tata Sons, the Aditya Birla group companies possess direct holdings in subsidiary firms. The three main firms, namely Grasim, Hindalco and AB Nuvohave subsidiaries under them and hold more than 50 per cent of direct holdings of their subsidiaries. Very recently, AB Nuvomerged with Grasim. Therefore, in the analysis of individual companies in Section 5.3, only Hindalco and Grasim are taken into account.

5.2.1 Trend Analysis

The performance of a firm is usually judged by sales and profits. For the group as a whole, the sales to assets ratio exhibited some volatility falling from 1993, then rose from 2001 due to the booming economy and high demand to peak in 2007, after which it fell

sharply in crisis year 2008 and then rose, albeit not to the earlier level (Fig. 5.1). The sales and profits both show a similar pattern.

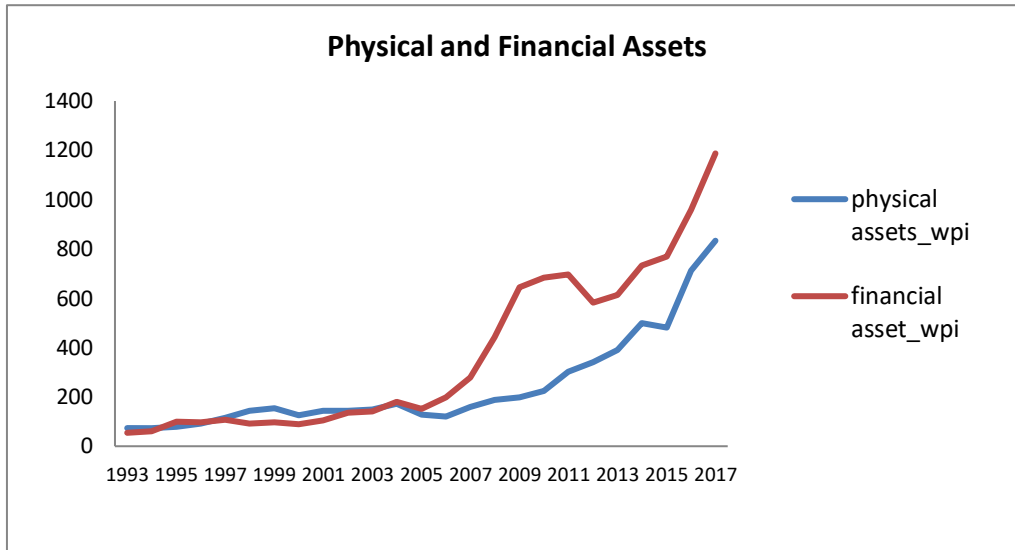
Fig 5.1 Profit and Sales of Aditya Birla Group



Source: Prowess database

The Prowess database classifies total assets into five components: a) net fixed assets, b) capital work-in-progress, c) financial investment d) long-term loans and advances e) cash and bank balances. Of these, the first two components are clubbed and termed as physical assets. Net fixed assets are the gross fixed assets less the wear and tear of the machines and equipment, while the capital work-in-progress refers to the funds used to build fixed assets. So the two together indicate the physical assets of the firm in a particular year. The third, fourth and fifth components together give the financial assets of the firms.

Fig 5.2 Physical and Financial assets of Aditya Birla Group



Source: Prowess database

Total assets rose sharply after 2005, both physical and financial assets rising in absolute terms deflated by WPI (Fig 5.2) with financial assets growing at a much higher rate than physical assets from 2005. This was due to the reform that facilitated outbound mergers and acquisitions during this period. The Foreign Exchange Management Act (2000) allowed companies to acquire foreign companies and direct investment in joint ventures or wholly owned subsidiaries without a profitability condition which was earlier required for repatriation of dividend of fifty percent of the declared profits upto an investment of \$100 million against the previous limit of \$50 million. In 2005 the investment limit was increased upto 200 percent of the net worth of the companies (Gopinath, 2007). Hence the group's foreign investment and mergers and acquisitions increased during this period. The group has been engaged in several big acquisitions. Among the biggest international acquisitions were those of Hindalco acquiring Novelis and Grasim acquiring L&T. There were other small and medium-sized foreign acquisitions, along with domestic acquisitions. Some of the important acquisitions are discussed in detail in Section 5.2.2. Apart from acquisitions, there has been an increase in cross holding investment within the group, by merging different non-performing and indebted units with the better performing counterparts. This helped the worse performing units to survive and strengthen their balance sheets.

5.2.2 Mergers and Acquisitions

The wave of mergers and acquisitions in India started from the 1990s in the newly liberalised economic environment. The Monopolies and Restrictive Trade Practices Act (MRTP Act) regulating the licensing of the free expansion of the enterprises, consolidation and acquiring of businesses and acquisition of the foreign technology and foreign investment was withdrawn. The Foreign Exchange Regulation Act (1993) was also altered with respect to removing all regulations relating to borrowing funds and raising deposits in India and foreign companies holding stakes in Indian enterprises. In 2005 FEMA was further amended to allow the Indian enterprises to invest internationally upto 200 per cent of their net worth. This increased the wave of mergers and acquisitions both domestically and internationally in India in the second half of the decade. Some of the big and medium-sized mergers and acquisitions made by Aditya Birla group companies are discussed below:

5.2.2.1 Mergers and Acquisitions outside the Group

Hindalco-Novelis Acquisition

Hindalco acquired Novelis in 2006. Novelis, a Canadian company, was the largest producer of aluminum, estimated to supply around 19 per cent of the world's flat-rolled aluminum products. It was the largest producer of rolled product not only in Canada, but also in both North America and Asia. After acquiring Novelis, Hindalco became the largest aluminum producer in the world.¹⁹ At the time of the acquisition, Novelis was a \$6 billion company with a debt of \$2.4 billion. Hindalco had to pay \$4.5 per share to shareholders at a 15 per cent premium for each outstanding share. Hindalco also had to arrange \$3.03 billion from ABN AMRO and Bank of America through its wholly subsidiary company AV Minerals as a bridge loan. Hindalco was an upstream (producing raw materials) company by mining bauxite and converting it into alumina and then smelting it to aluminum. Novelis was a downstream company producing finished products using aluminum such as cans for beverages and food packaging, supplying aluminum sheets and foil for automotive transportation, construction and industrial and

¹⁹<http://ssrn.com/abstract=1688882>

printing markets. Therefore, Hindalco acquired Novelis to have a downstream market for its upstream products.

Although acquisition was a big one and Hindalco expected it to be very profitable in the coming years, it increased the debt of the consolidated Hindalco balance sheets from Rs 8,443 crore to 32,352 crores in one year, a fourfold increase (Table 5.1). In 2008, to repay the bridge loan amounting to \$3.03 billion, Aditya Birla Group Promoters (consisting of Mr. Birla himself and 14 investment companies) issued shares and bought up to 50 percent of the unsold shares and increased its stake from 31.4 percent to 36 percent. The firm also entered into an agreement with five bankers to underwrite 40 percent of the unsold shares, with each subscribing 8 percent each. The bankers are ABN Amro, Asia Equities (India) Ltd., Citigroup Global Markets India Pvt Ltd, DSP Merrill Lynch Ltd., Deutsche Equities India Pvt Ltd. and State Bank of India. For this, the firm paid a fee of Rs 60.72 crore to these five underwriters. The amount collected of Rs 5,047.70 crore was used for the repayment of the loan. Hindalco also used cash flow from operations and made further borrowings and international debt financing to repay part of the loans²⁰.

In 2016 Novelis raised \$1.15 billion through bond issuance in the US at an interest rate of 6.25 percent to repay the debt. In 2018 Hindalco issued another Rs 6000 crore of non-convertible debentures to pay a portion of the loan.

Spice Communication

In 2008 Idea Cellular acquired 40.8 percent stake in Modi Group Spice Communication at Rs 77.30 per share. Idea Cellular also provided a non-compete fee amount to Rs 544 crore to the promoter group of Spice Communication. In addition, Idea made an open offer for a further 20 percent stake along with Telecom Malaysia International (which initially held 39.3 percent stake in Spice Communication and also got a proportional stake). The proposal was approved by both Idea and Spice with a stock swap ratio of 49:100 (i.e., shareholders holding every 49 shares of Idea will get 100 shares of Spice). Idea issued a preferential allotment to TMI of 46.473 crores at a price of Rs 156.96 per

²⁰<https://www.livemint.com/Home-Page/9IISpyowVmoHQmaQwFsKhO/Aditya-Birla-group-may-pick-up-half-of-Hindalco-issue.html>

share which comprise of 14.99 percent of Idea's equity capital post allotment. However, amid the strong competition and price war in the telecom industry Idea Cellular could not compete with Reliance. In 2013 Idea Cellular was slapped with a fine of Rs 600 crore by the Department of Telecommunication (DoT) for its violence of license conditions. As per the rules, a telecom operator cannot hold more than 10 percent equity in another operator in the same circle. When Idea Cellular acquired 40.8 percent the merger resulted in overlapping licenses in six circles. During the time of merger both the companies had the license for the region Andhra Pradesh, Delhi, Haryana, Maharashtra, Punjab, and Karnataka. However, in 2012, the Supreme Court canceled Idea Cellular's license for Punjab and Karnataka and Spice's license for Andhra Pradesh, Delhi, Haryana, and Maharashtra.

DomsjoFabriker AB

In 2011, the Aditya Birla group acquired the Swedish pulp maker and bio-refiner DomsjoFabriker AB, so as to gain control over the Viscose Staple Fibre (VSF) business. The acquisition was done through two of its international subsidiaries - Thai Rayon Public Co. Ltd. and Indonesia based Pt Indo Bharat Rayon for \$340 million (Rs 1500 crore approx.). The acquisition was funded by a combination of internal cash flow and debt at a ratio of 30:70. The two subsidiaries together paid \$180 million and \$160 million respectively raised from Standard Chartered Bank.

Columbian Chemicals Co.

In 2011 Aditya Birla Group made another important acquisition of Columbian Chemicals Co. (CCC) at a price of \$875 million, from JP Morgan Chase & Co. Columbian Chemicals was the producer of carbon black, which is the key raw material for producing tyres. Aditya Birla has its carbon black producing subsidiaries in Egypt, Thailand, and China. The group bought CCC through its Alexandria carbon black company SAE, Thai Carbon Black Co Ltd and SK Investment. Each held 21 percent of the stake, and \$450 million was raised through CCC's book. At the time of acquisition CCC's debt stood at \$771.58 million.

5.2.3 Mergers within the Group firms

The group has consolidated several different units under one business over the period. Firms with high debts and with low performance were often consolidated with better performing and related industries, which increased the overall consolidated debt of the firm with the added responsibility to repay the debt. The group resorted to different modes to repay the debts of the indebted firms. Some of the high debt mergers are discussed below:

In 2004, Grasim acquired L&T and then in 2009 Grasim demerged its cement production unit Samruddhi cement and merged with L&T to form UltraTech. While Samruddhi was demerged from Grasim however, the restructuring was designed in such a way that Grasim would still control 100 percent of the entity, but indirectly. Pre-merger, Grasim shareholders held 100 percent shares in the cement business. Post-merger, Grasim shareholders held 35 percent direct shares through Samruddhi and 65 percent shares indirect shares through UltraTech. Hence even after demerging the restructuring was such that Grasim retained full control over the cement business.

In 2010, the Aditya Birla Group invested Rs 300 crore in Aditya Birla Fashion Ltd. to boost its business and solvency requirements. By 2012, Pantaloons, a brand of Aditya Birla Fashion Ltd., held Rs 1600 crore debt. To service the debt, in 2012 Aditya Birla acquired controlling stakes in Pantaloons and raised Rs 1600 crore through subscription debentures and infused it. This resulted in acquiring another 25 percent of the unit making the Pantaloons as a subsidiary. This move not only cleared the debt of Pantaloons with the help of the group but increased the total promoter holding to 50 percent.

In 2015 Aditya Birla Chemicals merged with Grasim Industries. Aditya Birla Chemicals had a loan of Rs 1200 crore which Grasim would refinance after the merger.

In 2016, the Aditya Birla Group demerged Aditya Birla Financial Services Ltd. (ABFSL), a subsidiary of Aditya Birla Nuvo Ltd. (ABNL) and merged Aditya Birla Nuvo with Grasim Industries. The restructure was such that the promoter of the group would gain their stock holding through a complex cross-holding. The stock swap was

such that each ABNL shareholder would get three equity shares of Grasim for every 10 shares. With the demerger of the financial unit of ABFSL from ABNL, each shareholder of Grasim would get seven shares of ABFSL per single share of Grasim. This means that Grasim's shareholders, would be in the same position of holding the same number of shares of the company and in addition would receive seven shares of Aditya Birla Financial Services. For ABN shareholders, those holding ten shares of ABN would get 3 shares of Grasim. Grasim's shares were inclusive of ABFSL shares, which meant that ABN shares holders indirectly held shares of ABFSL even after demerging. This whole process shows that the stock swap was designed in a way to benefit the promoters of the group, whereby the shares held by them increased from 31 percent to 39 percent. The rationale behind the merger was consolidating the holding companies, so to make the financial statement stronger of the low performing and the high debt firms.

Grasim had better balance sheet numbers among the Aditya Birla Group firms and was the holding company. After this restructuring, along with the 60 percent holding in UltraTech and Chemical division, as well as the slow-growing Rayon business, it had to bear the indebted Idea Cellular as well to strengthen it to compete with Reliance Jio and Nuvo. However, the telecom subsidiary of Aditya Birla could not compete with Reliance Jio and in 2018 the company to strengthen its market share came up with another merger with Vodafone. For this new merger, Aditya Birla Group raised \$1 billion. The promoters of Idea Cellular including KM Birla held combined 42.7 percent stake among which the flagship company Grasim held 23.14 percent and Birla TMT holds 6.51 percent of Idea. The equity infusion would raise the stake to 47.2 percent. Aditya Birla Group also promises to infuse Rs 3,250 crore in Idea Cellular to strengthen its balance sheet while Vodafone would infuse Rs 9,350 as a part of the merger process.

These mergers and acquisitions within the group and internationally increased the financial investments of the group. They were not likely to generate immediate dividends as most of the profits of the indebted firms were promised to repay the debts, as the acquisitions raised the overall debt of the Aditya Birla Group, as reflected in the balance sheets. The net debt of consolidated Aditya Birla Group in 2017 stood at Rs 78,757 crore. In the last one decade, there has been a series of consolidation moves among the group

firms. In all of these, the common factor was high debt in the balance sheets of the merged firms which they were not being able to repay. These debts are being serviced by issuing equity, bonds and/or further borrowings. In a significant number of cases, the holding company was imposed with the responsibilities to repay the debt. The amount of debt of the group increased from Rs8,865 crore in 2004-05 to Rs78,757 crore in 2016-17, an increase of 10 times in 12 years.

Table 5.1 Consolidated Debt of Aditya Birla Group

Year	Debt (Rs Crore)
2004-05	8865
2005-06	9962
2006-07	13316
2007-08	37929
2008-09	42261
2009-10	36309
2010-11	47378
2011-12	53434
2012-13	71210
2013-14	74151
2014-15	75827
2015-16	81202
2016-17	78757

Source: Annual Financial Statement of individual companies of Aditya Birla, various years

5.2.4 Promoter Holding

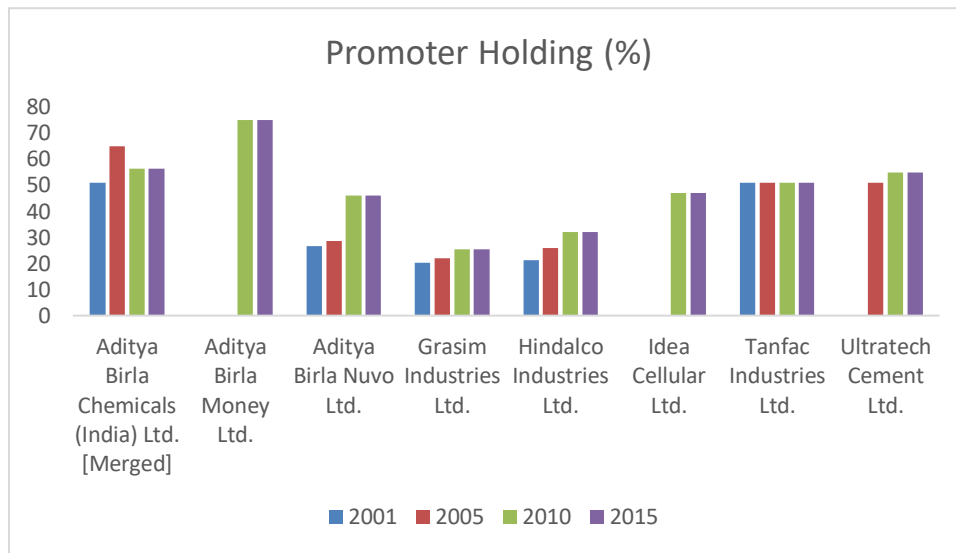
Promoter holding and ownership structure in this study are analyzed from 2001 onwards, that is post Clause 35 of the Listing Agreement²¹. Prior to the reform of Clause 35 there was no requirement for firms to show their ownership structure. The three most important reforms regarding ownership disclosure of the Listing Agreement in order to bring the Indian corporate governance standard at par with the international standards were carried out in 2001, 2006 and 2009. Among these three reforms, the first reform was the most fundamental one, which re-categorized the major block holders into two main categories, promoters and non-promoters, and required both the promoters and non-promoters holding more than 1 per cent of equity to disclose their shareholding every quarter rather than annually. Prior to 2001, the insider holdings were clubbed under categories such as Directors and Relatives (as definition given in Companies Act 1956) and corporate bodies, making it difficult to have clear data. Therefore, in this study I have taken data from 2001 to show the ownership structure and promoter holding of the group.

