

**AN ANALYSIS OF MERGERS IN THE  
PRIVATE CORPORATE SECTOR IN INDIA**

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## ABSTRACT

The liberalised economic policies have exposed Indian industry to several challenges. In response to this, the Indian economy has witnessed a sharp increase in mergers and acquisitions. An attempt has been made in this paper to analyse the significance of such mergers and its characteristics. The study suggests that acceleration of the merger movement in the early 1990s is accompanied by the dominance of mergers between firms belonging to same business group or house with similar product lines. So it is argued that though the merger movement in the early 1990s might have contributed to an increase in product or asset concentration measured on a firm-wise basis, it could not have contributed to an increase in concentration as measured by relative shares of business groups. But, there are signs that mergers between unrelated firms, though numerically less significant, have been gaining ground. This is especially true of mergers involving foreign-owned firms. The participation of foreign-controlled firms in the merger process has increased significantly since 1992-93. However it is evident that mergers contributed significantly to asset-growth in only one fifth of the sample firms studied. Most of these firms mobilised a large share of resources through capital markets, to finance their expansion during 1989-90 to 1994-95. Therefore the study argues that the merger wave in the early 1990s was more a means of internal restructuring rather than an instrument to further product market or asset share.

**JEL Classification :** D43, G34, L41

**Key Words:** mergers and acquisitions; horizontal merger, vertical merger, conglomeration, private corporate sector, India

## **Introduction**

The structural adjustment programme and the new industrial policy adopted by the Government of India would allow business houses to undertake without restriction any programme of expansion either by entering into a new market or through expansion in an existing market. In that context, it also appears that Indian business houses are increasingly resorting to mergers and acquisitions as a means to growth. The present paper seeks to analyse the role of such mergers in the private corporate manufacturing sector during the early 1990s. This paper consists of five sections. The first section discusses the concepts and definitions and some theoretical issues related to mergers. The second section explains the different type of "merger wave" occurred in developed countries and the Indian experience. The third section analyses the significance of merger process in the 1990s. This section also explains the data source and the method used for selecting the samples. An in-depth analysis of the characteristics of these mergers in terms of management and of their economic rationale is carried out in the fourth section. The role of acquisitions in the growth of assets of acquiring firms and sources of financing their growth are analysed in the last section.

## Section I

### Concepts and Definition

Mergers or amalgamation, result in the combination of two or more companies into one, wherein the merging entities lose their identities. No fresh investment is made through this process. However, an exchange of shares takes place between the entities involved in such a process. Generally, the company that survives is the buyer which retains its identity and the seller company is extinguished (Ramaiya, 1977).

A merger can also be defined as an amalgamation if all assets and liabilities of one company are transferred to the transferee company in consideration of payment in the form of equity shares of the transferee company or debentures or cash or a mix of the above modes of payment.

An acquisition, on the other hand, is aimed at gaining a controlling interest in the share capital of acquired company. It can be enforced through an agreement with the persons holding a majority interest in the company's management or through purchasing shares in the open market or purchasing new shares by private treaty or by making a take-over offer to the general body of shareholders.

A takeover, which is essentially an acquisition, differs from a merger in its approach to business combinations. In the process of takeover, the acquiring company decides the maximum price that is to be offered to the acquired firm and hence takes lesser time in completing a transaction than in mergers, provided the top management of the acquired company is co-operative. In merger transactions, the consideration is paid for in shares whereas in a takeover, the consideration is in the form of cash. However, mergers and takeovers can be treated as similar processes, since in both cases at least one set of shareholders loses executive control over a corporation which they otherwise held.

Based on the objective profile of an offer, business combinations such as mergers, acquisitions or takeovers could be categorised as vertical, horizontal, circular or conglomerate mergers (Peter, 1975).

### ***Vertical Combination***

A vertical combination is one in which a company takes over or seeks a merger with another company in order to ensure backward integration or assimilation of the sources of supply or forward integration towards market outlets. The acquirer company gains a strong position due to the imperfect market of its intermediary products and also through control over product specifications. However, these gains must be weighed against the adverse effects of the merger. For instance, firms which have monopoly power in one stage may increase barriers to entry through vertical integration and this would help to discriminate between different purchasers by monopolisation of raw material supplies or distributive outlets (Comanor, 1967).

### ***Horizontal Combination***

A horizontal combination is a merger of two competing firms belonging to the same industry which are at the same stage of the industrial process. These mergers are carried out to obtain economies of scale in production by eliminating duplication of facilities and operations and broadening the product line, reducing investment in working capital, eliminating competition through product concentration, reducing advertising costs, increasing market segments and exercising better control over the market. It is also an indirect route to achieving technical economies of large scale.

### ***Circular Combination***

In a circular combination, companies producing distinct products in the same industry, seek amalgamation to share common distribution

and research facilities in order to obtain economies by eliminating costs of duplication and promoting market enlargement. The acquiring company obtains benefits in the form of economies of resource sharing and diversification (Ansoff and Weston, 1962).

### ***Conglomerate Combination***

A conglomerate combination is the amalgamation of two companies engaged in unrelated industries. It enhances the overall stability of the acquirer company and improves the balance in the company's total portfolio of diverse products and production processes. Through this process, the acquired firm gets access to the existing productive resources of the conglomerate which result in technical efficiency and furthermore it can have access to the greater financial strength of the present acquirer which provides a financial basis for further expansion by acquiring potential competitors. These processes also lead to changes in the structure and behaviour of acquired industries since it opens up new possibilities (Mueller, 1969).

### **Mergers, Growth and Diversification**

Mergers, we have mentioned, are an important means to corporate growth. A firm or a group can be expanded in several ways. One way of growth, is through the extension of existing activities by upscaling capacities or establishing a new firm with fresh investment in existing product markets. However, a firm normally faces two major constraints when it seeks to grow within a single market. When the size of the market is small and the rate of expansion is too low, the growth of a set of firms in the same market might affect adversely the growth of other firms. Thus, it could lead to price wars or takeover bids. This, and other constraints such as control by the government over the expansion of

firms in particular lines, encourage firms to grow by diversifying into other markets.

Through diversification, firms can increase their sales by either creating new markets for the same product or entering new markets by diversifying into new product lines. When the present market does not provide much additional opportunity for growth, diversification as a strategy is vital for a firm if it wants to augment its demand base. In practice, diversification is an important way in which firms grow. A firm is said to diversify if it produces new products including intermediate products that are sufficiently different from the existing product lines (Penrose, 1959). Besides, it also diversifies to take account of the changing opportunity costs of its own resources, which might occur when existing markets become relatively less profitable than opportunities for new investments elsewhere. With a growing and reasonably stable industry, a shift can take place in the manufacturing processes, the product profiles and the demand patterns arising out of technological innovations. To reduce this vulnerability, a firm with excellent apparent growth and stability prospects which becomes vulnerable to sudden changes because its product line has a narrow technological and market base, may need to increase its flexibility by broadening this base to new markets and particularly to new areas of technology. For these reasons, during the 1970s, for example, large firms in India and elsewhere had diversified into new fields, related or unrelated to the existing business (Kumar, 1985,p.105).

Growth and diversification can be achieved both internally and externally. Mergers, tender offers and joint ventures are all strategies through which a firm can grow externally. A firm would grow by external expansion when it becomes difficult for a firm to use its resources

efficiently for further growth. Mergers do not require any cash outlay and therefore can be considered as the only way of diversifying activities for a firm whose financial position is not strong and whose managerial and technical services are highly specific to existing products (Penrose, 1959).

## **Section II**

### **Merger Waves in the Developed Countries**

A series of merger waves has been witnessed in many of the market-oriented economies. There have been three major merger waves in the United States during the periods 1887-1905, 1916-1929, and post-world war II. In the US economy, the first merger wave during 1895 to 1904 was characterised by horizontal mergers, which increased concentration in a number of industries. The second wave, 1922-29, appeared to have been characterised by a higher incidence of vertical integration and diversified mergers. However, the immediate post-war merger boom was relatively smaller. The difference between these two periods can be described as "mergers for monopoly" and "mergers for oligopoly". Anti-trust policies appear to have influenced the third wave significantly, which commenced after World War II. (Scherer, 1979). The diversification and conglomerate types dominated the merger movement during the sixties. During the eighties, the nature of mergers has been characterised by a return to specialisation and an enormous increase in real sizes. The merger waves in the US, in the eighties and beyond are characterised by the strong relatedness between the businesses of the merging firms unlike the conglomerate mergers in the sixties and seventies. In constant dollar terms, the mergers during 1988 increased almost four to six times more than the value of mergers in the early seventies. The value of mergers

which represented 10 to 15 percent of the investments made in plant and machinery in the seventies, increased to 40-45 percent levels in the later half of the eighties (Weston, et.al, 1996).

The other developed countries such as the UK, Canada, France, Germany and Japan have also witnessed periods of a sharp rise in merger activity, although the US has been the most active mergers market. In the United Kingdom, horizontal mergers were the dominant form between 1954 and 1965 and since then there has been a trend towards diversified merger. The value of assets acquired through diversified merger rose to 33 percent in 1972 from 5 percent in 1966. The merger wave since 1980s witnessed divestments on a large scale. In 1992 it was accounted for 31 percent of all acquisitions and mergers. A continuously rising trend in mergers has been noticed in Germany since 1958, with exceptionally high growth rates in the number of mergers during 1969 and 1970.

