

MPRA

Munich Personal RePEc Archive

From “Outsider” to Insider: The Case of Reliance

Mazumdar, Surajit

2016

Online at <https://mpra.ub.uni-muenchen.de/93162/>
MPRA Paper No. 93162, posted 09 Apr 2019 16:13 UTC

From 'Outsider' to Insider: the Case of Reliance

Surajit Mazumdar
CESP/SSS. Jawaharlal Nehru University

Revised Version of Paper presented at the Conference on the Sociology of the Indian Elites, Jawaharlal Nehru University, 4th and 5th January 2016

Abstract: At the time that India's liberalization, the Reliance group was already one of India's leading business groups and in subsequent years has only cemented its place at the top of India's corporate hierarchy. Reliance was not, however, among the 'traditional' large groups that emerged during the colonial era and were found to be still dominant in the mid-1960s. This paper traces the story of the Reliance phenomenon and discusses briefly the process (method) by which that story was constructed. In addition to demystifying the phenomenon, the paper seeks to demonstrate that there is sufficient evidence available to establish the proposition that the basis for the success of Reliance was fundamentally no different from that which other groups used to perpetuate their dominant position, the roots of which lay in the nature of Indian capitalism.

Introduction

A fundamental premise of this paper is that the capitalist or business class in any society is a product of its particular historical development. Its character is, therefore, not only variable across societies but can also change in any society over the course of its development. Changes in the composition of the class is one of the mechanisms through which such transformations of its character can be affected. This paper makes use of a case study of the pre-liberalization rise of a new business group to derive insights about the nature of the contemporary Indian capitalist class and the extent to which it shed its original character and became more *industrial* in nature before India's opening up process began in 1991.

India's modern capitalist class was born in very specific conditions of a colonial economy, emerging from a mercantile background and initially under the shadow of foreign dominance even in the sphere of business (Ray 1994). For nearly a century after it came into being, its development was constrained by the extremely limited growth of modern factory industry that was permitted by colonial conditions. A domestic market based process after independence saw industrial development being relatively more rapid and diverse after independence. Yet India never quite made the transition to being an industrialized economy before Indian capitalists came to confront a new competitive context with India's full-scale entry into the Globalization process (Mazumdar 2008). Through this period, big business in India remained mainly family controlled and usually organized in the specific form of the business group.

While the overall extent of industrialization between independence and the onset of liberalization in 1991 remained limited, it was accompanied by a marked continuity as well as important shifts in the composition of Indian big business (Mazumdar 2011). Notwithstanding the continued dominance of older elements within them, entry into and exit from the large business sector as well as a significant reordering of relative positions did take place over that period. These changes contradict the commonly held view that the competitive context created by the regulatory regime of Indian dirigisme was tailor made to perpetuate the reproduction of a traditional Indian business elite as

it protected them from competition from new entrants. However, the change in the composition does not by itself tell us if there was any fundamental transformation in the nature of the capitalist class.

Of the new groups that emerged in the large business sector, the Reliance group was the most important representative. The story of its rise to the top ranks of Indian business groups belonged to the period after independence and to the pre-1991 era of Indian capitalism. Its history was not traceable backwards to any old business firm of the pre-independence period. Yet, by 1990 Reliance was already among the largest of Indian private business groups, behind only the Tata and Birla (unified) groups in terms of assets commanded. Understanding the basis for the success of Reliance in the context of rivalry with older established constituents of the capitalist class can thus throw up some insights about the nature of the change whose expression was that growth.

The method used to construct the story of the Reliance phenomenon in this paper involved the mutually interacting processes of putting together of detailed evidence derived from a variety of available sources and finding a plausible interpretation of all that evidence. Insights available from major studies undertaken in the 1960s (Hazari 1966; Government of India 1969) into the structure of business groups, the ways of identifying linkages within a group and some of their implications proved to be specifically important for this exercise. Our method may be contrasted with a different approach prevalent in some of the current international literature on business groups in 'emerging markets'. (Bertrand, Mehta and Mullainathan 2002; Khanna and Ghemawat 1998; Khanna and Palepu 2000 and 2005; Khanna and Rivkin 2001; Khanna and Yafeh 2007; Leff 1978). Eschewing the task of putting together detailed concrete evidence on such groups, the approach in these studies tends to be one of using anecdotal observations to construct explanatory models and derive hypotheses about the behaviour of groups that are then sometimes 'tested' against the readily available statistical evidence.

It should, however, be emphasized that this study has been based entirely on information and data accessible from publicly available documents (details are given in the bibliography). Extensive use was made of the statutorily filings with the Registrar of Companies and annual reports of some of its major companies (including

their balance sheets and profit and loss accounts). Records of over a hundred companies were examined in the process. In addition, information was culled from reports of India's Monopolies and Restrictive Trade Practices (MRTP) commission or the Bureau of Industrial Costs and Prices and other official reports, as well as some prepared by different industry associations. The academic literature existing on the subject and the available official data sources were used to prepare the background story of the textile and petrochemical industries in India as well as internationally. The Bombay Stock Exchange Official Directory also provided a lot of information on the history of many companies engaged in these industries. Of course, what has been extracted from all these sources can only be presented in summary form in this paper¹.

Confidential insider information or interviews of either those involved with the Reliance group or those who dealt with it in any official capacity could, if available, have been of course used as additional material. Some such information is available in published biographical accounts available (McDonald 1998; Mohnot 1987; Piramal 1997; Piramal and Herdeck 1984). However, this study does not rely excessively on these sources. Part of the reason for this is simply that independent access to reliable material of this kind to add to or corroborate what was available in existing accounts would not have been easy to get. Such material could in any case not have completely substituted for the information gathered from the sources mentioned earlier. This was all the more so since one of the objectives of this study was also to shift attention from a virtually exclusive focus on the innate and highly exceptional abilities of a particular individual and to demystify the Reliance phenomenon by bringing out the combination of historical forces that produced it. Directing the effort towards the also significantly difficult task of putting together what was available in the public domain but scattered across a variety of sources thus seemed to be the better route to take. Reinforcing this choice were two important things. The first is the eventual outcome that it was possible to say a lot based on the evidence compiled. Further, this more reliable evidence was also found to be contradicting some impressions that have acquired the status of being 'facts' – for instance the myth that Reliance was forced to

¹ More details are available in Mazumdar (2006)

resort to capital issues because it could not get credit from public sector financial institutions².

The Reliance group in 1990

Like other Indian groups, the Reliance stable too had a large number of companies (close to 200) though only 10 companies and 5 partnership/ proprietorship firms, were registered under the then existing MRTP Act as inter-connected undertakings of the group. Most of these companies were primarily investment and trading companies and the group's manufacturing activities were concentrated in a small number of companies – the bulk of it in the one major public company, namely Reliance Industries, and its two subsidiaries. Moreover, manufacturing was the principal business activity and while the large number of investment and trading companies performed important functions, investment and trading were only nominally their business and not the actual reasons for which they existed. They were interconnected to each other through cross-holdings and common directors. Many of them in turn together held a fifth of the share capital of Reliance Industries and this constituted the major part of the stake through which the Ambani family exercised control over the company (the direct holding by the family being less than one per cent). A summary and *approximate* presentation of the structure of inter-corporate investments within the Reliance Group is shown in Figures 1A and 1B, incorporating 141 companies and based on shareholding information for the period 1983 to 1990.

While the key figure associated with the rise of Reliance was Dhirubhai Ambani, a larger extended family including not only his two sons but also the immediate families of his brothers, Natvarlal and Ramniklal, as well as their relations by marriage formed a large and cohesive controlling group. While Reliance was not an inherited family business, the Ambani family belonged to a mercantile caste group and their social network had always included wealthy members of their community (Macdonald 1998).

² Khanna and Palepu (2005) citing *India Unbound: From Independence to the Global Information Age* by Gurcharan Das.

In Reliance Industries family members occupied the positions of Chairman, Managing and Joint Managing Directors and Executive Directors in 1990. Another director was T Ramesh U. Pai was from the Manipal group with which Reliance had a long association. Two other directors, Jayantilal R. Shah and Mansingh L. Bhakta, had also been directors of the company from the time it was still a private limited company (before 1977). Indeed, the Board of Directors of Reliance Industries in 1990 did not look very different from what it had been nearly a decade and a half before. The Secretary of the company was also the same, as were the auditors and the advocates and solicitors³.