Promoter and Non-Promoter are the two main divisions of ownership structure²². The promoter holding of all the big enterprises of the group is such that the promoter has significant power over decisions of the group companies. In all the enterprises, the promoter holding from 2001 to 2015 remained the same or significantly increased. The lowest promoter holding is in Grasim; however, it is still sufficient to have control over the firm.

²¹Under the provision of Clause 35 of Listing Agreement, companies listed on BSE are required to file with BSE on quarterly basis within 21 days of the end of the each quarter, their shareholding pattern in the revised format.

²²Promoter ownership is mainly categorized into Individual Promoter and HUF, Promoter holding from central and State Govt., Corporate Promoter, Institutional Promoters. Again the same categories for Foreign Promoters. For Non Promoters, the main categories are Non Promoter Institutions under which Mutual Funds/UTI, Banks, Non Bank Financial Institutions, Insurance Cos and FIIs, Non Promoter Central and State Govt. holdings, Non Promoter Corporate Bodies and Non Promoter Non Institutions with Individuals holdings.

Fig 5.3 Promoter Holding of Aditya Birla Group



Source: Prowess database

One of the important characteristics of the pyramidal ownership structure of business in the Indian context is that despite family ownership being the most important component, little direct ownership exists with the family. This is evident from relatively low holdings by individuals. The Individual and Hindu Undivided Family (HUF) holding has been low throughout, while corporate holdings have been high. An HUF, according to the Companies Act, consists of "all persons linearly descended from a common ancestor and includes their wives and unmarried daughters". Therefore, individuals and HUFs have been mostly the family members. The table below shows that none of the HUF holdings has been over 1 per cent except for Tanfac Industries Ltd. On the other hand, corporate holdings have been high throughout. High corporate holdings suggest that group firms hold shares in other corporate firms and consequently develop a complex web of cross-holding among the companies to keep control and also to some extent take advantages of government policies.

On the other hand, for the non-promoters, the majority of the holdings are done through institutions, such as mutual funds, banks, nonbank financial institutions, insurance companies etc. For non-promoters, mutual funds have reduced while holdings through FIIs have increased. Foreign Institutional investments are highly volatile in nature and

depend on global phenomena. Moreover, dividend payments of the FIIs need to be consistent and the share prices high, the slightest market change in the companies' performance might cause investors to lose confidence very quickly. Hence high FII holdings are risky and also pressurize the firms to keep dividend payouts high (Table 5.6).

The holding of non-promoter non-institutions has reduced, except in the case of Tranfac. In all the other firms, the non-promoters' non-institutional shares reduced while the non-promoter institutions' shares held rose. This increased the power of institutions to negotiate with the firms.

5.2.5 How the Grasim-Nuvo Merger changed the holding structure of the group

Till the pre-merger period, the ownership structure of the promoters of Aditya Birla Group in six of its most important firms: Grasim, Aditya Birla Nuvo Ltd., Hindalco, UltraTech, Idea and Aditya Birla fashion and Retail Ltd. (ABFRL) was such that for Grasim, ABNL, Hindalco and ABFRL, the promoter group held over 30 percent except for Grasim where it held 28 percent. However, for UltraTech and Idea it had very little direct ownership (Fig 5.4). Grasim held significant shares in Ultra Tech and ABNL held significant shares in Idea. Apart from that, each of these firms held shares with one another. For example, Grasim held 2.6 percent in ABNL, 2.6 percent in Hindalco, 60.2 percent in UltraTech, 4.7 percent in Idea and 2.3 percent in ABFRL. Similarly, Hindalco also held shares in these companies. ABNL held 1.6 percent in Hindalco, 100 percent in ABFS as its subsidiary, 23 percent in Idea and 9 percent in UltraTech. Hence there was substantial crossholding among these firms and this structure facilitated indirect holdings as well increasing the total percentage of holding by the promoters.

Post-merger, the structure changed slightly. Grasim and Nuvo were merged, and ABFSL was made a separate entity to be listed in the stock market. The new structure is such that now the Aditya Birla Group hold 34.5 percent in the merged Grasim-Nuvo and 14.8 percent in ABFSL and 57.3 percent of ABFSL through Grasim-Nuvo merger while the direct holding of other firms remain the same (fig 5.5). The insider holding has increased after merging the two firms together. This complex holding of otherwise unrelated

businesses increases the complexity of analyzing the performance of the consolidated group.

According to Institutional Investor Advisory Service (2016), the demerger has increased the effective holding of the promoter group to 74 percent in ABFS. In 2004 Mr. Birla announced an increase in the promoter holding to 30 percent, which he could accomplish by 2010, except for the holding in Grasim which was at 28 percent. Then in 2011 he announced an increase of the promoter holding to 40 percent. In 2016, the restructuring achieved his target. This merger increased the holding to 39 percent while the Grasim holding is at 31.3 percent.

Fig 5.4 Pre-merger structure

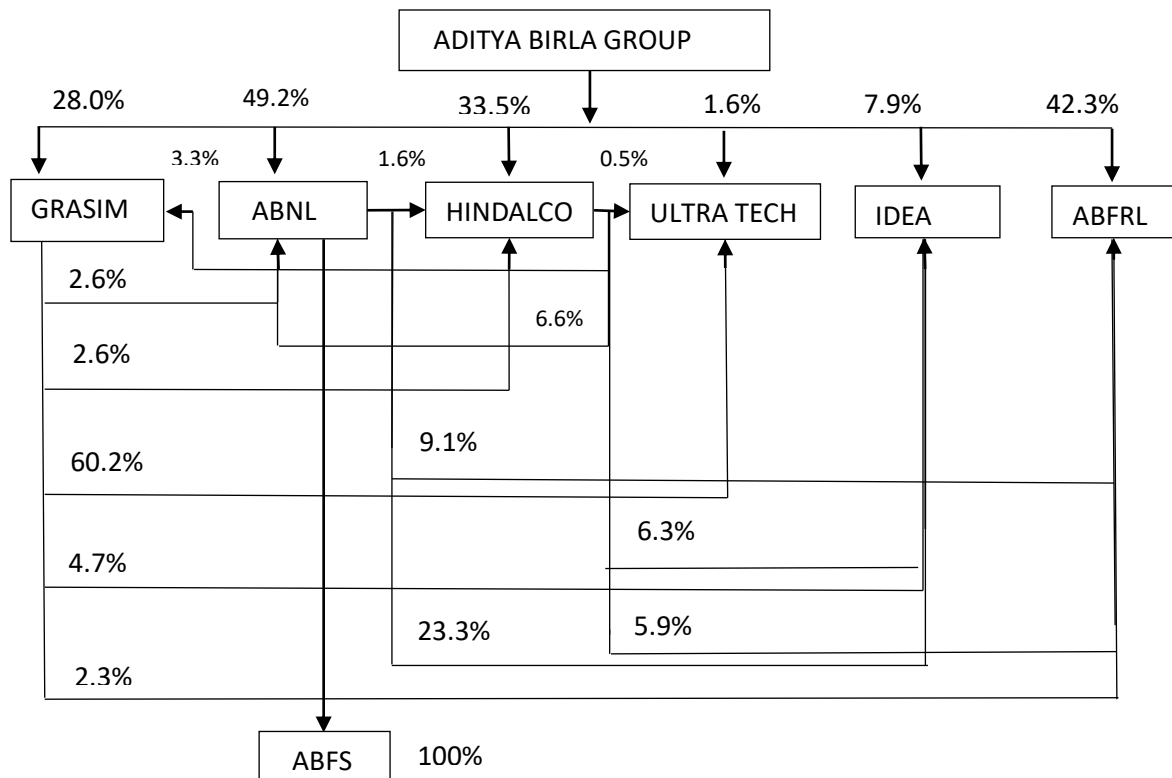
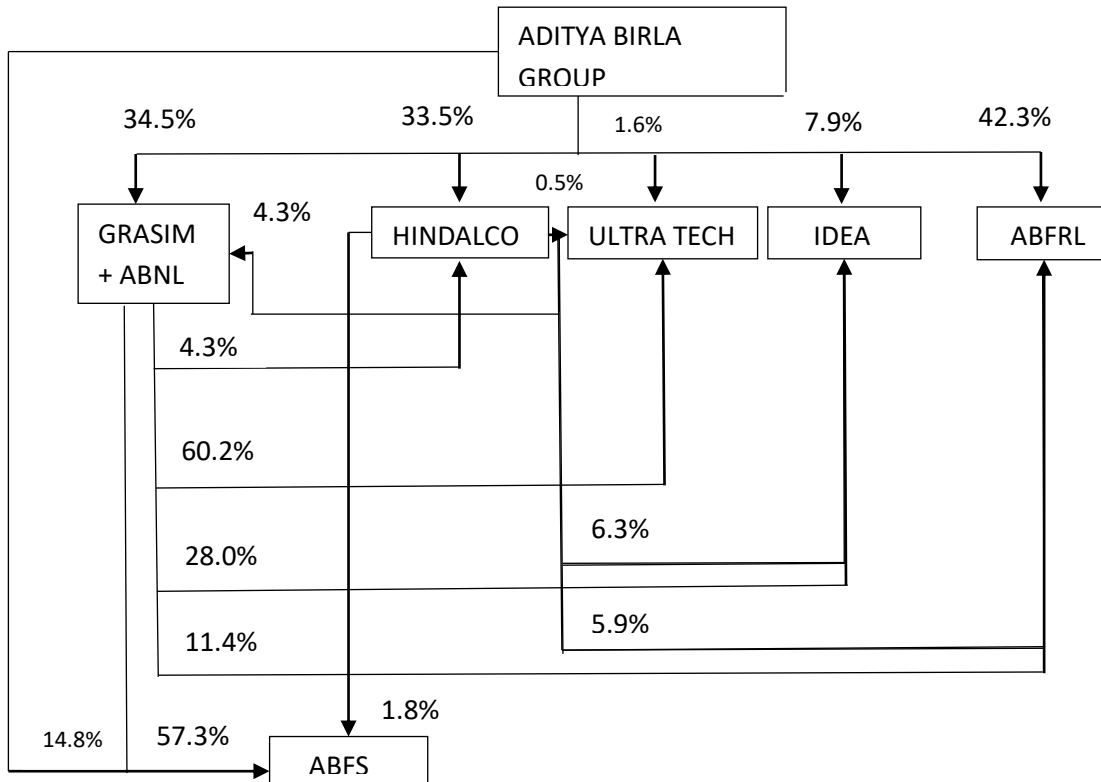


Fig 5.5 Post-merger structure



In the last 15 years the increase in promoter holdings of the Aditya Birla group has a pattern. Till 2007, the pattern has been characterized as "creeping acquisition", which refers to "the purchase of company shares by its investors (usually promoters or shareholders with significant holdings) over a number of small transactions, so as to increase the investors' stake in the company by an economically significant amount without requiring any disclosure or other action by the investors. Such creeping acquisitions allow promoters to increase their stakes in firms by up to the maximum amount allowed under the prevailing securities regulations, without triggering the need for any action mandated by the regulators" (Institutional Eye, 2016). From 2008, the pattern changed to preferential allotment. In the last few years 2015-16 it has been mainly through restructuring.

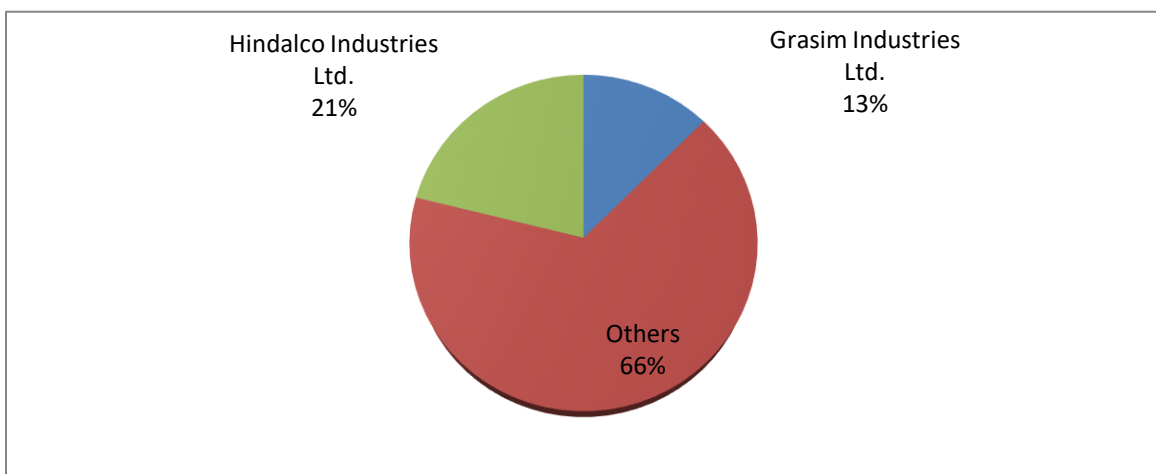
The main motive of this merging process has been twofold: a) to bring the underperforming financial service company and Idea Cellular under the better performing Grasim to give it a parent to strengthen the balance sheet and compete with stronger

market rivals and b) to increase the effective promoter holding of the group from 30 percent to 40 percent and increase the control. Unlike that of US firms where the main motive of the rising financial investment was to earn high financial income as a significant portion of the profits and pay substantial dividend to the shareholders, in this case the motive of the financial investment was not that of sole purpose to have a rising share of the profit from financial income but to acquire and repay the debt with the help of the holding firm in order to improve the balance sheet of the weak firms which is nothing but a part of the growing process of the groups.

5.3 Case studies of Hindalco and Grasim

In this chapter, two firms within the Aditya Birla group have been taken for detailed analysis: Hindalco (the aluminum giant) and Grasim (the textile and cement giant). The performance of these two firms shaped the overall performance of the group. Each of these firms is a dominant player in their respective industry and big enough to shape a considerable portion of the industry. Together Hindalco and Grasim comprise 34 percent of revenue of the group (Fig 5.6). The financial transactions of these firms hence affected the group. In this study, I examine in more detail the performance of these two firms and the purpose of their financial engagements.

Fig 5.6 Proportion of Hindalco and Grasim in total revenue



Source: Prowess database

5.3.1Hindalco

5.3.1.1 Short Overview

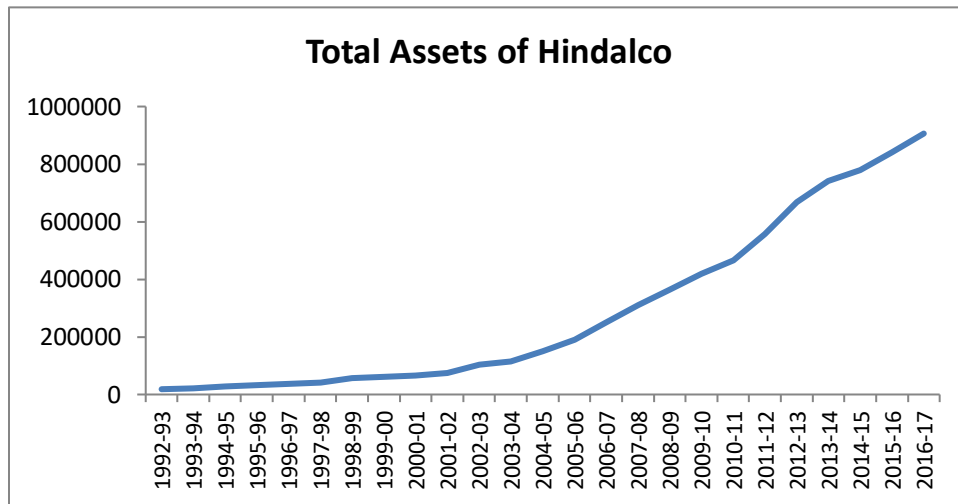
The aluminum industry in India is primarily dominated by three companies, namely National Aluminum Co. Ltd (Nalco, 22 percent), Hindalco Industries (22 percent) and Sterlite Industries Ltd (24 percent) as of April 2017. The other producers are Bharat Aluminum (Balco) and Madras Aluminum (Malco). Hindalco under the flagship of Aditya Birla Group is involved in two businesses: aluminum and copper. It was established in 1958, incorporated in Mumbai in collaboration with Kaiser Organization of USA. It started operations in 1962 in Renukoot in eastern UP. In 1965 rolling and extrusion mills were commissioned at Renukoot. Under the leadership of Aditya Birla, the firm expanded internationally and into industries like rayon, chemicals and phosphate. It also expanded within the country under Kumar Mangalam Birla and gradually over the years Hindalco became the largest aluminum manufacturer in the country, with a series of acquisitions. In 1998 the foil plant in Silvassa was started. The Indo Gulf subsidiary, a fertilizer company which was formed through Hindalco in 1980, added copper to its production in 1988. In 2002, Hindalco was restructured, with its fertilizer production spun out to form a separate company Indo Gulf Fertilizer. Indo Gulf Copper was also established directly under Hindalco. In 2000, Hindalco acquired Indian Aluminum Co. (Indal), an aluminum producer founded near Kolkata in 1938 with a 74.6 per cent equity holding. In 2003 Hindalco became the majority stakeholder in Utkal Alumina, and in 2007 it made two major acquisitions. One of these was of Novelis, which was the largest producer of rolled aluminum, making Hindalco the world's largest producer of rolled aluminum; and two of Alcan's 45 per cent equity stake in the Utkal Alumina project. The other acquisitions are given in Appendix(A 5.4).