### **Indian Experience**

Though mergers between large business firms have been negotiated and concluded right through the post-Independence period in India, a full list of mergers and amalgamations settled during each year has been published only since 1972-73. For this reason the discussion in this paper of the overall trends in mergers and acquisitions in the private corporate sector in India is restricted to the period 1972-73 to 1994-95. However, the constrained choice of the year 1972-73 as the cut off period, is not wholly inappropriate because a number of significant changes in government policies became operative immediately before or in that year. These changes were heralded, *inter alia*, through the abolition of the managing agency system, the passage of the MRTP Act 1969, the nationalisation of the banking system in 1969 and the announcement of

new provisions granting tax relief in the Finance Bill for 1967<sup>1</sup>. All these initiatives were aimed at curtailing the power of the big business houses and dealing with the adverse consequences of the absence of price competition among the established business groups. They therefore affected the process of growth through mergers as well.

The trends in amalgamations and take-overs during the period 1972-73 to 1994-95 are given in the Table 1. The annual number of amalgamations involving non-MRTP companies for the sub-period 1972-73 to 1991-92 was calculated from the lists provided in the annual issues of the publication "Registration and Liquidation of Joint Stock Companies" prepared by the R&D division of the Department of Company Affairs (DCA). Similarly, the annual number of amalgamations and take-overs involving MRTP companies for the period between 1972-73 to 1991-92 was obtained from the lists provided in various issues of the "Annual Report on the Working and Administration of the MRTP Act, 1969". However, the number of take-overs involving non-MRTP companies during this period could not be computed since the relevant lists are not available. Further, separate lists of amalgamations and take-overs for MRTP and Non-MRTP companies are not available for the period after 1992-93, since sections 23 and 24 of Chapter III which dealt with amalgamations and take-overs were removed through amendments to the MRTP Act, 1969. The number of amalgamations for the period

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1 The income tax Act, 1961 contains special provisions for some type of amalgamation and provides for some tax reliefs subject to certain conditions. The tax relief relates to development rebate and development allowance. The finance Act, 1967 extended the sphere of reliefs in tax matters in relation to an amalgamation. Under the Act, as amended, the issue of shares by the transferee company to the shareholders of the amalgamating companies will not by itself give rise to a liability to capital gain tax. The shares in the transferee company will be treated as the same as the shares in the amalgamating companies. It further appears that no part of the value of the shares received by shareholders in exchange under a scheme of amalgamation may be considered as dividend.

**Table 1: Trends of Mergers and Acquisitions During 1972-73 to 1994-95**

Year	Mergers			Takeovers		
	Non-Maf	Maf	Total	Non-Maf	Maf	Total
1974-79	48	108	156	0	11	11
Avg	10	22	31	0	2	2
1980-84	39	117	156	0	15	15
Avg	8	23	37	0	3	3
1985-89	33	79	113	6	85	91
Avg	10	23	35	2	17	18
1990-94	108	128	236	8	47	55#
Avg	22	25	47	Na	Na	Na

Source:- Registration and Liquidation of Joint Stock Companies in India, Various Issues. Report on the working and Administration of the MRTP Act, 1969, Department of Company Affairs, GOI, Various Issues.

Na = Not Available. # represents only the number of takeovers for 1990-91 and 1991-92 as the data for the rest of the years has not published.

between 1992-93 to 1994-95 was, however, computed from lists available in the various issues of the publication "Registration and Liquidation of Joint Stock Companies".

There are a number of aspects of the merger movement revealed by these figures. First, from these lists it is clear that both MRTP and non-MRTP companies have used mergers and take-overs as an important means of growth since the 1970s. Second, there are signs of acceleration in the merger movement in the liberalisation years of the 1990s. The

total number of amalgamations (computed from a listing of acquiring firms alone) during the period 1975-76 to 1979-80 was 156 (See Table 1). That figure remained at 156 during the next quinquennium (1980-81 to 1984-85), and then fell to 113 during the period 1985-86 to 1989-90. However, facilitated by changes in the policy environment, the number of mergers rose sharply to 236 during the period 1990-91 to 1994-95.

Third, the evidence suggests that the number of amalgamations among non-MRTP companies was always more than in the case of MRTP companies during the period 1970-71 to 1990-91, although the involvement of MRTP companies in the merger movement was relatively higher in the eighties as compared with the seventies (see Table 2). For instance, the total number of mergers among MRTP companies during the periods 1980-81 to 1984-85 and 1985-86 to 1989-90 was 41 and 43 respectively whereas it was only 27 during the period of 1974-75 to 1979-80. This dominance of MRTP companies is of significance, given the evidence discussed earlier, that the MRTP Act did not excessively constrain mergers. Thus mergers may have been a means adopted by non-MRTP firms to exploit the advantages of size in order to build their competitive strengths, including those vis-à-vis the larger companies belonging to the MRTP groups. Further, as reported in Table 2, it has been found that more than 50 percent of mergers during the 1990s involved acquiring firms in the manufacturing sector whose total assets were below Rs. 100 crore. This numerical preponderance of 'non-MRTP' firms is possible because size matters from the point of view of availing the opportunities provided by the new economic policy. For instance, the norm fixed for promoters' contribution for purposes of eligibility for getting loans from financial institutions was hiked to 25 percent with certain relaxation for large projects and projects promoted by first generation entrepreneurs. Further, the debt equity norm for financial institutions which was tightened to 1.5:1 as against 2:1 earlier could be

relaxed to 2:1 only for large projects. The interest rates on financial assistance provided by term lending institutions were made flexible with a floor rate of 15 percent per annum, and FIs were also allowed to charge higher interest rates on their loans taking in to account factors such as credit worthiness of the borrowing unit (Company News & Notes, 1993).

Fourth, the figures also show that MRTP companies have been increasingly resorting to takeovers since the 1970's, although the number was insignificant. However there was a sharp increase (to 91) in the number of takeovers among the MRTP companies during the period between 1985-86 to 1989-90 whereas it was only 15 during the period between 1980-81 to 1984-85. Once again, one of the reasons for this sharp increase in the number of takeovers in the late eighties as compared to the period before that could be the ethos of liberalisation and changes in the law it generated.

**Table 2: Composition of Amalgamated Companies during the Period Between 1974-75 to 1994-95**

Year	MRTP			Non-MRTP		
	Non-Maf	Maf	Total	Non-Maf	Maf	Total
1974-79	4	23	27	44	85	129
1980-84	5	36	41	34	81	115
1985-89	10	33	43	24	46	70
1990-94	Na	Na		108	128	236

Source: Same as Table 1.

Na = Not Applicable since MRTP Act has been removed in 1991.

Fifth, a categorisation of mergers in terms of manufacturing and non-manufacturing firms showed that the participation of manufacturing firms in the merger movement was always higher than that of the non-manufacturing firms in the case of both MRTP and non-MRTP companies throughout our study period. However, the participation of non-manufacturing firms in the amalgamation trend increased sharply in the 1990s. Thus, the annual average number of mergers among non-manufacturing firms for the period of 1974-1979, 1980-1984 and 1985-1989 stood at 10, 8 and 10 respectively whereas it was 22, 23 and 23 in the case of manufacturing firms. However, the average number of non-manufacturing firms resorting to mergers during the period 1990-94 had touched 22, which was not far below the 25 recorded in the case of manufacturing firms (see Table 1). One reason for this was the financial liberalisation of the 1990s which not merely increased mergers among financial firms for reasons of competitive capacity-building, but also because of a tendency of firms to merge with dormant or "shell" finance companies to facilitate early listing in the stock market. This possibility of being quoted afforded by mergers with financial firms registered in the market, allowed the private limited companies to exploit the capital market boom through the private placement of shares. A merger with a listed company allowed the firm concerned to provide a guarantee to the external investor that the shares would be listed within a specified period so as to offer the investor the possibility of exit. This is corroborated by the evidence on the incidence of amalgamations involving private limited as opposed to public limited companies during the period 1985-86 to 1994-95. That evidence shows that, while the overall involvement of private limited firms in the amalgamation process was relatively lower than that of public limited firms during this period, the share of cases involving the former increased from 20 percent during 1985 to 1990 to 31 percent during 1990 to 1995. The evidence also shows, as expected,

that the share of private limited firms involved in the merger process was higher in the non-manufacturing than in the manufacturing sector.

Finally, the data shows that in mergers involving non-manufacturing firms, while the participation of financial companies was less than that of service companies during 1985-86 to 1994-95, the share of financial companies increased from 26 percent during 1985-89 to 30 percent during 1990-91 to 1994-95 (Beena,1998).

### **Section III**

The evidence presented in the previous section suggests that the Indian private corporate sector have been considered mergers as a means of growth since the seventies. The present section would focus more on the significance of mergers during 1990s and its characteristics. Before getting in to the discussion, we would like to brief the data, methodology and the sample.