Reliance's manufacturing activities were by the end of the 1980s largely concentrated in petrochemicals – with polyester and polyester intermediates forming the core but with a greater diversification under way. While this gave it a strong linkage with the textile industry, the textiles side proper of Reliance's manufacturing portfolio accounted for less than a fifth of its sales in 1990. It was also in petrochemical products that Reliance had achieved the status of being the leading firm in a range of industries – accounting for a significant (mostly largest) share in installed capacity, production and sales of Polyester Filament Yarn, Polyester Staple Fibre, Linear Alkyl Benzene, Purified Terephthalic Acid and Paraxylene (Tables 1 and 2). Thus it was not only big in an aggregate sense but was also a dominant firm in its industries of operation.

Brief history of the Reliance group

The commercial history of the Reliance group began with the creation of Reliance Commercial Corporation, a partnership firm, in 1958. From then on till 1966, when Reliance Textiles and Engineers Ltd. was registered, the group had apparently no manufacturing activity and was engaged only in trading. Reliance Textiles and Engineers was also the first joint-stock company of the group. This was also thereafter always its most important company, being the entity that eventually became Reliance

³ The founder of one of the auditing firms, D.N. Chaturvedi, was supposed to be part of the inner think-tank of the Reliance group (Mohnot 1987).

Industries Ltd. in 1985⁴. Its growth served as the barometer for the growth of the entire group after 1966. Till 1977 it was a private limited company, going public in that year.

In terms of its organizational features therefore, three phases of the growth of the Reliance group up to 1990 may initially be distinguished: 1958 to 1966, when it operated through partnership or proprietorship firms; 1966 to 1977, when first one and then a few other narrowly held private limited companies were added to the group's stable; and 1977 to 1990, the period in which the principal group company became an extremely widely held public limited company, and there was a rapid proliferation in the number of companies in the group.

The incorporation of the first joint-stock company of the group neatly coincides with the entry of the Reliance group into manufacturing. However, the subsequent period till 1990 can also be divided into two phases on a different basis whose dividing line is 1982. Prior to Reliance going public, and for a period subsequent to that, Reliance's principal involvement was in the textile industries. In the 1980s, the focus shifted to polyester and other petrochemicals, and these became the locus of its growth from 1982 onwards and gave rise to the picture in 1990 that has been described before. Thus the period till 1982 may be called the textiles phase of Reliance's growth and the subsequent period the polyester fibres/petrochemicals phase. However, it may be noted that the textiles phase after 1977 was not just a mere expansion of past activities, and the same was also true of the polyester/petrochemicals phase from 1986. There was also an essential continuity that accompanied each transition and aided it.

1958 to 1966: The trading phase

Reliance Commercial Corporation (RCC) began its business activities with the export of spices and other items to the Middle East and East Africa (Mohnot 1986; Piramal & Herdeck 1984). Somewhere along the line the trading activities were extended to include textiles. By the mid-sixties, Reliance's business involvement with the textile and man-made fibres industry, in particular with what was known as the 'art silk' industry, would appear to have been fairly deep. Though the art silk industry in those days was an

⁴ Incorporated as Reliance Textiles and Engineers Ltd., it was eventually transformed into Reliance Textile Industries Ltd. before finally acquiring the name Reliance Industries Ltd. Technically however there was a discontinuity in between which is explained shortly.

export oriented industry, and was given various incentives by the Government for that reason, Reliance's primary focus in this period was not really on exports of rayon textiles but on the domestic market for synthetic fibres. 'Exports' were simply the instrument for taking advantage of the incentives and acquiring synthetic fibres whose production in India had not yet taken off in India though their use in the manufacture of fabrics had acquired proportions of some significance. Thus the early history of the Reliance group coincided with the incipient stages of the development of the synthetic fibres and textiles industry in India.

1966 to 1977: The first textile phase

Subsequent to the coming into being of Reliance Textiles and Engineers the Reliance group incorporated only 5 other companies before 1977 - Reliance Exports (1969), Vimal Fabrics (1973) and three companies in 1975 (Anil Fabrics, Dipti Textile Industries, and Nina Textile Industries) to take over the running businesses of three partnership firms in which the members of the Ambani family were partners. The growth in the first decade after the entry into manufacturing was, however, quite rapid (Table 3), and by 1975-76 the group had crossed the Rs. 20 crores (200 million) mark in terms of value of assets which at that time was the asset limit beyond which registration under the MRTP Act was required (even though the actual registration of Reliance companies under the Act was in 1978). The combined sales of the group had nearly touched the Rs. 100 crores (1000 million) mark by 1976-77. Thus, the Reliance Group had acquired fairly large dimensions even before it included any public company.

As earlier, the core of the group's business activities remained centred around the synthetic textile industry. While Reliance Exports occasionally dabbled in other business, the dominant sector in the group's operations was textiles and ultimately every company within the group focused itself on the textile industry. The Reliance group in 1977 was a combination of an art-silk weaving/knitting unit, a processing house for synthetic fabrics and yarns, and a trader in fabrics and yarn (the indicators in Table 4 serve to establish this). Thus while it had graduated from its purely trading enterprise character in the first phase, it still remained on the intersection between trading and

manufacturing. Moreover, while it was an organized sector unit it was actually a part of the 'powerloom' sector⁵.

While the group still continued to 'export' as a means of securing import entitlements its manufacturing and selling activity was by the mid-seventies mainly directed towards the domestic market and its export earnings even declined. However, from the entry into manufacturing through the installation of imported machinery till 1977, the dependence of the group on imports for production and expansion activity was substantial (Table 5).

Much of that expansion of the Reliance group was debt financed (Table 6), and loans accounted for two-thirds of its total liabilities in 1976-77. Public sector banks and ICICI⁶ were its major creditors. Even the conversion of Reliance Industries into a public company was initially prompted by the condition accompanying public sector financial institutions agreement to support to Reliance's expansion project in 1976-77. All the major public sector financial institutions⁷ were involved in this arrangement under which they agreed to finance nearly 69% of the total project cost of Rs. 1250 lakhs (including foreign currency loans of Rs 239 lakhs), which was nearly half of the value of the company's assets at that time.

Thus it is quite clear that significant support from public sector financial institutions and banks at an early stage of its history was a critical element in the making of the Reliance story. The establishment of a close association with the Pais of the Manipal group (erstwhile controllers of Syndicate Bank) and with the ICICI would appear to have played an important role in securing this institutional finance. Even before Reliance

⁵ Organized sector refers to formally registered units/establishments/factories. In the cloth producing textile industry, the major component of the organized sector was classified as the mill sector (spinning and weaving mills) while the 'decentralized' sector included handloom units as well as weaving units using power driven looms (mainly unregistered but including some registered units).

⁶ ICICI is presently a private sector bank. It was originally however a publicly sponsored industrial development bank (see 7 below) which though created in the private sector with shares held by banks, insurance companies, and international financial institutions, became effectively a government company with the nationalization of banks and insurance.

⁷ The Industrial Development Bank of India (IDBI), the Industrial Finance Corporation of India (IFCI), the Industrial Credit and Investment Corporation of India (ICICI), the Unit Trust of India (UTI), the Life Insurance Corporation of India (LIC) and the General Insurance Corporation (GIC) and its subsidiaries

Textile Industries became a public company, ICICI had become a minority shareholder in it. There is also clear evidence of the formation of a link with the Pais. During the early 70s (till 1972), Reliance Exports operated a business of rubberised coir products on the agency of Karnataka Coir Products Ltd., a Manipal Group company. The Manipal Group, as mentioned earlier, also acquired in this period a minority shareholding in Reliance Textiles, when it was still a private company. So too did Syndicate Bank, with which the Pais had a close association both before and after its nationalization in 1969⁸. Again, Syndicate Bank gave irrevocable guarantee in lieu of hypothecation of plant & machinery for Reliance's borrowing from the ICICI in this period. MAC Investments, an investment company which ultimately was to become (with its eight subsidiaries), a crucial link in the chain connecting various Reliance companies was originally a subsidiary of Maharashtra Apex Corporation, another Manipal Group Company. Mynylon Ltd. referred to in the next paragraph was also associated with the Manipal group. The significance of this close personal association, with a group that had a long history in financial businesses, and with individuals who were part of the political establishment, for Reliance's growth in this phase and thereafter cannot of course be calculated from any statistics.