5.3.1.2 Performance of Hindalco

Sales of Hindalco declined from 53 per cent of assets in 1992-93 to 35 percent in 2001-02, rising to reach around 80 percent in 2008 and fell to slightly above 40 percent of total assets in 2016-17 (Fig 5.8). The rise of sales reflected high demand in the boom period till the crisis. Profits fluctuated between 14-18 per cent between 1993 and 2007, but fell

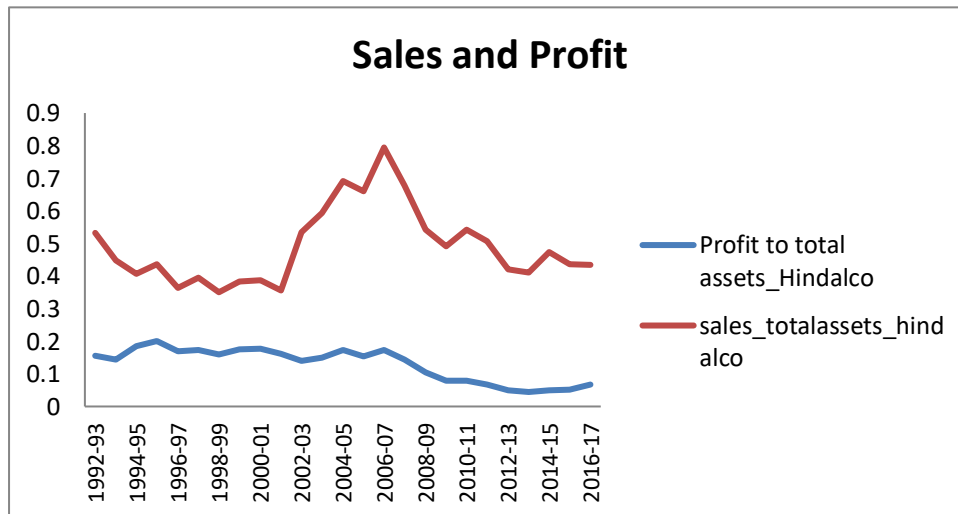
sharply and remained low over the subsequent decade (Fig 5.8). The financial assets increased compared to physical assets (Fig 5.9) while majority of financial investments are within the group (Figure 5.10). From 2008-09 onwards Hindalco invested around 80 per cent in group. The return has been high and most of the earnings came from these financial investments within the group. The financial returns increased from 11 percent of profit in 2009 to 70 percent in 2014-15.

Fig 5.7 Total Assets of Hindalco



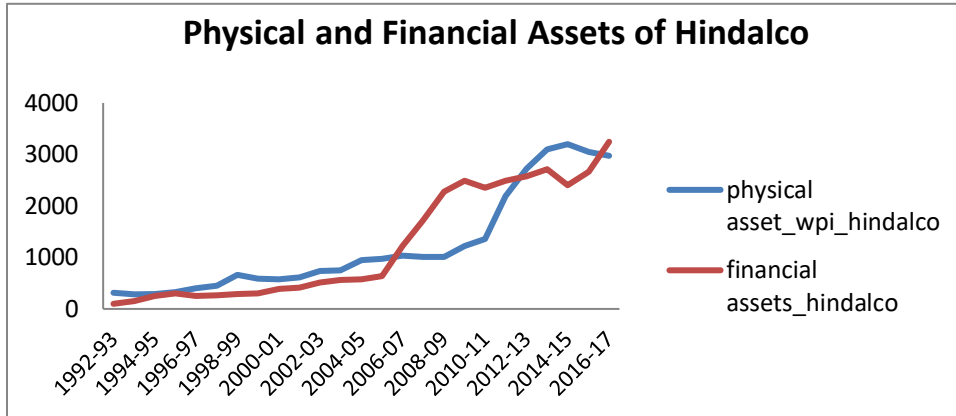
Source: Prowess database

Fig 5.8 Sales and Profit



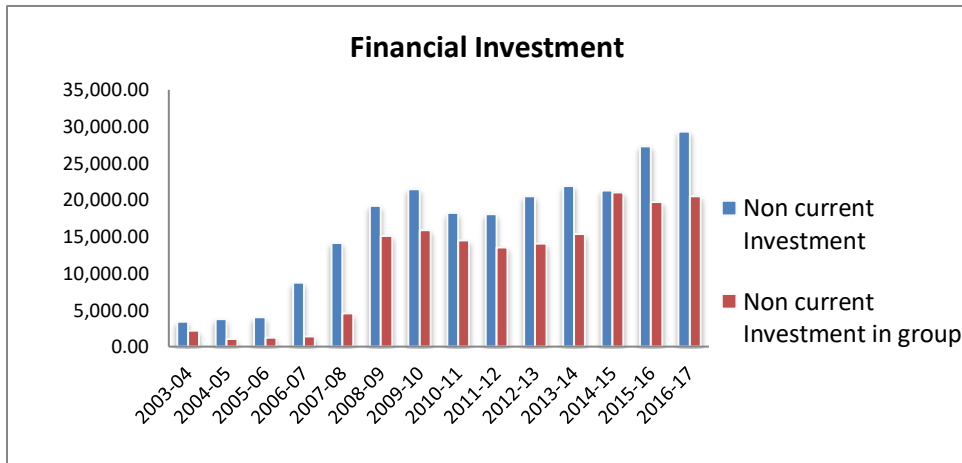
Source: Prowess database

Fig 5.9 Physical and Financial assets of Hindalco



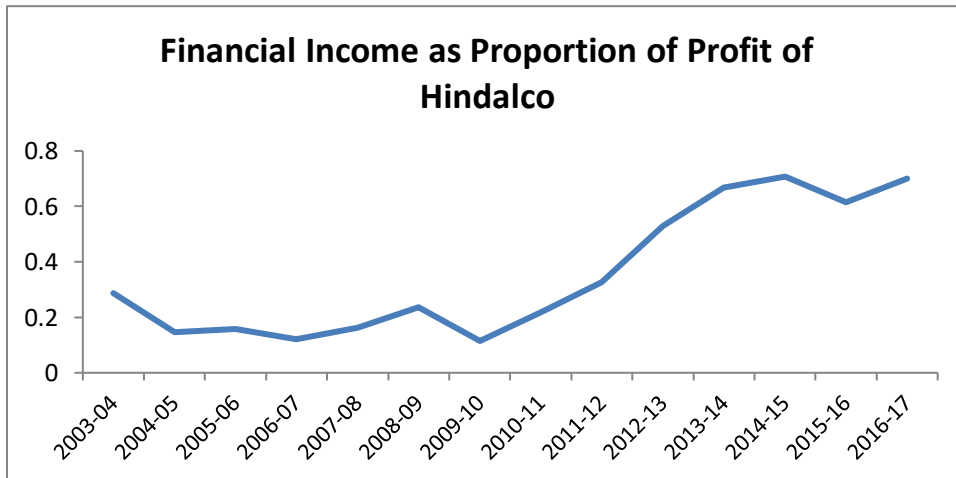
Source: Prowess database

Fig 5.10 Financial Investment



Source: Prowess database

Fig 5.11 Investment in group of Hindalco



Source: Prowess database

Hindalco also made some important acquisitions from 2005-06, after the amendment of FEMA Act. The first big international acquisition was of Novelis, which was a big strategical move for Hindalco where the firm saw good synergies. However, the profits of the company did not rise subsequently, largely because Hindalco and Novelis both had their respective commitments. For the initial four years after the acquisition, Hindalco could not send its upstream products to the downstream Novelis. On the other hand, Novelis had earlier commitments of selling aluminum cans to customers at a lower price than the raw material cost²³. It was only from 2011 that Hindalco could send products to Novelis. However, even after 2011, Hindalco did not see any improvement in its profits (Table 5.2). The Novelis acquisition brought with it a huge amount of debt. The consolidated debt of Hindalco rose from Rs8,443 crore in 2006-07 to Rs32,352 crore in 2007-08 (Table 5.3). Hindalco took a bridge loan²⁴ amounting to \$3.03 billion from six banks. The bridge loans had to be repaid by 2008. Hence in 2008 Hindalco took another set of loans to clear the previous loans. Hindalco took a loan of \$982 to refinance the previous loan taken to acquire Novelis²⁵. Secondly it raised rights of \$1.2 billion. A rights issue is a funding technique where the company offers new shares to the existing shareholders in proportion to the number of shares held. Issuing new shares by the company is an alternative to issuing public debt or bank debt when the company requires funds to finance the company. Out of the \$1.2 billion rights issue, Hindalco bought only 17% and forced the owners and bankers to buy the rest to raise the required money. However, the post-merger performance of Hindalco did not see any significant improvement. Though sales to assets ratio increased somewhat in the post-merger period compared to the pre-merger period, the profit fell to half from 16 percent to 7 percent in the post-merger period. However, even after 2011, when both Hindalco and Novelis could send products to each other and utilize the linkage of upstream and downstream facilities, neither sales nor profit showed any significant rise in the performance. Rather both sales and profit fell below the overall post-merger performance.

²³<https://economictimes.indiatimes.com/industry/indl-goods/svs/metals-mining/inside-the-novelis-turnaround/articleshow/6680916.cms>

²⁴A short term loan taken out for a period of 2 weeks to 3 years pending the arrangement of larger or longer-term financing.

²⁵<https://www.livemint.com/Companies/LwopDJqtvV3XBRVycqh8jP/Hindalco-borrows-982-mn-to-refinance-Novelis-buyout.html>

Table 5.2 Pre and Post merger Performance of Hindalco-Novelis

Hindalco-Novelis	Sales to assets	Profit to assets
Pre merger (1992-93 to 2006-07)	48.8	16.8
Post merger (2007-08 to 2016-17)	49.3	7.3
Post merger (2011-12 to 2016-17)	44.8	5.5
Overall (1992-93 to 2016-17)	49.08	13.04

Table 5.3 Debt of Hindalco

Hindalco	Standalone Debt (Rs Crore)	Debt to Sales Ratio (Standalone)	Consolidated debt (Rs Crore)	Debt to Sales Ratio (Consolidated)
2004-05	3,800	0.40	4,931	0.49
2005-06	4,903	0.43	6,279	0.52
2006-07	7,359	0.40	8,443	0.44
2007-08	8,328	0.43	32,352	0.54
2008-09	8,324	0.46	28,310	0.43
2009-10	6,357	0.31	24,000	0.39
2010-11	9,038	0.36	32,832	0.45
2011-12	14,572	0.51	37,127	0.45
2012-13	24,145	0.86	49,850	0.61
2013-14	27,020	0.90	53,944	0.60
2014-15	28,649	0.78	55,386	0.52
2015-16	28,537	0.78	58,176	0.57
2016-17	27,150	0.69	51,855	0.51

Source: Annual financial statement of Hindalco, various years

The pattern of debt suggests that the acquisition did not bring greater profits but added to the debt burden of the company. Till 2010-11, Hindalco standalone debt did not increase much. However, from 2011-12 Hindalco standalone debt started rising as part of

refinancing other subsidiaries' debt by taking newer loans to repay older ones. This aligns with the overall pattern of Aditya Birla. Hence high financial investment and high promoter holdings served two purpose a) raised fund from the promoter whenever required and b) channelized the fund to the required firm or industry. The firm also issued equity mainly through right issue and preferential shares or QIP to raise fund to repay debt. Hence though the financial engagements of the firms which has shown substantial increase are mainly for the purpose of either merging the group firms to improve the balance sheet of the particular firm or to repay the debt of the indebted firms. The purpose is not to earn financial income or to provide high rewards to the shareholders who are mostly insiders.

5.3.1.3 Hindalco Ownership structure

Hindalco has as many as 28 subsidiaries in India and around the world, with nearly 100 per cent control over most of them, barring a few like Tubed Coal Mines Ltd and East Coast Bauxite Mining Company Private Limited, where the company has less than 100 per cent ownership control (Appendix A5.1). This high shareholding prevents hostile takeovers. The promoter holding has increased from 21 per cent to 37 per cent during 2001 to 2014 (Table 3.2). Within this, the holdings exclusively by the family members that is by HUFs has been very low while the corporate bodies hold the majority of promoter holdings. The non-promoter holdings has reduced from 78 per cent to 55 per cent. Among the non-promoters' holdings, institutions hold majority of stakes at around 41 per cent and this share did not change during these years. Within the non-promoter institutions, mutual fund holdings reduced significantly from 15 per cent to 0.6 percent while FIs increased from 8 per cent to 13 per cent. The rise in FII holdings has been significant from 17 per cent to 27 per cent in non-promoter institutions. It should be noted here that investments by FIIs are not only risky and subject to global market volatility but also requires regular payment of dividend and constant increase of share prices to prove healthy performance to the global market. High holdings by FIIs can be withdrawn any time if the investors lose confidence on the producer. Non promoter non institutional holdings reduced from 37 per cent to 14 per cent (Table 5.6).

5.3.2Grasim Industries Ltd

5.3.2.1Overview

Grasim Industries Ltd flagship company of Aditya Birla Group was incorporated as Gwalior Rayon Silk Manufacturing (Weaving) Co. Ltd. It started operations with a textile manufacturing mill in 1948 after which it diversified to viscose staple fibre and rayon grade pulp. In 1954, Grasim set up the first big plant to produce Viscose in India in Nagda in Madhya Pradesh. In 1962, Grasim started a separate engineering division to manufacture plant and machinery for VSF production and in the next year it set up a VSF plant in Mavoor, Kerala. Under the leadership of Aditya Birla, VSF production base was established in South East Asian countries like Thailand and Indonesia. Eventually Grasim diversified into cement and sponge iron.

Grasim currently has two main businesses: cement and viscose staple fibre (VSF). Grasim diversified into chemicals and cement industries in the mid-1980s by gradually acquiring stakes in different companies (Asian Case Journal, 2005). Acquisition of UltraTech in 2004 has been the biggest acquisition of Grasim till now. The cement business is another important player in Grasim. Grasim merged with L&T in 2004 and separated its Samruddhi Cement to merge it with L&T and formed UltraTech Cement. Hence in order to understand Grasim we need to examine the performance of this sector as well. Other important acquisitions of Grasim include that of Dharani Cements Ltd. & Shree Digvijay Cements Ltd in 1998, St. Anne Nackawic Pulp Mill Canada in 2005. In 2007 Grasim divested Shree Digvijay Cement Company Limited and acquired stake in Domsjo Fabriker AB in 2011 (for other acquisitions see Appendix A5.5). Grasim has expanded within and abroad over the years. Among its foreign expansions, those in Thailand and Canada were most prominent.

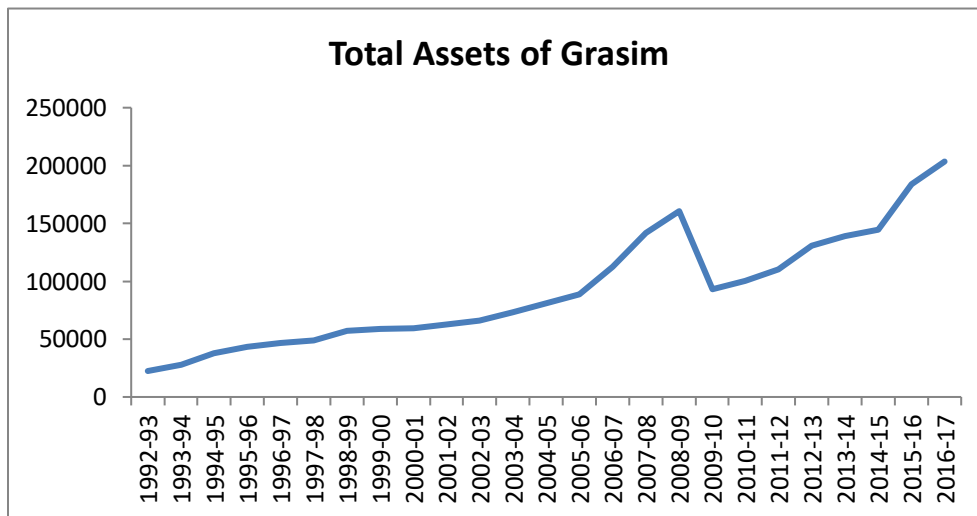
Grasim was the holding company of its VSF, textiles, cement, and sponge iron companies till 2016 before the Grasim-Nuvo merger. After the merger, Grasim became the holding company of Nuvo, Idea Cellular and Aditya Birla Fashion. Since the Grasim-Nuvo merger is a very recent phenomenon, hence the performance of Grasim in this chapter is judged based on three of its important businesses: textiles, cement and chemicals. Textile

contributes around 30 per cent, cement contributes around 65-70 percent and chemicals contribute around 3 per cent of the revenue of the company on average. The Aditya Birla group claims that Grasim is the best performing firm among its conglomerate and merged its less performing firms with Grasim, first Nuvo (which was not performing well and needed a parent firm) and then Idea (the telecommunication branch of Aditya Birla).