#### **Data, Methodology and the Sample**

An attempt was made to construct a partial list of mergers which had occurred in the manufacturing sector at the all-India level over the period 1990-91 to 1994-95 by visiting the offices of the Regional Directors of the Department of Company Affairs at Kanpur, Madras and Bombay. The office of the fourth Regional Director at Calcutta could not be accessed for various reasons. Though the partial list compiled from the office of the Regional Directors overlapped with the annual list of mergers and amalgamations prepared by the R& D division of the Department of Company Affairs (DCA), it included some firms that were not listed by the DCA. The final list prepared for this analysis consisted of the set of all mergers listed by the R&D division of the Department of Company Affairs and those that were not included in the DCA list but

whose records were available at the Regional Directors' Offices in three regions. This list is, however, still partial, since it does not cover all firms for which the records are available at the office of the Regional Director of the Eastern region located at Calcutta. It is likely that while a large number of such cases would be covered by the list used here, there would be some mergers that may have been excluded, since they may have been left out of the DCA list. That the likelihood that some of the mergers relating to the Eastern region may have been left out of the DCA list is high is suggested by the fact that a number of cases for which records were available at the offices of the Regional Directors of the DCA at Kanpur, Madras and Bombay were excluded from the All-India DCA list. As a result even the partial list constructed for this study is longer than the all-India list prepared by the R&D division of the Department of Company Affairs.

As per the partial list constructed for this study, there were at least 128 public limited firms involved, as acquiring firms, in the merger process in the manufacturing sector during the period 1990-91 to 1994-95, whereas the lists published by Department of Company Affairs reported only 102 cases. Both these sets are constituted of cases which are governed by sections 391-394 of the Companies Act, 1956. The reason for the divergence between the two sets is not hard to find. There are two reporting steps involved in the preparation of the list published by the DCA. In the first step, as per the law, companies which are involved in a merger are required to inform the Registrar of Companies (ROC) within thirty days of the issue of an order by the High Court sanctioning a merger. In the second step, based on the information received from the companies, the ROC prepares a list of mergers for every month and sends it to the R&D division of the DCA. The all-India list available with the DCA might be incomplete if there is a delay in or a violation of any one of these procedures.

## **Significance of the Merger Process During the 1990s**

A preliminary examination of the acquiring firms involved in the merger process during the 1990s indicates that even though they account for a marginal segment of the corporate sector as a whole, the size of that segment has been increasing quite sharply through the 1990s. In order to assess the relative size of the segment involved in the merger process during the 1990s, we chose a sub-sample 109 mergers, in whose case data on the paid-up capital of the acquiring firm was available in the "Directory of Joint Stock Companies" (published in 1990). These firms accounted for around 85 per cent of total number of mergers (128) included in the partial list for the manufacturing sector constructed from the list of the DCA and the files in the various offices of the Department of Company Affairs. A comparison of the total paid-up capital of the acquiring firms involved in the mergers included in our sub-sample with the paid-up capital of the corporate manufacturing sector as reported in the "Annual Report on the Working and Administration of the Companies Act 1956" of the Ministry of Law, Justice & Company Affairs provides a reasonable estimation of the strength of the merger movement during the 1990s. In case the paid-up capital for all the years could not be obtained for any company the paid-up capital in the year 1990 was taken as a proxy. As can be seen from Table 3, the share of paid-up capital of firms involved in the merger process in paid up capital of corporate sector as a whole rose from 1.03 percentage in 1990-91 to 1.42% during 1991-92, 2.71% in 1993-94, and 3.54% in 1994-95.

An interesting point that emerges from Table 3 is that the strength of the major movement, as defined by us, has not depended on the number of mergers in a particular year. Thus, the relative share of total corporate paid-up capital of the acquiring firms was not high during the year 1992-93 (1.15%) when compared with the other years, in spite

of it being a year characterised by the occurrence of a large number of mergers. This divergence is because of the participation of a large number of small sized firms in the merger movement in that particular year, making mergers a less important influence on corporate structure as compared with other years.

**Table 3: Share of Acquiring Manufacturing Firms in the Public Limited Private Corporate Manufacturing Sector During 1990-91 to 1994-95.**

Rs Lakhs						
Year	Private Corporate Manufacturing Firms		Total Acquiring Firms		Share of Acquiring Firms to the Total (%)	
	PUC	No	PUC	No	PUC	No
1990-91	1117920	12855	11468.10	12	1.03	0.09
1991-92	1349394	13717	19137.71	14	1.42	0.10
1992-93	1933997	15599	22166.75	39	1.15	0.25
1993-94	2403066	16862	65164.64	21	2.71	0.12
1994-95	2952634	19544	104455.30	23	3.54	0.12
Total	9757011	78577	222392.5	109	2.28	0.14

Source :-

(a) For columns 1 and 2 "Annual Report on the Working and Administration of the Companies Act 1956", Ministry of Law Justice and Company Affairs, GOI, Various Years.

(b) For columns 3 and 4 CIMM database, Annual Reports of the various firms, and the Directory of the Joint Stock Companies, 1990, Various Volumes.

In order to analyse the composition of acquiring firms in terms of total assets, 94 out of 128 acquiring firms have been selected for which the data on total assets could be obtained. Table 4 categorises the total assets figure of all selected acquiring firms for each year during period 1990-91 to 1994-95 into different size classes. While undertaking this exercise we used total assets figure for the year 1990 as a proxy for assets in all years in the case of those firms for which data for the later period could not be obtained. Thus our figures underestimate the significance of merger movement both because the sample is partial and in some cases the data underestimates the actual size of assets.

Thus around 41 per cent (39 out of 94) of the acquiring firms belong to the asset-size class of Rs 100 crore and above, which was the cut-off asset figure in the now diluted MRTP Act. Looking at the official categorisation of firms in the sample, it was found that 30 out of the 94 acquiring firms were listed as the MRTP companies as on 30/6/1989 (Company News & Notes, 1989). Interestingly, as of 1990-91, only 13 out of these 30 held total assets which were in excess of Rs.100 cr, whereas the rest of the firms belonged to size classes of below Rs.100 cr as on that date. However, 27 out of these 30 MRTP firms were in size class of Rs.100 cr and above when they went in for the merger. Interestingly, most of these firms which would have at an earlier date been classified as MRTP firms had acquired another firm which both belonged to the same management and produced a similar product. As per the law relating to mergers, any merger involving these characteristics is exempt from obtaining a special clearance from the government under the MRTP Act and could opt for merger through High Court sanction alone. Thus, it may not be true that MRTP regulations were responsible for these mergers not having occurred prior to the 1990s. At the same time, it can further be argued that most of these MRTP firm which have been involved in the merger process could not have opted for this route expansion if

government had not diluted the MRTP Act. Thus the removal of institutional entry barriers had encouraged a few Indian and foreign firms to redefine their product portfolios and reformulate their corporate and business strategies through the merger process.

Among the MRTP firms, big firms dominated the merger process. Thus, 16 out of 39 acquiring firms with assets more than Rs.100 crores belonged to the asset-size class of Rs 500 crores. These 16 firms had accounted for an overwhelming share of 86.52 per cent of the total assets of the sample acquiring firms. Though 34 percent of the sampled mergers involved small-sized firms belonging to the asset-size category of Rs 1 crore to Rs 25 crores, they accounted for a meagre 0.33 percent of the total assets.

**Table 4: Size-wise Distribution of 94 Acquiring Firms in Terms of Total Assets and Number**

(Rs Lakhs)

Size	1990-91	1991-92	1992-93	1993-94	1994-95	Total	%Share to total
Above 500 crores	118911	488021	427515	1288767	1599705	3922919	86.52
	1	1	2	6	6	16	17.02
250-500 crores	46441	0	105725	34046	48874	235086	5.18
	1	0	3	1	1	6	6.38
100-250 crores	68999	73228	57590	36623	60828	297268	6.56
	4	4	3	2	4	17	18.09
25-100 crores	2545.00	0	42213	15843	2714	63315	1.40
	1	0	7	2	1	11	11.70
10 to 25 crores	0.00	3254	2321	0	0	5575	0.12
	0	2	2	0	0	4	4.26
5 to 10 crores	0.00	0	3179	0	0	3179	0.07
	0	0	4	0	0	4	4.26
1 to 5 crores	815.61	633	2180	326	2283	6238	0.14
	3	3	8	2	8	24	25.53
< 1 crore	92.52	58	20	242	0	413	0.01
	2	2	4	4	0	12	12.77
Total	237804	565194	640743	1375847	1714404	4533992	100
	12	12	33	17	20	94	100

Source: Same as Table 3

## **Mergers, Concentration and Profitability**

The fact that in terms of total assets mergers are concentrated in MRTP firms, points to an increase in concentration as a result of the merger movement. This tendency towards increased concentration was however not too damaging because the merger movement affected a relatively small section of the private corporate sector. To illustrate this we compare the size and performance of 68 out of 107 acquiring firms, in whose case the required data on financial indicators could be obtained, with the private corporate sector as a whole. The size and performance of the latter is taken as being well represented by Reserve Bank of India's surveys of Finances of Public Limited Companies, 1991 to 1992, which give the performance of non-financial public limited firms in the private corporate sector in India.

Table 5 presents a comparison of the size of the sample of acquiring firms considered for our purpose and the RBI's sample. The former represents 3.7 percent of the latter in terms of number of manufacturing firms, and accounts for 13.48 percent of the total paid-up capital of the latter. Further, small firms with paid-up capital smaller than 1 crore accounted for a much larger share of the RBI sample both in terms of number and size of paid-up capital than was the case with the sample of firms involved in mergers. While the latter sample likely to be more biased in terms of inadequate coverage, this evidence of a preponderance of larger firms in the merger movement does tally with some of the results discussed earlier.