The first manufacturing phase of Reliance's growth came to an end with the public offer for the equity shares of Reliance Textiles in end 1977, and its subsequent listing on the Bombay and Ahmedabad Stock Exchanges in January 1978. The conversion to a public company was, however, done through a complex route. First Reliance Textiles was amalgamated into another company with no business, Mynylon Ltd., whose name was then changed to Reliance Textiles and its registered office shifted from Bangalore to Bombay. This otherwise strange sequence was apparently undertaken with the objective of maximizing the increase in the family holding in Reliance Industries before converting it into a public company. The number of shares did increase from 17 to 59.5 lakhs on account of the amalgamation, and it is from this that the family offered

⁸ Dattaraj Salgaocar, of the Salgaocar group and son in law of Dhirubhai Ambani, in a tribute to his father-in-law stated that both K.K. Pai (Chairman and Managing Director of Syndicate Bank from 1972 to 1978, and custodian of the Bank after nationalization) and T.A. Pai (Chairman of Syndicate Bank before nationalization, and subsequently a Union Minister) were close common friends of Dhirubhai Ambani and his father in the early 1970s (Goa Today, August 2002).

28.2 lakh shares in 1977 for sale to the public in order to get the company listed on the stock exchanges.

1977 to 1990: From textiles to petrochemicals

The first public offer of shares by Reliance Textiles, and the subscription to it, did not bring any additional finance into the company because it only amounted to a change of ownership of existing shares. However, the oversubscription of that issue pointed towards possibilities which Reliance was then able to exploit. Recurrent large public capital issues became thereafter a major source of financing the rapid expansion that made Reliance one of the largest business groups in the country. It became the most significant beneficiary of the capital market boom of the 1980s (Table 7), the conditions for which were created by larger trends in the Indian economy and the consequent increase in financial savings. Public sector financial institutions continued to provide fairly significant financing support. However, given the scale of expansion, in purely *relative* terms this support was less significant than it had been before 1977.

Coinciding with the transformation of Reliance Industries into a public company was the addition of a new dimension to the group's growth - a consistent trend of proliferation of the number of its companies (Table 8). This regular increase in the number of investment and trading companies was associated with the need to increase (even if not proportionately) the shareholding of Reliance Industries that the family could control even as the share capital base of the company increased massively. Narrowly held investment and trading companies could achieve this objective by subscribing to shares or acquiring them through purchases and financing these by borrowing from institutional and non-institutional sources. The proliferation of companies also permitted the transfer of both the debt and the holdings from one set of companies to other, allowing each of them to service their own individual debt.

The growth of Reliance Industries however still served as the barometer of the growth of the group (Table 9). In contrast to the earlier phase, the growth of its assets in this period was more rapid than of its sales. This reversal was a result of the gradual replacement by the group of trading and processing related sales by sales based on its own production and its increasing vertical integration. This happened in two stages. The initial expansion after Reliance Industries became a public company was within the textile industry itself – partly the completion of the expansion project mentioned

earlier which saw an increase in the number of installed looms. The group also entered into the spinning of yarn for the first time when it set up a new unit for the manufacture of man-made fibre yarn on the worsted system. The weaving and spinning capacities were also expanded by the acquisition of a sick industrial unit, Sidhpur Mills (originally belonging to the Shri Ambica group). However, even as Reliance Industries became through these a more conventional textile mill, it also ceased to grow on that basis.

The Reliance group's textile manufacturing capacities, measured in terms of spindlage and loomage, remained virtually frozen from 1979 onwards and increase in capacity thereafter was limited to that on account of modernization operations (Table 10). The entire thrust of expansion shifted towards petrochemicals, which was in fact initiated alongside the last major expansion in textiles. The commissioning of the Polyester Filament Yarn (PFY) project in 1982 marked the first realized step of this change in course. By the mid 1980s, Reliance had applied for and secured clearances (partial or complete) for expanding its PFY capacity and setting up large capacities for the manufacture of a range of petrochemicals – Polyester Staple Fibre (PSF), Purified Terephthalic Acid (PTA), Monoethylene Glycol (MEG), Linear Alkyl Benzene (LAB), High Density Polyethylene (HDPE), Polyvinyl Chloride (PVC), and Synthetic Filament Yarn including Industrial Yarn/Tyre Cord. By the end of the 1980s, it had secured further Letters of Intent or Licenses for the manufacture of Ethylene, Propylene, and Butadiene, Synthetic Rubber, as well as acrylic fibre. In other words, its planned areas of expansion covered the entire range of the four main categories of petrochemicals - viz. plastics, synthetic fibres, synthetic rubber, as well as synthetic organic chemicals used in their manufacture. The group also in this period secured clearances for a few projects outside the sphere of petrochemicals - for the manufacture of coloured glass shells and TV tubes as well as Chlorine (with Caustic Soda and Hydrogen as by-products).

Of course not all of these approvals had been converted into actual capacities by 1990. In 1985, the capacity of the PFY plant was increased by 2.5 times and a horizontal diversification was achieved with the commissioning of the PSF plant. In 1987-88, the PTA and LAB capacities were commissioned, the former representing a backward integration from PFY and PSF manufacture. A further step in backward

integration was achieved with the commencement of paraxylene production for manufacture of PTA in 1989. The MEG, HEG, HDPE, PVC, and Chlorine and by-products projects were still under implementation in 1990 while those of others had not been initiated.

The strategy of growth that Reliance pursued in the 1980s was thus clearly not that of the backward integration of a synthetic textile manufacturer. On the contrary, the expansion strategy adopted was one of using its base in the synthetic textile industry to transform itself into an enterprise with the manufacture of petrochemicals as its core activity. Facilitating that metamorphosis was the essential link between its earlier base in textiles and its new thrust in petrochemicals provided by synthetic yarns.

Like in the earlier phase, in the petrochemical phase too the growth of Reliance was based on the domestic market but required an exceptional ability to command imports and foreign exchange. Large capital goods and technology imports were associated with its major foray into petrochemical manufacture in the 1980s. Further, its backward integration process only involved the replacement of one set of its imports of current inputs by another so that the imported component of its raw material consumption remained high throughout (Table 11).

Explaining Reliance's growth

In different ways in different periods of its growth from 1958 to 1990, through its transitions from trading to processing and manufacturing activities, and from textiles to petrochemicals, the trajectory of movement of the Reliance group remained firmly tied to that of the synthetic textiles industry in India. Even the growth in the 1980s, though mainly outside the textile industry proper, was based on products that were part of the chain of production of synthetic textiles. In other words synthetic textiles provided a common thread to a process of growth that took place along the intersections of the textile and chemical industries, the shifting weight within whom was one of the features of Indian industrialization over the period. The path of rapid expansion that Reliance took advantage of was created by the overall trajectory of import-substituting industrialization based on a diffusion of technology from advanced capitalism.

The post-war period had seen the initiation of a rapid transformation in the global textile industry, which had till then been an extremely slow changing industry (Kroese 1971 and 1972; Strolz 1971; Thiriez 1970). Technological changes originating in the textile machinery and chemical industries, the conditions of the Golden Age, and the new political context of the world, were the driving forces of these changes. The increasing use of synthetics as against natural (and even rayon) fibres, polyester being the most important, and the increasing speed of machinery and use of newer techniques like knitting were indications of the changes in textile manufacture that were initially most marked in the advanced economies. Alongside that, however, was also a redistribution of the more conventional spinning-weaving and cotton based textile production towards the underdeveloped economies. Synthetic fibres and their intermediates were products of the petrochemical industry, and a handful of advanced country MNCs came to initially dominated world synthetic fibre production (Read 1986; Spitz 1988; Tisdell and McDonald 1979). The end of the Golden Age in the 1970s and the consequent crisis of the synthetic fibre industry, along with the ongoing process of global redistribution of textile production, set the stage for a more widespread diffusion of synthetic fibre manufacture to the Asian continent and a process of import-substitution in them.

India too was incorporated into the changes within the global textile and synthetic fibre industries but in its own specific way (Alam 1982; Chandrasekhar 1984; Chaudhuri 1994; Goswami 1991; Khanna 1984, 1989; Mishra 1993; Siddharthan & Narayanan 1990). The initial redistribution of world textile production did not have any significant impact in India. It was one of the few Third World countries that already had substantial textile industry and the Indian process of import-substitution in textiles had been completed before independence. In India instead, stagnant demand conditions and an increasing shift of fabric production into the 'decentralized sector' resulted in a protracted crisis for the organized textile industry – most acutely in its fabric production segment. However, there was a gradual penetration of synthetic fibres and a trend of change in the fibre composition of textiles. This penetration first took the form of imports and then synthetic fibre manufacture and the petrochemical industry got established in the 1960s with state support and initiative.

Though the growth of synthetic fibre and fibre intermediate production was in itself of an import-substituting kind, the growth of the synthetic textiles and fibres industry at the same time had a domestic production replacing character. In comparison to the cotton textiles that they replaced, synthetic textile growth had to be significantly more import-dependent for both inputs as well as technology. Foreign exchange availability and the import-policy environment therefore were important factors conditioning their growth. The greatest expansion and rapid import-substitution in these industries, actually took place in the 1980s so that India also came to participate in the global redistribution of such manufacturing.