5.3.2.2 Financial statement

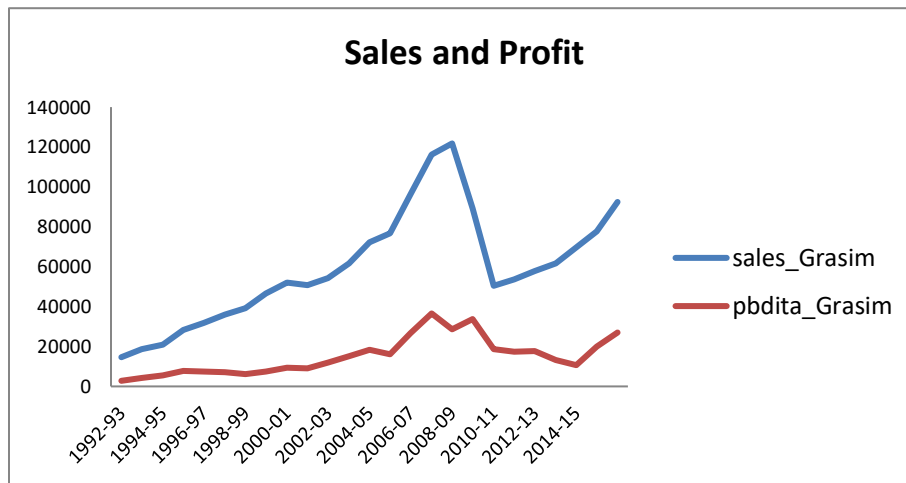
The sales of consolidated Grasim increased till 2008-09 which dropped in 2010-11 after which it increased to some extent. Profits had a similar trend (Fig 5.13). Grasim derives a major portion of revenue and profit from its cement business; hence, any changes in the performance of cement impacts the performance of the parent firm. The profit of UltraTech, the cement subsidiary of Grasim (where Grasim holds 60 percent of stake indirectly but hold all 100 per cent of stake directly and indirectly) declined to some extent in 2010-11 when the consolidated profit also fell. Despite high revenues in the cement business, the profit in this sector did not rise as smoothly (Fig 5.14). The profits of cement industry rose significantly till 2008-09, then fluctuated with a drop in 2010-11 and rose from 2013-14. For the VSF industry, the revenue rose with a slight drop in 2008; however, the profit fell after 2011 with a small drop in 2008 (Fig 5.15).

Fig 5.12 Total Assets of Grasim



Source: Prowess database

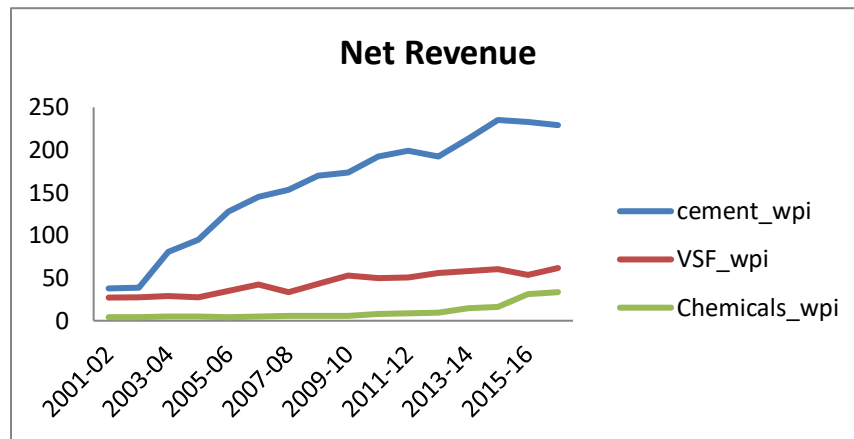
Fig 5.13 Sales and Profit of Grasim



Source: Prowess database

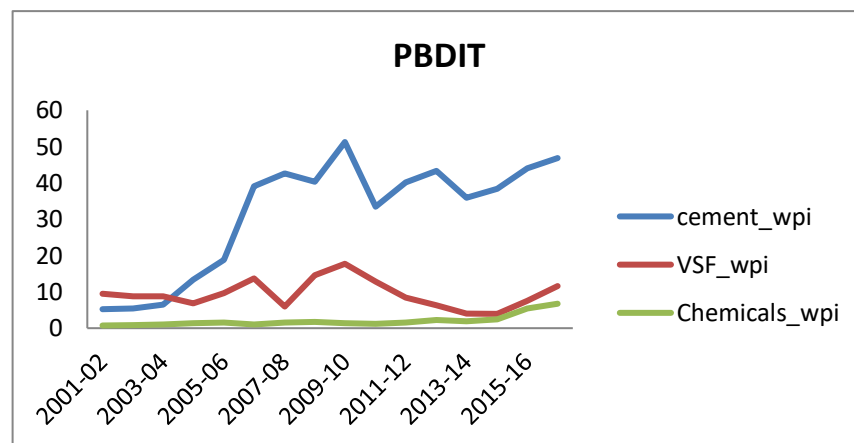
Although the company through their different announcements declared different openings and expansion of both cements and textile manufacturing outlets almost every year, the contribution in physical assets of Grasim fell since 1998 with a further steep fall in 2008 (Fig 5.16). On the other hand, the financial assets (financial investment+ loans and advances+ cash balances) rose steeply from 2001 till 2011. The rise of financial assets was predominantly due to huge financial investments(Fig 5.17). The investment rose about 5 times. This is because Grasim had to merge many related and unrelated firms as its subsidiaries and the investments in the group were 80 percent. This high investment of the firm increased the financial income which almost rose from 10 percent of profit in 2002-03 to 55 percent of profit in 2014-15 (Fig 5.18).

Fig 5.14 Net Revenue of Cement VSF and Chemical



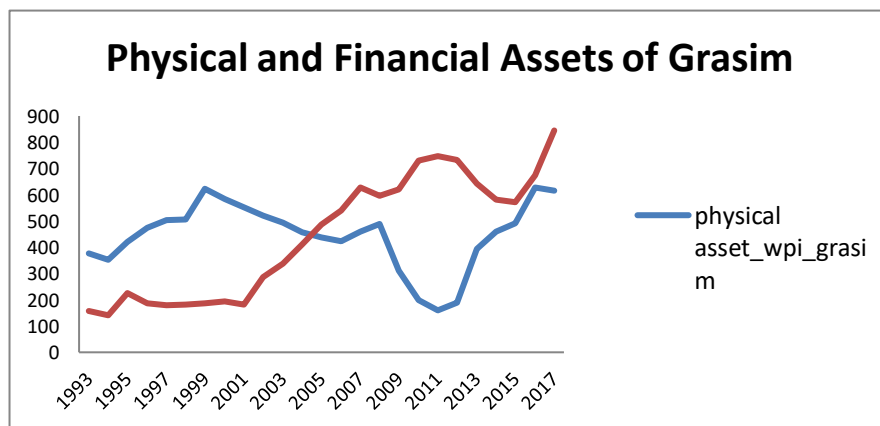
Source: Prowess database

Fig 5.15 Profit of Cement, VSF and Chemical



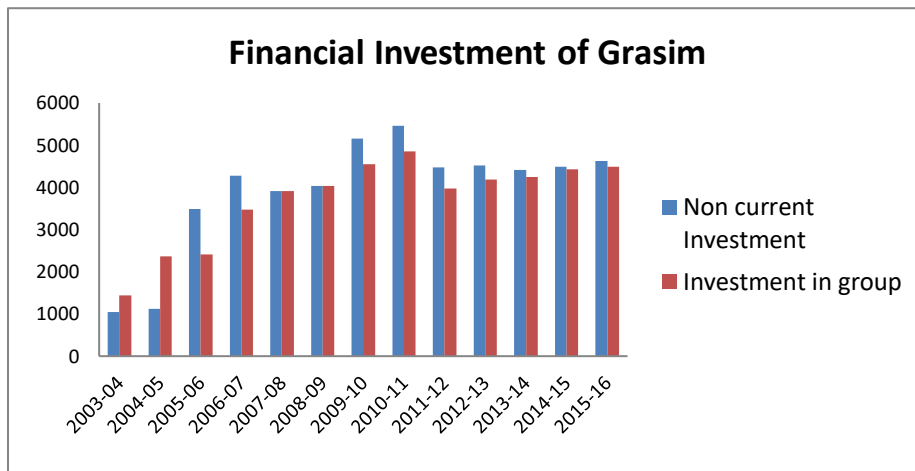
Source: Prowess database

Fig 5.16 Physical and Financial assets of Grasim



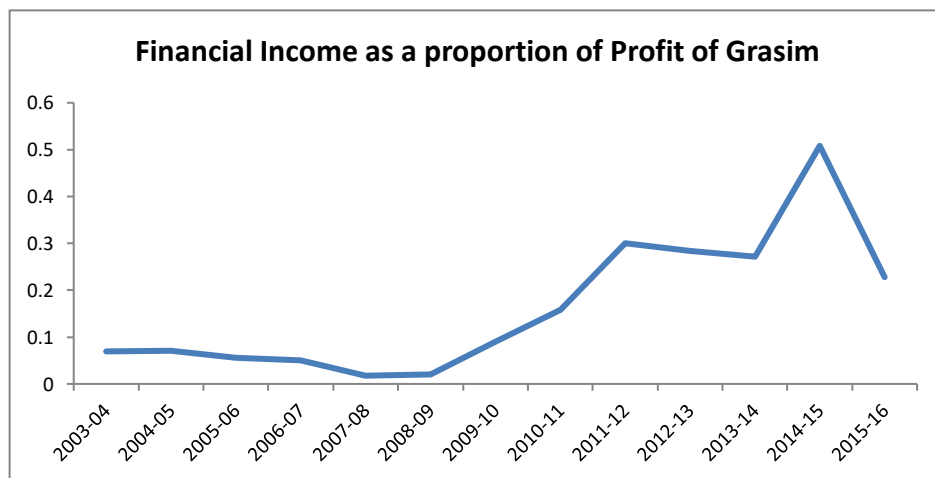
Source: Prowess database

Fig 5.17 Financial investment of Grasim



Source: Prowess database

Fig 5.18 Financial income of Grasim



Source: Prowess database

The mergers of Grasim were mostly within the group. It is to make the firm the most important holding company of Aditya Birla flagship, including with unrelated industries. Since Grasim was the best performing firm of the group, merging the less performing firms with Grasim was anticipated to give the underperformed firms a parent that would provide help in times of financial need. Hence, the mergers with Grasim were mostly with underperforming and highly indebted firms. These increased the consolidated debt

of Grasim. While the standalone debt remained around Rs 1000 crore, the consolidated debt was around nine times higher at Rs 9,000 crore from 2012 to 2016 (Table 5.4).

Table 5.4 Debt of Grasim

Year	Total debt Standalone (Rs Crore)	Debt to sales ratio (Standalone)	Total debt consolidated (Rs Crore)	Debt to sales ratio (Consolidated)
2012	1,295	0.26	9,561	0.38
2013	1,311	0.25	9,314	0.33
2014	1,132	0.20	9,142	0.31
2015	931	0.15	9,456	0.29
2016	1,615	0.18	9,023	0.25
2017	444	0.05	7,927	0.20

Source: Annual Financial statement of Grasim, various years

The performance of Grasim until the Grasim-Nuvo merger was better compared to the other firms of Aditya Birla Group. With the merger, the flagship company was vested with the responsibilities of a number of unrelated businesses. The debt of these firms along with the low performance of the indebted firms had to be taken care of by Grasim. Analyzing the performance of Grasim would be a complex task due to the heterogeneous nature of each business and the short time that has elapsed since the mergers.

Hence the overall picture of Grasim shows that the firm's engagement in financial investment is due to the merging of the underperformed firms that need a parent. Hence though the performance of Grasim has been better in terms of sales and profits compared to other Aditya Birla flagship companies, the financial investments seem greater than investments in physical assets.

5.4 Econometric Investigation and Model Specification

$$\frac{I}{K} = f\left(\frac{S}{K} + \frac{P - \text{Fin Inc}}{K} + \frac{\text{Fin Inc}}{\text{Fin Inv} + \text{LA}} + \frac{\text{Fin Inv grp}}{K}\right)$$

where,

I=real investment

K=Gross fixed Asset

S=sales

P= profit

Fin Inv= Financial investment

Fin Inc= Financial Income

LA= Loans and advances provided

Fin InvGrp= Financial investment in group

5.4.1 Implications and Expected signs

The dependent variable is the real investment defined by the change in gross fixed assets. The exogenous variables are sales, profits, financial investment coming from the group, and the non operating profits i.e., financial income (interest income + dividend income). All the variables are taken with a one-year lag. Sales and profits measure the real variables while financial investment and financial income are the financial variables. Sales and profits of the previous year are expected to have positive impact on current year real investment. Financial investment by other group firms can have a positive impact on investment by a firm if these resources are invested in physical assets. Financial income could be expected to have a positive relation with real investment from the supply side by providing more resources for investment. However, higher financial income could induce the firm to make more financial investments (depending on relative rates of return) and so could impact negatively on real investment. In analyzing the firm-level data, I have used variables relative to gross fixed assets, which enables comparison between firms of different size, capacity and characteristics.

5.4.2 Results and Findings

Table 5.5 Regression result

Aditya Birla Group		
real_inv	Coef.	Std. Err.
L1.S/k	.2644082(***)	.0788178
L1.fi_finc	-.0731986	.081868
L1. (P-Fin Inv/k)	1.114461(**)	.5796818
L1.Fin InvGrp/k	.0330868	.0303418

The results show a positive relation with sales and profit as expected. The coefficient of financial income is insignificant, implying that financial income coming to a firm does not affect real investment. Financial investment coming from the group has a positive relation.

5.5. Conclusion

This chapter has mainly focused on Aditya Birla group to find out whether the functioning of this group has been similar to the rest of the country's corporate sector and that of the biggest conglomerate of the country Tata group. It was found that the functioning of this group is similar to the rest of the corporate sector and the Tata group. The group's financial intermediation has increased post 2005, with financial assets rising faster than physical assets, which in turn has led to the rise of non-operational profits.

The two most important firms of the group, Hindalco (the aluminum giant) and Grasim (the textile and cement giant) were studied in more detail. Both these firms are leaders in their respective industries and both these firms are purely non-financial. The trend is similar in not only in whole group but also in these two most important firms as well. This can give the impression that the group has been following the path of financialization similar to that of US firms. However, with deeper analysis it is found that the financial investment made by the firms are mostly within the group, with financial incomes also mostly coming from the group. Similarly, financial investments into the

firm are largely from the group. Hence what appears as increased financial intermediation actually reflects the transfer of funds from one particular firm to another where the group found it profitable. Such investments in the form of financial assets are actually real investments inside the group.

The group has also been engaged in mergers and acquisitions. Aditya Birla has its global footprint in many countries across the globe. The group has made several acquisitions in different industries, the biggest of which was of Novelis at a cost of \$6 billion in 2006. This acquisition required huge borrowing, which increased the debt of the group. However even after a decade of the acquisition, the post-merger performance of Hindalco did not see any significant improvement. Rather, Hindalco as well as the consolidated group are bearing the burden of the debt. The debt of the consolidated group has increased ten times. The group has been engaged further in consolidating different underperforming units of the group under a parent firm, such as consolidating different unrelated businesses under Grasim. The restructure was designed such that the promoter holding increased. Similarly, Idea Cellular was merged with Nuvo for its underperformance, Pantaloons merged with Nuvo due to high debt, ABC Chemicals was merged with Grasim for its high debt and NUVO was merged with Grasim to get a parent. The mergers increased the debt of the consolidated Grasim. Stock swaps increased the promoter holdings from 31% to 39%. The presence of a complex ownership pattern, stock swaps and the possibility of designing the restructuring in such a way as to increase the promoter holding facilitated easy moving of funds within the group as well as mobilization of funds by issuing bonds and equity.

The empirical results supported the overall argument. The exercise showed that financial investment coming from the group positively affects real investment while financial income does not impact the real investment significantly. Therefore, despite the evidence of greater significance of financial variables, this does not reflect US-style financialization but a very different process specific to Indian business groups.