In terms of financial performance as well, the acquiring firms were among the more successful during 1990-91 to 1994-95 (see Table 6). We have measured profitability by using three different ratios and from this it is observed that the acquiring firms performed relatively better as compared to the overall-manufacturing sector. Firms relying on mergers

**Table 5: Size wise Distribution of Share of Sample Acquiring Firms to the Total Manufacturing Sector(Rs.Lakhs)**

Size	RBI Sample		Acquiring Firms		% Share	
	PUC	No	PUC	No	PUC	No
>25 crores	301,300	60	71,547.48	10	23.75	16.67
10 to 25 crores	154,100	112	12,571.38	9	8.16	8.04
5 to 10 crores	112,400	168	10,519.49	15	9.36	8.93
1 to 5 crores	156,100	724	6,879.64	25	4.41	3.45
25 Lakhs to 1 crore	30,400	518	662.12	9	2.18	1.74
5 Lakhs to 25 Lakhs	3,500	216	0	0	0	0
< 5 Lakhs	100	38	0	0	0	0
Total	757,900	1,836	102,180.11	68	13.48	3.7

Maf. = Manufacturing

Source:-

a) RBI Bulletin, October- November, 1995

b) The table titled "Selected Financial Parameters for the Year 1991-92 in respect of Large-Sized Non-Government Companies each having PUC of Rs. 50 Lakhs or more" in Registration and Liquidation of Joint Stock Companies in India, 1993-94

for growth require less of both their own reserves and debt to finance their expansion.

Thus the contribution of reserves and surpluses for generating net fixed assets in the case of the acquiring firms was relatively low when compared with the private corporate manufacturing sector. Similarly, acquiring firms were characterised by a relatively low ratio of debt to equity as compared with the overall-manufacturing sector, suggesting

**Table 6: Financial Performance of Acquiring Manufacturing Firms and the Private Corporate Manufacturing Sector in India**

Ratios		1990-91	1991-92	1992-93	1993-94	1994-95	Average
PBT/TA	Acquiring	0.06	0.08	0.06	Na	0.09	0.07
	Maf. Sector	0.02	0.01	0.05	0.06	0.07	0.04
PBT/TI	Acquiring	0.07	0.07	0.06	Na	0.09	0.07
	Maf. Sector	0.02	0.02	0.05	0.07	0.09	0.05
PBT/NW	Acquiring	0.17	0.23	0.12	Na	0.2	0.18
	Maf. Sector	0.07	0.05	0.14	0.16	0.18	0.12
R&S/NFA	Acquiring	0.72	0.63	0.87	Na	0.96	0.79
	Maf. Sector	1.94	1.89	1.75	1.55	1.35	1.69
Debt/Equity	Acquiring	6.73	4.43	5.29	Na	4.39	5.21
	Maf. Sector	5.39	5.89	5.78	5.37	5.28	5.54
No of firms	Acquiring	68	64	69	Na	61	
	Maf. Sector	1,836	1,836	1,720	1,720	1,720	

Note: Na: Not Available

Source: Same as Table 5

that mergers helped them to maintain a more viable capital structure when compared to the overall-manufacturing sector.

## Section IV

The previous section argued that the new economic environment in the 1990s had facilitated the merger process in the Indian corporate sector. A few large corporations dominated the merger movement during the 1990s. The financial performance of the acquiring firms was relatively better than the performance of the overall private corporate manufacturing sector. The present section seeks to extend that analysis, by looking

closely at the nature of these mergers in terms of management and of their economic rationale in a selected sample of 45 cases. This reduction in sample size has the added advantage of restricting the analysis to those cases wherein the papers submitted by the firm regarding the scheme of amalgamation provided adequate details and could be accessed. With this objective in mind we chose a sub-sample of 45 mergers out of 94. The choice was determined by the following considerations: i) availability of the scheme of amalgamation; ii) availability of adequate information in the scheme relating to the period of analysis; and iii) listing of the firm in the stock market, which made it easier to obtain any supporting information that may be required. Though the chosen sub-sample covered less than half (47.87 percent) of the mergers, they accounted for almost 99% of the total assets of the acquiring firms covered.

This was because special care was taken to cover the major and important merger cases in each year during the period 1990-91 to 1994-95. As a result, most firms have been drawn from the large sized class since the evidence indicates that such mergers dominated during the 1990s.

### **Nature of Mergers**

Besides the dominance of large sized firms in the merger movement during the liberalisation years in the 1990s, the other remarkable characteristic of the movement was the dominance of mergers between firms under related management. By related management we mean here firms which, either in terms of controlling block or in terms of other indicators like company name, composition of the board of directors, etc. are clearly identifiable as belonging to a particular business group or house. Such information has been extracted from the scheme of amalgamation and other documents related to the firms involved in the

merger process. As Table 7 shows, more than 70 per cent of the 45 sample cases relating to the period 1990-91 to 1994-95 involved mergers between companies under the same management. In terms of total assets these firms accounted for a comparable 77.57 per cent of the total assets of all the sample firms.

The dominance of mergers between related firms is overwhelming even though there are signs of an increase in the role of mergers between unrelated companies or those under different management. In terms of number of firms, the share of 'unrelated mergers' rose almost continuously from around 17 per cent in 1990/91 to 40 per cent in 1994/95. However, in terms of total assets only 6.87 per cent of the total assets of the selected acquiring firms involved in mergers in 1990-91 were of those participating in unrelated mergers. Though this share increased over the 1990s, it remained as low as 13.99 per cent even in 1994-95. In fact, there was one year (1993-94) in which the share in total sample assets of acquiring firms involved in unrelated mergers was relatively high (48.4 per cent). However, when looked at in terms of the number of firms involved in unrelated mergers, the figure remained small (3 firms accounting for 27 per cent of the sample firms).

### **The Role of Foreign Firms**

A second issue of importance in the analysis of merger trends during the liberalisation years is the role of foreign firms in the process. There are a number of reasons why this issue is of importance. To start with, the 1990s were a period in which controls on the operation of foreign firms in India were considerably diluted, encouraging them to set up and build their operations in India. In fact, it has been argued that one of the reasons for the increase in mergers during the 1990s was the keenness of international firms to exploit this opportunity, (Khanna, 1993) which in some instances is furthered through mergers with existing

**Table 7: Pattern of Mergers in India During the Period 1990-1 to 1994-95**

Year	Unrelated		Related		Total	
	T Assets	% share to Total	T Assets	% share to Total	T Assets	% share to Total
1990-91	16115	6.87	218236	93.12	234351	100
	1	16.66	5	83.33	6	100
1991-92	11885	2.11	551195	97.88	563080	100
	1	16.66	5	83.33	6	100
1992-93	75389	12.18	543514	87.81	618903	100
	4	33.33	8	66.66	12	100
1993-94	665751	48.4	709528	51.59	1375279	100
	3	27.27	8	72.72	11	100
1994-95	237245	13.98	1458835	86.01	1696080	100
	4	40	6	60	10	100
Total	1,006,385	22.42	3,481,308	77.57	4487693	100
	13	28.88	32	71.11	45	100

Source: Same as Table 4 and the Schemes of Amalgamation.

**Table 8: Pattern of Total Mergers in Terms of Ownership (Rs Lakhs)**

Year	Indian Owned		Foreign Owned		Total	
	T.Assets	% share to the total	T.Assets	% share to the Total	T.Assets	% share to the Total
1990-91	234351	100	0	0.00	234351	100
	6	100	0	0.00	6	100
1991-92	563080	100	0	0.00	563080	100
	6	100	0	0.00	6	100
1992-93	317591	51.32	301312	48.68	618903	100
	8	66.67	4	33.33	12	100
1993-94	1157661	84.18	217618	15.82	1375279	100
	8	72.73	3	27.27	11	100
1994-95	1546393	91.17	149687	8.83	1696080	100
	7	70.00	3	30.00	10	100
Total	3819076	85.10	668617	14.90	4487693	100
	35	77.78	10	22.22	45	100

Source: Same as Table 4.

operators rather than through the establishment of greenfield projects. Secondly, the 1990s have been years in which foreign direct investment flows into India have risen from less than half a billion dollars to more than 3 billion dollars a year. This makes India's experience a part of the international experience with regard to rising FDI flows during the 1990s. Interestingly, one aspect of the latter has been the role of rising cross-border mergers and acquisitions in explaining the cross-border flows of capital. It would therefore be useful to examine whether foreign firms in part due to an increase in cross-border mergers resort to the rise in FDI flows into India. Finally, the liberalisation years have seen some striking instances of acquisitions and mergers involving foreign firms.

However, the evidence yielded by our sample partially confirms these expectations. Foreign firms have a significant presence among acquiring firms involved in the merger process, but not a dominant presence. In the 45 sample cases studied, foreign owned business firms controlled 22.22 percent of the acquiring companies. In terms of total assets of the sample-acquiring firms, their share was even lower at 14.90 percent. The rest of the mergers were between the companies under Indian ownership. But it needs to be noted that the presence of foreign firms among merging entities is visible only after 1992-93 (See Table 8). This could be because the relaxation of FERA regulations occurred in January 1992, when foreign companies were allowed to open branches, permitted to use their trademarks, carry out any activity of a trading, commercial or industrial nature, borrow money and accept fixed deposits like any other Indian company. It is noteworthy that in 1992/93, foreign firms, which were not involved in mergers till that year, accounted for one-third of the acquiring firms in the sample, and for almost half the total assets of the sample acquiring firms. Though these shares fell in the subsequent two years, they did remain significant.