Notwithstanding the crisis in the organized textile industry, organized sector units did play an important role in the increasing penetration of synthetic fibres. To begin with, before the 1980s, most of the processing of yarn as well as the production of synthetic fabrics was undertaken by organized units – some of the traditional spinning-weaving mills focused on blended fabrics while organized units outside the mill sector in the art-silk industry specialized in synthetic fabrics. At this time, synthetic fibres were costly and the market for synthetic textiles was small and concentrated in the upper-income segments. In the 1980s, however, the transmission of the global cheapening of synthetic fibres relative to cotton, partly through increased scales of production of these fibres in India, led to a greater penetration of synthetics into the mass-market for textiles. The more conventional ‘decentralized’ or powerloom units, however, led this process. Yet this meant an expansion of the market for synthetic fibres and the scope for growth in their manufacture behind the wall of protection from imports, and the production of synthetic fibres and intermediates was the natural preserve of organized sector units. In comparison to the other textile related activity, technological factors made the minimum levels of concentration in their production also significantly higher.

Clearly Reliance’s trajectory of growth was one that closely reflected the overall pattern of expansion for organized units connected to the textile industry associated with the increasing penetration of synthetic fibres. It began with trading in synthetic fibres. It then moved into manufacturing and processing of synthetic textiles and processing of synthetic yarns enabling the group to grow through its participation in the process of substitution of cotton textiles by synthetic textiles in the upper segment

of the market. Since it had no history in that industry, it was able to avoid the parallel crisis that afflicted the cotton textiles industry. In the 1980s, as the scope for growth of organized sector units in synthetic textile manufacture tended to reach a plateau, Reliance moved backwards and tied its fortunes with the synthetic fibre and petrochemical industries, where the potential growth opportunities for individual organized sector enterprises came to be greater. The base in these industries in turn enabled the horizontal expansion into the manufacture of other petrochemicals that Reliance initiated towards the end of the decade.

What is in addition a remarkable feature of Reliance's growth is that even in the Indian context it was not a pioneering firm – whether one considers the activities with which the Reliance group began its manufacturing history or any one of those it subsequently diversified into. It was typically a later entrant in all of them, though usually before they had achieved full maturity. Synthetic textile manufacturing including both knitting and weaving units existed before 1966 and Reliance as a trading enterprise in fact did business with them. The spinning of synthetic fibre yarn began much before Reliance entered into that field in the late 1970s. Reliance's entry into PFY manufacture was nearly a decade and a half after its first production in India, while the same gap in the case of PSF was two decades. The public sector Indian Petrochemicals Corporation (IPCL) initiated the manufacture of polyester intermediates in 1973, again a decade and a half before Reliance's entry into them. Even in the case of LAB, Reliance followed IPCL and the private sector Tamil Nadu Petroproducts of the M.A. Chidambaram group.

Not only was it typically a later entrant, Reliance's entry in most of the industries was also as part of a generalized trend of investment in them in which other new entrants or incumbent firms, both private and public sector, also participated. In other words, the directions in which it chose to seek growth opportunities for itself were not typically unique.

In its textiles phase, the Orkay group closely resembled the Reliance group. The Orkay group, like Reliance, was not a traditional large group, and began its business activities through partnership firms. Orkay Silk Mills, the principal Group Company in 1990, was incorporated in 1968 to take over the business of a partnership firm set up in 1957. The group was involved in the organized synthetic textiles industry till the 1980s, like

Reliance combining the knitting and weaving of textiles with the processing of fabrics and synthetic yarns. In the 1980s, it too like Reliance and in the same year diversified into the manufacture of PFY as part of a proposed expansion into chemicals⁹.

In 1981, apart from Reliance and Orkay, two of the existing manufacturers of PFY, Petrofils Co-operative and J.K. Synthetics, were also granted approval for substantial increases in their capacity. Between that year and 1984, before Reliance secured approval for its entry into PSF manufacture, two existing units, J.K. Synthetics and BRPL, and two new entrants, India Polyfibres and Orissa Synthetics, secured approvals for a large addition to the industry capacity. Indeed in the 1980s, four-fifths of the capacity expansion in PFY and PSF manufacture was by some 20 odd firms other than Reliance. Apart from Reliance, J.K. Synthetics, Bombay Dyeing of the Nowrosjee Wadia group, and the public sector Bongaigaon Refinery and Petrochemicals (BRPL) and IPCL expanded or created capacities for polyester intermediate manufacture. The combining of PSF and PFY manufacture was done before Reliance by J.K. Synthetics, which along with BRPL also preceded Reliance in going in for a degree of vertical integration in polyester manufacture.

If its expansion was still of an exceptional magnitude it was because of two features of Reliance's growth:

- a) No other group or company operating in the same industries as Reliance managed to achieve involvement in *all* the industries it managed to diversify into through its sequence of expansion. Orkay for example matched its trajectory up to the point of entry into polyester manufacture but not thereafter. BRPL, manufacturing paraxylene, Dimethyl Terephthalate (DMT), and PSF, came the closest to Reliance's petrochemical product profile, but did not have the same involvement in the textile industry. Neither did IPCL, a producer of paraxylene and DMT, and a host of other petrochemicals in whose production Reliance was still creating its entry capacities in 1990. Other private groups combining involvement in the textile and synthetic fibre industries on the other hand had no presence in fibre intermediate and

⁹ The sanctions for the establishment of PFY plants by Reliance and Orkay were on the same date.

petrochemical industries, with the exception of the limited captive capacities for DMT and MEG of the JK group. Bombay Dyeing produced one fibre intermediate, DMT, but the Nowrosjee Wadia group was not involved in synthetic fibre manufacture.

- b) In both its textiles phase as well petrochemicals phases, the Reliance group managed to secure for itself a larger share in the expansion in its chosen areas as compared to most other enterprises participating in it. In each venture that it undertook, Reliance acquired a dominant position despite being a later entrant. Its large share in 1990 in petrochemical products has already been highlighted. In its earlier phase, Reliance also clearly became one of the dominant enterprises within the organized art-silk industry. The emergence of a dominant firm of the type that Reliance became in either phase was in itself a likely possibility given the inherently concentrated structure of the industries it operated in. In its textiles phase, the limited size of the upper end of the market for synthetic textiles, the prevalence of non-price competition in it, and the restricted access of firms to imported machinery and inputs, gave it an inherently oligopolistic character. In synthetic fibre and petrochemical manufacture, the existence of significant economies of scale made for highly concentrated industries. Indeed, as the Reliance group graduated from the synthetic textiles to fibres and then to the fibre intermediates industries, it moved in the direction of industries where scale factors were more and more significant. This made the sequence of its diversification something that could not be easily replicated by a number of firms. By achieving it, the Reliance group successively left behind other enterprises competing with it in an earlier stage of its expansion, even as its scales of production and vertical integration reinforced its position vis-à-vis these competitors.

To sum it up then, the story that the Reliance group scripted for itself over its life span from its birth to 1990, a short span of two and a half decades, had its objective basis in factors largely originating outside the group itself, and in making which it had little direct contribution or influence. The path that Reliance traversed to become one of the largest business groups in India was a creation of the specific pattern of industrialization in the post-independence period. Like other traditionally dominant

Indian business groups, it used foreign technology as the basis for taking advantage of that path and was not a technological innovator. Like them it also made significant use of external finance – from both public sector institutions as the capital market in the 1980s. Even the boom in the capital issues market was something that had its basis in the increased significance of financial savings of the household sector that emerged from the late 1970s. The investment opportunities the Reliance group used were also not in areas overlooked by other firms or considered too risky by them. At each stage the group was induced to move in particular directions by a combination of its own past history as well as the operation of generalized inducements to which other firms also responded. But in its entire sequence of diversification across phases, and the consequent ultimate combination across industries, in its relative position in each industry and the capital issues market, as well as in the scale of its expansion, Reliance was unique amongst all these enterprises¹⁰. But here again objective circumstances dictated that the Reliance kind of story at least in terms of its magnitude had to be a somewhat unique one.

It says something about the nature of Indian capitalism and its capitalist class that such a remarkable story of movement to the top of the corporate hierarchy in India as Reliance's was based on so little of what could be considered as expressions of *industrial entrepreneurship*. The only two related things that can be identified as the key to separating Reliance from others, those that made Reliance rather than any of its actual and potential rivals the most successful exploiter of the opportunities that were in principle open to other firms, were its exceptional success in gaining from the regulatory regime and in mobilizing finance.