Table 5.6 Ownership Pattern																									
Tranfac					Ultratech Cement Ltd.				Idea Cellular Ltd.				Aditya Birla Money Ltd.				Grasim				Hindalco				
	2001	2005	2010	2015	2001	2005	2010	2015	2001	2005	2010	2015	2001	2005	2010	2015	2001	2005	2010	2015	2001	2005	2010	2015	
Total Shares (In %) - Shares held	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Promoters (In %) - Shares held	51	51	51	51	51.1	63	61.7		47	42			66.3	75	75		20	22	25.5	25.5	21.4	25.9	32	37	
Indian Promoters (In %) - Shares held	51	51	51	51	51.1	63	61.7		47	42			66.3	75	75		0.2	14.3	25.5	25.5	21.4	16.8	32	37	
Indian Promoter Individuals & HUF (In %) - Shares held						0	0.03		0	0									0.15	0.15			0.1	0.1	
Indian Central & State Govt. Promoters (In %) - Shares held			26	26																					
Indian Promoter Corporate Bodies (In %) - Shares held			25	25		63	61.7		47	42				75	75				25.4	25.4			31	36	
Indian Promoter FIs & Banks (In %) - Shares held																									
Other Indian Promoters (In %) - Shares held			0	0																			0.9	0.8	
Foreign Promoters (In %) - Shares held																									
Foreign Individuals (NRIs) Promoters (In %) - Shares held																									
Foreign Promoter Corporate Bodies (In %) - Shares held																									
Foreign Promoter Institutions (In %) - Shares held																									
Promoter Qualified Foreign Investor (In %) - Shares held																									
Other Foreign Promoters (In %) - Shares held																									
Persons acting in concert as promoters (In %) - Shares held		0.01															20	7.63			0.02	9.12			
Non-promoters (In %) - Shares held	49	49	49	49	48.9	35	36.6		53	58			33.7	25	25		80	78	63.7	60.1	78.6	74.1	59	55	
Non-promoter Institutions (In %) - Shares held	12.5	0.82	0.1	0.1	16.9	21	25.4		17	29							47	43.2	43.2	38.9	41.2	39.8	45	41	
Non-promoter Mutual Funds/ UTI (In %) - Shares held	10.9	0.03	0.1	0.1	3.1	1.5	2.38		0.7	1.7							9.3	6.58	4.36	5.78	15.3	6.16	2.9	0.6	
Non-promoter Banks, FI's, Insurance Cos. (In %) - Shares held	1.57	0.78	0	0	6.76	7	3.5		6.3	2.6							15	13	15.4	10.3	8.37	10.9	13	14	
Non-promoter Insurance Companies (In %) -						6.9	3.3		1.9	1.5									15.2	10.2			12	9.8	

Shares held																							
Non-promoter Financial Institutions & Banks (In %) - Shares held			0	0			0.1	0.15			4.4	1.1				0.22	0.09			1.1	4		
Non-promoter Central & State Government (In %) - Shares held								0.05												0	0		
Non-promoter FIIs (In %) - Shares held	0.01	0.01	0	0		7.04	12	19.5		9.7	24			23	23.7	23.4	22.8	17.6	22.7	29	27		
Non-promoter Venture Capital Funds (In %) - Shares held											0.1												
Non-promoter Foreign Venture Capital (In %) - Shares held																							
Non-promoter Qualified Foreign Investor - Institutions (In %) - Shares held																							
Other Institutional Non-promoters (In %) - Shares held																							
Non-promoter Non-institutions (In %) - Shares held	36.6	48.2	49	49		32	14	11.2		36	29		33.7	25	25	33	34.8	20.5	21.1	37.4	34.3	15	14
Non-promoter Corporate Bodies (In %) - Shares held	1.9	8.74	7.6	8		14.7	5	4.41		0.5	0.7		1.31	9.27	1.9	12	7.61	5.33	7.52	7.62	6.83	4.1	3.8
Non-promoter Individuals (In %) - Shares held	34.6	39.4	41	40		16.6	7.8	5.92		2.6	1.6		32.4	15.3	22	20	14.8	11.5	10.1	12.6	10.3	8.2	7.5
Non-promoter Investors holding nominal invest. upto Rs 1 lakh (In %) - Shares held	29	28					7.1	5.86		2.4	1.2			9.3	12			10.5	9.22			7.6	7.1
Non-promoter Investors holding nominal invest. over Rs 1 lakh (In %) - Shares held	12	12					0.7	0.06		0.2	0.4			5.96	11			1.02	0.88			0.6	0.4
Non-promoter Qualified Foreign Investor (In %) - Shares held																							
Other Non-institutional Non-promoters (In %) - Shares held	0.04	0.02	0.7	0.7		0.74	0.9	0.83		33	27		0.47	1			12.4	3.72	3.52	17.1	17.2	2.4	2.6
Shares held by Custodians (In %) - Shares held			0				2.1	1.75			0						10.8	14.4			8.6	7.9	

CHAPTER 6

Conclusion and Policy Recommendations

Financialization has been one of the most discussed topics in recent times in the advanced countries. The increasing significance of financialization with its consequent impact on real economies in the western world has been the motivation for this thesis to examine this process in emerging economies like India. Financialization is a broad concept defined in many ways by many economists. In this thesis, I have defined relatively narrowly, as the rising involvement of the non-financial enterprises in financial operations, holding increasing and significant amount of financial investments in their portfolio and earning a rising proportion of income from these financial investments. The rising significance of finance in India has been evident from the 1990s. Financial liberalization opened up financial markets and had significant implications for the non-financial sector as well. There were rising interconnections between the capital market and the non-financial corporate sector in the post-reform period. The non-financial corporate sector has been increasingly involved in investment in financial assets and financial subsidiaries and has derived an increasing share of income from these financial investments.

The US corporate sector is mostly characterized by standalone entities with separation of ownership and management. However, the management aligns with the ownership for their benefit and works in accordance with the benefit of the owners. There is a presence of large institutional owners which pressurizes the management and board of directors to provide huge dividends and capital gains to the shareholders. The main motive of the institutional investors is to receive high dividend income and capital gains. Hence US managements tend to adopt policies and strategies that provide a constant flow of dividend payment and capital gains. They seek every possible means to raise share prices, like huge buybacks instead of reinvesting in productive means, which are harmful to the development of the firms as well as the economy. The strategy of the firms shifted from 'retain and reinvest' to 'downsize and distribute', which can reduce investment and growth in the economy.

By contrast, the Indian corporate sector is dominated by business groups with complex ownership structures and significant inter-corporate investment, typically

with family members at the apex. Hence the managerial control lies in the hands of the apex body. The presence of a complicated web of cross-holding makes it difficult for the outside minority shareholders to get information about the inside management and to influence decisions. Dividend payments are mostly received by the majority of shareholders who are the corporate bodies within the group. The dividend payment of one firm is the dividend income of the other. This enables easy mobilization of resources through non-operating channels within the group and easy cash flow as well as non-cash flow facilities due to the presence of complex interrelated transactions.

The financing pattern of the corporate sector in India has changed from the pre-liberalization period to the post-liberalization period. In the pre-liberalization period, these firms were mostly dependent on internal resources of finance, among which retained profits and reserves were prominent. Borrowing was the single external source of finance. In the post-reform period, the scenario changed and the firms started to depend on external finance. Although borrowing remained one of the important sources of external resources, the capital market started gaining in importance, and the government came up with different policies to encourage resource mobilization from the capital market. Though IPOs did not show any significant improvement, private placement showed a significant rise. Mutual funds have also grown in significance during this period. Non-financial firms have begun to depend more on the capital market.

The physical assets of the non-financial firms declined relatively over the years while the share of financial assets increased. This seems to suggest that the non-financial firms were increasingly engaging in financial activities and diverting the investible funds more towards investment in securities. However, a deeper examination revealed that this pattern does not fall into the type of financialization described for the US and other developed economies. Financial investments of non-financial firms were mostly in shares and debentures of subsidiaries or other firms belonging to the same business group. The business groups have been investing within the group in those firms where the rate of return was expected to be higher and using financial investments to transfer the required resources across firms. This in turn was reflected as a high proportion of financial investment, but it was actually real investment in profitable activities of other firms in the group. Therefore, although it appeared that Indian firms have been

investing more in financial assets to get higher financial incomes, the reality was rather different. Within business groups that still dominate the Indian corporate scene, firms have been investing within group companies as part of an overall groups strategy, so as to get a high rate of return in particular industries. Returns from such investment are expressed as financial income, which therefore seems to have been increasing.

The thesis further made a detailed study of functioning and performance of two business groups, Tata and Aditya Birla, to examine the financial engagements of these groups.

Tata Group of industries works through a complex ownership pattern. After becoming the chairman of Tata Sons(the holding company of the Tata Group of Industries) Ratan Tata changed the holding pattern of the group to a more complex cross-holding structure, with group firms holding high stakes in other group firms so to keep the decision making power in the hands of the holding company. To maintain the complex structure of cross holding, the firmsspenthuge share of their reserves to buy financial securities within the group. The ownership structure is designed to maintain the control with Tata Sons. The dividend income earned by Tata Sons from the group has risen significantly. This has led Tata Sons to channelize the resources to higher profitable avenues from less profitable business and also come to the rescue of highly indebted firms. The huge debt of the firms in the group is serviced by issuing bonds and equity from the capital market as well as from the group. Since the shareholders are mostly the member firms of the group, the funds raised are mostly through groups. Thus the firms are getting increasingly engaged in financial investment in other firms inside the group and these investments in equity and debenture of the group are being utilized for investing in real assets of those firms where the group found it profitable. Financial income associated with these financial investments has also risen, but such income does not affect the real investment negatively.

The group has a high level of mergers and acquisition both domestically and internationally. However, the post-performance of the mergers and acquisitions did not improve significantly compared to the pre-merger performance, and in some cases, the post-merger performance deteriorated. This has affected the overall performance of the firms. Tata group has been investing in group firms as well as

acquisitions of unrelated firms over the period. The group has been earning significant profits from some firms like TCS, Tata Motors and other Tata companies; however, the greenfield investments by the group have not been as high as expected. This is due to the fact that significant proportion of the profits are required to service debts incurred because of the big acquisitions the group made.

Aditya Birla Group, like the Tata group, is also engaged in financial activities. The financial assets of the non-financial firms of the group have increased more than the physical assets. These investments are mostly within the group, and the financial income from these investments comprise a considerable portion of the total profit of the group. Aditya Birla group like Tata Group has also been engaged in big mergers and acquisitions. The biggest was the acquisition of Novelis, which led the group to fall into huge debt, the burden of which persists to the present. Even a decade after the acquisition, the post-merger performance of Hindalco did not see any significant improvement. Rather, Hindalco as well as the consolidated group are bearing the burden of the debt. The debt of the consolidated group has increased ten times. The group has also been engaged further in consolidation of different underperforming units of the group under a parent firm, such as Grasim. But the restructuring has been designed such that the promoter holding increased. The stock swaps increased the promoter holding in the merged firms from 31% to 39%.

With the rise in financial investment, a considerable portion of the profit comes from this financial income. The shareholders are the insiders and corporates within the group. Hence it is found that the financial investment made by the firms are mostly within the group, with financial incomes mostly coming from the group. Similarly, financial investments into the firm are largely from the group. Hence what appears as increased financial intermediation actually reflects the transfer of funds from one particular firm to another where the group found it profitable. Such investments in the form of financial assets are actually real investments inside the group. Therefore, despite the evidence of greater significance of financial variables, this does not reflect US type of financialization but a very different process specific to Indian business groups.

This suggests that the question of why investment rates in India have been falling cannot be answered by a simplistic reference to financialization, but must be sought in

other causes. Further, policies to deal with financialization in India should take a somewhat different approach that recognizes the specific character of business groups and their functioning. Some recommendations in his regard are briefly stated below.

- Policies should aim at providing incentives for more greenfield projects to boost production in the economy and also give special emphasis on the development of "strategic industries" like the energy and power sector to foster indigenous growth. These could include a combination of tax concessions and financial subsidies to infrastructural and manufacturing industries to get high growth, since these sectors play a very important role in the development of the economy.
- Non-financial firms need to reduce their overall debt levels. With very high debt, significant proportion of the profits are required to service debts which lead to the reduction of investment in real assets. Hence more emphasis needs to be given of the non-financial firms investing their resources in the real sector. This requires addressing the problem of persistent and increasing NPAs in the banking sector.
- R&D also needs special attention from the government. Incentives like subsidies and tax concessions can help the industries upgrade their production technology and gainfully compete in the foreign market. These should include incentives special concessions for research with long gestation gaps, which are otherwise difficult for the private firms to incur.
- Resource fund mobilization from international capital flows should aim at long-term investment rather than short-term foreign institutional investors. If the companies are to reap the full benefit of the global capital market, there is a need to attract long-term capital.
- A tighter regulation of the domestic financial system is required supplemented by global and regional measures to discourage short-term speculative flows and encouraging domestic credit system, along with higher utilization of reserve funds of the firms.

- Borrowings need to be of long-term nature which could be invested in long-term physical capital. Policies need to encourage long-term borrowings for development purposes. Moreover, there should be periodic and systematic checks of the proper utilization of these borrowings.
- The government and the RBI needs to consider the revival and strengthening of regulated development banking operations, which could finance start-ups and encourage new entrepreneurs with projects. This would also increase macro level investment as well as investment in infrastructure. Development banks can also provide predictable source of finance and can insulate the industrial sector from the volatility of capital markets.
- Policies should focus on banking and institutional finance products and services to reach every corner of the country and every category of the economy and the population. This could also mobilize more savings and investments so that the nation could survive on its own financial strength rather than depending on the external sources which increases the vulnerability to external shock.
- The rising participation of the banks in the stock market with investing in equity market, providing advances against equity and offering guarantees to the broking community has increased the banks' vulnerability to capital market shocks. Moreover, the nexus between banks and the brokers of stock market might fuel speculation in the market as the extra liquidity banks are providing could encourage speculative investments hence rising the stock market volatility undermining the stability of bank. Hence policies should aim at a stable and regulated banking system providing finance to the industrial and economic development and maintaining a regulated relation of the banks and stock market to benefit from both.
- Reducing interest rates can boost investment in the physical sector. Rather than relying on inflation targeting and high interest rates to have high capital inflows and balance of payments, a cautious combination of capital control and interest rate management would provide productive and long term capital inflows encouraging domestic investment.

For the Business Groups

- With 30 percent of the corporate sector comprising family owned business groups the board of directors and the shareholders being primarily the insiders, there might raise issues relating to majority and minority shareholders with majority shareholders appropriating the larger share at the cost of the other. Policy needs to be focused on this concentration of power, to keep in representatives from outside the family and the management to better serve a transparent procedure.
- Reduction of complexity in the ownership pattern to have transparency in the process of financial holdings and a check in the financial income. With the high complex ownership pattern between the firms inside the group, the transparency in the decision making of the group ceases to exist. This disallows any checks and balances for the insiders for a high level of financial investment within the group through stock swaps and other forms. Hence policy requires to tackle this high complex web of ownership holdings and financial investment within the group. Policies need to be addressed to include effective succession planning, the implication of cross-holdings and ensuring risk management strategies.
- Mergers and acquisitions require high resources of the firm as well as increases the debt level. With the post-merger performance worse than the pre-merger increases the burden of not only the high debt incurred for the acquisitions but also the needs to bear the indebted and less performing firms. The policy needs to address and put in place checks to judge both the merger and the merged firm's ability to improve their performance in the future.
- M&A in overseas countries for first time should require knowledge on host countries institutional aspects, foreign relation, economic performance which could have in dept subsequent impact. Firms should perform thorough analysis on issues such as pre merger planning, deal structure, post merger integration to perform better in the post merger period.

- More focus on the proper utilization of the non-operational income. The financial income as a proportion of total income has been rising which needs to be used for investment in the real sector. Policy checks are required to direct these financial income to reinvestment in real sector, and are not further utilized for financial investment or financial payments.
- Last but perhaps most important, proactive fiscal and industrial policies are required, which would support domestic productivity growth and boost aggregate demand in the economy.