What is interesting is the nature of mergers analysed in terms of relationship between the management of merging firms. As is to be expected from our analysis earlier, out of the mergers involving Indian owned acquiring firm, around 71 per cent was between companies under related management. However, looked at as a trend, there appears to be a marginal shift towards the participation of unrelated entities in mergers involving Indian owned firms, with a sharp swing in favour of unrelated mergers in 1994/95. While these aspects of mergers between Indian owned firms is as expected, the structure of mergers involving foreign firms is surprising. Here also we find that mergers between firms under the same management play an important role, accounting for 70 per cent of the mergers and almost 80 per cent of total assets of acquiring firms involved in 'foreign-owned mergers' during the 1990s. Thus, the factors that encouraged splitting of operations in India in the years prior to liberalisation obviously influenced foreign players as well, and the need to retreat from that strategy in the liberalisation years seems to also apply in their case.

Finally, if we compare the relative roles of Indian- and foreign-owned firms in mergers involving the same and those involving different managements. We further observed that while the dominance of Indian owned firms in the arena of related mergers was complete, their dominance over the arena of unrelated mergers was also overwhelming. The similarity in distribution across related and unrelated mergers implied by these figures suggests that the pattern and therefore the objectives of foreign firms involved in mergers were more or less the same as those of Indian firms.

### **Structure of Mergers**

Some idea of the nature of such internal restructuring can be gleaned from an analysis of the structure of mergers during the 1990s. Based on the product profile of the acquiring and acquired firms, the

selected mergers have been categorised into horizontal, vertical and conglomerate mergers. This exercise has been carried out based on the data available in the Directory of the Bombay Stock Exchange. Out of the 45 sample cases chosen for this study, around 69 per cent (31 cases) were horizontal mergers (i.e. between the firms under the same industry). The remaining cases were divided equally between vertical mergers (between the firms which are complementary to each other) and conglomerate mergers (between firms producing unrelated products). In terms of total assets, however, only 50.57 per cent of the total assets were with acquiring firms involved in horizontal mergers, whereas a disproportionately large 44.32 per cent were with firms involved in vertical mergers (See Table 9). Conglomerate mergers accounted for a relatively small 5.11 per cent of the total assets of the acquiring firms. These figures suggest that while horizontal mergers dominate, some of the larger firms were opting for vertical mergers, leading to a higher share of assets involved in such mergers as compared with their share in the number of mergers. Conglomerate mergers between firms in different industries were both asset-wise and numerically not a significant option. Further, the evidence points to an increasing trend in the share of horizontal mergers both in terms of number and total assets during the period of analysis, whereas conglomerate mergers registered a declining trend over time. Thus the internal restructuring that resulted in the spate of mergers during the 1990s appears to be of two kinds. Firstly, there are signs of consolidation aimed possibly at increasing size, deriving marketing advantages, deriving financial benefits for specific or all shareholders and exploiting scale economies outside that of production (since the units already exist as separate entities). Secondly, there are signs of mergers aimed at the synergies associated with vertical mergers; at linking more closely the production plans of related firms; at reducing costs through transferring margins to the final stage; at increasing size; and at deriving financial benefits for specific or all shareholders.

The dominance of horizontal merger has, as expected, affected the product market share of individual acquiring firms before and after merger. We estimated the share of value of sales by product lines of a sample of 43 acquiring firms in their corresponding 'industry totals' for the period 1990-91 and 1994-95. The market share of the major product lines of these acquiring firms and the total sales of the corresponding industries are collected from the India's industrial sector, 1996 published by Centre for Monitoring Indian Economy Pvt.Ltd. It needs to be noted that the "industry total" provided there, in some cases, included the sales of only a selected set of major firms within that industry. However, from this exercise, it is observed that the ratio of the total sales of the sample of acquiring firms to the total sales of the respective industries has increased from 0.24 to 0.58 during the period 1990-91 to 1994-95. The ratio of the total sales of those acquiring firms which have merged with the related product lines to the total sales of the respective industries has increased from 0.193 to 0.244. Thus, even if not substantially due to related mergers, the process of amalgamation does seem to have contributed to some increase in product-wise concentration. However, as mentioned earlier since related mergers dominated the merger movement, these changes would not have amounted to much when we take account of the fact that the representative unit of capital<sup>2</sup> in the India's corporate sector is the business group and not the individual firm.

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2 The defining feature of this unit was that unlike the diversified, single conglomerate firm which was the industrial, decision making unit in the West, the business group consisted of a large number of *legally independent* firms which functioned as a single entity according to the dictates of a single decision-making authority (see Dutt, 1969; Ghose, 1972; Hazari, 1986).

**Table 9: Structure of Total Mergers in India (Rs Lakhs)**

Year	CONGLOMERATE		HORIZONTAL		VERTICAL		TOTAL	
	T Assets	%Share	T Assets	%Share	T Assets	%Share	T Assets	%Share
1990-91	147836	63.08	86515	36.92	0	0.00	234351	100
	3	50.00	3	50.00	0	0.00	6	100
1991-92	43987	7.81	31072	5.52	488021	86.67	563080	100
	2	33.33	3	50.00	1	16.67	6	100
1992-93	0	0.00	426962	68.99	191941	31.01	618903	100
	0	0.00	10	83.33	2	16.67	12	100
1993-94	18210	1.32	1275345	92.73	81724	5.94	1375279	100
	1	9.09	8	72.73	2	18.18	11	100
1994-95	19077	1.12	449642	26.51	1227361	72.36	1696080	100
	1	10.00	7	70.00	2	20.00	10	100
Total	229110	5.11	2269536	50.57	1989047	44.32	4487693	100
	7	15.56	31	68.89	7	15.56	45	100

Source: Same as Table 5.

An interesting feature is the distribution of horizontal and vertical mergers between firms under the same and under separate managements. Horizontal mergers overwhelmingly dominated 'unrelated mergers' and accounted for 88.34 percent of the total assets of acquiring firms involved in mergers between firms under unrelated management. On the other hand, vertical mergers, though small in number in mergers among firms under the same management, accounted for a disproportionately large share of the assets of acquiring firms involved in such mergers (Table 9). Interestingly, conglomerate mergers though equal in number to vertical mergers in the case of both 'related' and 'unrelated' mergers, accounted for a small share of total assets of the acquiring firms involved, independent of whether the mergers were between firms under the same or different management. Thus consolidation of unrelated firms in a particular industry was an important part of the restructuring process as was the consolidation of firms under the same management in the same industry. On the other hand, consolidation of related firms aimed at linking different stages of production under a single legal unit seems to be the dominant objective behind vertical mergers.

Interestingly, while there are no differences between Indian and foreign-owned acquiring firms in terms of mergers between related and unrelated companies, there are differences with regard to the relative roles of horizontal and vertical mergers. Among Indian-owned, unrelated mergers included in the sample, horizontal mergers account for 85.27 percent of the total assets of the acquiring firms. The rest of the assets were distributed among conglomerate and vertical mergers, with the latter dominating the remaining assets share (Table 10). Among Indian owned related mergers on the other hand, horizontal mergers that constituted 60 per cent of the number of mergers, accounted for only 29.14 percent of the total assets. 20 per cent of firms involved in vertical mergers

**Table 10: Structure of Unrelated Mergers in India (Rs Lakhs)**

Year	CONGLOMERATE		HORIZONTAL		VERTICAL		Total	
	T Assets	%Share	T Assets	% Share	T Assets	%Share	T Assets	%Share
1990-91	16115	100	0	0.00	0	0.00	16115	100
	1	100	0	0.00	0	0.00	1	100
1991-92	0	0.00	11885	100	0	0.00	11885	100
	0	0.00	1	100	0	0.00	1	100
1992-93	0	0.00	66866	88.69	8523	11.31	75389	100
	0	0.00	3	75.00	1	25.00	4	100
1993-94	0	0.00	592098	88.94	73653	11.06	665751	100
	0	0.00	2	66.67	1	33.33	3	100
1994-95	19077	8.04	218168	91.96	0	0.00	237245	100
	1	25.00	3	75.00	0	0.00	4	100
Total	35192	3.50	889017	88.34	82176	8.17	1006385	100
	2	15.38	9	69.23	2	15.38	13	100

Source: Same as Table 4.

accounted for 64.32 per cent of assets of acquiring firms (Table 11). This is obviously due to the participation of large sized firms in the vertical merger process, resulting in the domination of vertical mergers in assets of acquiring firms involved in related mergers.

As compared with the experience of Indian firms, mergers involving foreign owned firms were all in the nature of horizontal mergers. Thus, it can be concluded that: (i) mergers involving foreign firms, which accounted for one-fifth of the total acquiring firms during the 1990s, were similar to mergers involving Indian firms inasmuch as most of these firms acquired another firm belonging to the same management; and (ii) these mergers were different from Indian mergers inasmuch as they were all horizontal mergers between companies which were engaged in the same product lines.

## **Section V**

### **Mergers and the Growth of Firms**

Since consolidation of related firms seems to be a factor explaining mergers during the 1990s, one question that arises is whether the attainment of larger size was an important objective driving the merger movement. To answer that question, this section analyses the growth of acquiring firms, the role of acquisition in the growth of these firms and the other means through which the growth of acquiring firm has been financed during these years. This exercise is restricted to 34 firms, since adequate information for the rest of the firms could not be obtained. However in terms of number, it covers 76 percent of the total sample. In terms of total assets, it covers 83.14 percent of the total assets of total sample- acquiring firms.