Reliance's expansion was achieved in the context of rivalry with other firms which played itself out not primarily in the marketplace but in the determining of the preconditions or parameters of market rivalry. The execution of the growth strategy of Reliance and its rivals necessarily involved multiple points of interaction with the prevailing regulatory regime. Every industry Reliance entered into was governed by the industrial licensing policy so that capacity creation had to be 'approved'. Once it

¹⁰ This statement needs a small qualification in that in terms of the absolute increase in size between 1966 and 1990, the Tata and Birla groups achieved a greater expansion than Reliance.

became registered under the MRTP Act, additional approvals were required. Foreign collaboration and imports too required approvals and import licenses. If public sector institutions were the sources of institutional finance, capital issues too were subject to government approval. The levels of taxes, excise duties and import duties were also crucial in determining profitability and market prospects in the industries Reliance operated in. Of course, Reliance was not subject to any exceptional regulation and nor was it the only firm to try and use the regulatory regime to its advantage. The evidence, however, does indicate that Reliance's success in getting a favourable configuration of decisions by State agencies was rather exceptional through most of its history:

- i. The direct results of favourable decisions on the financing side of Reliance's growth were the support of the public sector financial institutions and the approvals for making use of the potential for capital issues in the 1980s. It is in the latter that Reliance proved to be somewhat 'innovative' and the use of this mode of financing also contributed to reduction in costs of finance. The consequent improvement in profitability in turn also increased the availability of retained earnings for financing expansion. Adding to this was the fact that Reliance paid virtually no taxes on its profits for two decades – taking advantage of available concessions.
- ii. While it managed to secure licenses and MRTP approvals for what were then fairly large capacity creations/expansions in the petrochemicals industries, Reliance also benefited from the fact that rivals who might have created barriers to its entry by creating similar capacities or diversified structures *before* Reliance were denied similar approvals. A perusal of rejections/approvals under the MRTP Act for capacity creation, for example, reveals that the Thapar group's proposal for setting up a PFY plant with a larger capacity than that created by Reliance, and made before Reliance actually began its production, was rejected after two years. By contrast, just a year after, Reliance's proposal for substantially increasing its capacity was approved in the same month in which the application was made. Similarly, the Shri Ram group's LAB proposal made before Reliance was also rejected as were those of others subsequently. Not only applications of other groups for large capacities, but

also those that could have created other similarly vertically or horizontally integrated petrochemical manufacturers as Reliance were also rejected – for instance, the Thapar group's applications for both PFY and PTA, and of the JK Singhania group for PFY, PSF and PTA.

It had been widely alleged that Reliance's succeeded in installing capacities that were much larger than its stated and licensed capacities and these allegations were even translated into official charges made by the customs authorities Mohnot (1987). As far as evidence goes, it is true that Reliance Industries actual production figures for PFY were much higher than its stated installed capacity, almost double in 1989-90. Similarly, in the case of PTA production, in its very first year of operation, Reliance's PTA plant produced 25% over its stated capacity. Though it was not the only manufacturer with a capacity utilization of over 100%, the gap between its production and the industry average per unit was larger than that in the respective capacities.

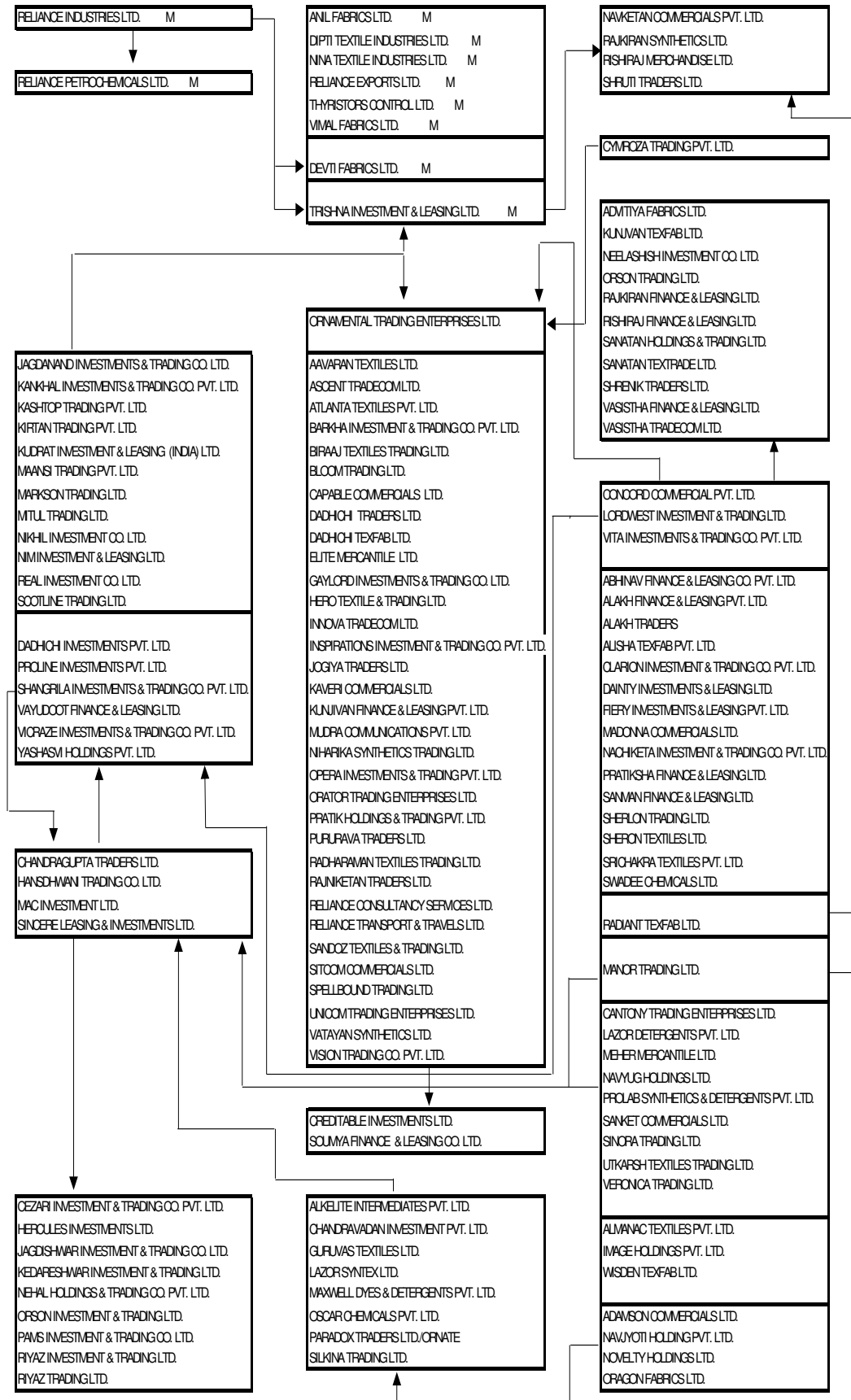
- iii. Not only was Reliance able to be a major net user of scarce foreign exchange throughout its expansion path, its raw material consumption and technology imports were more foreign currency intensive than of its peers. Also, in the 1980s the raising of customs duties on imports of certain products and the lowering of excise duties on the same at times coincided with Reliance's switch from importing the product to producing it. Thus, in the case of both PFY and PSF, Reliance's entry was followed by sharp rises in customs duties on imports of these products and in the case of the latter, there was also a parallel reduction in excise duties.

The success that Reliance achieved on the financing side, in combination with that in securing approvals, enabled Reliance to pursue a strategy – encompassing the combination of industries, degree of vertical integration, scales of production and technology choices – different from those of any of its rivals. Apart from allowing it to achieve a larger size these also proved Reliance a decisive advantage when the polyester industry faced difficulties because of overcapacity in the late 1980s and some firms turned sick.