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APPENDIX

Chapter 3

Table A3.1 Credit-Deposit Ratio and Investment in Government Securities as a percent of Total Earning Assets of SCBs, 1990-91 to 2016-17

Year	Credit-Deposit Ratio	Investment in Government Securities (Rs Crore)	Total earning assets (Rs Crore)	Investment as % of total assets
1990-91	60.40%	499.98	2208.09	22.64%
1991-92	54.43%	627.27	2578.94	24.32%
1992-93	56.59%	759.45	2972.16	25.55%
1993-94	52.17%	1012.02	3561.24	28.42%
1994-95	54.69%	1176.85	4351.19	27.05%
1995-96	58.55%	1322.27	4860.35	27.21%
1996-97	55.06%	1588.90	5386.55	29.50%
1997-98	54.15%	1869.57	6247.25	29.93%
1998-99	51.66%	2232.17	7217.67	30.93%
1999-00	53.60%	2784.56	8457.69	32.92%
2000-01	53.13%	3400.35	10034.92	33.89%
2001-02	53.45%	4111.76	11432.58	35.97%
2002-03	56.93%	5234.17	13941.15	37.54%
2003-04	55.89%	6547.58	16355.49	40.03%
2004-05	64.72%	7189.82	19789.85	36.33%
2005-06	71.46%	7007.42	24059.85	29.12%
2006-07	73.94%	7760.58	29803.69	26.04%
2007-08	73.88%	9586.61	36816.28	26.04%
2008-09	72.39%	11557.86	43027.25	26.86%
2009-10	72.22%	13783.95	50453.75	27.32%
2010-11	75.69%	14971.48	59172.50	25.30%
2011-12	78.05%	17350.18	68508.22	25.33%
2012-13	77.93%	20036.53	77687.79	25.79%
2013-14	77.79%	22111.94	87183.10	25.36%
2014-15	76.60%	24897.51	96230.90	25.87%
2015-16	77.72%	26239.33	105229.65	24.94%
2016-17	72.90%	30297.48	116249.32	26.06%

Source: Chandrasekhar and Ghosh (2018)

Table A3.2: NPA Ratio of Public sector Banks in India (percent)

Year	Gross NPAs to Advances Ratio	Gross NPAs to Assets Ratio	Net NPAs to Net Advances Ratio	Net NPAs to Assets ratio
1992-93	23.1	11.8		
1993-94	24.8	10.8		
1994-95	19.5	8.7	10.7	4.0
1995-96	18.0	8.2	8.9	3.6
1996-97	17.8	7.8	9.2	3.6
1997-98	16.0	7.0	8.2	3.3
1998-99	15.9	6.7	7.1	3.1
1999-00	14.0	6.0	6.9	2.9
2000-01	12.4	5.3	6.3	2.7
2001-02	11.1	4.9	5.8	2.4
2002-03	9.4	4.2	4.5	1.9
2003-04	7.8	3.5	3.1	1.3
2004-05	5.5	2.7	2.0	1.0
2005-06	3.6	2.1	1.3	0.7
2006-07	2.7	1.6	1.1	0.6
2007-08	2.2	1.3	1.0	0.6
2008-09	2.0	1.2	0.9	0.6
2009-10	2.2	1.3	1.1	0.7
2010-11	2.4	1.4	1.1	0.7
2011-12	3.3	2.0	1.5	1.0
2012-13	3.6	2.4	2.0	1.3
2013-14	4.4	2.9	2.6	1.6
2014-15	5.0	3.2	2.9	1.8
2015-16	9.3	6.0	5.7	3.5
2016-17	12.5			

Source: Chandrasekhar & Ghosh (2018)

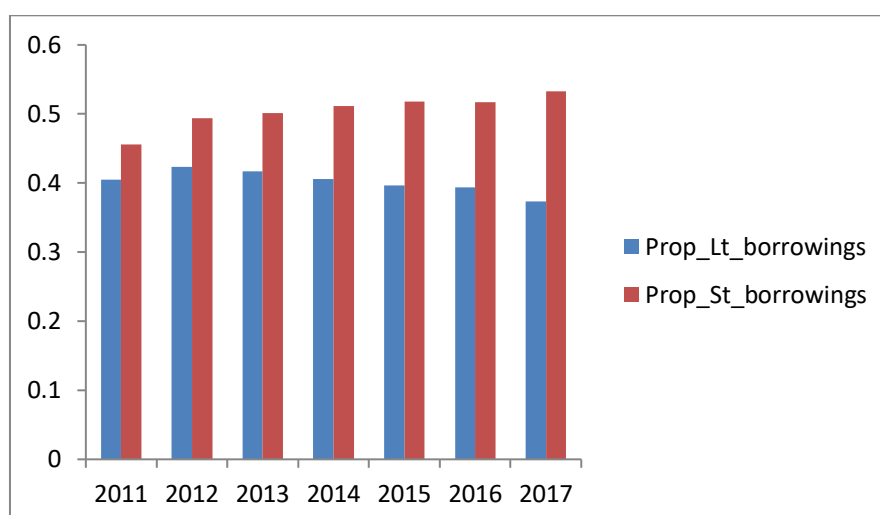
Table A3.3 . New Capital Issue by Non-Government Public Limited Companies (Rs Billion)

	Of capital Issue													
	Equity Shares		Preference Shares		Debentures		Total	New					Existing	
	No. of issues	Amount	No. of issues	Amount	No. of issues	Amount	No. of issues	Amount	No. of issues	Amount	No. of issues	Amount	No. of issues	Amount
1981-82	357	3.1	5	0.03	73	2.9	435	5.98	256	2.33	179	3.66		
1982-83	570	2.6	8	0.02	66	4.45	644	7.06	498	2.15	146	4.91		
1983-84	734	3.8	7	0.02	53	4.54	794	8.38	651	2.95	143	5.42		
1984-85	402	3.6	5	0	64	6.93	471	10.56	338	3.09	133	7.47		
1985-86	758	9.0	9	0.01	83	8.46	850	17.45	536	6.27	314	11.18		
1986-87	424	10.1	3	0.01	94	15.7	521	25.81	244	7.35	277	18.46		
1987-88	174	11.1	5	0.07	46	6.76	225	17.88	83	3.18	142	14.7		
1988-89	256	10.3	6	0.03	79	21.9	341	32.25	121	12.33	220	19.92		
1989-90	269	12.2	4	0.08	134	52.8	407	65.1	102	6.13	305	58.97		
1990-91	246	12.8	3	0.13	115	30.2	364	43.12	86	7.37	278	35.75		
1991-92	366	19.2	3	0.02	145	42.8	514	61.93	94	9.41	420	52.52		
1992-93	868	99.5	1	0.01	171	98.5	1040	198	188	33.11	852	164.9		
1993-94	983	99.6	1	0	149	93.7	1133	193.3	244	55.8	889	137.5		
1994-95	1548	174.1	9	1.31	121	88.7	1678	264.2	368	64.65	1310	199.5		
1995-96	1591	118.8	9	1.5	63	39.7	1663	160	577	31.17	1086	128.8		
1996-97	801	61.0	5	0.75	32	42.3	838	104.1	367	22.7	471	81.39		
1997-98	89	11.6	1	0.04	12	19.7	102	31.38	27	6.75	75	24.63		
1998-99	33	25.6	3	0.6	12	23.9	48	50.13	7	0.58	41	49.55		
1999-00	69	27.5		0	10	24	79	51.53	10	2.22	69	49.31		
2000-01	128	26.1	2	1.42	9	30.7	139	58.18	111	23.12	28	35.06		
2001-02	6	8.6		0	13	48.3	19	56.92	4	0.88	15	56.04		
2002-03	5	4.6		0	4	14.2	9	18.78	3	2.07	6	16.71		
2003-04	35	24.7		0	3	12.5	38	37.22	9	13.84	29	23.38		
2004-05	51	114.5		0	3	16.3	54	130.8	22	47.78	32	83.01		
2005-06	128	209.0	1	0.1	2	2.45	131	211.5	77	102.6	54	108.9		
2006-07	114	297.6		0	3	8.5	117	306	72	256.6	45	49.41		
2007-08	111	568.5	1	54.81	2	8.09	115	636.4	80	370.9	35	265.5		
2008-09	45	146.7		0	1	15	46	161.7	21	20.33	25	141.4		
2009-10	67	253.0		0	4	26.8	71	279.8	36	144.8	35	135		
2010-11	70	248.3		0	6	26.3	76	274.6	49	161.5	27	113.1		
2011-12	49	81.5		0	14	75.3	63	156.8	33	57.77	30	99.03		
2012-13	48	138.9		0	6	22.2	54	161	32	49.39	22	111.6		
2013-14	53	58.1		0	17	58.7	70	116.8	38	12.36	32	104.5		
2014-15	63	93.2		0	23	77.4	86	170.6	46	30.39	40	140.2		
2015-16	87	240.0		0	9	27.1	96	267.2	73	142.6	23	124.6		
2016-17	116	303.6		0	16	295	132	599.1	104	280.6	28	318.5		

Table A3.4 Mutual Funds

Year	UTI	Bank-sponsored mutual funds	FI-sponsored mutual funds	Private sector mutual funds	Total
1980-81	0.52	-	-	-	0.52
1990-91	45.53	23.52	6.04	-	75.09
1993-94	92.97	1.48	2.38	15.60	112.4
1994-95	86.11	7.66	5.76	13.22	112.7
1995-96	-63.14	1.13	2.35	1.33	-58.3
1996-97	-30.43	0.07	1.37	8.64	-20.3
1997-98	28.75	2.37	2.04	7.49	40.65
1998-99	1.70	-0.89	5.47	20.67	26.95
1999-00	45.48	3.36	2.96	169.38	221.1
2000-01	3.22	2.49	12.73	92.92	111.3
2001-02	-72.84	8.63	4.06	161.34	101.1
2002-03	-94.34	10.33	8.61	121.22	45.82
2003-04	10.50	45.26	7.87	415.10	478.7
2004-05	-24.67	7.06	-33.84	79.33	27.88
2005-06	34.24	53.65	21.12	415.81	524.8
2006-07	73.26	30.33	42.26	794.77	940.6
2007-08	106.7	75.97	21.78	1382.24	1586
2008-09	-41.12	44.89	59.54	-305.38	-242
2009-10	156.5	98.55	48.71	479.68	783.4
2010-11	-166.3	13.04	-169.88	-162.81	-486
2011-12	-31.79	3.89	-30.98	-395.25	-454
2012-13	46.29	67.08	22.41	652.84	788.6
2013-14	4.01	48.45	25.72	467.61	545.7
2014-15	-12.78	-11.48	-9.94	1063	1028
2015-16	154.1	274.21	13.88	875.33	1317
2016-17	201.4	425.77	64.06	2742.89	3434

Fig A3.1 Long and short term borrowings



Chapter 4

Table A4.1

	Tata Steel Consolidated debt	Tata Motors Consolidated debt	Tata Power Consolidated debt	Tata Chemical Consolidated debt	Indian Hotel Consolidated debt	Tata global beverages consolidated debt	Consolidated Debt
2003-04	3497.95	1698.42	2,143.06	1,851.56	2,074.97	1,797.22	13063.18
2004-05	3315.63	2714.2	3,385.16	1,851.56	1,969.33	1,632.36	14868.24
2005-06	3377.43	3379.14	3,878.01	1,851.56	1,500.95	1,698.47	15685.56
2006-07	24925.53	7301.9	4,876.14	1,885.33	2,055.14	4,577.76	45621.8
2007-08	53592.75	11584.87	9,203.28	4,865.26	3,466.83	2,609.30	85322.29
2008-09	59900.5	34973.85	13,949.62	6,292.84	4,646.88	2,431.07	122194.76
2009-10	53100.35	35192.36	18,353.41	4,998.04	4,460.69	1,796.78	117901.63
2010-11	54545.13	30362.15	23,606.38	5,114.78	2,467.98	1,021.37	117117.79
2011-12	52212.32	38704.07	33,429.24	5,946.13	3,253.80	888.26	134433.82
2012-13	57247.18	43722.28	36,655.43	6,950.57	3,678.85	1,016.83	149271.14
2013-14	70667.59	54954.47	36,685.54	8,369.61	3,245.13	1,401.33	175323.67
2014-15	71578.88	69211.48	38,713.24	7,001.44	4,631.06	1,265.98	192402.08
2015-16	82869.9	61961.17	38,502.79	8,567.62	3,512.60	912.68	196326.76
2016-17	84625.37	74489.12	42,922.75	5,082.10	2,808.02	770.33	210697.69
2017-18	90949.08	77994.35	42,683.59	5,534.23	2,334.21	1,056.18	220551.64

Table A4.2

	Mergers and Acquisitions of Tata Group
1996	Tata Teleservices Ltd was established
1998	Tata Indica was launched by Tata Motors
2000	Tata Tea acquires Tetley group in the UK.
2001	Tata AIG was formed through a joint venture with American International Group (AIG)
2002	Tata Sons acquires VSNL from State government
2004	Tata Motors got listed in New York Stock Exchange
	Tata Motors acquires Daewoo Motors of South Korea
	TCS goes public in the largest public sector IPO in the Indian market
2005	Tata Steel acquires NatSteel of Singapore
	VSNL acquired Tyco Global Network
	Taj Acquires Starwood of Sidney
	Tata Motors acquire INCAT International, UK
	Tata Auto Comp System acquires WundschWeidinger, Germany
	Tata Chemicals acquire Indo MarocPhosphere, Morocco
	Tata Tea acquires Good Earth Corporation, USA
	Tata Motors acquire Hispano Carrocera, Spain (21%)
	Tata Industries acquire Indigene Pharmaceuticals
2006	Tata Sky was launched
	Tata Steel acquires Millenium Steel, Thailand
	Tata Coffee acquires 8'O'Clock Coffee, USA
	Tata Tea acquires Glaceau (Energy Brands), USA
	Indian Hotels acquires Ritz-Carlton Boston, USA
	Tata Tea acquires JEMCA, Czech Republic
2007	Tata Steel acquires Corus

	Tata Communications acquires Transtel Telecoms, South Africa
	Taj acquires Campton Place Hotel in San Fransisco
2008	Tata Motors acquires Jaguar and Land rover from Ford Motors
	Tata Chemicals acquire General Chemical Industrial Products,USA
2009	Tata Sons acquires Piaggio Aero Industries, Italy
	TRF acquires Dutch Lanka Trailer Manufacturer in Sri Lanka
	Tata Motors acquires Hispano Carrocera
	Tata Global Beverages acquires Grand
2010	TRF acquires UK-based Hewitt Robins International
	Tata Tea announces a joint venture with PepsiCo for health drink
	Tata Chemicals acquires 100 per cent stake in vacuum salt producer, British salt, UK
2011	Tata Medical centre established in Kolkata
	Tata BP solar becomes wholly owned Tata company
2012	Tata Global Beverages and Starbucks forms a joint venture
2013	Group Executive Council is formed
	Tata technologies acquire Cambric, a US-based engineering service company
	TCS acquires Alti in France
	Tata Tayp and Air International came into a joint venture
2014	TCS and Mitsubishi join hands
	Tata Global Beverages, UK acquires 100 percent stake in Earth Rules
2015	Tata AutoComp system inaugurates plant in China
2016	Tata Steel inaugurates first greenfield ferro-chrome plant in India
2017	GE and Tata group enter into a partnership to manufacture LEAP engine components in India