In terms of absolute size, the total assets of the selected 34 firms increased by Rs.265.67 billion over the period 1989-90 to 1994-95. The

**Table 11: Structure of Related Mergers in India (Rs Lakhs)**

Year	CONGLOMERATE		HORIZONTAL		VERTICAL		Total	
	T Assets	%Share	T Assets	%Share	T Assets	%Share	T Assets	%Share
1990-91	131721	60.36	86515	39.64	0	0.00	218236	100
	2	40.00	3	60.00	0	0.00	5	100
1991-92	43987	7.98	19187	3.48	488021	88.54	551195	100
	2	40.00	2	40.00	1	20.00	5	100
1992-93	0	0.00	360096	66.25	183418	33.75	543514	100
	0	0.00	7	87.50	1	12.50	8	100
1993-94	18210	2.57	683247	96.30	8071	1.14	709528	100
	1	12.50	6	75.00	1	12.50	8	100
1994-95	0	0.00	231474	15.87	1227361	84.13	1458835	100
	0	0.00	4	66.67	2	33.33	6	100
Total	193918	5.57	1380519	39.66	1906871	54.77	3481308	100
	5	15.63	22	68.75	5	15.63	32	100

Source: Same as Table 4.

gross fixed assets of the acquiring companies for the corresponding period increased by Rs.151.41 billion. The annual average growth rate during the period 1989-90 to 1994-95 stood at 25.73 percent in the case of total assets and 24.86 percent in the case of gross fixed capital. When the figures are deflated by the CSO's gross fixed capital formation deflator (base 1980-81=100) obtained from National Accounts Statistics these rates of growth amounted to 16.78 and 15.93 percent respectively. Whereas at the all India level, the annual average growth of capital formation of private corporate sector was 16.96 per cent during the corresponding period. Around 26 percent of the total acquiring firms recorded a growth rate of total assets of 20 per cent and above. Another 50 per cent of the total acquiring firms recorded a growth rate of between 10 and 19.9 per cent. The growth of gross fixed capital amounted to 20 percent and above in the case of 35 per cent of the selected acquiring firms, and around an equal number recorded growth rates between 0 and 9.9 per cent. The data reveals that a larger number of acquiring firms which merged with an unrelated firm registered growth rates of 20 % and above in their gross fixed capital inspite of the lower growth in total assets.

### **Role of Acquisition in the Growth of Acquiring Firms**

From Table 13 and Table 14, it is also evident that assets acquired through mergers accounted for a significant but by no means overwhelming share of the growth in total assets and fixed assets. The ratio of total assets (or the total gross fixed capital) of the acquired firms before the year of merger to the increase in the size of the total assets( or gross fixed capital) of the acquiring companies over the period 1989-90 to 1994-95 is used to measure the role of acquisition in explaining asset expansion. Only 17.87 percent of the increase in total assets and 20.09

percent of the increase in the gross fixed capital of the sample-acquiring firms were due to acquisition through merger.

In the case of about one-fourth of the sample acquiring firms, acquisition accounted for 20% or more of the growth in total assets during the period 1989-90 to 1994-95. In the case of increases in gross fixed capital, acquisition amounted for 20 percent or more of the growth during

**Table 13: Distribution of Firms According to the Role of Acquisition in the Growth of Total Assets**

Gr of T Assets	Nature of Firms			% Share
	Related	Unrelated	Total	
0-9.9	13	4	17	50
10-19.9	5	3	8	23.53
20-29.9	2	0	2	5.88
>30	5	2	7	20.59
Total	25	9	34	100.00

Source: CIMM Data Base and the Annual report of the acquired firms for the previous period of Merger

**Table 14: Distribution of Firms According to the Role of Acquisition in the Growth of GFA**

Gr of GFA	Nature of Firms			% share to total
	Related	Unrelated	Total	
0-9.9	12	4	16	47.06
10-19.9	5	3	8	23.53
20-29.9	3	0	3	8.82
>30	5	2	7	20.59
Total	25	9	34	100.00

Source: CIMM Data Base and the Annual report of the acquired firms for the period prior to the merger

this period in the case of around 29 percent of the sample acquiring firms. However, in the case of half of total acquiring firms, acquisition explained only 0-9.9 percent of the growth in their assets during this period.

While most of the firms which registered a relatively smaller expansion in GFA had a smaller share explained by acquisition, those which registered large increases in gross fixed assets of 20 percent and above did not have a large share of their asset expansion explained by acquisition. Thus there appears to be no asset growth group in which acquisition played a dominant role, suggesting that there is little relation between asset expansion and acquisition.

The relatively insignificant role of expansion as an explanation for merger ties in with our earlier understanding that mergers were more a means of internal restructuring than an instrument of further product market or asset share. It also suggests that the pursuit of size alone, with the aim of having a larger equity base on which to undertake borrowing, could not have been the determining stimulus for the merger wave of the 1990s.

### ***Financing Growth in Total Asset of Acquiring Firms***

One of the reasons why mergers were not a major means of asset expansion during the 1990s was the fact that such expansion could be easily financed through funds acquired from a capital market rendered buoyant by the initial effects of liberalisation and the stock market scam. An analysis of the major source of funds of the sample of 34 firms involved in mergers, shows that 71 percent of the total assets of the acquiring firms during the period 1989-90 to 1994-95 was mobilised from external sources. Among these, the capital market accounted for 33 per cent of the total funds acquired and current liabilities for another

21.8 percent. Only about 16 percent of the total funds were mobilised through borrowing. The major share of the funds mobilised from the capital market was obtained in the form of a premium on shares sold.

An analysis of the shares of different sources of funds in firms classified by the rate of growth of their total assets (Table 15) indicates that firms which recorded high rates (20 percent and above) mobilised a large share of their resources from the capital market, i.e., 46.84 percent. On the other hand, the firms which showed an annual average growth rate of 10-19.9 percent in its total assets mobilised a relatively lower share of resources from the capital market, i.e., 17.52 percent. These firms mobilised a larger share of resources through borrowing. Firms which recorded a rate of growth of assets of less than 10 percent mobilised 26.81 percent of their resources from the capital market and another 32.98 percent of the total funds through internal financing. In sum, it appears that during the 1990s firms targeting a high rate of growth of assets exploited other sources of finance, particularly the buoyant capital market, and were not dependent on "external" means to growth like mergers and acquisitions.

From Table 15, it appears that firms which had a higher growth in their total assets mobilised a relatively large share of resources from the capital market through share premium, although they paid a lower rate of dividend (i.e., 23%) relative to their total earnings. It can also be observed that the firms, which had an annual growth rate of 10-19.9 percent in their total assets, could mobilise only 17.52 percent of their total resources through the capital market inspite of paying out large dividends relative to their total earnings i.e. 42.55 percent. This may be because low-growth are also the less successful firms which attracted investors by providing greater incentives in the form of higher dividends paid out as compared with the more successful firms.

**Table 15: Distribution of Source of Finance of Total Sample Acquiring Firms According to the Growth in T Assets During the Period of 1989-90 to 1994-95**

Sources of Finance	0-9.9	10-19.9	>20	Total
Retained Profits	17.11	16	17.54	16.88
Depreciation	15.87	9.52	14.28	12.37
Internal Finance	32.98	25.53	31.82	29.24
Capital Market	26.21	17.52	46.84	33.02
Fresh Capital	3.9	4.43	2.91	3.63
Share Premium	18.19	13.93	35.08	24.98
Debentures	4.2	-1.62	9.78	4.56
T.Borrowing	14.74	21.15	11.61	15.9
Current Liabilities	26.06	35.55	9.73	21.84
External Financing	67.02	74.47	68.18	70.76
Total	100	100	100	100
No of Firms	8	17	9	34
% Share of Div.paid to Profit After Tax	28.68	42.55	23	32.93

Source: CIMM Data Base

## Conclusion

To conclude, acquisitions and mergers, although always an important means of corporate growth since the seventies, it became much more prominent during the early 1990s in the Indian corporate sector. While liberalisation has spawned a merger wave among large firms, the removal of barriers such as those created by the MRTP Act do not appear to be the proximate cause for mergers. However the policies of economic liberalisation adopted during those years triggered a sharp increase in mergers between domestically owned companies and between domestically owned companies and companies under foreign ownership. The acceleration of the merger movement in the 1990s was accompanied

by the dominance of mergers between firms belonging to the same business group or house. This has two implications. First, it could be argued that while the merger movement may have contributed to an increase in product or asset concentration measured on a firm-wise basis, it could not have contributed to an increase in concentration as measured by the relative shares of business groups. Thus the liberalisation-induced merger wave of the 1990s did not have as its principal locomotive, the drive to reproduce and extend the bases of monopoly power of big capital in India.

The second, related implication of the evidence cited above is that the objective underlying the acceleration in mergers in the 1990s was the need for business groups to restructure themselves. If hitherto the business groups preferred to carry out similar or unrelated activities through the creation of a number of legally independent firms, there appears to be a change that occurred in the 1990s, with firms obviously preferring to integrate hitherto separate operations under a single legal entity. The factors that explain this drive to integrate also therefore are the factors that explain the increase in the number and significance of mergers during the 1990s. Acquisitions contributed significantly to asset-growth in only one fifth of the sample firms studied. Further the study suggests that merger was not a route to growth which was dominantly financed through resources acquired from a buoyant share market.