Conclusion

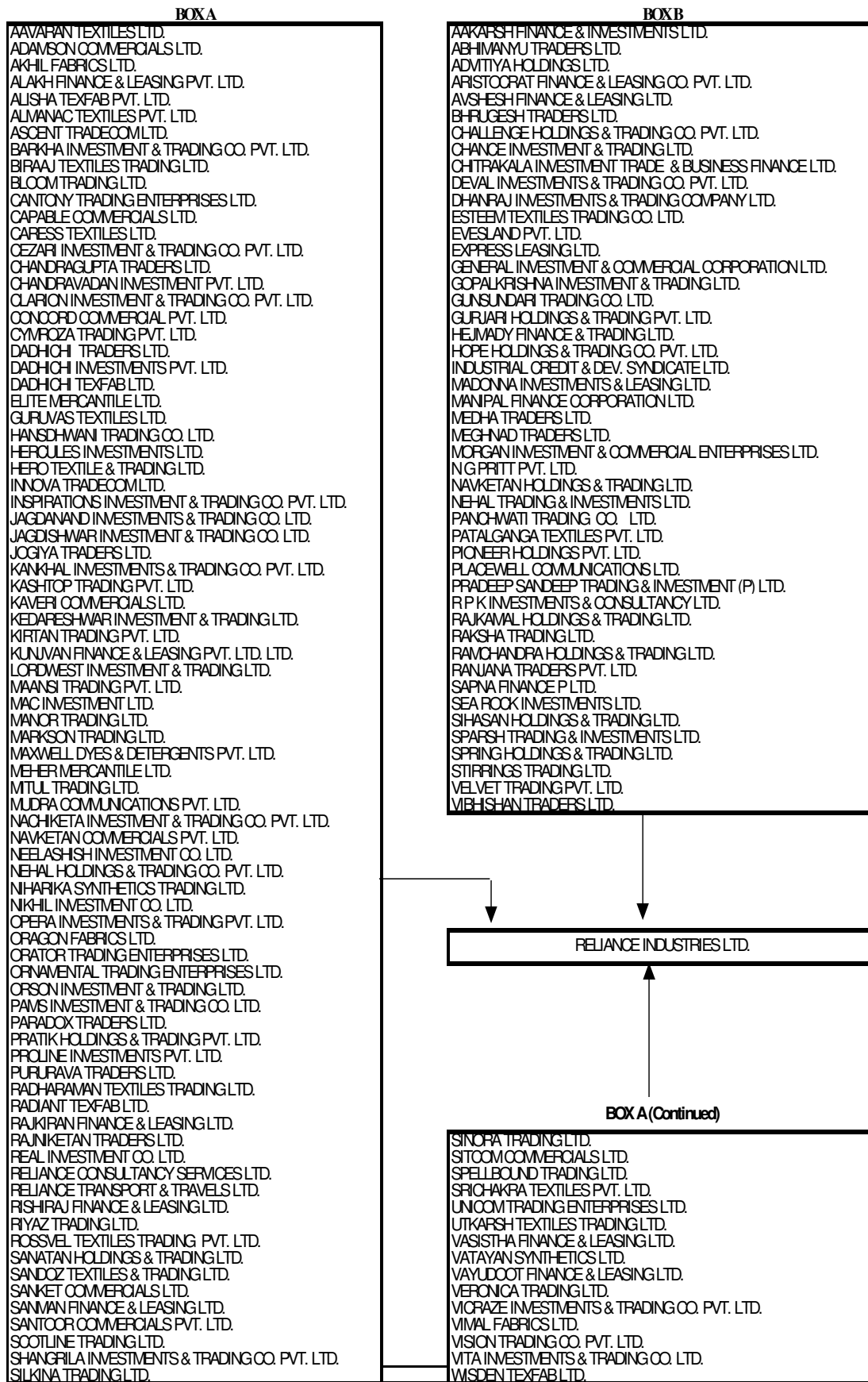
The phenomenal success of Reliance was very much a product of the pre-1991 regime of Indian capitalism, though it was also able to make use of that success as the foundation to benefit greatly from the subsequent liberalization process. This of course begs the question – was Reliance truly an outsider which forced its way into the Indian business elite by achieving business success overcoming the disadvantages of not being initially a part of it? Or was its success itself based on it finding a way to becoming a privileged insider and making use of the means made available by that privilege? On balance, it would seem that the Reliance story was a specific reflection of the fact that in Indian capitalism business success has heavily relied upon securing means – finance, technology and state support – from the outside rather than on creating technological and managerial capabilities within firms that would be proprietary in nature. Many, though not all, older members of the business elite were able to use precisely this feature to transform their enterprises and grow even as the industrial landscape changed and the industries in which they had originally established themselves declined in importance. Reliance's success and the way it was achieved, however, serves to establish that the degree of influence commanded by a business firm did not have a simple relationship with its past business success as the causality also operated in the other direction. The growth of Reliance and the survival in the elite of those it joined thus had common roots – highlighting in the process the persistence of the mercantile element in Indian capitalism. To that extent, it cannot really be said that the rise of Reliance was an expression of a fundamental transformation in the nature of India's capitalist class. That the ability to influence government decisions has been an important facet of Reliance's success even after 1991 (Guhathakurta 2014) would suggest that some essential features of Indian capitalism have survived the transition to liberalization.

FIGURE V.1: STRUCTURE OF INTERCONNECTIONS BETWEEN COMPANIES OF THE OF THE RELIANCE GROUP IN THE LATE 1980s, Part A



Notes: 1. Cos. marked 'M' are those which were registered under MRTP Act in 1980; 2. All arrows originate from company(ies) holding the shares; 3. Arrows to/from top/bottom of box valid for all companies in the box, and arrows to/from the sides valid only companies in the relevant sub-box

FIG. 1B: STRUCTURE OF INTERCONNECTIONS, RELIANCE GROUP, PART B



Note: Companies in Box A appear in Fig. 1A too.

Tables

Table 1: Number of Companies and Reliance Share in Installed Capacity in Selected Industries, 1990

Product	Number of Companies	Percentage Share of Reliance in Total Industry Installed Capacity
PFY	16	24.41
PSF	10	22.95
LAB	3	42.86
PTA	1 (4)	100.00 (42.55)
Paraxylene	3	74.59

Figures in brackets represent the position with regard to the aggregate of PTA and its substitute, DMT.

Source: DGTD, Handbook of Indigenous Manufacturers, 1990; CMIE, Markets & Market Shares, 1991; GOI, BICP (1994).

Table 2: Production Shares and Market Shares of Reliance Industries in 1989-90 (Percentages to Industry Totals)

Product	Reliance Share in Production	Reliance Share in Sales	
		Quantity	Value
PFY	38.04	N.A.	N.A.
PSF	41.93	44.32	33.61
LAB	38.54	45.53	43.78
PTA	100.00 (50.35)	100.00	100.00
Paraxylene	76.89		

Source: CMIE, Markets & Market Shares, 1991 and GOI, BICP (1994).

Table 3: Selected Balance Sheet Items of Reliance Group Companies, 1970-71 and 1976-77 (Values in Rs. Lakhs)

Year	Share Capital	Net Worth	Gross Block	Net Block	Total Assets/Liabilities
RELIANCE TEXTILE INDUSTRIES					
1970-71	65	152.18	289.14	265.03	399.81
1976-77	595.11	954.16	1699.92	1451.45	2910.87
TOTAL for All 6 Group Companies					
1970-71	65	152.18	289.14	265.03	399.81
1976-77	655.33	1023.37	1756.91	1489.03	3082.93

Source: Company Balance Sheets

Table 4: Indicators of Manufacturing Activity and Capacities of Reliance Group Companies, 1975-76 and 1976-77 (Yarn quantities in kilograms and Fabric quantities in metres)

Item	Total for 4 companies	
	1975-76	1976-77
Raw Materials Consumed		
Yarn	2101253	2416260
Fabrics (Grey)	8648496	6089677
Production		
Crimped Yarn	1498450	1762983
Fabrics	15273260	14391274
Installed Capacity (Numbers/Spindles)		
Looms	246	246
Knitting Machines	34	34
Crimping Machines	2848	2848
Twisting Machines	20	20

Source: Company Annual Reports

Table 5: Import Intensity of Reliance Textile Industries Investment and Production, 1975-76 and 1976-77 (Values in Rupees Lakhs)

	1975-76	1976-77
1. Imports		
Raw Materials	420	350
Dyes, Chemicals, Stores and Spare parts	18	16
Capital Goods	84	154
Total Imports	522	520
2. Import Intensity of Investment		
Capital Goods Imports as percentage of Increase in Plant and Machinery	28	49.68
3. Import Intensity in Current Costs		
Share of Imports in Consumption of Raw Materials and Dyes, Chemicals, etc	41.15	48.24

Source: Company Annual Reports

Table 6: Structure of Liabilities of the Reliance Group, 1970-71 to 1976-77

Year	Percentage to Total Liabilities			
	Net Worth	Secured Loans	Unsecured loans	Total Liabilities
Reliance Textile Industries				
1970-71	38.06	48.10	13.84	100.00
1971-72	37.73	61.16	1.11	100.00
1972-73	33.72	65.43	0.85	100.00
1973-74	35.79	63.50	0.71	100.00
1974-75	40.63	59.24	0.06	100.00
1975-76	37.79	60.70	1.44	100.00
1976-77	32.78	65.04	2.18	100.00
All Group Companies				
1970-71	38.06	48.10	13.84	100.00
1971-72	37.73	61.16	1.11	100.00
1972-73	33.72	65.43	0.85	100.00
1973-74	35.78	63.46	0.76	100.00
1974-75	40.63	59.14	0.16	100.00
1975-76	38.36	62.11	1.43	100.00
1976-77	33.19	63.84	2.20	100.00