Source: Tata Website

Fig A4.1 Composition of Assets

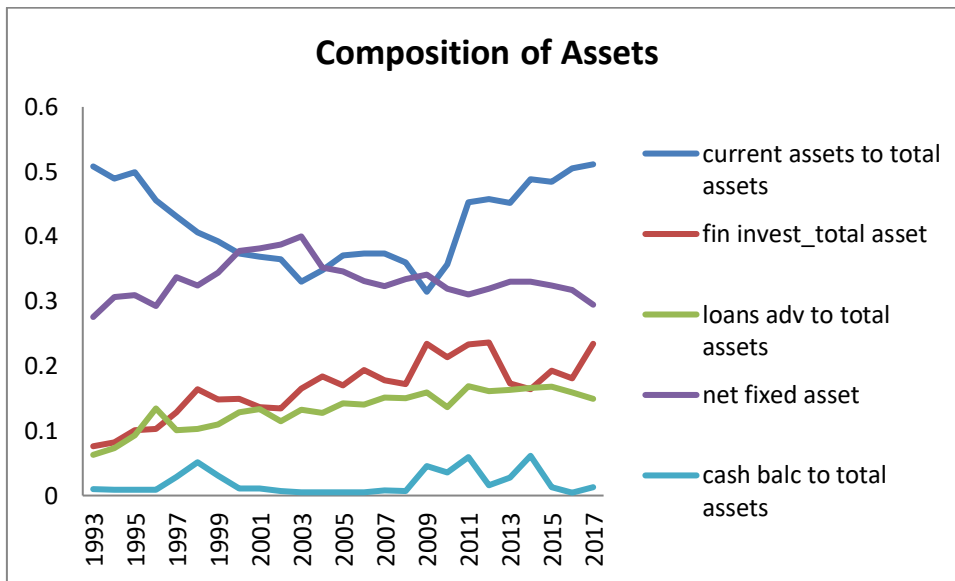


Fig A4.2 Composition of financial investment

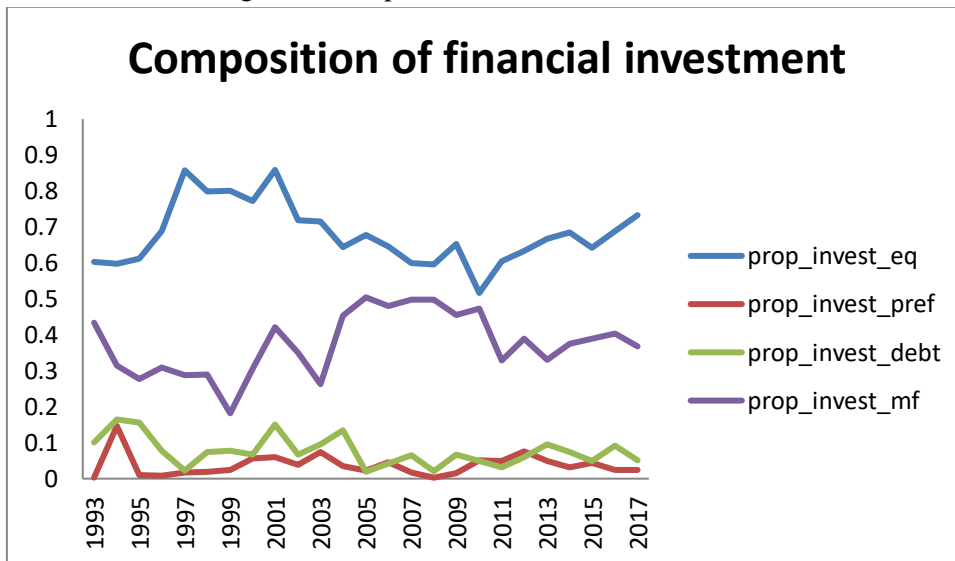


Fig A4.3 Financial investment within group

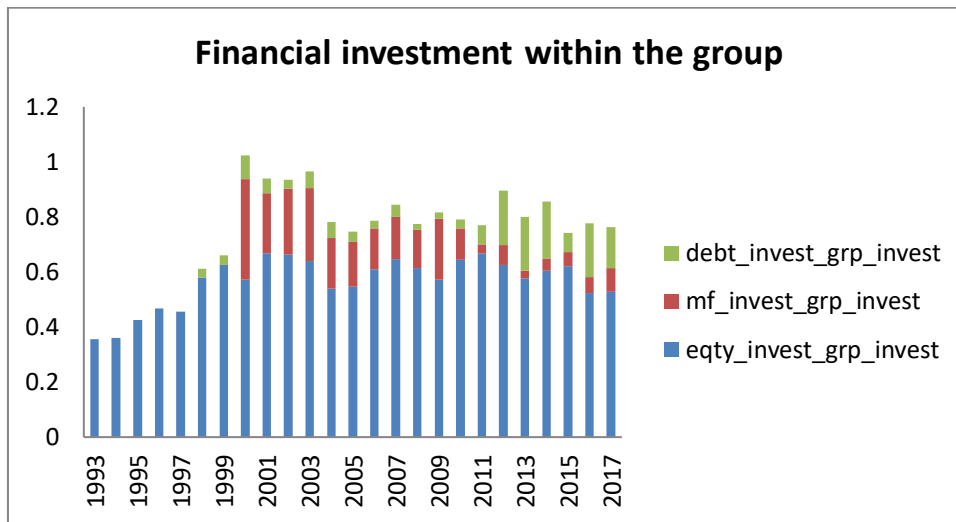
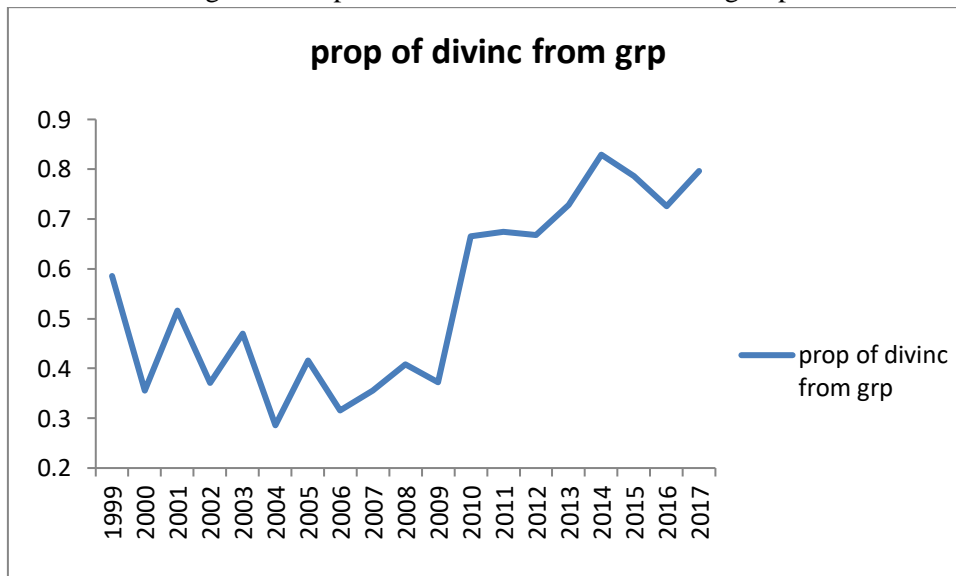


Fig A4.4 Proportion of dividend income from group



Chapter 5

Table A 5.1

Hindalco Ownership Structure			Group's Proportion Of Ownership	
Company Name	Relationship with the Company	Country of Incorporation	2013	2014
Minerals & Minerals limited	Subsidiary	India	100.00%	100.00%
Aditya Birla Chemicals (India)	Subsidiary	India	54.65%	54.65%
Utkal Alumina international Limited	Subsidiary	India	100.00%	100.00%
Suvas holdings Limited	Subsidiary	India	51.00%	51.00%
Renukeshwar Investment & Finance Limited	Subsidiary	India	100.00%	100.00%
Renuka Investment & Finance Limited	Subsidiary	India	100.00%	100.00%
Dahej Harbour and Infrastructure limited	Subsidiary	India	100.00%	100.00%
Lucknow Finance Company limited	Subsidiary	India	100.00%	100.00%
Hindalco-Almex Aerospace Limited	Subsidiary	India	97.18%	97.18%
Tubed Coal Mines Limited	Subsidiary	India	60.00%	60.00%
East Coast Bauxite Mining Company Private Limited	Subsidiary	India	74.00%	74.00%
Mauda Energy Limited	Subsidiary	India	100.00%	100.00%
Utkal Alumina technical & General Service Limited	Subsidiary	India	100.00%	-
Birla Resources Pty. Limited	Subsidiary	Australia	100.00%	100.00%
Aditya Birla Minerals Limited	Subsidiary	Australia	51.00%	51.00%
A V Minerals	Subsidiary	Netherland	100.00%	100.00%
A V Metals Inc.	Subsidiary	Canada	100.00%	100.00%
Novelis Inc.	Subsidiary	Canada	100.00%	100.00%
Hindalco Do	Subsidiary	Brazil	100.00%	-
Hindalco Guinea SARL	Subsidiary	South Africa	100.00%	100.00%
Mahan Coal Limited	Subsidiary	India	50.00%	50.00%
MNH Shakti	Subsidiary	India	15.00%	15.00%
Hydromine Global	Subsidiary	British Virgin Island	45.00%	45.00%
Idea Cellular Limited	Subsidiary	India	6.89%	6.89%
Aditya Birla Science & Technology Company Limited	Subsidiary	India	49.00%	49.00%
Birla Maroochy Pty. Limited	Subsidiary	Australia	51.00%	51.00%
Birla Nifty Pty. Limited	Subsidiary	Australia	51.00%	51.00%
Birla Mt. Gordon Pty. Limited	Subsidiary	Australia	51.00%	51.00%

Table A 5.2

Grasim

Group's Proportion

Company Name	Relationship with the Company	Country of Incorporation	Of Ownership	
			2013	2014
SamruddhiSwastik Trading And Investments Limited	Subsidiary	India	100%	100%
Sun God Trading And Investments Limited	Subsidiary	India	100%	100%
Grasim Bhiwani Textiles Limited	Subsidiary	India	100%	100%
UltraTech Cement Limited	Subsidiary	India	60.29%	60.25%
Dakshin Cements Limited	Subsidiary	India	60.29%	60.25%
Harish Cement Limited	Subsidiary	India	60.29%	60.25%
Gotan Limestone KhanijUdyog Pvt. Ltd.	Subsidiary	India	60.29%	60.25%
Bhagwati Lime Stone Company Pvt. Ltd.	Subsidiary	India	60.29%	60.25%
UltraTech Cement Lanka Pvt. Ltd.	Subsidiary	Sri Lanka	48.29%	48.20%
UltraTech Cement Middle East Investment Ltd. (Standalone)	Subsidiary	UAE	60.29%	60.25%
Star Cement LLC, Dubai	Subsidiary	UAE	60.29%	60.25%
Arabian Cement Industry LLC, Abu Dhabi	Subsidiary	UAE	60.29%	60.25%
Star Cement Co LLC, Ras Al Khaimah	Subsidiary	UAE	60.29%	60.25%
Al Nakhla Crushers LLC, Fujairah	Subsidiary	UAE	60.29%	60.25%
Arabian Gulf Cement Company WLL, Bahrain	Subsidiary	Saudi Arabia	60.29%	60.25%
Emirates Cement Bangladesh Ltd, Bangladesh	Subsidiary	Bangladesh	60.29%	60.25%
Emirates Power Company Ltd, Bangladesh	Subsidiary	Bangladesh	60.29%	60.25%
Awam Minerals LLC , Sultanate of Oman	Subsidiary	Oman		30.73%
PT UltraTech Mining Indonesia	Subsidiary	Oman	48.23%	48.20%
PT UltraTech Investment Indonesia	Subsidiary	Indonesia	60.29%	60.25%
PT UltraTech Cement Indonesia	Subsidiary	Indonesia	59.69%	59.65%

Table A 5.3

Aditya Birla Nuvo			Group's Proportion Of Ownership	
			2013	2014
Company Name	Relationship with the Company	Country of Incorporation		
Aditya Birla Financial Services Limited	Subsidiary	India	100.00%	100.00%
Aditya Birla Capital Advisors Private Limited (ABCAPL) (Subsidiary of ABFSL)	Subsidiary	India	100.00%	100.00%
Aditya Birla Customer Services Limited (ABC SL)	Subsidiary	India	100.00%	100.00%
Aditya Birla Trustee Company Private Limited	Subsidiary	India	100.00%	100.00%
Aditya Birla Money Limited	Subsidiary	India	75.00%	75.00%
Aditya Birla Commodities Broking Limited	Subsidiary	India	75.00%	75.00%
Aditya Birla Financial Shared Services Limited	Subsidiary	India	100.00%	100.00%
Aditya Birla Finance Limited	Subsidiary	India	100.00%	100.00%
Aditya Birla Securities Private Limited	Subsidiary	India	—	100.00%
Aditya Birla Insurance Brokers Limited	Subsidiary	India	50.01%	50.01%
Aditya Birla Money Mart Limited	Subsidiary	India	100.00%	100.00%
Aditya Birla Money Insurance Advisory Services Limited	Subsidiary	India	100.00%	100.00%
Birla Sun Life Asset Management Company Limited	Subsidiary	India	51.00%	51.00%
Birla Sun Life AMC (Mauritius) Ltd.	Subsidiary	Mauritius	51.00%	51.00%
Aditya Birla Sun Life AMC Ltd., Dubai	Subsidiary	Dubai	51.00%	51.00%
Aditya Birla Sun Life AMC Pte. Ltd., Singapore	Subsidiary	Singapore	51.00%	51.00%
India Advantage Fund Limited	Subsidiary	Mauritius	51.00%	51.00%
International Opportunities Fund SPC(IOF)	Subsidiary	Cayman Island	51.00%	51.00%
Birla Sun Life Trustee Company Private Limited	Subsidiary	India	50.85%	50.85%
Aditya Birla Housing Finance Limited	Subsidiary	India	100.00%	100.00%
ABNL IT & ITES Ltd	Subsidiary	India	100.00%	100.00%
Aditya Birla Minacs Worldwide Limited	Subsidiary	India	—	99.85%
Aditya Birla Minacs Philippines Inc.	Subsidiary	Philippines	—	99.85%
AV TransWorks Limited (AVTL)	Subsidiary	Canada	—	99.85%
Aditya Birla Minacs Worldwide Inc. (ABMWI)	Subsidiary	Canada	—	99.85%
Aditya Birla Minacs BPO Ltd. (ABMBL)	Subsidiary	UK	—	99.85%
Aditya Birla Minacs BPO Private Limited (ABMBPL)	Subsidiary	India	100%	100%
Minacs Worldwide SA de CV (MWSC)	Subsidiary	Mexico	—	99.85%

Table A 5.4

Year	Hindalco Major Acquisition
2000	Acquisition in Indian Aluminium Company, Limited (Indal) with 74.6 per cent equity holding.
2003	Hindalco acquires Nifty Copper Mine through Aditya Birla Minerals Ltd. ABML acquires the Mount Gordon copper mines
	Hindalco becomes majority stakeholder in Utkal Alumina, a joint venture with Alcan by acquiring 45% of equity
	Divestment of 8.6 per cent holding in Indo Gulf Fertilisers Ltd.
2004	Scheme of arrangement announced to merge Indal with Hindalco
2005	All businesses of Indal, except for the Kollur Foil Plant in Andhra Pradesh, merged with Hindalco Industries Limited
2006	Joint Venture with Almix USA for manufacture of high strength aluminium alloys for applications in aerospace, sporting goods and surface transport industries. JV with Essar Power (M.P.) Ltd. to develop and operate coal mines at Mahan, Madhya Pradesh.
	Acquired an aluminium rolling mill and wire rods facility situated at Mouda (Nagpur), from Asset Reconstruction Company (India) Ltd (ARCIL), belonging to Pennar Aluminium Company Ltd.
2007	Novelis became a Hindalco subsidiary. The transaction makes Hindalco the world's largest aluminium rolling company and one of the biggest producers of primary aluminium in Asia, as well as being India's leading copper producer. Acquisition of Alcan's 45 per cent equity stake in the Utkal Alumina project, thereby making Hindalco the 100 per cent project owner.
2008	Aluminum expansion at Muri
2010	Expansion of copper rod mills
2015	Acquisition of Gare Palma Coal mines in Chhattisgarh and Kathautia and Dumri Coal mines in Jharkhand through auction
2016	Greenfield projects - Mahan Aluminium, Aditya Aluminium and Utkal Alumina ramped up to full capacity. Coal blocks in Chhattisgarh and Jharkhand, acquired through auction, became operational
2017	Novelis entered into JV agreement in May 2017 with Kobe Steel to sell 50 per cent of its ownership interest in its Ulsan, South Korea facility, for USD 315 million.

Table A5.5

Year	Grasim Major Acquisition
1998	Atholville Pulp Mill at Canada – a joint venture with Tembec Inc Acquired Dharani Cements Ltd. & Shree Digvijay Cements Ltd.
2002	Grasim divests Gwalior textiles unit. Textile operations consolidated at Bhiwani to manufacture Grasim and Graviera brands. Merger of Dharani Cements Limited in Grasim Industries Limited.
2003	The board of engineering major, Larsen & Toubro Ltd (L&T) decides to de-merge its cement business into a separate cement company, UltraTechCemCo Ltd., now UltraTech Cement Ltd
2004	Completion of the implementation process to de-merge the cement business of L&T by Grasim; renamed as UltraTech.
2005	Acquired St. Anne Nackawic Pulp Mill, Canada with Tembec Inc.
2006	Formed joint venture company, Birla JingweiFibre Company Ltd. and acquired VSF plant in China.
2007	Grasim divests Shree Digvijay Cement Company Limited. Textile units at Bhiwani transferred to a subsidiary, Grasim Bhiwani Textiles Limited.
2009	Grasim hives off its sponge iron business by way of slump sale
2011	Acquires stake in DomsjoFabriker AB
2012	Acquires AV Terrace Bay Inc. in Canada in JV with Thai Rayon in joint venture with other group companies.
2013	Caustic Soda and Epoxy plant commissioned at Vilayat (Gujarat).
2014	Grasim's state-of-art VSF plant commissioned at Vilayat.
2015	Merger of ABCIL with Grasim
2017	Merger of Aditya Birla Nuvo with Grasim

Table A 5.6

Company	Year of Incorporation
Aditya Birla Fashion & Retail Ltd.	2007
Aditya Birla Health Services Ltd.	2001
Aditya Birla Minacs Technologies Ltd. [Merged]	2000
Aegis Gas (Lpg) Pvt. Ltd.	2001
Bhubaneswari Coal Mining Ltd.	2010
Grasim Bhiwani Textiles Ltd.	2007
HindalcoAlmex Aerospace Ltd.	2007
Idea Cellular Infrastructure Services Ltd.	2007
Idea Cellular Towers Infrastructure Ltd. [Merged]	2007
S K I Carbon Black (India) Pvt. Ltd.	2013
Ultratech Cement Ltd.	2000

Table A 5.7. Acquisitions of Aditya Birla Group.