## Appendix

### **Legal Procedures for Merger, Amalgamations and Take-overs**

The control exercised by the government over mergers is articulated in an elaborate legal framework embodied in the Companies Act and the MRTP Act. The general law relating to mergers, amalgamations and reconstruction is embodied in sections 391 to 396 of the Companies Act, 1956 which jointly deal with the compromise and arrangement with creditors and members of a company needed for a merger. Section 391 gives the High Court the power to sanction a compromise or arrangement with creditors and members, subject to certain conditions. Section 392 gives the power to the High Court to enforce and supervise the carrying out of such compromises or arrangements with creditors and members. Section 393 provides for the availability of the information required by the creditors and members of the concerned company when acceding to such an arrangement. Section 394 makes provisions for facilitating reconstruction and amalgamation of companies. Section 395 gives power and duty to acquire the shares of shareholders dissenting from the scheme or contract approved by the majority. And Section 396 deals with the power of the central government to provide for an amalgamation of companies in the national interest.

In any scheme of amalgamation, both the amalgamating company or companies and the amalgamated company should comply with the requirements specified in sections 391 to 394 and submit details of all the formalities for consideration of the High Court. It is not enough if one of the companies alone fulfils the necessary formalities. Sections 394, 394A of the Companies Act deal with the procedures and the requirements to be followed in order to effect amalgamations of companies coupled with the provisions relating to the powers of the

court and the central government in the matter of bringing about amalgamations of companies.

After the application is filed, the High Court would pass orders with regard to the fixation of the dates of the hearing, and the provision of a copy of the application to the Registrar of Companies and the Regional Director of the Company Law Board in accordance with section 394A and to the Official Liquidator for the report confirming that the affairs of the company have not been conducted in a manner prejudicial to the interest of the shareholders or the public. Before sanctioning the scheme of amalgamation, the court has also to give notice of every application made to it under section 391 to 394 to the central government and the court should take into consideration the representations, if any, made to it by the government before passing any order granting or rejecting the scheme of amalgamation. Thus the central government is provided with an opportunity to have a say in the matter of amalgamations of companies before the scheme of amalgamation is approved or rejected by the court. The powers and functions of the central government in this regard are exercised by the Company Law Board through its Regional Directors. While hearing the petitions of the companies in connection with the scheme of amalgamation, the court would give the petitioner-company an opportunity to meet all the objections which may be raised by shareholders, creditors, the government and others. It is, therefore, necessary for the company to keep itself ready to face the various arguments and challenges. Thus by the order of the Court, the properties or liabilities of the amalgamating company get transferred to the amalgamated company. Under section 394, the court has been specifically empowered to make specific provisions in its order sanctioning an amalgamation for the transfer to the amalgamated company of the whole or any parts of the properties, liabilities, etc. of the amalgamated company. The rights and liabilities of the employees of the amalgamating company

would stand transferred to the amalgamated company only in those cases where the court specifically directs so in its order. The assets and liabilities of the amalgamating company automatically gets vested in the amalgamated company by virtue of the order of the court granting a scheme of amalgamation. The court also make provisions for the means of payment to the shareholders of the transferor companies, continuation by or against the transferee company of any legal proceedings pending by or against any transferor company, the dissolution (without winding up) of any transferor company, the provision to be made for any person who dissents from the compromise or arrangement, and any other incidental consequential and supplementary matters to secure the amalgamation process if it is necessary. The order of the court granting sanction to the scheme of amalgamation must be submitted by every company to which the order applies (i.e., the amalgamating company and the amalgamated company) to the Registrar of Companies for registration within thirty days.

### ***Provisions in the MRTTP Act***

The law relating to mergers also explicitly prescribed that any merger or amalgamation, which increased concentration of asset ownership, should not be approved by the High Court. Thus wherever such a possibility existed the role of the High Court as the agency which ensured that a merger was not prejudicial to the interests of its members or the public was superseded by the role of the central government as an agency that safeguards the national interest. This was done under Section 23 of the MRTTP Act. According to sub-section (2) of this section, Government approval for amalgamations was necessary in the following circumstances: (i) if one MRTTP undertaking amalgamated with another undertaking; and (ii) if, on amalgamation of two or more undertakings, an undertaking came into existence which became registrable under the MRTTP Act.

As per the law, the power of the central government under section 23 of the MRTP Act overrode the power of the Court to sanction a scheme of merger or amalgamation under sections 391 to 396 of the Companies Act. According to this section, no scheme for the merger or amalgamation of an undertaking could be sanctioned by any Court or would be recognised for any purpose or would be given effect to unless the scheme for such merger or amalgamation had been approved by the central government under the specific provisions of this section. The owner of the undertaking had to make an application to the central government for the approval. The scheme of approval could not be modified without the previous approval of the central government. The approval of the central government was not necessary for the merger or amalgamation of interconnected undertakings (which were not dominant undertakings) if they produced the same goods or provided the same services. If one of the transacting parties is a non-resident Indian, then transfer of shares could be made only with the permission of the RBI.

Finally, the provisions under the sections 23 and 24 of chapter 3 of MRTP Act were abolished in 1991. As a result, the MRTP commission does not play a role in mergers and acquisitions in the same manner in which it used to. But, it does play a role in cases where it believes that a merger or a take-over would lead to restrictive trade practices. Regarding take-overs there were no comprehensive regulations to govern these activities until the new clauses 40A and 40B were incorporated in May 1990 although both the companies Act (section 395) and the MRTP Act (section 24) had provisions for corporate take-overs. According to this clause, any person who acquires 5% or more of the shares in a company must notify the stock exchange and when the holdings cross 10%, a public offer to purchase shares must be made. However, this agreement was restricted to only listed companies and was effective only when either of the parties in an acquisition was a listed company. In November

1994, the Securities and Exchange Board of India came out with SEBI (Substantial acquisition of shares and take-overs) Regulation, 1994 to regulate the take-over of the companies. But this code was inadequate to address all the complexities and therefore a new committee was set up to review the present code. The committee under the chairmanship of P.N.Bhagwati suggested substantial modifications in the existing code. The important changes are:

- consolidation of holdings by an existing shareholder holding not less than 10 percent of voting rights will be allowed;
- Conditional bid will be allowed;
- Acquirer will be required to deposit upfront 10 percent of the total consideration in an Escrow account;
- Time limit for competitive bidding has been extended to 21 days;
- The consideration shall be payable even by exchange and/ or transfer of secured instruments with a minimum of 'A' grade rating from a credit rating agency. The valuation of the instrument will be duly certified by an Independent category 1 merchant banker or a chartered accountant of 10 years standing;
- Acquisition of shares by the acquirer during offer period is permitted, except in case of conditional offer;
- Time schedule for each event in the take-over process has been specified;
- Waiting for offer letter by SEBI has been dispensed with.

Thus the revised code is applicable to the take-overs through acquisition of control over a company irrespective of whether or not there has been any acquisition of shares or voting rights in the company

whereas, the present code restricts its applicability to take-overs through acquisition of shares or voting rights. However mergers and amalgamations constitute a subject matter of companies Act, 1956 and is outside the perview of SEBI.

## References

- Ansoff, H.I & Weston, J.F (1962) " Merger Objectives and Organisational Structure," *The Quarterly Review of Economics and Business*, Vol.2, No.3, pp.49.
- Abhijit, Roy (1994) *Business Today*, Vol. 3, No. 6, pp. 68.
- Banerjee, B.N (1984) *Company Takeovers*, Paribus Publishers and Distributors.
- Bhattacharyya, A.K (1996) "Revised Takeover Code - An Analysis", *The Chartered Accountant*, Vol.46, No.3.
- Bhattacharyya H.K (1987) "Amalgamations and Take-Overs", *Company News Notes*, Vol.25, No.4, pp. 1.
- Bansal.R.N (1970), "Amalgamation, Mergers and Schemes of Arrangement Under the Companies Act", *Company News and Notes*, Vol. 8, Special Number, pp. 80.
- Beena, P.L (1998) "Mergers and Amalgamations: An Analysis in the Changing Structure of Indian Oligopoly", unpublished Ph.D thesis submitted to the Jawaharlal Nehru University, New Delhi.
- Chandra N.K (1979) "Monopoly Capital, Private Corporate Sector and the Indian Economy: A Study in Relative Growth, 1931-76", *Economic and Political Weekly*, Vol. XIV, No. 30-32, pp. 1243.
- Chandrasekhar, C.P (1987) "Investment Behaviour, Economies of Scale and Efficiency under an Import-Substituting Regime": A study of Two Industries, *Economic and Political Weekly*, Vol. XXII, No. 19-21, pp. 61.
- Chaudhuri Sudip, (1995) "Government and Transnationals: New Economic Policies Since 1991", *Economic and Political Weekly*, Vol. XXX, No. 18-19 pp.999.