Source: Company Balance Sheets

Table 7: Public Capital Issues by the Private Corporate Sector, 1980-81 to 1989-90

Group	No. of Issues	Amount Raised (Rs. Crores)	Percentage to Total Capital Issues
Large Issues (Over Rupees 50 Crores)			
Reliance	8	1749.00	9.16
Tata	10	1261.76	6.61
Birla	11	1024.93	5.37
L & T	4	994.19	5.21
Oswal Agro	4	871.72	4.56
Usha Rectifier	3	714.50	3.74
Essar	3	506.53	2.65
Total Issues	4938	19096.54	100
Reliance (All Issues)	13	1833.79	9.60

Source: Misra, B.M (1993)

Table 8: Increase in the Number of Companies of the Reliance Group, 1978 to 1989

Year->	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Companies Registered in the Year	6	7	2	10	17	21	31	6	49	5	2	5
Cumulative Total of Group Companies	12	19	21	31	48	69	100	106	155	160	162	167

Note: The above table excludes companies for whom the relevant information was not available. 7 companies that were registered earlier but acquired during this period have also not been included.

Source: Company Memorandums of Association and Directory of Joint Stock Companies, 1990

Table 9: Growth of Reliance Industries: 1977-78 to 1989-90 (Values in Rupees Crores)

Year	Share Capital	Net Worth	Net Fixed Assets	Total Assets/Liabilities	Sales
1977-78(15)	6.25	14.44	25.03	57.98	120.11
1979	7.84	23.63	37.74	85.42	155.13
1980	12.36	31.79	57.95	124.66	214.58
1981	16.97	57.09	105.56	222.51	312.22
1982	24.40	91.54	314.61	317.98	421.03
1983	41.95	129.88	321.46	388.42	520.35
1984	51.98	246.39	426.28	490.45	622.01
1985	57.41	311.12	606.80	946.76	733.14
1986	57.41	311.53	949.46	1137.34	905.48
1987-88(18)	157.90	1022.12	1584.08	1956.69	1770.74
1988-89(9)	157.91	1071.31	1502.78	2123.65	1112.45
1989-90	157.92	1086.98	1469.01	2203.31	1840.66

Note: Figures in brackets indicate number of months in the relevant accounting period when different from a year

Source: Company Annual Reports

Table 10: Installed Capacity of Reliance Group Companies, 1977-78 to 1989-90

Product->	TEXTILES				PETROCHEMICALS			
	Cotton/Blended/ Crimped Yarn		MMF Fabrics		PFY	PSF	PTA	LAB
Unit->	Spindles/ Nos.	Crimping and Twisting Machines/Nos.	Looms/ Nos.	Knitting Machines/ Nos.	M.T.	M.T.	M.T.	M.T.
End-Year	RELIANCE INDUSTRIES							
1977-78	0	61	450	22	0	0	0	0
1979	9582	80	450	22	0	0	0	0
1980	12494	122	450	22	0	0	0	0
1981	50682	130	940	22	0	0	0	0
1982	50682	200	940	22	10000	0	0	0
1983	50682	221	940	22	10000	0	0	0
1984	50682	0	940	22	10000	0	0	0
1985	12494	0	450	18	25125	45000	0	0
1986	12494	0	450	16	25125	45000	0	0
1987-88	12494	0	450	20	25125	45000	100000	60000
1988-89	12494	0	450	20	25125	45000	100000	60000
1989-90	12494	0	450	20	25125	45000	100000	60000
	DEVTI FABRICS							
1986	36448	0	490	0	0	0	0	0
1987	35496	0	490	0	0	0	0	0
1988-89	36546	0	490	0	0	0	0	0
1989-90	37536	0	490	0	0	0	0	0

Source: Company Annual Reports

Table 11: Import Intensity of Current Consumption of Reliance Industries, 1977-78 to 1989-90 (Percentage Share of Imports in)

Raw material Consumption	Dyes, Chemicals, Spares and Parts Consumed	Total
56.77	37.00	54.67

Source: Company Annual Reports

SELECT BIBLIOGRAPHY AND REFERENCES

Books, Articles and Reports

Alam, Ghayur 1982. "Growth of Man-Made Fibre Industry in India with Special Reference to Changes in International Technology Market" (mimeo). New Delhi: ICRIER-NCAER

Bertrand, Marianne, Mehta, Paras, and Mullainathan, Sendhil 2002. "Ferretting Out Tunneling: An Application to Indian Business Groups". *The Quarterly Journal of Economics*. 117(1): 121-148.

Boon, Gerard K. 1981. *Technology Transfer in Fibres, Textile and Apparel*. Alphen aan Rijn, The Netherlands: Sijtoff & Noordhoff

Chalapati Rao, K.S. 1985. "Inter-Connections under the MRTP Act in the Context of Asset Limit Hike". *Economic and Political Weekly*. 20(27): 1132-1146.

Chandrasekhar, C.P. 1984. "Growth and Technical Change in Indian Cotton-Mill Industry". *Economic and Political Weekly, Review of Political Economy*. 19(4):PE22-PE39.

Chandrasekhar, C.P. 1999. "Firms, Markets and the State, An Analysis of Indian Oligopoly". Pp. 230-266 in *Economy and Organization: Indian Institutions under the Neoliberal Regime*, edited by Amiya Kumar Bagchi. New Delhi: Sage Publications.

Chaudhuri, Saumitra 1994. *Cotton Yarn Spinning in India: The Competitive Advantage and Prospects, ICRA Sector Focus Series # 1*. New Delhi: Investment Information and Credit Rating Agency of India Limited.

Clairmonte, Frederick and John Cavanagh 1981. *The World in Their Web, Dynamics of Textile Multinationals*. London:Zed Press.

Dutta, Sudipt 1998. *Family Business in India*. New Delhi: Response Books (A Division of Sage Publications).

Ghemawat, Pankaj and Khanna, Tarun 1998. "The Nature of Diversified Business Groups: A Research Design and Two Case Studies". *The Journal of Industrial Economics* 46(1): 35-61.

Goswami, Omkar 1990. "Sickness and Growth of India's Textile Industry: Analysis and Policy Options". *Economic and Political Weekly* 25(44): 2429-2439 and 25(45): 2496-2506.

Government of India 1961. *Handbook of Export Promotion*. New Delhi: Ministry of Commerce and Industry.

Government of India 1964. *Report of the Powerloom Enquiry Committee*. New Delhi: Ministry of Industry.

Government of India 1969. *Report of the Industrial Licensing Policy Inquiry Committee (ILPIC Report), Main Report and Appendices*. New Delhi: Department of Industrial Development, Ministry of Industrial Development, Trade and Company Affairs.

Government of India 1976. "Petrochemicals in the Public Sector, Extracts from the Performance Budget of the Union Ministry of Petroleum, 1976-77". *ICMF Journal* 12(11):

Government of India 1985. *Report of the Expert Committee on the Textile Industry* New Delhi: Ministry of Supply and Textiles.

Government of India 1994. *Report on Paraxylene, DMT and PTA*. New Delhi: Bureau of Industrial Costs and Prices, Ministry of Industry.

Government of India 1999. *Report on Polyester Filament Yarn*. New Delhi: Bureau of Industrial Costs and Prices, Ministry of Industry.

Guhathakurta, Paranjay, with Subir Ghosh and Jyotirmoy Chaudhuri (2014). *Gas Wars, Crony Capitalism and the Ambanis*: New Delhi: Paranjay Guhathakurta, AuthorsUpFront and Feel Books

Guillén, Mauro F. 2000. "Business Groups in Emerging Economies: A Resource-Based View". *The Academy of Management Journal* 43(3): 362-380.

Hazari, R.K. (assisted by A.N. Oza) 1966. *The Structure of the Private Corporate Sector, A Study of Concentration, Ownership and Control*. Bombay: Asia Publishing House.

Khanna, Sushil 1984. "Transnational Corporations and Technology Transfer, Contours of Dependence in Indian Petrochemical Industry". *Economic and Political Weekly, Annual Number*. 19 (31/33): 1319-1340.

Khanna, Sushil 1989. "Technical Change and Competitiveness in the Indian Textile Industry". *Economic and Political Weekly* 24(34): M103-M111.

Khanna, Tarun and Krishna Palepu 2000. "Is Group Affiliation Profitable in Emerging Markets? An Analysis of Diversified Indian Business Groups". *The Journal of Finance* 55(2): 867-891.