Acquisition of Aditya Birla Group in the last 15 years		
Year	Sector	Comapny
1998	Cement	Digvijay Cement
2000	Aluminium	Indal
	Apparels	Madura Garments
2001	IT services	Aditya Birla Minacs
	Insurance	Sun Life Insurance, Canada
2003	Metals and Mining	Mount Gordon Copper Mills
	Chemicals	Indo Raya Kimia acquired Methane gas plant
2004	Cement	L&T Cement
2005	Paper product	St. Anne-Nackawic Pulp
	Packaged Food	Pan Century
2006	Fibre	VSF Plant, China acquired Methane gas plant
	Data Processing and Outsourcing	Transwork Information Service
2007	Aluminium	Novelis
		TrinetraSuperretail Ltd (100%)
2008	Telecom	Spice Communication (\$1.8bn)
		Birla JingweiFibres Company Limited.
2009	Financial Service	Apollo Sindhoori Capital
2010	Cement	Star cement(80% stake)
	Carbon Black	Liaoning Birla Carbon Thai Carbon Black acquires remaining 11.46% stake
	Office services and supplies	Bureau of Collection Recovery
2011	Oil and Gas Refining and marketing	Domsjo
	Commodity Chemicals	Columbian Chemicals
	Chemicals	Canoria Chemicals
2012		Terrace Bay Pulp Mill in North Western Ontario
	Aditya Birla Nuvo Limited	Future Group's Pantaloon
2013	Aditya Birla Chemicals (Thailand)	Chemicals & Technologies for Polymers (CTP GmbH) (100%) and Chemicals & Technologies for Polymers Advanced Materials (CTP AM GmbH) (50% stake) in Germany
	UltraTech Cement	Gujarat Cement Unit of Jaypee Cement Corporation
	Aditya Birla Chemicals (India) Limited	chlor-alkali and phosphoric acid divisions of Solaris Chemtech Industries through ABCIL for Rs.153 crore
2014	UltraTech Cement	Jaiprakash Associates Limited in Madhya Pradesh with Rs.5,400 crore.
	Birla Sun Life Asset Management, joint venture between Aditya Birla Group	Mutual Fund Assets of ING Investment

	and Sun Life Financial Inc	
2015		Merger of Aditya Birla Chemicals with Grasim
2017	Cement	UltraTech Cement completes acquisition of Jaiprakash Associates Limited cement plants
	Telecom	Vodafone combines its subsidiary Vodafone India

Fig A5.1 Loans to group and non group

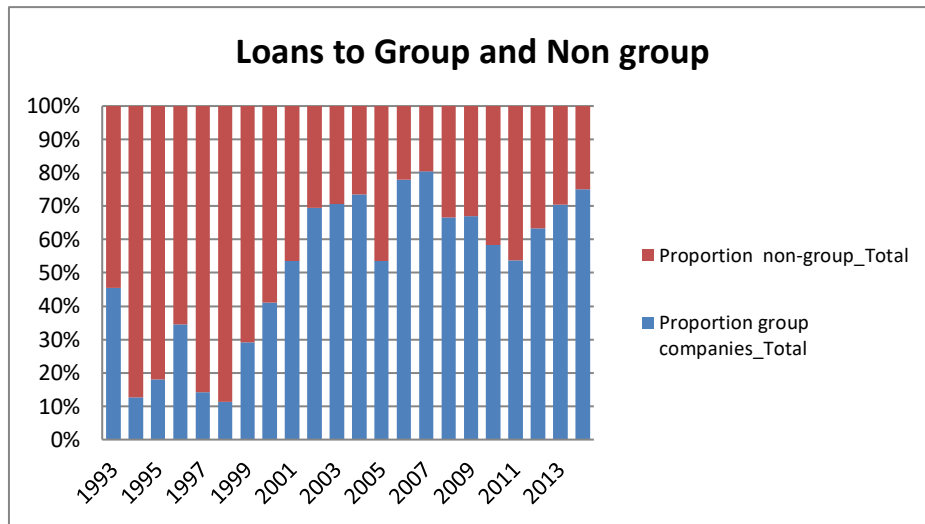


Fig A5.2 Financial investment in group and non group

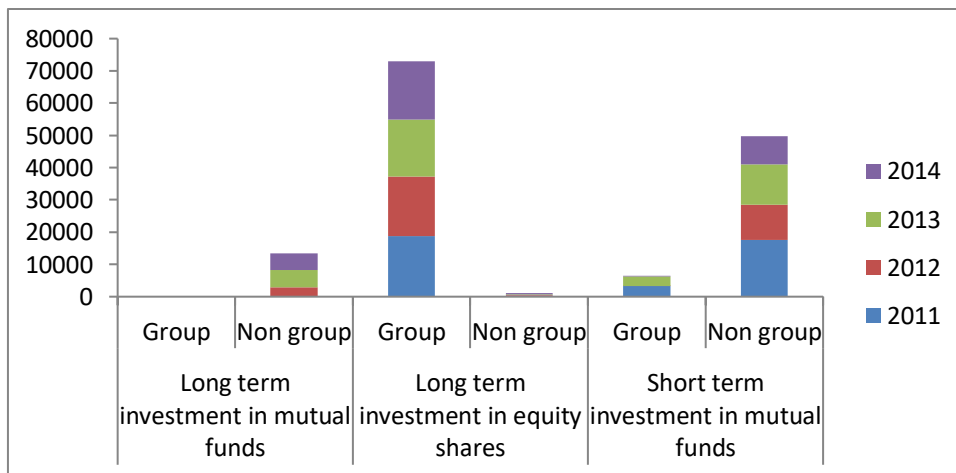


Fig A5.3 Financial investment of Hindalco in group and non group

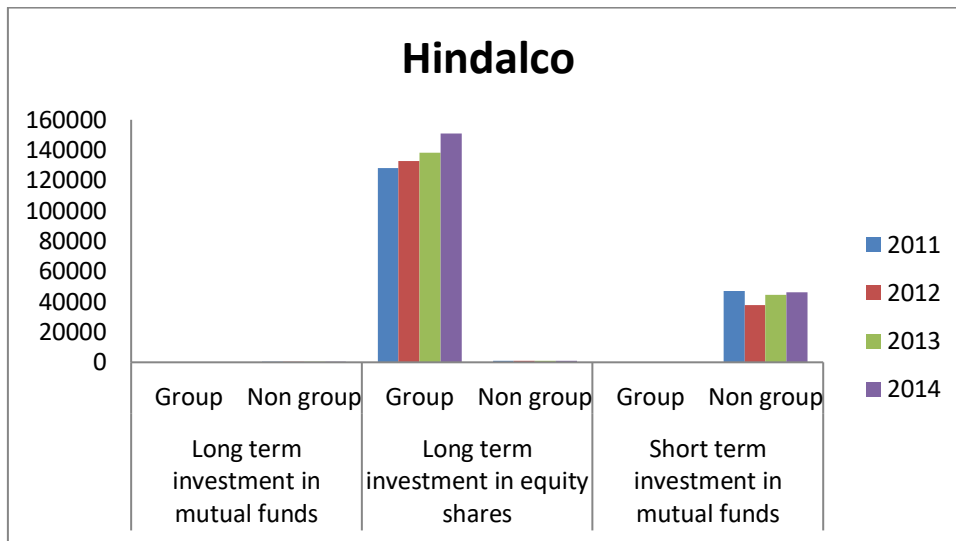


Fig A5.4 Loans and advances of Hindalco

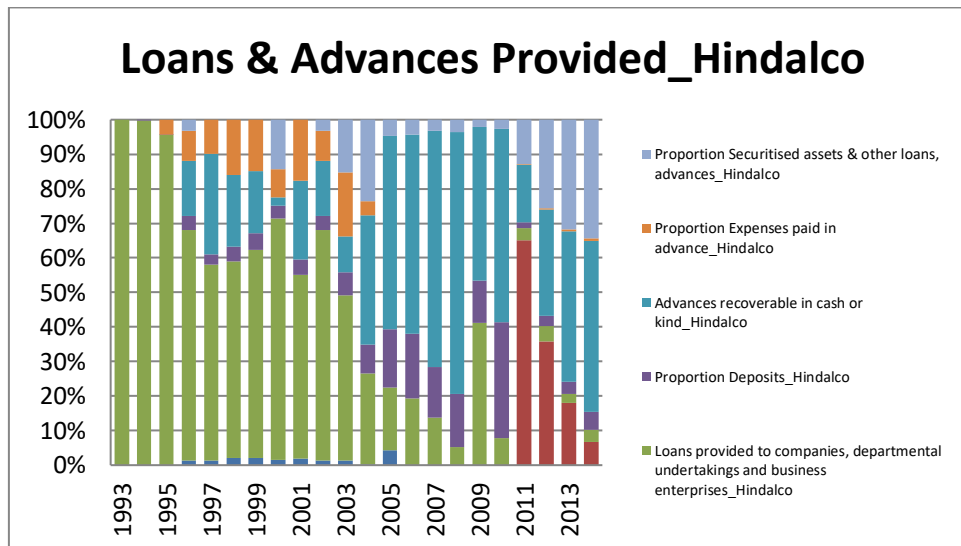


Fig A5.5 Short term loans provided by Hinadalco

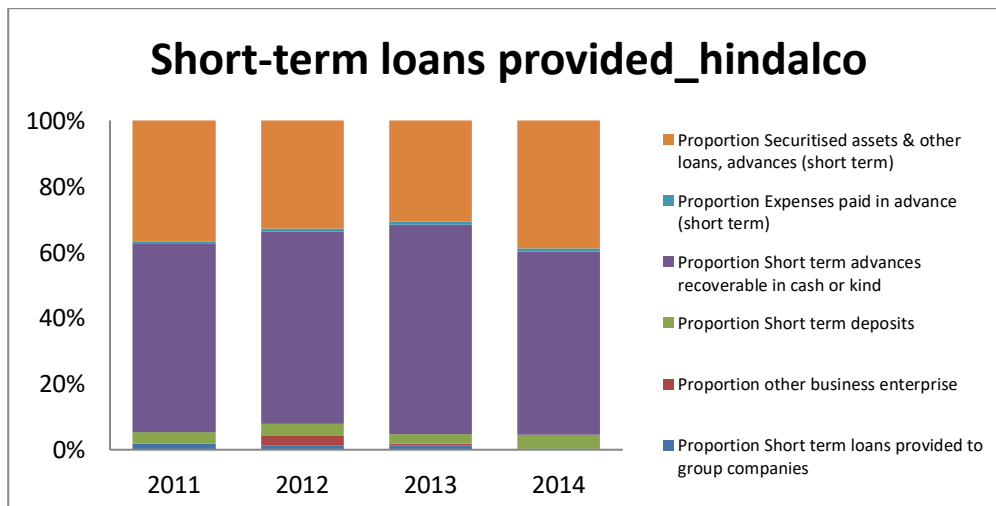


Fig A5.6 Long Term loans provided by Hindalco

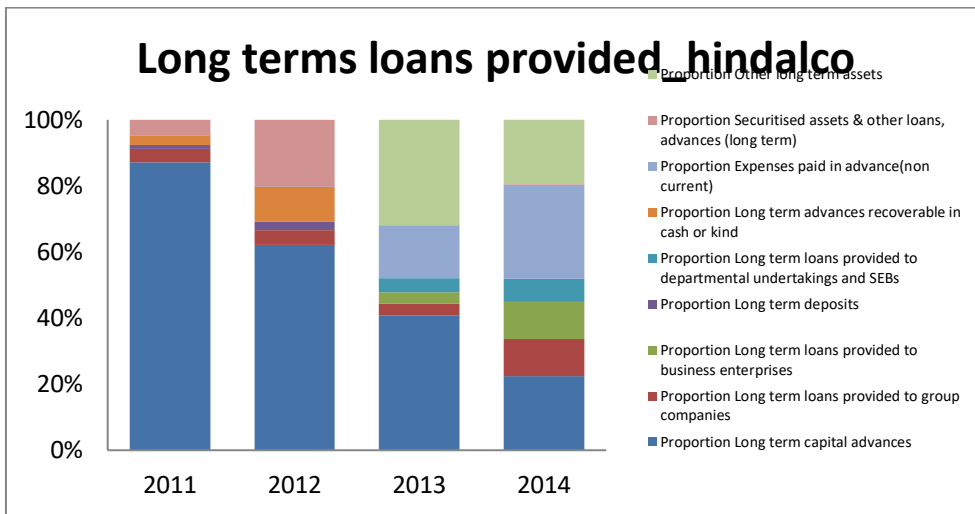


Fig A5.7 Loans Provided by Grasim

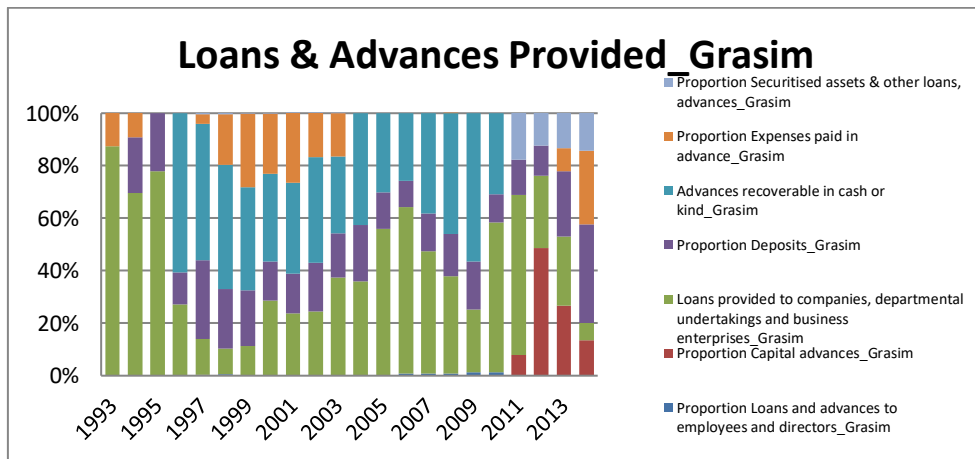


Fig A5.8 Proportion of loans and financial investment by Grasim

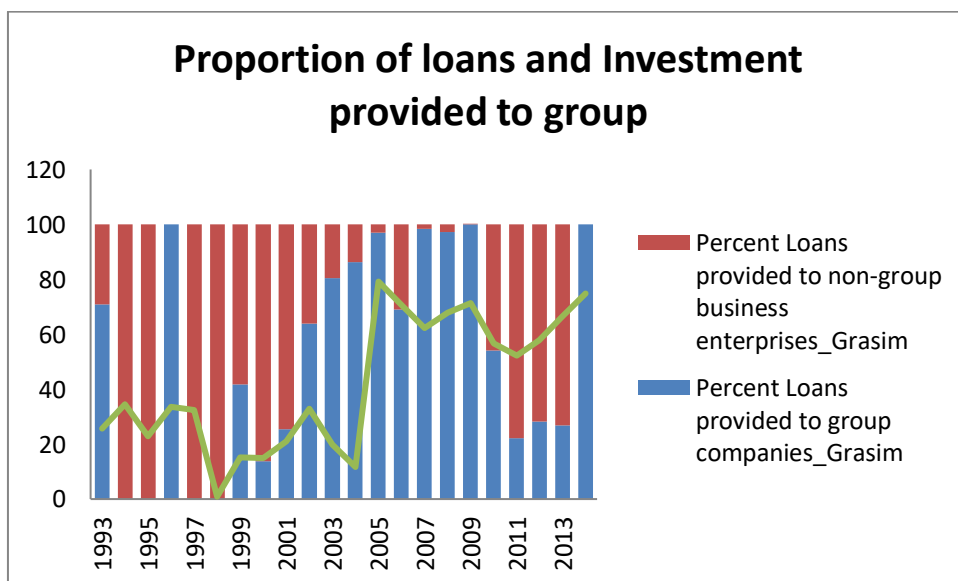


Fig A5.9 Financial investment to group and non group by Grasim

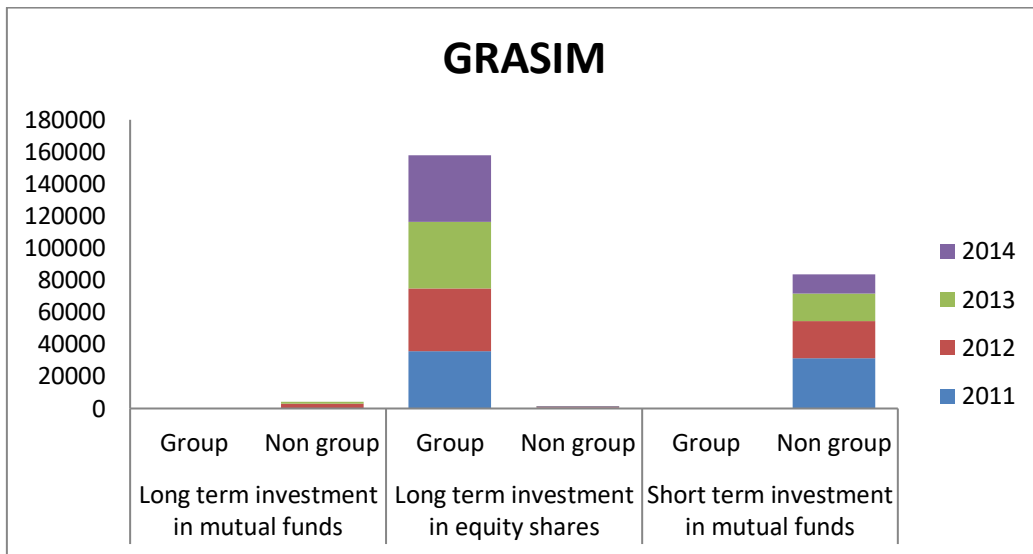


Fig A5.10 Long and short term loans provided by Grasim