- Comanor, W.S. (1967) "Vertical Mergers, Market Power and the Anti-trust Laws," *American Economic Review*, Vol.57, pp.254.
- Dennis Raja Kumar (1996)"Financial Intermediation and Corporate Finance in India: Some Recent Experiences", *Journal of Entrepreneurship*, Vol.5, No.2, pp. 193.
- Department of Company Affairs (1990) "Directory of Joint Stock Companies", Various Volumes.
- (1991) Financial Institutions and Capital Market, *Company News and Notes*, Vol. 28, N0.8,pp.1.
- (1993) "Important Features of Corporate Sector and Policy Development", *Company News and Notes*, Vol.31, No.1,pp.3.
- "Registration and Liquidation of Joint Stock Companies in India", Various Volumes, Government of India.
- "Report on the Working and Administration of the MRTTP Act, 1969", Various Issues, Government of India.
- Edith, T.P.(1972) *The Theory of the Growth of the Firm*, Oxford, Basil Blackwell.
- Federal Trade Commission (1971) *Current Trends in Merger Activity*, Washington D.C, Government Printing Office.
- (1981) *Statistical Report on Mergers and Acquisitions*, Washington D.C, Government Printing Office,
- (1948) *The Merger Movement*, Washington D.C, Government Printing Office,
- Goyal S.K (1979) *Monopoly Capital & Public Policy: Business and Economic Power*, Allied Publishers.
- (1992) "Nature and Growth of Indian Corporate Sector", WP, ISID, New Delhi.

Government of India (1964) "Committee on Distribution of Income and Levels of Living", Chairman, New Delhi (P.C. Mahalanobis)

----- (1965) "Report of the Monopolies Inquiry Commission", New Delhi (K.C.Das Gupta).

----- (1967) "Study of the Industrial Planning and Licensing Policy", New Delhi,(S.Dutta).

----- (1978) "Report of the High Powered Expert Committee on Companies and MRTP Acts", Ministry of Law & Company Affairs, New Delhi (Rajinder Sachar).

----- "Report of the High Powered Committee on Stock Exchange Reforms", India, Ministry of Finance, Department of Company Affairs.

Ghose Aurobindo (1972) "Monopoly in Indian Industry: An Approach", *Economic and Political Weekly*, Vol. VII, No. 5-7, pp. 385.

----- (1974) "Investment Behaviour of Monopoly Houses: II Economics of Pre-Emption", Vol. IX, No. 44, pp.1868.

----- (1974) "Investment Behaviour of Monopoly Houses III- Time Profile of Fixed Investment and Other Implications of the Structure of Investment Decisions", *Economic and Political Weekly*, Vol. IX, No. 45-46, pp.1911.

----- (1974) "Joint Sector and 'Control' of Indian Monopoly", *Economic and Political Weekly*, Vol. IX, No. 23, pp.906.

Gopalakrishnan A.A and Mubeen Rafat (1997) "Case Study:HLL-TOMCO Merger", Seminar on Mergers and Acquisitions, February 20-22, Administrative Staff College, Hyderabad.

Hazari, R. K (1966) *The Structure of the Private Corporate Sector*, Asia Publishing House, Bombay.

- (1986) *Essays on Industrial Policy*, Concept Publication House, New Delhi.
- Khanna Sushil (1993) "Deregulation and Competition in Indian Industry: Anatomy of Rent Seeking Behaviour in the Corporate Sector", Monograph, IIM, Calcutta.
- Khurana Rakesh (1981) *Growth of Large Business: Impact of Monopolies Legislation*, Wiley Eastern Ltd.
- Kidron, M (1965) *Foreign Investment in India*, Oxford University Press
- Kumar Darshan (1976) "Amalgamations of Companies: Concept and Implications", *Chartered Accountant*, Vol. 24, No 11, pp.670.
- Kumar, P (1985) *Growth of Industrial Corporations in India: Structure, Strategy, Determinants*, Deep & Deep Publications.
- Kumar, M.R. (1995) *Corporate Mergers in India: Objectives and Effectiveness*, Kanishka , New Delhi.
- Kuashal Vijay Kumar(1995) *Corporate Takeovers in India*, Sarup & Sons, New Delhi.
- Kumarasundaram ,S (1983) "Corporate Takeovers: The Indian Situation", *Economic and Political Weekly*, Vol .18, No. 23, pp.1023.
- Kaveri, V.S (1986) *Financial Analysis of Company Mergers in India*, Himalaya Publishing House, New Delhi.
- Kothari, M.L (1967) *Industrial Combinations*, Chaitanya Publishing House, Allahabad.
- Lalitha, N (1995) "Public Issues by Private Corporate Sector", *Economic & Political Weekly*, Vol. XXX, No. 21, M-63.
- Meir, M (1969) *Technological Dependence, Monopoly and Growth*, Pergamon Press.

- Mehta, M.M (1952) *Combination Movement in Indian Industry*, Friend's Book Depot, Allahabad.
- Mueller, D. C (1987) *The Corporation: Growth, Diversification and Mergers*, University of Maryland, USA.
- (1977) " The Effects of Conglomerate Mergers: A survey of the Empirical Evidence", *Journal of Banking and Finance*, Vol. 1, December, pp. 315.
- (1985) "Mergers and Market Share", *Review of Economics and Statistics*, Vol. 67, May, pp.259.
- Muller, J. (1976) "The Impact of Mergers on Concentration: A Study of Elean West German Industries", *Journal of Industrial Economics*, Vol. XX, No.2, pp. 113.
- Manne, Henry G (1965) "Mergers and the Market for Corporate Control", *Journal of Political Economy*, Vol. 73, No. 2, pp. 110.
- Mani, Sunil (1995) "Economic Liberalisation and the Industrial Sector", M-38-M-50, *Economic and Political Weekly*, Vol. XXX, No.21, pp. M-38.
- Melicher, R.W J. Ledolter and L.D Antonio (1983) "A Time Series Analysis Aggregate Merger Activity", *The Review of Economics and Statistics*, Vol.65, August, pp.423.
- Rao.V. Narasimha & Rao .P.V(1987) "Regulation of Mergers Under the MRTTP Act 1969: A Critical Study", *Company News and Notes*, Vol. 25, No.6, pp.1.
- Nelson, R. L (1959) *Merger Movements in American Industry, 1895-1956*, Princeton, NJ: Princeton University Press.
- Nitish Sen Gupta (1987) "F.E.R.A and Corporate Take Overs", October 1987, Number 38, ICRIER, Working Paper.

- Paranjpe, H.K. (1982) "The Vanishing MRTP Act, Will Only the Grin Remain ?, *Economic and Political Weekly*, Vol. XVII, No. 23, June 5, pp. 955.
- (1984) "MRTP Amendment Bill -A Trojan Horse", *Economic and Political Weekly*, Vol. XIX, No. 17, pp.715.
- (1988) "Indian 'Liberalization' Perestroika or Salaami Tactics?" *Economic and Political Weekly*, Vol. XXIII, No.45-47, Special Number, pp.2343.
- Penrose,E.T (1959) *The Theory of the Growth of the Firm*, Blackwell, London.
- Steiner P.O. (1975) *Merger Motives, Effect, Policies*, Ann Arbor, University of Michigan Press.
- Ramaiya, A (1977) *Guide to the Companies Act*, Eighth Edition.
- Reserve Bank of India Bulletin (1995) "Finances of Public Limited Companies, 1991-92", October-November.
- (1996) "Financial Performance of Private Corporate Business Sector, 1995-96", October.
- (1997) "Financial Performance of Private Corporate Business Sector, 1996-97", December.
- Saharay, H.K (1981) *Mergers Amalgamations and Takeovers*, Eastern Law House, Pvt Ltd, Calcutta.
- Sandesara, J.C (1966) "A Critique of the Monopolies Commission's Report," *The Indian Economic Journal*, Vol.13, No. 5, pp. 688.
- (1994) "Restrictive Trade Practices in India, 1969-91: Experience of Control and Agenda for Further Work", *Economic and Political Weekly*, Vol. XXIX, No. 32, pp. 2081.
- Santhanam, R (1998) *A Guide to Amalgamations of Companies with Reference to Tax Planning*, Sultan Chand, New Delhi.

- Scherer, F.M (1979) *Industrial Market Structure and Economic Performance*, Houghton Mifflin Company, Boston.
- Sen Kunal & Rajendra R. Vaidya (1997) *The Process of Financial Liberalization in India*, Oxford University Press.
- Sidharthan N.S (1979) "Industrial Houses, Multinationals and Industrial Policy", *Economic and Political Weekly*, Vol. XIV, No. 29, Special Articles, pp. 1197.
- Steven, C Salop (1987) "Symposium on Mergers and Antitrust", *Journal of Economic Perspective*, Vol. 1, No.2, pp. 3.
- Stephen Lye and Aubrey Silbertson, (1981) "Merger Activity and Sales of Subsidiaries between Company Groups", *Oxford Bulletin of Economics and Statistics*, Vol. 43, August, pp. 257.
- Venkiteswaran, N (1993) "Towards an Orderly Indian Market for Corporate Control", Working Paper 1081, IIM, Ahmedabad
- Verma, J.C (1993) *Bharat's Corporate Mergers & Takeovers Concept, Practice & Procedure*, Bharat Publishing House, New Delhi.
- Weston, J.F (1953) *The Role of Mergers in the Growth of Large Firms*, Berkeley and Los Angeles: University of California Press.
- Weston, J.Fred, Kwang S. Chung and Susan E. Hoag (1996) *Mergers, Restructuring and Corporate Control*, Englewood Cliffs, Prentice-Hall International.

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