Khanna, Tarun and Krishna Palepu 2005. "The Evolution of Concentrated Ownership in India: Broad Patterns and a History of the Indian Software Industry". Pp. 283-324 in *A History of Corporate Governance around the World: Family Business Groups to Professional Managers* edited by R. Morck. Chicago: University of Chicago Press.

Khanna, Tarun and Jan W. Rivkin 2001. "Estimating the Performance Effects of Business Groups in Emerging Markets". *Strategic Management Journal* 22(1): 45-74.

Khanna, Tarun and Yishay Yafeh 2007. "Business Groups in Emerging Markets: Paragons or Parasites". *Journal of Economic Literature* 45(2): 331-372.

Khurana, Rakesh 1981. *Growth of Large Business, Impact of Monopolies Legislation*. New Delhi: Wiley Eastern Limited.

Koedam, Hans E. 1971. "Cotton in Expanding Textile Market". *ICMF Journal*. 8 (2):

Kroese, W.T. 1971 and 1972. "A Quarter Century of Textile History", *ICMF Journal*. 8(7): , 8(8): , 8(9): and 8(10):

Kumar, L.R. 1986. *Sanctioned Capacities for Industries, November 1973 to March 1986*. Delhi: Indcom Associates.

Leff, Nathaniel H. 1978. "Industrial Organization and Entrepreneurship in the Developing Countries: The Economic Groups". *Economic Development and Cultural Change*. 26(4): 661-675.

Mazumdar, Surajit 2006 *Business Groups and Concentration in the Private Corporate Sector in India*, unpublished thesis, New Delhi: Jawaharlal Nehru University.

Mazumdar, Surajit 2008. "The Corporate Sector and Indian Industrialization: A Historical Perspective". Pp. 193-236 in *Industrial Development and Globalisation* edited by S. R. Hashim, K. S. Chalapati Rao, K. V. K. Ranganathan and M.R. Murthy. New Delhi: Academic Foundation.

Mazumdar, Surajit 2011. "The State, Industrialization and Competition: A Reassessment of India's Leading Business Enterprises under Dirigisme". *Economic History of the Developing Regions*. 26 (2): 33-54.

McDonald, Hamish 1998. *The Polyester Prince: The Rise of Dhirubhai Ambani*. Sydney: Allen and Unwin

- Mishra, B.M. 1993. "Developments in the Primary Capital market During the Eighties and Early Nineties" (mimeo). *Reserve Bank of India Staff Studies*. Bombay: Department of Economic Analysis and Policy.
- Mishra, Sanjiv 1993. *India's Textile Sector: A Policy Analysis*. New Delhi and London: Sage Publications,
- Mohnot, S.R. 1987. *Reliance: An Industrial Legend*. New Delhi: Centre for Industrial & Economic Research.
- Piramal, G. and M. Herdeck 1984. *India's Industrialists, Vol. I*. Washington: Three Continents Press.
- Piramal, Gita 1997. *Business Maharajas*. New Delhi: Penguin Books India.
- Ramaiya, A. 1992. *Guide to the Companies Act, 12th Edition* (edited by Y.V. Chandrachud, S.M. Dugar, Pesi M. Narielvala, T. Raghavan, Arvind P. Datar), Nagpur: Wadhwa and Company.
- Ray, Rajat K. 1994. 'Introduction'. Pp. 1-69 in *Entrepreneurship and Industry in India, 1800-1947* edited by Rajat K. Ray. Delhi: Oxford University Press.
- Read, Robert A. 1986. "The Synthetic Fibre Industry: Innovation, Integration and Market Structure". Pp. 196-224 in *Multinationals and World Trade: Vertical Integration and the Division of Labour in World Industries* by Mark C. Casson and Associates. London: George Allen and Unwin.
- Royal Dutch/Shell Group of Companies 1983. *The Petroleum Handbook, Sixth Edition*. Amsterdam: Elsevier Science Publishers.
- Siddharthan, N.S. and K. Narayanan 1990. "Synthetic Fibre Industry: Structure, Technology Expenditures, and Performance" (mimeo). Delhi: Institute of Economic Growth.
- Spitz, Peter H. 1988. *Petrochemicals: The Rise of an Industry*. New York: John Wiley and Sons.
- Sreenivasan, K. and Indira Doraiswamy 1973. *Survey of the Knitting Industry*. Coimbatore: SITRA.

Strolz, Herwig 1971. "Trends in World Textile Industry: Shift in Raw-Material Base and Capacity". *ICMF Journal* 8(6):

Thiriez, Marcel 1970. "Structural Changes in European Textile Industry". *ICMF Journal* 7 (2):.

Tisdell, C.A. and P.W. McDonald 1979. *Economics of Fibre Markets, A Global View of the Interdependence Between Man-Made Fibres, Wool and Cotton*. Oxford, New York, Toronto, Sydney, Paris, Frankfurt: Pergamon Press,

Uchikawa, Shuji 1998. *Indian Textile Industry: State Policy, Liberalization and Growth*. New Delhi: Manohar Publishers.

Wingate, Isabel B. 1976. *Textile Fabrics and their Selection*. Englewood Cliffs, New Jersey: Prentice-Hall Inc.

Winterbottom, W.T. 1966. "Man-Made Fibres as a Textile Catalyst". *ICMF Journal*. 3 (7):.

Statistical and Other References

A. Government

Compendium of Textile Statistics, 1991 and 1993, Office of the Textile Commissioner, Ministry of Textiles, Government of India, Bombay

Consumer Purchases of Textiles, Market Research Wing, Textiles Committee, Ministry of Commerce, Government of India, Bombay

CSO, National Accounts Statistics (various issues), Central Statistical Organisation, Department of Statistics, Ministry of Planning and Programme Implementation, New Delhi.

Directory of Joint Stock Companies in India 1980, Research and Statistics Division, Ministry of Industry, Government of India, New Delhi.

Directory of Joint Stock Companies in India 1985, Research and Statistics Division, Ministry of Industry, Government of India, New Delhi.

Directory of Joint Stock Companies in India 1990, Research and Statistics Division, Department of Company Affairs, Ministry of Law, Justice and Company Affairs, Government of India New Delhi.

Directory of MRTP Companies (1987 to 1990), Department of Company Affairs, Government of India, published in August issue of Company News and Notes.

Government of India (1965, 1968, 1977): **Directory of Indian Exporters**, Directorate General of Commercial Intelligence and Statistics, Calcutta

Government of India, **List of Textile Mills as on 31st March 1990**, Office of the Textile Commissioner, Ministry of Textiles, Bombay

Handbook of Indigenous Manufacturers (Chemical and Misc. Stores), 1990, Directorate General of Technical Development, Ministry of Industry, Government of India, New Delhi

Indian Textile Bulletin (various years), Office of the Textile Commissioner, Ministry of Commerce, Government of India, Bombay

Reserve Bank of India: **Private Corporate Business Sector in India, Selected Financial Statistics from 1950-51 to 1997-98 (All Industries)**, Company Finances Division, Department of Statistical Analysis and Computer Services, Mumbai

B. Non-Government

(Bombay) The Stock Exchange Official Directory (various years), Bombay Stock Exchange, Bombay.

ASFI (Association of Synthetic Fibre Industry) (various years), **Handbook of Statistics on Man-Made/Synthetic Fibre/Yarn Industry**, Bombay

Chandhok, H. L. and The Policy Group (1990): **India Database: The Economy**, Annual Time Series Data, Living Media India, New Delhi

CIER's Industrial Databook, 1994, Centre for Industrial and Economic Research, New Delhi

CMIE (Centre for Monitoring Indian Economy): **Market and Market Shares**, February 1991, Bombay

SASMA (Silk and Art Silk Mills Association Ltd.) 1964. **Directory of Members** (Brought out on Silver Jubilee of Association), Bombay

SASMA (Silk and Art Silk Mills Association Ltd.) (1966): **Statistical Supplement for Year 1965-66**, Bombay

SASMIRA (Synthetic and Art Silk Mills' Research Association): **Statistics Man-Made Textiles**, 1974, Bombay

C. International

UN (United Nations) (various years), **Industrial Statistics Yearbook/Yearbook of Industrial Statistics**, Department of Economic and Social affairs/Statistical Office of the UN

UN (United Nations), **Industrial Commodity Statistics Yearbook**, 2001 and 2002

D. Reliance

Annual Reports of Reliance Industries and Subsidiaries, 1975-76 to 1989-90

Annual Returns (various years) and other filings of 115 Companies submitted to the Registrar of Companies, Bombay and Bangalore.